



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Research Commons

<http://researchcommons.waikato.ac.nz/>

Research Commons at the University of Waikato

Copyright Statement:

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

The thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right to be identified as the author of the thesis, and due acknowledgement will be made to the author where appropriate.
- You will obtain the author's permission before publishing any material from the thesis.

**Ka Hao te Rangatahi:
Rangatahi Māori Experiences of Climate Change**

A thesis
submitted in fulfilment
of the requirements for the degree
of
Master of Applied Psychology (Community)
at
The University of Waikato
by
ARETA JANE RANGINUI CHARLTON
(Ngāi Tūhoe, Ngāti Ruapani)



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

2023

Ariā | Abstract

“Ka pū te rūhā, ka hao te rangatahi”

Climate change is well established as one of the earth’s most pressing global issues, whereby Māori and Indigenous communities are more vulnerable to its impacts. Internationally, youth have been participating in a range of climate activism, demanding rapid and adequate responses to climate change from decision makers; with Indigenous youth advocating for Indigenous rights to be centred in these responses. More often than not, research on youth involvement in climate change focusses on the general youth population and sidelines the experiences of minorities such as global Indigenous communities. Due to this inattention, there is a lack of research focussing on rangatahi Māori experiences and perceptions of climate change, leaving rangatahi Māori to advocate for their voices to be heard.

The purpose of this research is to amplify the voices of rangatahi Māori regarding climate change, beyond where rangatahi are already sharing their voices. It focusses on rangatahi perceptions of climate change, specifically exploring how being Māori, and youth, influence their experience. This includes investigating the role rangatahi have within climate change, and any challenges and supportive factors that rangatahi may experience related to climate change.

This thesis utilises Kaupapa Māori and its guiding principles to ground this research agenda, employing Pūrākau methodology to guide research methods. Specifically, semi-structured whakawhitinga kōrero were undertaken with five rangatahi Māori participants, who are passionate about climate change and the taiao, exploring each of their diverse experiences and understandings of climate change. Following a process involving thematic and Pūrākau methodology inspired analysis, key themes from each of the rangatahi whakawhitinga kōrero are presented within a case study, maintaining individual narratives for each rangatahi.

This research found that rangatahi experience is grounded in whakapapa, shaping connection to the taiao, motivations to care about climate change, and encompassed aspirations and hopes regarding climate change responses. These narratives highlight that the exclusion of rangatahi from research spaces leaves a gap in literature that explores youth understandings on climate change. Further findings established that the participants believe that being a rangatahi presents unique skills and perspective to offer to climate spaces. Lastly, through exploring participants experiences of specifically being a rangatahi Māori, the findings of this thesis offer tangible opportunities to support rangatahi in voicing their concerns regarding climate change, as this was an identified challenge.

Ultimately, exploring the rangatahi participants' understandings contributes to: shaping the narratives of rangatahi Māori experience of climate change; further diversifying Māori understandings of climate change and responses; and amplifying the voices of Māori youth within the growing set of literature on youth engagement in climate change. This research lays a foundation for the voices of rangatahi Māori to be actively included in climate change research, and further contest Western misconceptions that rangatahi must gain more experience to contribute to changing the world.

He Kupu Whakamihi | Acknowledgements

This thesis is dedicated to all the rangatahi Māori living up to dreams their tīpuna held for their uri - driving change that honours their whakapapa, future, past and present.

Throughout this journey I have been endlessly inspired by the hope and resilience of the rangatahi Māori I've met and had wānanga with. Ameera, Eilidh, Hannah, Julz, and Tiana - ko koutou te whakatinanatanga o te mana wāhine - without the taonga you shared with me, this rangahau would be nothing - tēnā koutou i ō koutou tākoha mai, mei kore ake koutou kua kore ake tēnei rangahau. Being a teina in this space I am humbled by the learning I have had from each of you all. I hope that you see your voices authentically represented in this rangahau, adding to the many spaces you already work so tirelessly in for your whenua, whānau, hapū, iwi, and uri. I hope that this thesis can carry even an ounce of the mana that you each embody daily. I'd also like to make a special mihi to the community of Te Ara Whatu who welcomed me as a teina and have blazed the way as tuakana for Māori and Indigenous rangatahi in climate spaces.

I hold endless gratitude for my supervisor, Bridgette Masters-Awatere, who brought me on board the Haumanu Hauora project. Thank you for your never-ending patience, guidance, and willingness to support me over the course of this journey. I would also like to acknowledge the wider Haumanu Hauora rōpū for being awesome team members to work and learn alongside throughout this research, especially my fellow Masters student Elisha – I appreciated all of our catch ups!

To the financial supporters of this research journey, tēnā koutou! I am deeply grateful for support from the Deep South National Science Challenge, Te Whare Wānanga o Waikato, The Māori Psychology Research Unit and Te Aka Matua - ngā mihi nunui!

E mihi kau ana au ki a Pita me tōku whānau o Te Toi o Matariki - thank you for providing me with a researching whānau, learning opportunities, friendly reminders, inspiration, kawhe, grad room mates and writing retreats, supporting me to be the best kairangahau Māori I can be. An extra special thanks to my friends who have travelled along this research journey with me: Mihiterina - our hangs always got me grounded in my why, sparked the fire and filled my cup; my Community Psychology cohort - we made it! To the rest of my close friends - thank you for the kind words and support regardless of me being so busy and even distant at times!

Lastly, I'd like to extend my mihi aroha to my tane, Māmā, Pāpā, and wider whānau for all the endless guidance, motivation and belief in me through the ups and down of this research journey, for meeting my stress with love and awahi – e kore rawa tēnei puna o te aroha e mimiti mō koutou.

Rārangi Ūpoko | Table of Contents

Ariā Abstract	ii
He Kupu Whakamihi Acknowledgements	iv
Rārangi Ūpoko Table of Contents	v
Tohutaka Glossary	viii
Rārangi Whakaahua List of Figures	xiii
Chapter One: He Tīmatanga Kōrero	1
Researcher Positionality	2
Purpose of Rangahau	3
Chapter Breakdown	4
Chapter Two: Te Tūāpapa o te Rangahau	6
Māori Relationship to the Taiao	6
Indigenous Relationality with the Environment	9
Indigenous Understandings of Climate Change	10
Colonialism and Climate Change Vulnerability	10
Indigenous Approaches to Climate Change	12
Māori Responses to Climate Change	12
Māori Perspectives of Rangatahi	16
Rangatahi Māori Engagement with Climate Change	18
Youth Engagement with Climate Change	20
Whakarāpopoto Chapter Summary	23
Chapter Three: Rautaki Rangahau	25
Kaupapa Māori Research	25
Kaupapa Māori Methodology: Pūrākau Methodology	27
Research Process	28
Recruitment of Rangatahi	28
Rangatahi Participants	29
Whakawhitinga Kōrero	30
Thematic Analysis	31

Case Studies Approach	31
Ethical Considerations	32
Whakarāpopoto Chapter Summary	33
Chapter Four: Ngā Kitenga.....	34
Case Study One: Tiana (Ngāti Kahungunu ki Te Wairoa, Te Whakatōhea, Ngāi Tūhoe, Rongomaiwahine, Ngāti Pahauwera, Ngāti Hineuru, Koroātia)	34
Introduction and Context	34
Rangatahi Changemakers	36
Kaitiakitanga	38
Whanaungatanga-centric Climate Aspirations	40
Colonial Structures Restrictive Grasp on Climate Approaches	42
Case Summary	44
Case Study Two: Eilidh and Hannah (Te Aitanga a Māhaki, Rongowhakaata)	44
Introduction and Context	44
The Influence of Whakapapa	46
Understanding Climate Change as an Intersectional Issue	50
Māori Aspirations Embody Climate Solutions	53
The Nuances of Being a Rangatahi	55
Aspirations for Engaging with Climate Action	59
Case Summary	62
Case Study Three: Julz (Ngāti Whātua, Tainui)	63
Introduction and Context	63
Connecting to the Taiao as a Kaitiaki	63
The Role and Reclamation of Mātauranga Māori for Climate Change Responses	65
The Taiao and Well-being	67
Case Summary	69
Case Study Four: Ameera (Ngāti Whatua Ōrākei, Ngāpuhi, Te Rarawa)	69
Introduction and Context	69
Responsibility to Future Whakapapa	70
Encouraging Rangatahi to Engage	71
Independent and Self-sustaining Climate Solutions	72
Case Summary	74
Whakarāpopoto Chapter Summary	74
Chapter Five: Whakawhānuitanga	76

Section One: Whakapapa Informing Rangatahi Perceptions and Experiences of Climate Change ..	76
Whakapapa Shaping Whanaungatanga With the Taiao	77
Whakapapa Conveying Inherited and Intergenerational Responsibility	79
Whakapapa Aspirations for Climate Change	81
Section One Summary	83
Section Two: Being a Rangatahi in Climate Change Spaces	84
Challenges identified by Rangatahi – Sitting at the Intersections of Marginalisation	85
Exploring Supportive Factors as Identified by Rangatahi Using <i>Te Tapatoru</i>	86
Section Two Summary	90
Whakarāpopoto Chapter Summary	90
Chapter Six: Kōrero Whakakapi	92
Ngā Tohutoro References	95
Ngā ĀpitiHanga Appendices	107
Appendix A	107
Information Sheet for Rangatahi Māori	107
Appendix B	110
Consent Form for Rangatahi Māori	110
Appendix C	112
Interview Guide for Whakawhitinga Kōrero	112
Appendix D	114
Ethical Approval Letter	114

Tohutaka | Glossary

This glossary is based on the researcher's personal understanding of te reo Māori, and *Te Aka Māori-English, English-Māori Dictionary and Index* online dictionary adaption of book developed by John C Moorfield (2005).

Ā-tinana	In person
Ā-wairua	In spirit
Ahikā	Refers to those residing as haukāinga
Ahurea Māori	Māori Culture
Ate	Seat of emotions
Atua (Māori)	Māori gods
Awa	River
Haerenga	Journey
Haka	Performing haka
Hao	Net
Hapū	Sub-tribe
Harakeke	Flax
Hauora	Wellbeing
He Whakaputanga	The Declaration of Independence
Hōhā	Tiresome
Hui	Meeting
Iwi	Tribe
Kai	Food
Kaimahi	Staff
Kaitiaki	Guardian, custodian
Kaitiakitanga	Enacting being a kaitiaki
Kanohi ki te kanohi	Face-to-face

Karakia	Incantation
Kaumātua	Elderly
Kaupapa	Initiative
Kawa	Ceremony, protocol
Kete whakaaro	Fine woven bag
Kirikiroa	Hamilton
Kohu	Mist, fog
Kōrero tuku iho	Oral tradition
Kōrero	Speech, discussion, talk
Mamae	Hurt
Mana	Inherent authority/prestige
Mana motuhake	Autonomy
Manaakitanga	Reciprocal respect and generosity
Manu	Birds
Māoritanga	Māoriness, Māori practices and beliefs
Māra kai	Food garden
Marae	Māori ancestral/communal space
Mātauranga	Traditional and contemporary Māori knowledge
Mātauranga ā iwi	Iwi-centric knowledge
Maunga	Mountain
Mauri	Life force
Moana	Ocean
Mokopuna	Grandchild/children
Ngahere	Forest
Ngāi Tūhoe	Iwi residing in and around Te Urewera

Oko-horoi	Wash basin
Pākehā	New Zealand European
Papakāinga	Communal Māori living
Papatūānuku	Mother earth, the earth surface
Pātaka kai	Food storehouse
Pikau	Backpack
Pōneke	Wellington
Pou	Pillar
Pūrākau	Narratives, ancestral stories
Rāhui	Temporary prohibition
Rangahau	Research
Rangatahi	Youth
Ranginui	Sky Father, the sky
Raranga	Weaving
Rongoā	Māori traditional medicine
Rōpū	Group
Taiao	Environment
Takatāpui	Māori LGBTQ+
Tamaiti	Child
Tamariki	Children
Tangata tiriti	People of Te Tiriti e.g. Pākehā and Taiwi
Tangata whenua	Indigenous people
Tangata/tāngata	Person/people
Taonga	Prized possession
Tauira	Student

Tauiwi	Non-Māori
Tautoko	Support
Te ao Māori	Māori worldview
Te Herenga Waka	Victoria University of Wellington
Te Tairāwhiti	East Coast of Aotearoa
Te Tiriti (o Waitangi)	The Treaty of Waitangi
Te Whare Wānanga o Waikato	The University of Waikato
Teina	Junior positioning in a relationship
Tika	Just, right, to be correct
Tikanga	Māori cultural custom
Tino rangatiratanga	Self-determination, sovereignty
Tīpuna kuia	Grandmother
Tipuna/tīpuna	Ancestor/s
Toi	Māori art
Tohu	Sign
Tuakana	Mentor
Tūhoetanga	Being Tūhoe
Tuoro	Taniwha
Tūranganui-ā-kiwa	Gisborne
Tūrangawaewae	Place of belonging through whakapapa
Uri	Descendant
Urupā	Cemetery
Wāhi	Place/space
Wāhi tapu	Sacred space
Wāhine	Women

Waiata	Song
Waipapa Taumata Rau	Auckland University
Wairua	Spirit
Wā kāinga	True or ancestral home
Wānanga	Forum for discussion or deliberation
Wehi	Act of being in awe
Whakaaro	Thought, idea
Whakamā	Shame
Whakapapa	Māori genealogy or lineage
Whakataukī	Māori proverb
Whakawhanaungatanga	Process of establishing relationships
Whānau	Family, extended notion of family
Whanaunga	Relation
Whanaungatanga	Kinship
Whāriki	Mat
Whenua	Land
Whenua tīpuna	Ancestral land

Rārangi Whakaahua | List of Figures

- Figure 1:** Photograph of Lake Waikaremoana with Panekire on the left **1**
- Figure 2:** Picture of my maunga Panekire shrouded by Hinepūkohurangi **7**

Chapter One: He Tīmatanga Kōrero

Introduction and Context

Born, raised and living in a city five hours away from my tūrangawaewae, the concept of *matemateāone* is a real feeling and concept that I live and breathe. *Matemateāone* is not a kupu that can be found in Māori dictionaries as it is a Ngāi Tūhoe concept that cannot be defined, nor translated into the English language. Experiencing *matemateāone* invokes feelings and *wairua* almost unique to each individual, but what is persistent is the notion of enduring and nurturing relationships between people and the *taiao* which nourishes them (Te Awekotuku & Nikora, 2003) *ā-wairua, ā-tinana*¹; for Tūhoe this is Te Urewera. For me and my whānau especially, this *taiao* and space is Waikaremoana at the heart of Te Urewera.

Figure 1

Photograph of Lake Waikaremoana with Panekire on the left



(Photo supplied by author)

Looking at image above of Waikaremoana invokes *matemateāone* from within me. It figuratively transports me to my whenua, traversing deep into Te Urewera to the base of my maunga Panekire and finally to the shores of our beloved lake, Waikaremoana, which *Hinepūkohurangi* often caresses. Waikaremoana is the *oko-hōroi* of my tīpuna, the home of our tuoro Haumapuhia and holds a spiritual power that connects me to my whenua and whakapapa. Our mighty lake Waikaremoana used to frighten me as a child; I was scared of its depth and darkness of what may lay within it. I understand now that my fear as a child was in fact a sense of *wehi*, an inextricably bound experience of fear and awe all wrapped in one as response to the *mana* of the wāhi. The majestic nature of our moana holds a timeless *mana* and every time I visit, I feel as though it exists out of the Western concept of time, with each moment there feeling like a lifetime within a couple of hours. Regardless

¹ I am only one descendent of Tūhoe so my personal understanding and experience of *matemateāone* cannot be accredited to other uri of Tūhoe or their experiences, it is solely and uniquely my own.

of the number of times we return as whānau to the lake, I always feel a sense of awe, and whenever I leave the same longing returns, gnawing at my ngākau; matemateāone.

Whilst matemateāone invokes awe and longing, it also awakens the trauma and mamae of severed connection. When I feel the pull of matemateāone, I hear the karanga of my tīpuna and I grieve for my whenua, my maunga and moana; it is painful being removed from your wākāinga. The agenda of colonisation and assimilation through urbanisation disrupted the relationship of our whānau to Waikaremoana. In a Tūhoe metaphor, matemateāone is described as knowing “the yearning that Ranginui, the sky father, feels for Papatūānuku, the earth mother from whom he is eternally separated” (Warne, 2016, para. 31). Although our pūrākau of creation is a beautiful one, it is not without trauma. Matemateāone, although a uniquely Tūhoe concept rooted in Te Urewera, is a concept that, in some ways, can be experienced by Māori of any iwi descent. The familiar history of colonisation and living amongst a settler colonial society has its shared experiences. Whether it is missing your kāinga whenever you are away from it, yearning for a whenua which whānau have been displaced from, or grieving for wāhi tapu that have been stolen and desecrated, the concept of matemateāone encapsulates these experiences.

In the past I have reflected on how colonial annexation has played a role in shaping my experience of matemateāone, and as I’ve begun this rangahau journey I contemplated the influence of the climate crisis on this notion. Climate change is one of the most pressing issues of this generation that will have dire impacts on the future of human society. The uncertain health of our taiao invokes a kind of matemateāone, similar feelings of yearning, anxiety, trauma, and grief associated with loss of the whenua, due to climate change. Considering what could occur to my whānau and wākāinga, after everything we’ve already endured through colonisation, the grief I feel of a future that might see the richness of Waikaremoana plundered for profit is both visceral and physical. Colonisation has already stolen much our whenua tīpuna and it is re-traumatising to consider the reality that climate change could strip the land from my mokopuna again, so that they will never fully experience matemateāone on our whenua.

Researcher Positionality

Matemateāone reflects my unique relationship with the environment as Tūhoe and in turn introduces my positioning on the broad topic of research, and climate change. As stated previously, matemateāone sets out a connection to people, and a connection to the land, beyond solely economic or physical need, that is inclusive of cultural notions and socio-political contexts. It is through the positioning of matemateāone, through whakapapa, that I come into conversation with literature on youth, climate change, the taiao, and furthermore, the rangatahi engaged with this

rangahau. This positions me as a researcher who is inherently grounded in my whakapapa, and in turn Kaupapa Māori, which will be explored in further chapters. Whakapapa is highlighted further on as crucial to building whanaungatanga in research contexts, as is my positioning as a rangatahi, thus providing a rangatahi perspective on a rangatahi topic.

Purpose of Rangahau

In 2021, the Intergovernmental Panel on Climate Change (IPCC) released the most extensive scientific work on climate change. They pinpointed the rapidly warming atmosphere and increase of weather extremes as very much human-induced, with rising earth temperatures moving at a faster rate than previously predicted (IPCC, 2021). Largely climate change is framed as an emissions issue, but further analysis attributes capitalism and over-consumerism paved by colonialism as a root cause of climate change (Whyte, 2017).

In Aotearoa, Māori have been identified as more vulnerable to climate change impacts, with losses to culture, mātauranga, and Māori primary industries investments at risk with the rising issue (Climate Change Adaptation Technical Working Group, 2017). Despite this, New Zealand government responsiveness to Māori and climate change has been lacklustre and critiqued by activists and scholars alike (Logan-Riley, as cited in Dunlop, 2021). Deep South Challenge leadership team, made up of Māori and non-Māori scholars, criticised the Draft New Zealand National Adaptation Plan for the lack of action and silence on the depth of climate impacts facing Māori society, and the tokenistic use of Te Tiriti o Waitangi, stating that it “falls well short of genuine partnership provided for under Te Tiriti o Waitangi and could result in further breaches of Te Tiriti” (The Deep South, 2022, p. 5). Whilst studies debate the most efficient and appropriate course of action, it is clear that the literature and research in the field of climate change lack a focus on Māori understandings of the issue, nor do they value Māori contributions (Kanawa, 2010), which is reminiscent of the rangatahi Māori experiences of climate change.

Similarly, youth in Western societies are marginalised and not valued in decision-making due to widespread stereotypes (Orana, 2016; Ritchie, 2021). Common Western views perceive youth as ‘without direction’ and often apathetic towards politics, inclusive of issues such as climate change (Mackay et al., 2020; Orana, 2016). These perceptions have been challenged in the last few years with the rise of youth climate change activism (Elsen & Ord, 2021). In 2018, Swedish teenager Greta Thunberg’s call for youth climate strikes saw a global response, and in Aotearoa we saw the effect of this with youth exercising their political voice through protest, demanding immediate climate action from the New Zealand government (Thomas et al., 2019). Global media and researchers have highlighted Thunberg as the champion of this current wave of youth climate activism (Elsen & Ord,

2021), but this obsession with Thunberg’s activism invisibilises the movements led by different communities (Nissen et al., 2021), including “inspirational youth climate activists who aren’t white, who are indigenous, and who live in the global South, among others” (Weadock, 2020, pp. 87-88).

No one can deny the inspiration that Thunberg has globally, but focussing on her work limits the scope of literature (Neas et al., 2022), and ignores the plethora of examples of Indigenous youth and rangatahi Māori who continue to mobilise and centre Indigenous rights and experiences on climate change (Ritchie, 2021; Mackay et al., 2020), offering a radically different worldview to their Pākehā and Tauīwi counterparts (Nairn et al., 2021). Additionally, youth voice is often misinterpreted by decision-makers (Thomson & Gunter, 2006) and in the instances where rangatahi Māori perspectives are sought out, their voices are often silenced through homogenisation or a lack of analysis focussed on intersectionality and power relations (Kidman, 2018).

Despite the fact that amongst youth climate activists there are many Māori and Indigenous individuals and groups, there is little research that enquires about rangatahi Māori experiences of climate change (Prendergast et al., 2021). That being the case, the aim of this research is to explore rangatahi Māori perspectives, understandings, feelings, responses and aspirations surrounding climate change. By exploring rangatahi perspectives through methods of whakawhitinga kōrero, this research seeks to amplify the marginalised experiences of rangatahi Māori. This thesis will attempt to address the gap in youth climate change literature by delving into the experiences of rangatahi Māori, building their voice and further contributing to the valuable field of Indigenous knowledge on climate change.

Chapter Breakdown

This thesis is inspired by the whakataukī referenced in the title. *Ka pū te rūhā, ka hao te rangatahi* which literally translates to; “When the worn-out net lies in a heap the new net goes fishing” (Te Aka Māori Dictionary, n.d.). Metaphorically, the whakataukī refers to ushering in the next generation of leaders, namely our rangatahi (Black, as cited in Murray, 2018), aligning to the aim and topic of this thesis. This imagery of weaving a new hao can further be used as a metaphor to explain the process of this thesis, with each chapter embodying a stage of the raranga process. The end goal is to weave together a hao that is symbolic of the experiences and understandings of rangatahi Māori within the intergenerational context of the whakataukī.

Chapter Two: Te Tūāpapa o te Rangahau | Literature Review – The literature review forms the foundation of this thesis, critiquing and discussing relevant rangahau to highlight any gaps or key areas of development. The literature review covers the following key areas scholarship that have

informed this thesis: Māori and Indigenous relationships with the environment, Indigenous understandings of climate change, Māori responses to climate change, rangatahi Māori literature, and youth engagement with climate change. Largely Māori and Indigenous work was explored prior to seeking out other work to amplify Māori and Indigenous understandings of the topics.

Chapter Three: Rautaki Rangahau | Methodology and Methods – Outlined in Chapter Three are the methodological approaches considered throughout the research process. The application of Kaupapa Māori principles, and further Pūrākau methodology will be explained. Further practical steps of the research process are detailed, including recruitment, whakawhitinga kōrero methods, and analysis choice.

Chapter Four: Ngā Kitenga | Presentation of Findings – This chapter presents the whakawhitinga kōrero post analysis through four different case studies. The case studies present each of the individual rangatahi kōrero, introduce each of the rangatahi, and share the themes developed surrounding the research topic.

Chapter Five: Whakawhānuitanga | Discussion – Chapter Five builds further upon the findings presented in the rangatahi case studies, by looking across the narratives and literature to weave together the understandings to further explore the research questions in depth.

Chapter Six: Kōrero Whakakapi | Conclusion – The conclusion summarises the findings woven throughout this thesis and reiterates the implications and key messages.

Chapter Two: Te Tūāpapa o te Rangahau Literature Review

The following chapter, a phase of wānanga, examines the different contexts that this rangahau sits within. This includes the interrogation of academic literature and non-academic sources related to the research topic in order to highlight the context that has shaped the research questions of this thesis. Throughout the review of literature, Māori and Indigenous literature was actively prioritised above other work (which in some cases has been actively excluded) in accordance to Kaupapa Māori research approaches (Smith, 1999; Smith 1997). Whilst this chapter endeavours to explore all relevant literature, it is important to acknowledge the restraints of this thesis in allowing for a comprehensive recognition of the interconnected nature of the research topics.

Each area of knowledge has been examined within their relationships and connections to one-another- and also to the research topic. Māori and Indigenous knowledge bases regarding the environment and climate change have been examined to establish understandings that underpin the research aim and questions. The interrogation of Māori and Indigenous research, theories and responses to climate change is foundational to moving into rangatahi Māori understandings and experiences of climate change. Further, in this chapter, te ao Māori perspectives of rangatahi are explored, interrogating an understanding of what being a youth means in Māori context. As pointed out in this section, the literature on this topic highlights colonial views of rangatahi exist. In addition, limited published rangatahi Māori perspectives of climate change are explored, which is then contrasted by the significant amount of literature aimed at exploring youth engagement in climate change. Each of these areas are examined to highlight established perspectives on the key topics, to then contrast or align to rangatahi Māori experiences. Finally, this chapter presents the key research questions that guide this thesis, which are developed largely from the gaps present in literature that will become evident throughout this chapter.

Māori Relationship to the Taiao

Hiki ake te kohu e

Ko Hinepūkohurangi

Tāpapa ana ki ngā kōawa

Hei kākahu mō Papatūānuku

Ka hora nei te moenga

Mō te tipua nei a Te Maunga

Ki runga o Ōnini e

Ka hono ki a Hinepūkohurangi

Hurainga ko ngā rarauwhe

Kia puta ko Ngā Pōtiki

Ngā uri o Te Maunga

Ngā Tamariki o te Kohu

(Melbourne, 1999)

Figure 2

Picture of my maunga Panekire shrouded by Hinepūkohurangi



(Photo supplied by author)

This waiata was written by esteemed Tūhoe composer, Hirini Melbourne, and it shares the pūrākau of how Ngāi Tūhoe came to be known as *Ngā tamariki o te kohu*. This pūrākau can be seen at the core of Tūhoe’s distinctive relationship with Te Urewera (Tūhoe, n.d.). As the waiata goes, Hinepūkohurangi is the atua wahine of the kohu, or maiden of the mist, and like Melbourne’s (1999) waiata recites, she joined in union with Te Maunga. From this union came Ngā Pōtiki, ngā tamariki o te kohu or the ‘descendants of the mist’, the iwi later to be known as Ngāi Tūhoe (Melbourne, 1999). This tīpuna knowledge shared through waiata and oral pūrākau illustrates the cosmological beginnings of Ngāi Tūhoe through whakapapa to the ‘beyond-human’ (Mika, 2021) atua that personifies the mist, and Te Maunga, our relationship to the natural world is therefore familial. The knowing of this whakapapa is crucial to Tūhoetanga entrenching our belonging in Te Urewera as genealogical (Higgins, 2004).

Māori cosmology, much like the referenced Tūhoe pūrākau, is key to understanding the unique relationship Māori have with the land and environment (Wareka, 2020). “From a te ao Māori perspective, the understanding of ecosystems starts with whakapapa which means humans are therefore, intrinsically linked with biodiversity”. Whakapapa, much like how Wilson (2008) describes

relationality, is central to Māori ontology and epistemology, “the skeletal backbone to our knowledge system is whakapapa” (Tau, 1999, p. 15). Roberts (2013) asserts that whakapapa as epistemology acts to hold mātauranga, tangible environment based knowledges, and through esoteric knowledge of origin allows us to understand the world around us. As a ‘relational ontology’ whakapapa is described as a ‘explanatory framework’ for the world around us, including our place as Māori alongside everything else (Mahuika, 2019). By knowing whakapapa through pūrākau, we also inherently recall kawa embedded within it.

Understanding the pūrākau shared in the *Ngā Tamariki o te kohu* (Melbourne, 1999) waiata is an example of the intertwined nature of whakapapa and kawa. As explained, our whakapapa as Tūhoe to Hinepūkohurangi establishes being tangata whenua of the rohe, but it leaves behind kawa that goes with this. The pūrākau prompts us to remember that Hinepūkohurangi is our tīpuna kuia and therefore provokes us to continue to act in relationship with our environment, leaving direct instruction to treat the taiao like relatives. A Tūhoe expression of this kawa is matemateāone, embodying the ‘deep affection’ we have within our relationship to one another and the whenua (Higgins, 2004); and it is by that affection that we inextricably bound to responsibility for our people and our land.

For the rest of Ngāi Māori, our whakapapa descends us to from the primordial parents, Ranginui and Papatūānuku, who are the atua personified by the sky and the earth beneath our feet. Papatūānuku is considered a “living organism with her own biological systems and functions creating and supplying a web of support systems for all her children whether man, animal, bird, grass, microbes or insect” (Royal, 2003). Therefore, our whakapapa connection to the atua, such Hinepūkohurangi and Papatūānuku, intrinsically connections Māori with the environment around us, and requires our actions to reflect that. Māori environmental ethics are derived from kawa and tikanga (Harmsworth & Awatere, 2013), which are informed by this whakapapa connection that further resides at the core of the relational outset of a Māori worldview (Rangiwai, 2018).

The intrinsic whakapapa connection to, and therefore the importance of, the taiao and whenua is embedded in our cultural knowledges (Mead, 2006) and it is through kawa and tikanga that these values are practiced. ‘Cultural mechanisms’ (Mead, 2006) much like tikanga, practices, whakataukī, waiata, pūrākau, or the expression of matemateāone, often hold eco-centric epistemological positioning (Wareka, 2020). These practices ensure the transmission these values, and the longevity of the environment, from generation to generation, and are therefore central to understanding the importance of the taiao to Māori identity (Koroi, 2021). Understanding that a Māori relationship to

the taiao is whakapapa based is foundational to discussing Māori environmental responses, and further the impacts of climate change for iwi, hapū and whānau Māori.

Indigenous Relationality with the Environment

Broadening this lens to look to global Indigenous Peoples, there is a certain affinity to that of a Māori relationship to the environment. Across many Indigenous cultures the roots of relationality with the environment reside in cosmology, much like Māori, where “Indigenous cosmologies in general are holistic, conceptualising the entire universe; that all beings animate and inanimate, belong to an all-encompassing genealogy; that beings are not framed into rigid categories, and are purposeful beings in their own right” (Wareka, 2020, pp. 26-27). Holistic Indigenous cosmologies sit at the crux of Indigenous worldviews as shaping Indigenous relationships with the world around them (Pasisi, 2019; Kimmerer, 2013).

In his book, *Research Is Ceremony* (2008), Wilson describes a vision he once had in which he was a part of a web of connected points of lights, a web of relationships and connections. He uses this vision to illustrate Indigenous relational ontology, in which our reality is the relationships we have with everything in existence. Wilson (2008) discusses how this ‘relational way of being’, and seeing, is central to the ontology of being Indigenous, through our familial relationships with communities and non-human things, and relationship with the land and environment.

This Indigenous relational way of viewing everything and the environment is described by Winter (2020) as ‘eontology’, which ontologically does not distinguish living from non-living, seeing everything, including humans and ecosystems, as interconnected. This Indigenous way of being is further positioned as an anti-thesis to the “colonial and capitalist understanding, structure and practice” (Winter, 2019, p. 286) that positions nonhuman entities as resources to be violently exploited (Wareka, 2020). Highlighting ‘eontology’ as a ‘relational way of being’ shapes Indigenous environment ethics and further presents a worldview that doesn’t treat environment as a commodity (Johnson et al., 2022). Indigenous environmental ethics, including the preservation of and care for the environment, are therefore ontological notions irremovable from Indigenous ways of being (Kimmerer, 2013).

As a result of relational ontology, land and the wider environment is integral to the “identity, well-being and culture” of Indigenous Peoples, and is transmitted generation to generation (Department of Economic and Social Affairs, 2021, p. X). Furthermore, the integral nature of the environment is discussed as ingrained in Indigenous epistemology (Johnson et al., 2022) The generation of knowledge is derived from being in relationship with all natural things, but also with time, ideas,

values, languages, histories or spiritualities (Friedel, 2015; Wilson, 2008). This framing of Indigenous epistemology allows Indigenous knowledge to be co-constructed with non-human relatives, the environment included and is referred to in literature as Traditional ecological knowledge (TEK) (Wildcat, 2013). TEK is very much located within an econtological view, strongly grounded in relationship with the environment and is widely referred to within sustainable and climate related literature as uniquely Indigenous knowledge (Whyte, 2017; Wildcat, 2013).

Indigenous Understandings of Climate Change

In understanding Indigenous Peoples' relationships with the environment, it is important to note the Western perspective that was briefly touched on prior (Wareka, 2020). The anthropocentric perception of the West relies on the assumption that all things in nature sit separately from humans, therefore not responsibility of human society (Chakrabarty, 2016). With these obvious ontological differences in how the environment is viewed infers an inherent difference in how Indigenous Peoples experience and understand climate change, yet, overwhelmingly climate change is consistently framed within in a Western approach, as Jones (2019) observes:

One of the striking observations about globally dominant approaches to climate change is the centrality of Western worldviews, philosophies, epistemologies, values, and knowledges in framing the issues and defining the solutions. Indigenous knowledges and values have been systematically devalued and silenced in global research, policy and advocacy. (pp. 76-77)

The systemic exclusion of Indigenous Peoples and knowledges from climate change approaches is hugely problematic as climate change intersects with many challenges Indigenous Peoples face, and further, continue to maintain power imbalances facilitated by ongoing colonialism (Johnson et al., 2022). In light of this, rather than further centring the dominant Western knowledges and framings of climate change, this section aims to prioritise Indigenous understandings of climate change.

Colonialism and Climate Change Vulnerability

Indigenous scholars establish that Indigenous Peoples have long lived harmoniously with natural climatic changes, adapting alongside the environment by utilising TEK (Whyte, 2017). Indigenous Peoples began to experience drastic human induced climate change with the arrival of colonial settlers during the imperial era, contributing to the oppressive powers of colonisation (Wildcat, 2009). Yet, the West frames climate change as an unprecedented 'apocalyptic' experience of anthropogenic environmental change (Whyte, 2020). This Western framing of climate change erases Indigenous experiences, and further highlights inaction at the plight of Indigenous Peoples, wherein

“if we had listened to the first cries of injustice at the hands of settler-colonialism, we would not have had to wait until settler populations were in harms way before deciding to act [about climate change]” (Koroi, 2021, p. 25).

In a sense, Indigenous Peoples have already ‘survived the apocalypse’ (Gross cited in Whyte, 2017, p. 159) which involved the colonial destruction of Indigenous civilisation: “Since the colonial project began, we have been overcoming an apocalypse on our lands; this has embedded patriarchy, homophobia, ableism, transphobia, white supremacy and systemic oppressions in our national and international mechanisms” (Sherwood cited in Grosse & Mark, 2020, p. 151). This apocalypse includes the introduction of the ‘nature-cultural dichotomy’ (Roberts, 2013), promoting the annexation of Indigenous land and violation of natural resources at colonial hands. The disruption of carefully respected ecosystems further resulted in the loss of indigenous spiritual and practical knowledge bases derived from relationship with the environment, as Whyte illustrates, “colonialism has always included terraforming that tears apart [...] the “flesh” of human-nonhuman-ecological relationships” (Whyte, 2017, p. 159).

Across literature, Indigenous Peoples are referred to as vulnerable populations to the impacts of climate change whilst continue to be excluded from mainstream responses to climate change, as established (Jones, 2019; Whyte 2018). Indigenous climate change scholarship affirms the necessity of understanding Indigenous Peoples lived experience of colonisation to address Indigenous vulnerability to climate change, as colonialism continues to impact the resilience of Indigenous communities (Whyte, 2018; Johnson et al., 2022). When climate change policy, adaption strategies and responses refuse to acknowledge colonialism, the systemic roots of Indigenous Peoples vulnerability to climate change is ignored and not adequately addressed (Johnson et al., 2022). Furthermore, colonialism is clearly highlighted as paving the way for the behaviours, practices and attitudes that sustain climate change (Whyte, 2017).

Further problematic outcomes of dominant climate change responses is the notion of crisis, coined as ‘crisis epistemology’ (Whyte, 2020). The unprecedented framing of climate change allows for the “suspension of the considerations of ethics and justice” when settler colonial governments pursue climate action (Whyte, 2020, p. 56). Underlying this urgent action there is often direct and indirect harm at the detriment of Indigenous communities. For instance, Koroi (2021) shares the experiences of displacement of their people from their whenua, historically and contemporarily. Historically their relationship with the environment was disrupted by the colonisation of their land by settlers, and contemporarily their land has been dispossessed in the name of sustainability (Koroi, 2021). This

demonstrates that Indigenous Peoples are vulnerable to the impacts of climate change, and are further vulnerable to climate change responses, policies and approaches that exclude them.

Indigenous Approaches to Climate Change

In response to the failures of Western settler responses, Indigenous led responses to climate change is a growing field of scholarship that demonstrates the diverse realities and knowledge bases of Indigenous communities. In comparison to a scoping review of all Indigenous responses to climate change, the purpose of this section is to highlight key points present across Indigenous climate literature as to what makes up the foundation of Indigenous approaches to climate change.

As established, Indigenous ontologies, in comparison to a Western worldview, facilitates a set of values entrenched in reciprocal care for the environment, therefore encouraging climate adaptation and mitigation (Johnson et al., 2022). These values, combined with Indigenous knowledges, creates climate responses that re-establish Indigenous practices that bring renew our relationships with the environment (Whyte, 2017; Kimmerer, 2013), which were disrupted through colonisation.

As proven, viewing climate change through an Indigenous position locates anthropogenic climate change rooted in colonisation (Whyte, 2018). Therefore, an Indigenous approach to climate change is inherently a critical and decolonial approach that demands that climate responses mitigate the structures of oppression, embedded by colonialism (Johnson et al., 2021; Johnson et al., 2022). This approach envisions intersectional transformation within society, beyond the narrow scope of dominant Western adaptation attempts (Johnson et al., 2022), and reimagines indigenised futures, outside of colonial realities (Whyte, 2017). The promotion of Indigenous climate change approaches requires the regeneration and application of Indigenous knowledge, therefore, asserts the need for self-determination amongst Indigenous communities' (Whyte, 2018; Johnson et al., 2022).

Indigenous-led approaches and research on climate change is required to see the flourishing of Indigenous communities. Further research is deemed necessary, delving further into lived experiences of broader Indigenous identities, much like age, gender and sexuality (Vinyeta et al., 2015). Exploration of these narratives will allow for deeper and more nuanced understandings to guide Indigenous aspirations and approaches (Johnson et al., 2022).

Māori Responses to Climate Change

Climate change is unsettling our long-established relationships with our taiao, our whakapapa, our place-based kōrero tuku iho, and therefore our culture. Our spirituality is suffering also threatening our lifeways. In this light, it is possible to view climate change as a

further manifestation of colonisation and ongoing subjection of Māori and other indigenous peoples. (Morrison & Kaio, 2021, Mātauranga in climate change research section)

As indicated by the quote above, Māori are positioned within the colonial context that is referred to across Indigenous climate change literature. This context includes: vulnerability influenced by colonisation (Whyte 2021; Johnson et al., 2022); the dominance of non-Indigenous responses to climate change (Jones, 2019; Johnson et al., 2022); the need for Māori and Indigenous self-determination in developing adequate climate approaches (Whyte, 2017; Johnson et al., 2022); and the need for further research exploring climate change through the lens of many diverse realities of Indigenous identities (Vinyeta K et al., 2015).

As identified by King et al. (2010), prior to 2010 limited research had been conducted into Māori concerns related to climate change, framing climate change as an emerging field. Looking to formative texts, Māori recognised climate change as a pressing and significant issue for their communities (Te Aho, 2007), largely focussing on the fact that “climate change will exacerbate many of the difficulties and disparities already faced by Māori” (King et al., 2010, p. 109). Māori priorities and concerns regarding climate change were identified early on, highlighting the importance of honouring te Tiriti o Waitangi through relationships and policy, and further, the need for resourcing of Māori-centric climate change tools, information (Ministry for the Environment, 2007), and Māori research (King et al., 2010).

Awatere et al. (2021) describes the slow development of Māori climate change scholarship as a ‘research lag’, caused by the host of inequities that generate barriers for Māori to adequately respond to climate change in research contexts. Although this is the case, research is catching up to Māori led climate action that has occurred over the years. Whether related to land rights, environmental sustainability, food sovereignty or Māori and Indigenous rights, Māori communities have been mobilising for the climate a long time (Smith, as cited in McConnell, 2022). To name a few kaupapa that can be considered climate action: Parakore Inc², Protect Ihumātao campaign³, Te Puanga Maara rangatahi taiao innovator collective⁴, legal personhood of Te Urewera and Whanganui awa (Te Urewera Act 2014; Te Awa Tupua (Whanganui River Claims Settlement) Act 2017), Ngāti

² <https://www.parakore.maori.nz/>

³ https://www.youtube.com/channel/UCYHrEcrVV_E2KceZXOUQ3Hg

⁴ <https://puangamaara.wixsite.com/tpnm>

Ruanui protesting offshore oil exploration⁵ and the Wai 2347 and 2607 climate change claims (Pirini & Morar, 2021). Over recent years, iwi driven responses to climate change have led to the development of climate change strategies and frameworks; including, but not limited to, iwi such as Ngāi Tahu, Te Arawa and Ngāa Rauru Kaitiaki⁶.

This 'lag' is furthermore described as forcing Māori to generate research within the 'shallow' and dominant Western priorities and approaches to climate change (Awatere et al., 2021; Koroi, 2021). Looking across Māori climate change scholarship, largely this research fits into mainstream government driven framings of climate change, climate vulnerability, risk and impact assessments (Ministry for the Environment, 2020), alongside adaptation and mitigation approaches (see *National Adaptation Plan* (Ministry for the Environment, 2022b); *Emission Reduction Plan* (Ministry for the Environment, 2022a); New Zealand emissions trading scheme (Ministry for the Environment, n.d.)). These approaches are largely translated for the Māori community context within Māori climate change research. Māori research includes mitigation and adaptation approaches contextualised for iwi catchments and Māori primary industry-based economies to reduce carbon emissions and respond to climate change policy (McMillan et al., 2021; Awatere et al., 2018; Landcare Research, 2012). Further research explores localised assessing of climate impacts and vulnerabilities of wāhi tapu (Warmenhoven et al., 2014), much like marae and urupā (Bailey-Winiata, 2021), or Māori land (Smith, 2020; Smith et al., 2017) using a Kaupapa Māori and Mātauranga Māori lens. An additional interest is the vulnerability of Māori health outcomes to the impacts of climate change.

Often discussed across Māori literature is that current Māori health disparities are at risk of being exacerbated by climate change (Jones et al., 2014; Brett-Stephenson, 2012). The connections between Indigenous people, health, and place that have been disrupted by colonialism, are further weakened by climate change impacts (Jones, 2019; Johnson et al., 2021). As Jones (2019) asserts, land is a crucial determinant of the health, wealth, identity and culture of Indigenous Peoples. Western framings of climate change highlight 'tangible components' of health risks such as illnesses, mental health, and diseases that will be impacted (Jones et al., 2020; Jones et al., 2014). But biomedical understandings of health fail to recognise the full extent in which climate change will impact Māori health and wellbeing (Johnson et al., 2021), as Māori holistic aspects of health such as

⁵ <https://www.stuff.co.nz/taranaki-daily-news/news/107671692/groups-opposed-to-seabed-mining-plan-prepare-to-go-back-to-court>

⁶ Ngāi Tahu <https://ngaitahu.iwi.nz/wp-content/uploads/2018/11/Ngai-Tahu-Climate-Change-Strategy.pdf>; Te Arawa <https://tearawa.io/wp-content/uploads/2021/09/RS03642-Ta-Arawa-Climate-Change-Strategy.pdf>; Ngāa Rauru Kaitiaki <https://environment.govt.nz/assets/publications/ngaa-rauru-kaitiaki-climate-change-strategy.pdf>

spirituality, and identity will be largely impacted (Ministry for the Environment, 2020). The continual radical degradation of land and environment will see further disruption to Māori cultural practices, cultural identity, and furthermore Māori collective well-being (Morrison & Kaio, 2021; Jones et al., 2020).

A key piece of literature contributing to translating climate tools and approaches for Māori communities is the 2021 Ngā Pae o Te Māramatanga and Manaaki Land Care report *He huringa āhuarangi, he huringa ao: A changing climate, a changing world* (Awatere et al.). The purpose of this report was to provide specialised climate mitigation guidance for Māori governance structures including, whānau, hapū, iwi and also Māori businesses through a Kauapapa Māori adaption of the established *National Climate Change Risk Assessment* (NCCRA). This tool allows for deeper analysis of climate risks facing Māori communities within our contexts, which was not explored greatly in the initial NCCRA. Building on proceeding Māori scholarship, the report provided context and examples of assessments across four priority areas to Māori: He Kura Taiao (Living treasures), Whakatipu rawa (Māori enterprise), He Oranga Tāngata (Healthy people), Ahurea Māori, tikanga Māori (Māori culture and practices). The report echoed the sentiments of earlier scholarship recommendations and concerns for Māori communities, highlighting the unique challenges and vulnerabilities of Māori inclusive of our cultural infrastructure (King, 2010).

Further Māori climate literature offers guidance as to how to ensure climate change approaches equitable for Māori. Bargh's 2019 work, *A Tika Transition* commands that climate change responses and transitions to low emissions society must have a foundation in Māori tikanga to ensure a 'tika' approaches that are inclusive of Māori aspiration and worldviews (Bargh, 2019). This work highlighted the following aspects of tikanga as guiding points to lead to equitable adaption approaches: whanaungatanga (relationships), kaitiakitanga (environmental guardianship), utu (balance), mana (authority), and tapu (a spiritual aspect to all things). Additionally, Bargh explained that te Tiriti o Waitangi, and further, the articles of the United Nations Declaration on the Rights of Indigenous People (UNDRIP) can support facilitating climate approaches responsive to Māori (2019). Similarly, Jones et al. (2014) discusses the need to remedy climate change, and also health issues, through a human rights framework, such as UNDRIP, to ensure that equitable results are the outcome of climate responses.

An additional value-based publication is the recently commissioned *Rauora Indigenous Worldview Framework* (Rauora framework) (Ihirangi, 2022). Commissioned by Ministry for the Environment to sit alongside *Aotearoa New Zealand's first national adaptation plan* (2022b), the purpose of the Rauora framework is to encourage transformative strategies through acting as mātauranga-centric

guidance for both Māori communities and national climate change responses. The framework itself is an aspirational framework that proposes radical climate approaches through the application of an Indigenous lens, inclusive of ‘Hoki Whenua Mai’, ‘Advance Constitutional Transition to reaffirm Te Tiriti o Waitangi’, ‘Manaaki mātauranga Māori’, and ‘Divest from extractive industries and other demonstrably problematic practices’ (Ihirangi, 2022). The Rauora framework (Ihirangi, 2022) is a comprehensive way of framing climate change through a Māori lens, providing direction in how Māori may approach climate change, and further contributing to diversifying and expanding literature on how Māori understand climate change.

This theorising by Māori researchers yet to have an influence on mainstream climate change approaches, but the growing field of Māori literature on climate change all points in a similar direction. New Zealand government climate change policy and strategies have progressed, but unfortunately, reviewing Māori-centric climate change literature underwhelmingly reveals that mainstream mitigation approaches do not encapsulate Māori concern and priorities or utilise mātauranga Māori well, demonstrating they are not well developed to serve Māori communities. The capacity of Māori communities to produce climate change responses was identified to the government as an issue (King et al., 2010). But, lack of proactive action from government agencies has left Māori behind, translating mainstream approaches for Māori communities to be useful within our unique Māori context (Awatere et al., 2021), rather than resources supporting the creation of Māori-centric approaches and solutions.

Overwhelming, the growing field of Māori climate change literature highlights that Māori must be at the forefront of climate change responses if we wish these solutions to meet Māori needs (Ihirangi, 2022). Literature states the importance of the incorporation of mātauranga Māori, Māori values, ways of understanding, and tino rangatiratanga (Bargh, 2019; Ihirangi, 2022). To ignore the need for Māori rangatiratanga over climate approaches will exacerbate current inequities and create even further inequity embedded in climate responses (Johnson et al., 2022). The exploration of Māori climate change literature pinpoints the necessity for more Kaupapa Māori research, including research that examines the diverse understandings of tangata whenua to expand on Māori ways of understanding climate change and further, support the growth of Māori-centric approaches to climate change.

Māori Perspectives of Rangatahi

Ka pū te rūhā ka hao te rangatahi (Black, as cited in Murray, 2018),

Ka haere te mātātini, ka noho te mātāpuputu (Mead & Grove, 2003, p. 153);

Tā te tamariki, tāna mahi he wāwāhi (Mead & Grove, 2003, p. 363)

The whakataukī opening this section speak to Māori precolonial perceptions of rangatahi and tamariki. Each of the whakataukī can be metaphorically interpreted to discuss the role of youth as challenging the conventions of society, taking risks, and boldly taking steps into (Mead & Grove, 2003). Shifting to more contemporary perceptions of rangatahi, a whakataukī that is relevant is credited to esteemed leader within te ao Māori, Dame Te Atairangikaahu, “Kei te huri te ao, ki te kore taatou e aro atu ki te rangatahi me oo raatou whakaaro, ka noho taatou ki roto i te poouri i ngaa raa o nehe” (Tapiata et al., 2020, p. 188). This kōrero speaks to the importance of paying attention to the voice of rangatahi, for without the ideas of rangatahi we are left living ignorantly in the past⁷ (Tapiata et al., 2020). Exploring this kōrero, it echoes the sentiment that if we are to ignore our rangatahi we are going to be stuck in the past.

To elaborate more on precolonial perceptions, it is considered that youth and children were invested in from an early age to as they were recognised to carry the mana of their tīpuna (Moss, 2021; Page & Rona, 2021). Herewini explains that within te ao Māori, “the child is not just an individual, but they are the physical manifestation of aeons and aeons of ancestors, and embody the achievements of those who have gone before them” (Herewini, 2018, p. 8), imposing the importance of rangatahi due to whakapapa. The notion of whakapapa allows us to understand rangatahi as reflections of their tīpuna (Burgess & Painting, 2020).

A Māori worldview illustrates rangatahi as future leaders and ancestors full of potential, which is fostered within intergenerational collectives (Hamley & Le Grice, 2021). Furthermore, Moss (2021) when discussing rangatahi Māori leadership, draws on literature that describes youth leaders as key stakeholders of their communities that challenge action in the pursuit of needs. Youth perceived as leaders is not commonly acknowledged but, as Tawhai (2016) explains, rangatahi leadership in te ao Māori isn't an unfamiliar concept. Furthermore, Tawhai draws on the examples of predominate leaders in our Māori history, Whina Cooper, Apirana Ngata and Ngā Tamatoa (to name a few) whose activism and roles in political change began during their time as rangatahi. Tawhai (2016) goes on to state that rangatahi Māori are ‘decolonisation agents’ of right here and now, and furthermore explains that ‘adult-centric’ lens that views rangatahi as anything less than that can be considered a colonised perception of rangatahi.

⁷ English interpretation by researcher

These precolonial perceptions of rangatahi are largely contrasted by the current society, which Kidman (2018) describes, does not place value on rangatahi, as the power balance favours adult. The rich history of rangatahi political changemakers is also contrary to the stereotype that youth choose to not speak up, or that youth are apathetic when it comes to politics (MacKay 2020), with further colonised perceptions underestimating rangatahi as “passive learners rather than active contributors” (Thew et al., 2020, p. 3). Regardless of the colonial perceptions of rangatahi, youth voice is often very much desired in many sectors of settler colonial New Zealand, but the methods of seeking youth voice are often tokenistic in nature, or these voices are manipulated for adult agendas (Kidman 2018). Further critique of gathering authentic youth voice is the erasing of rangatahi Māori and other minorities through the lack of attention to power intersections within groups of youth (Kidman, 2018). This is systemic, as both Nairn et al. (2021) and Tawhai (2015) recognise, privileged youth in Aotearoa are often taken more seriously and included more in political processes more than less privileged and ‘radical’ youth. Amongst the Kaupapa Māori literature exploring authentically engaging with rangatahi voice and aspirations, the importance of reciprocal and power mitigating relationships are presented through models such as Te Tapatoru (Hamley et al., 2022) and concepts like ‘Self-determining pedagogy of relations’ (Berryman et al., 2017).

Although studies do show rangatahi Māori participate less in Western democratic systems (Tawhai & Cheyne, 2009), further research explains that Māori “youth disengagement from traditional political systems does not equate to youth apathy or lack of interest in politics” (Tawhai, 2015, p. 511). Instead of traditional Western participation there is a rise of rangatahi Māori mobilising through the creation of online networks, which allow for rangatahi to create inclusive movements that act as forums to hold those in power to account (Tawhai, 2015; Waitoa et al., 2015). Additionally rangatahi models of wellbeing highlight rangatahi potential that authentically centre rangatahi insights, With these perspectives in mind, this thesis upholds the precolonial, Māori-centric lens of viewing rangatahi as “insightful, creative and have solutions for transformative change now, as well as future aspirations for their whānau” (Page & Rona, 2021, para 1; Tawhai, 2016).

Rangatahi Māori Engagement with Climate Change

Little scholarship has examined both Indigenous and Māori youth experiences of climate change. Yet, there is a growing field of literature exploring youth engagement in climate change including youth attitudes and motivations to participate in climate activism, how youth perspectives can contribute to understanding climate change, and psychological and social impacts of climate change on youth (Prendergast et al., 2021; Thew et al., 2022; Haugestad et al., 2021; Thomas et al., 2019; Nissen et al., 2021). Although Indigenous youth are largely excluded from literature, they have been

advocating for the environment for a long time through activism and other means (MacKay, 2020), much like Māori responses to climate change. As such, rangatahi Māori articulations of climate change is not largely found in literature. Hence, the following section includes rangatahi articulations of climate change across a range of material sourced from various online spaces.

The limited literature that does explore Indigenous youth and climate change points out that rangatahi are leading the way through “already having conversations about decolonization and linking fights for true self-determination with fights for climate justice” (Grosse & Mark, 2020, p. 151). This comment is true for rangatahi Māori, with rangatahi mobilising for climate change without failing to centre tino rangatiratanga. Gifford (2021) refers to two clear examples of rangatahi mobilisation, the Protect Ihumātao rangatahi led occupation campaign (Tibble, 2019) and the Te Ara Whatu⁸ rōpū with their commitment to frontline climate activism. Both of these rōpū have had strong representation across media, and have been referred to within literature (Nairn et al., 2021; Ritchie, 2021).

Delving into published whakaaro of rangatahi Māori, the whakapapa of climate change is often touched on. In an unfiltered essay published in a university students’ magazine, Rachel Trow shares how Māori experiences of grief associated with climate change intersects with the historic environmental injustices associated with colonisation:

Environmental grief is real and it’s not just a Millennial conspiracy. From our tīpuna to our tamariki, grief does not discriminate. If the whenua that your tīpuna belonged to—the whenua you belong to—was stolen in the name of a distant monarch or of corporate greed, you’d be pretty sad about it too. And, because dealing with the grief of colonisation wasn’t enough, we now have to watch the climate crisis harm the mauri of the whenua and the waters we have called home. (Trow, 2019, p. 10)

Haylee Koroī expressed a similar sentiment, whereby climate change has become an issue for not only people currently, but it was also an experience her tīpuna encountered through colonisation (Hura, 2019). Koroī states: “Human-induced climate injustice has been enacted on my tīpuna for centuries. Climate change to me represents the progressive erosion of our whakapapa... through colonisation, we’ve been experiencing the symptoms of climate crisis for generations” (Koroī, as cited in Hura, 2019, para. 10)

⁸ Te Ara Whatu is a Māori and Pasifika youth led collective advocating for Indigenous rights and sovereignty within climate action

This intersectional understanding of how climate change has been established and continues to be upheld is further expressed by Māori and Indigenous rangatahi activists, and global activists (Grosse & Mark, 2020), through the concept of climate justice: “Climate justice recognises the oppressive power structures that have contributed to the causes of climate change and their intersectional relationship with other challenges that our communities face: gender violence, food sovereignty, cultural integrity and land threats” (Te Ara Whatu, n.d., para. 6) This quote clearly points to the need for intersectional solutions that target existing power structures and reinforces comments that require Indigenous leadership in adequate climate change solutions because: “Indigenous peoples, our knowledge holds the solutions to addressing this climate crisis. We don't create the climate crisis but we have the solutions to fix the climate crisis” (Radio New Zealand, 2021, para. 6).

When examining Māori and Indigenous youth engagement in climate change, a commonly recorded site of involvement is the youth delegation attendance to the annual United Nations Conference of the Parties (COP). Te Ara Whatu, referred to earlier, was the first Māori and Indigenous youth delegation to attend the COP forum from Aotearoa, attending COP to “push for solutions that centre the needs of our peoples, to act in solidarity with our indigenous whanaunga from around the world and learn from experts in the kaupapa” (Te Ara Whatu, n.d., para. 2). In the words of a Te Ara Whatu delegate Nakia Randle, COP is not a space that embraces Indigenous Peoples, nor Indigenous youth:

We show up so that there's an indigenous and in particular, indigenous youth, presence in the space because climate change impacts us, our communities, the first and the hardest, a lot of the time... It's kind of that idea of 'nothing about us without us' - and all this climate change decision making is a lot about us. But the process excludes us essentially. (as cited in Huffadine, 2019, para. 5)

This description of COP as an unwelcoming space for Indigenous Peoples, including Indigenous youth, is evidenced in literature; as Grosse and Mark (2020) explain, Te Ara Whatu attending COP adds to the many Indigenous groups that choose to attend COP with the aim to have more Indigenous voices at the decision-making table. Koroi articulates this systemic silencing of Indigenous Peoples in climate change forms metaphorically, wherein “[Indigenous Peoples are] being asked to gather around the fire that someone else has lit (after they've systematically gone about putting my fire out for generations) and then asking me to help them stoke it” (Hura, 2019, para. 5), highlighting the tokenistic inclusion of Indigenous Peoples in forums.

Youth Engagement with Climate Change

Recently there has been an increase of research interest into youth engagement with climate change, seemingly induced by the swell of action from youth globally through the school climate strike movement (Prendergast et al., 2021; Haugestad et al., 2021; Thew et al., 2020). Largely, studies have examined youth participation in the climate movement, seeking to understand lived experience of youth, and their perceptions and attitudes towards climate change, often through mixed methods approaches (Thomas et al., 2019; Nissen et al., 2021). Studies found that youth were more likely to engage with climate protest based on higher social capital (Haugestad et al., 2021), with further research suggesting that shared feelings of being “deprived of a decent future” is a common motivator alongside feelings of betrayal from governments, and strong sense of justice (Prendergast et al., 2021 p. 11).

Frequently, youth activism research can heavily refer to, and often focus on, the protest work of Greta Thunberg, the Swedish youth who rallied the global youth ‘strike for the climate’, *Friday for Future* (FFF) movement (Boulianne et al., 2020; Han, & Ahn, 2020; Budziszewska & Głód, 2020). Research on youth activism pertaining to climate change mostly occurs in the global North which reinforces the lack of representation of the global South (Prendergast et al., 2021). By focussing on the global North and framing Thunberg as ‘the’ leading youth activist, scholarship on climate youth activism marginalises already minority voices of the global South, including Indigenous youth and youth of colour (Weadock, 2020; Prendergast et al., 2021).

The global school strikes saw the establishment of *Student Strike 4 Climate NZ* (SS4C), an Aotearoa climate youth action movement exercising their political voice through protest (Thomas et al., 2019). These strikes rallied an estimate of 170,000 New Zealand youth, but the movement has not been without critique, with commentary that Māori and Indigenous youth are forced to advocate from the margins (Handford & Maeder, 2020; Hura, 2019). Lourdes Vano, a rangatahi activist of Māori and Pacific whakapapa, voiced concern about the SS4C NZ youth movement, stating that hosting climate strikes that do not centre Indigenous Peoples, or Te Tiriti o Waitangi, are “worse than no strike at all” (Vano, 2021). These critiques that youth climate mobilisations ignore the intersectional nature of climate change are not solely being made by rangatahi activists in Aotearoa, with strong commentary highlighting similar issues occurring globally (James & Mack, 2020). Further literature critiques the research attention given to mass mobilisations, which further emphasises on the activism of White and middle-class youth, whilst overlooking minority youth mobilisations that may not fit this scale (Neas et al., 2022).

The SS4C movement, although of interest to researchers, has not incurred an in-depth surveying of members that can highlight the demographics of its membership. Although that is the case, the

Auckland chapter of SS4C disbanded in 2021 on the grounds of the organisation taking accountability for being a “racist, white-dominated space”, that has “tokenised BIPOC voices” (SS4C Auckland, 2021). Within a statement, SS4C Auckland shared sentiments of the need to centre tangata whenua and BIPOC voice in this space: “BIPOC communities are disproportionately affected by climate change, so the fight for climate justice should be led by their voices and needs, not Pākehā ones” (2021). Te Ara Whatu acknowledged the disbandment as a display of allyship and solidarity, stating “there cannot be true climate justice while Indigenous lands and peoples are still oppressed and determined under colonial rule” (Te Ara Whatu, 2021). This acknowledgment is a step towards recognising the need to build an intersectional movement which uplifts climate activists that are silenced by systems of oppression and power imbalances, a notion supported by literature (Handford & Maeder, 2020; Weadock, 2020).

Alongside the Aotearoa based FFF movement, SS4C, research explores another prominently youth led NZ organisation *Generation Zero*. In an article based on a survey of Generation Zero members, the membership demographic was described as “urban, educated, affluent, Pākehā and ‘progressive’”, (Dodson & Papoutsaki, 2017, p. 207) with the word ‘homogenous’ used as a description of the supporter base. The research suggested that diversification of Generation Zero membership would provide broader appeal, add strategic values (Dodson & Papoutsaki, 2017), and better uphold Te Tiriti. Both SS4C and Generation Zero have received public support, and in certain situations, direct engagement with government where demands have been considered in policy discussions (Handford & Maeder, 2020; Dodson & Papoutsaki, 2017). Although there is critique on the weight our current society gives to youth voice, the attention paid to these particular youth organisations aligns with literature that states privileged youth are considered and included more in aspects of mainstream politics (Kidman, 2018; Tawhai, 2015).

A study examining youth activism in Aotearoa produced an interesting article that examined some observed differences between Generation Zero and youth led campaign Protect Ihumātao (Nairn et al., 2021). In the article, Protect Ihumātao was identified as an Indigenous justice rōpū, but this labelling does not remove their movement from mobilising for climate action. The article highlighted how these two groups experienced temporality differently, which was found to shape their goals and actions, but also how they viewed other generations (Nairn et al., 2021).

Throughout the article, the researchers aligned with Māori scholars by de-centring ‘dominant linear settler-colonial temporalities’ through arguing that it is this linear framing of time that places the burden of averting crisis on the shoulders of youth (Nairn et al., 2021). Subsequently, this often-unseeable temporality for many settlers/Pākehā, including the youth of Generation Zero, is

attributed to causing divides between generations, removing a collective approach and shared responsibility (Nairn et al., 2021). In comparison, Protect Ihumātao members “took for granted that the past, present and future were intertwined and their responsibility to act on behalf of ancestors and descendants to address settler-colonial injustices” (Nairn et al., 2021, p. 263), which researchers described shared the sense of responsibility across generations. It is this ‘radical re-envisioning’ of non-linear and relational temporality that the authors believe will ‘serve the planet better’ for the purpose of climate safe futures. In closing of the article, the researchers propose that this learning from observing youth is relevant in a broader context. It is shared as a challenge to fellow settler scholars and activists, youth or not, to come to understand how “settler-colonial temporalities are placing the world at risk” (Nairn et al., 2021, p. 265), in relation to climate safe realities.

The lack of attention to intersectionality when engaging with youth, as discussed earlier, seems to be reflected in international literature on youth climate activism, whilst also being prevalent within the growing area of literature examining Aotearoa youth engagement in climate change activism (Prendergast et al., 2021). Ultimately, the Aotearoa scholarship on youth involvement in the climate movements contributes to the broad literature produced by the rest of the global North, silencing Indigenous Peoples and minorities (Neas et al., 2022). Whilst some literature briefly gestures to need to centre colonialism and tangata whenua, these comments are often made as side remarks and do not feature heavily throughout the scholarship (Handford & Maeder, 2020). Overall, minority voices are calling out the global and Aotearoa youth climate movements for emphasising white voices over Indigenous and other youth minority activists who are disproportionately silenced and ignored, yet, have been doing this work for decades (Weadock, 2020).

Whakarāpopoto | Chapter Summary

The purpose of this chapter was to illustrate the relevant areas of literature related to the thesis topic. By scanning related Aotearoa and global research, some gaps in literature have become evident, wherein both Māori and rangatahi perspectives and insights are missing. Across the growing field of Indigenous and Māori climate change research there is clear space for rangatahi perspectives to be fostered, as these will contribute to richer climate change approaches for diverse Māori identities (Vinyeta et al., 2015; Johnson et al., 2022).

Overwhelmingly, the gap across the youth climate activism literature is disheartening. The frontline work of Māori youth activists and their rōpū are acknowledged in some instances (Handford & Maeder, 2020; Ritchie, 2021) and the value that Māori and Indigenous perspectives can add to diversify research on youth climate action is further highlighted (Nairn et al., 2021; Prendergast et

al., 2021). Yet, scholarship refuses to promote the experiences of Māori and Indigenous youth (Neas et al., 2022).

The literature explored throughout this chapter and the sheer exclusion of rangatahi Māori within climate change research establishes a clear rationale of the need for research that amplifies and explores in-depth the perspectives and experiences of rangatahi Māori, much like this thesis. The research questions that guide this thesis inquires ***What are rangatahi Māori experiences and perceptions of climate change?***, as largely across research contexts this question is not posed to rangatahi Māori. Additional sub-questions investigate further aspects of the rangatahi experience of climate change to build a more in-depth understanding, asking ***What is the role of rangatahi Māori within climate change?*** and ***What are challenges and supportive factors that rangatahi Māori identify?***

Chapter Three: Rautaki Rangahau

Methodology and Methods

The purpose of this chapter is to lay out the research design and approach entailed in this rangahau. This chapter will explore the methodology employed to achieve the aims of the rangahau, namely Kaupapa Māori, and will also review the methods and processes followed throughout the data collection and analysis. This chapter further explores the ethical practices that have been considered during the research process, including institutional ethics and Māori ethical considerations.

Kaupapa Māori Research

The research agenda set out in this thesis is Kaupapa Māori, which challenges the reductionist, positivist and often dehumanising framing of Western research (Mahuika, 2015). Kaupapa Māori is the development of a research agenda that establishes research “assumptions, values, concepts, orientations and priorities” (Smith, 1999, p. 185) that serve Māori community aspirations. Research has been, and often continues to be, wielded as an “instrument of colonization” (Lee-Morgan, 2019, p. 152) that denies the validity of mātauranga, tikanga and ahurea Māori (Smith, 1999). Since its formation, Kaupapa Māori has been used as a decolonial tool to address Māori issues “through both a Māori and decolonizing lens” (Pihama, Campbell, et al., 2019, p. 137) versus a deficit lens that often underpins Western research. Kaupapa Māori research assumes that the research agenda and process are not siloed and separated, but are instead interwoven with shared underlying assumptions, values, and rationales.

In Chapter Two, the literature review wove together Kaupapa Māori research regarding Māori and Indigenous rangatahi engagement with climate change. However, it also highlighted a dominance of non-Indigenous researchers in these spaces. Two decades ago, Smith (1999) documented the ways in which non-Indigenous researchers, who dominate Indigenous research spaces, can contribute to the cycle of oppressive research. It is concerning that little has changed since then. Smith’s (1999) work thus highlights of the necessity for Kaupapa Māori in this research; not only as an avenue to uplift Māori knowing, but also to actively resist Western research and make room for further Kaupapa Māori research examining rangatahi Māori participation in climate change.

Developed to resist dominant colonial systems, Kaupapa Māori theorists define Kaupapa Māori as a fluid and ever-evolving framework (Pihama, 2015). It is not prescriptive nor deterministic. Instead, Kaupapa Māori provides research tools that are grounded in a Māori way of being for the purpose of being responsive to Māori needs and is further built upon Māori knowledge and lived experiences (Pihama, 2015). Kaupapa Māori theory aligns with wider developed Indigenous theories. One related

theory relevant to this thesis is Indigenous Standpoint theory, which proposes the necessity of "giving voice and agency to Indigenous people" whilst also "creating spaces where Indigenous ways of knowing, being, and doing can be included and articulated" (Durmush et al., 2021, p. 4).

Indigenous Standpoint theory deems Indigenous Peoples as self-determining of their experiences and understandings in the creation of knowledge, in contrast to dominant colonial views (Cox et al., 2021; Nakata, 2007). Furthermore, Indigenous Standpoint theory aligns with Kaupapa Māori theory, and further the aim and purpose of this thesis, in maintaining that Māori realities and experience inform knowledge building.

Indeed, asserting Kaupapa Māori as a theoretical framework allows for the determination of priorities, principles, and issues pertinent to our realities as Māori (Smith, 1999). Additionally, Kaupapa Māori principles challenge existing discourse through understanding the context of colonisation and oppression, which is crucial to address the needs of Māori self-determination (Lee-Morgan, 2019). Initially established by Graham Smith (1997), principles of Kaupapa Māori research have been developed and built upon by many Māori scholars. The principles provide guidance when conducting research with Māori, and how to create safe research spaces for Māori (Smith, 1999), hence their use as a foundation for the research agenda of this thesis. The following paragraphs explores how three Kaupapa Māori principles are inherently drawn upon within the research processes of this thesis.

The principle of *Tino Rangatiratanga* requires the researcher to examine how the orientation and aims of the research contribute to the agenda of Māori self-determination (Smith, 1997). In this research, *Tino Rangatiratanga* requires climate change to be interrogated within the context and history of colonialism. To do otherwise and view climate change with an apolitical lens is problematic as it ignores the role of inequitable structures that are at play, and therefore, disregard the aspiration of self-determination (Pihama, 1993). *Tino Rangatiratanga* furthermore asserts that Māori, including rangatahi in this rangahau, are autonomous beings with experiences and views that should not go without recognition. This view actively counters the colonial perceptions that often silence Māori, and youth.

Through the principle of *Taonga Tuku Iho*, mātauranga Māori is considered foundational to the theoretical underpinnings of this research. *Taonga Tuku Iho* legitimises Māori epistemology, ways of knowing and knowledge bases, such as mātauranga-ā-iwi, whakataukī, pūrākau, cosmology and other forms of mātauranga (Smith, 1997). Subsequently, in this research taonga tuku iho pertaining to the taiao, climate change and rangatahi are prioritised prior to seeking out Western knowledge bases.

The principle of *Whānau* represents the centrality of the collective in te ao Māori. *Whānau* provides a theoretical basis for ethical practices, and implies obligations and a responsibility to care for all facets of the research, including the community, participants and researcher (Pihama, Simmonds, et al., 2019). This responsibility of *Whānau* is embodied through *whakawhanaungatanga*, or, the reciprocal act of building relationships, which is a necessary process that is embedded throughout the research processes.

Kaupapa Māori Methodology: Pūrākau Methodology

Kaupapa Māori methodologies are grounded in the above principles and provide the basis for the choice of methods utilised (Smith, 1999). Kaupapa Māori methodology ensures that the principles used to form Kaupapa Māori research and theory are actioned through the methods, which sometimes necessitates repurposing of Western methods to take into account of these principles (Moewaka-Barnes, 2015). Alongside Kaupapa Māori methodology having a huge influence on how this research is set out, a more specific approach has been interrogated throughout this process: Pūrākau methodology.

In te ao Māori, pūrākau are a crucial structure. Pūrākau maintain ancestral knowledge whilst simultaneously acting as a system of knowledge transmission from generation to generation (Pihama, Campbell, Greensill, 2019). Pūrākau generally contain understandings of the world around us, including cultural values, knowledge of our natural world, histories or other learnings that are fundamental to our identities as Māori (Xiēm et al., 2019). Through colonisation, pūrākau have been misinterpreted and reframed as ‘fables’, which distorts foundational beliefs and disrupts systems of knowledge (Lee-Morgan, 2019).

As a response to these colonial disruptions and distortions, Pūrākau methodology has been developed as a tool of decolonisation within research spaces; widely used by Māori scholars and researchers to reframe, rewrite and recentre our silenced narratives (Lee, 2009; Seed-Pihama, 2019). A notable example of this is the work done by Mana Wāhine theorists in applying Pūrākau methodology across tikanga, narratives and kōrero tuku iho to look beyond the often imposed negative, colonial, and patriarchal lens (Mikaere, 1994; Cavino, 2019). An all-encompassing methodological approach, Pūrākau can be described as a “Māori narrative process which links, contextualises and politicizes stories and draws on Māori oral literature tradition, knowledges, philosophies, histories, experiences, dreams and aspirations” (Cavino, 2019, p. 95). Much like Kaupapa Māori methodology, employing Pūrākau methodology does not rule out methods like interviews, thematic analysis or case studies, but instead, repurposes these Western approaches to be responsive to the needs of Māori (Lee, 2009; Smith, 1999).

Drawing on Pūrākau Methodology

Indigenous and Māori climate change research asserts the importance of paying attention to our ancestral pūrākau to find solutions and ways forward in the climate crises (Whyte, 2017). One example of the use of Pūrākau methodology in Māori climate change research is a Deep South challenge project, *Te Tai Uka a Pia*, that has demonstrated the power of kōrero tuku iho in the context of understanding the spiritual impacts of climate change (Morrison & Kaio, 2021). *Te Tai Uka ki Pia* explored kōrero tuku iho, a form of pūrākau, as a tool for developing iwi-based climate knowledge pools, working with kaumatua to revitalise tīpuna pūrākau, waiata and haka surrounding the Southern Sea and how that connects to the local landscapes, iwi, hapū and whānau. This approach promoted whakapapa connections to wāhi tapu to raise community awareness of climate change impacts and in-turn opportunities to address it (Morrison & Kaio, 2021).

Rather than utilising historic pūrākau much like the *Te Tai Uka a Pia* approach, this thesis uses Pūrākau methodology as the foundation for choice of method and analysis approaches. The literature review highlighted the need to hear rangatahi Māori experiences as their voices are frequently silenced within many spaces, including climate change contexts (Prendergast et al., 2021). It is for these reasons that Pūrākau methodology holds dual implications for this research. Positioned epistemologically, Pūrākau methodology positions our ancestral narratives as valid sources of knowledge (Lee, 2009; Lee-Morgan, 2019). In a methodological sense, Pūrākau methodology repositions voices that have historically been marginalised and frequently ignored by dominant practices (Lee, 2009; Smith, 1999), which in this context, is rangatahi Māori.

Further to this, Western (and often qualitative) research can subordinate Indigenous ways of knowing by privileging dominant interpretations of known ‘truths’ (Tiakiwai, 2015). Contrary to this fact, Pūrākau methodology cautions researchers about producing definitive ‘truth’ and proposes that the meaning and depth is found within the heart of the story and how we relate to it (Lee-Morgan, 2019). From a Māori and Indigenous worldview, truth is an understanding that “multiple and different interpretations can be valuable simultaneously” (Brayboy & Deyhle, 2000, p. 168) which often clashes with Western assertions in research. As such, this research does not aim to produce the ‘truth’ surrounding rangatahi Māori experiences and perspectives of climate change. Rather, it takes on challenge of contributing to collective meaning making through sharing narratives.

Research Process

Recruitment of Rangatahi

Rangatahi were recruited to participate in this project based on their interest in climate change, and interest in engaging with the rangahau. For consent purposes, the participant age was set to 18 years old and older, but a cut off age limit was not set to allow participants to self-identify as a rangatahi, recognising the diverse interpretations of a rangatahi, including the relational nature of being a rangatahi (Moss, 2021). The recruitment of rangatahi was organic and word-of-mouth occurring over four months.

Prior to the commencement of this rangahau, I attended a Te Ara Whatu Flax Roots Wānanga for Indigenous rangatahi interested in learning about climate justice. At this wānanga I connected with a lot of Māori and Indigenous youth who were passionate about climate change. After the wānanga concluded, a forum was created so Te Ara Whatu members and rangatahi attendees were able to stay in contact, including regular Zoom hui. Throughout this continued relationship, I was able to share the research project through word of mouth to recruit potential participants and be put in contact with rangatahi participants through these networks. Whakawhanaungatanga through mutual connections was essential in this recruitment process, ensuring the rangatahi were comfortable in participating in the research.

Once a relationship was developed with rangatahi that were interested in participating, an email was sent with the Information Sheet (Appendix A) attached, formally inviting them to take part in the rangahau. From there, a time and place suitable for the rangatahi was organised for the whakawhitinga kōrero to take place, in person, or over Zoom. Due to COVID-19 restrictions, Zoom kōrero allowed me to connect with rangatahi across the North Island, as well as rangatahi locally.

Rangatahi Participants

During the research period, five different rangatahi Māori engaged in whakawhitinga kōrero for the rangahau project. Each of the rangatahi Māori were wāhine between the ages of 18-25 with passion, interest or experiences related to climate change. These rangatahi participants included two sisters, Eilidh and Hannah. During the process of informed consent, and highlighted explicitly on the Consent Form (Appendix B), each of the rangatahi were given the option to remain anonymous within the research, and were happy to work with me as to how they wished to be identified within the research.

Table 1. *Rangatahi information*

Name	Iwi	Setting of Whakawhitinga kōrero
------	-----	---------------------------------

Tiana	Ngāti Kahungunu ki Te Wairoa, Te Whakatōhea, Ngāi Tūhoe, Koroātia, Rongomaiwahine, Ngāti Pahauwera, Ngāti Hineuru	Zoom (COVID-19 restrictions)
Eilidh	Te Aitanga a Māhaki, Rongowhakaata	Kanohi ki te kanohi
Hannah	Te Aitanga a Māhaki, Rongowhakaata	Kanohi ki te kanohi
Julz	Ngāti Whātua, Tainui	Zoom (COVID-19 restrictions)
Ameera	Ngāti Whātua o Ōrakei, Ngāpuhi, Te Rarawa	Zoom (COVID-19 restrictions)

Whakawhitinga Kōrero

The core aim of this research was to explore the experiences of rangatahi Māori, hence whakawhitinga kōrero, or semi-structured interviews, were used to create a conversational space for rangatahi whakaaro to be explored in-depth (Kvale & Brinkman, 2009). Using a semi-structured question guide (Appendix C) allowed the interviews to be flexible, ensuring rangatahi could share experiences they believed to be relevant, thus creating a space where all pathways of kōrero could be explored. Choosing to have open and flexible whakawhitinga kōrero with rangatahi promoted more natural conversations and trust between researchers and participant, which was relevant to ensure rangatahi continued to feel empowered in the research space (Clarke, 2020).

Two of the whakawhitinga kōrero were hosted over Zoom due to COVID-19 restrictions, and two were held kanohi ki te kanohi, in a public place organised between the researcher and rangatahi. The whakawhitinga kōrero were conducted one-on-one aside from Ameera and Julz, who both attended the same Zoom kōrero together alongside one of their tuakana. The tuakana did not contribute to the discussion, but supported the whakawhanaungatanga aspect of the whakawhitinga kōrero.

The whakawhitinga kōrero were approximately one hour, excluding general chat, whakawhanaungatanga, and the consent process, but there was no time limit placed on these kōrero aside from any time constraints identified by the rangatahi. Kai was brought along to the kanohi ki te kanohi whakawhitinga kōrero for us to share, establishing a more informal setting, whilst also being an important whakawhanaungatanga protocol. Unfortunately, it wasn't possible to share kai during Zoom kōrero, but all the rangatahi participants received koha in the form of vouchers and toi following the whakawhitinga kōrero, in recognition of the taonga they gifted to the research through their time and contribution.

Each of the kōrero were audio recorded, transcribed verbatim using a transcribing service, and then checked by the researcher. These transcripts were returned to the rangatahi as taonga in reflection of the value expressed in their whakaaro, but also to offer the opportunity to review or redact any kōrero. Once rangatahi returned any changes, the process of analysis began.

Thematic Analysis

To analyse the whakawhitinga kōrero, thematic analysis has been utilised with the purpose to “make sense of collective or shared meanings and experiences” (Braun & Clarke, 2012, p. 57). Methods for engaging with youth voice have been critiqued as “flattening participant voice” when analysis blindly follows the pursuit of patterns and commonly occurring thoughts (Kidman, 2018, p. 59). Thematic analysis as defined by Braun and Clarke (2021) does not search for meaningful findings solely in repetition or pattern, but through exploration of themes in relationship to research aims.

The use of thematic analysis was influenced by Pūrākau methodology through maintaining each rangatahi narrative, rather than deconstructing each kōrero. Thematic analysis was therefore undertaken within individual whakawhitinga kōrero, with analysis focussing solely on the discussion from each rangatahi. Key issues identified by the rangatahi were explored and developed into a set of themes, largely developed around the interview questions (see Appendix C) and the research questions of this thesis. Whilst theming was an aspect of the analysis process, the aim was to develop pūrākau reflective of each of the individual rangatahi whakaaro, prior to weaving the themes into discussion with one another.

Case Studies Approach

Case studies have been used to present the findings from each rangatahi whakawhitinga kōrero, which gives rangatahi mana over their individual whakaaro, and combats the perpetration of homogenised rangatahi voice. Case studies are described as a data-rich and in-depth approach that allows descriptive and exploratory research questions to be examined (Noor, 2008). Case studies allow for the “construction of a narrative around the research that is being conducted” (Walker, 2016, p. 50) and also gives room for the reader to add their own analysis and interpretation of the data (Harland, 2014), much like the fluidity of Pūrākau.

Chapter Four presents the four case studies covering the whakawhitinga kōrero with each of the five rangatahi, aside from Case Study Two which combines kōrero from both Eilidh and Hannah. Whilst the sisters were initially interviewed separately, their familial connection presented an opportunity to present their kōrero as a joint case study. While presented as a single case, each of the sisters

have distinct experiences and whakaaro and were consulted about the decision to present their kōrero together.

The case studies initially introduce each of the participants to provide context to the kōrero, before presenting the issues and themes that were developed from analysis. Chapter Five draws together the perceptions and themes that were presented across the case studies, and extends the discussion towards exploring the implications of these issues that arose during analysis.

Ethical Considerations

As required, ethical review and approval of this research was obtained from the University of Waikato Human Research Ethics Committee prior to the commencement of research. A letter of ethical approval was received from the committee (see Appendix D). Furthermore, this approval was noted on both the Information Sheets and Consent Forms. Although approved by the Ethics committee, for research to be responsible to Māori and Indigenous communities it is imperative that ethics beyond institutional guidelines are adhered to. Wilson (2008) describes Indigenous research ethics as relational accountability, describing it as a key aspect to Indigenous research processes. To elaborate, relational accountability must inform methodological choices and processes to ensure that the research does not reproduce harm for the communities involved. Accountability in a research context is detailed by Wilson as the '3 R's', or "Respect, reciprocity and responsibility" (p. 77). The 3 Rs require the researcher to consider the needs of the Indigenous community regarding the usefulness of research, and to develop authentic relationships with those involved when seeking knowledge, whilst also being invested in the methodological approaches.

The notion of Indigenous ethics for research has been developed in Aotearoa for the local Māori context. Initially proposed by Linda Smith (1999) and further developed by Cram (2009), the following practices are widely used to guide ethical practices when engaging in Kaupapa Māori research:

- *Aroha ki te tangata*: A respect for people—allow people to define their own space and meet on their own terms.
- *He kanoahi kitea*: It is important to meet people face-to-face, and to also be a face that is known to and seen within a community.
- *Titiro, whakarongo... kōrero*: Looking and listening (and then maybe speaking)—develop understanding to find a place from which to speak.
- *Manaaki ki te tangata*: Sharing, hosting, being generous.

- *Kia tupato*: Be cautious—be politically astute, culturally safe, and reflective about insider/outsider status.
- *Kaua e takahia te mana o te tangata*: Do not trample on the “mana” or dignity of a person.
- *Kia mahaki*: Be humble—do not flaunt your knowledge; find ways of sharing it. (Cram, 2009, p. 313)

Each of these ethical practices encapsulate a te ao Māori approach of engaging with others - whether human, knowledge, or our natural world - and underpin the processes within this thesis. Understanding these principles required me to critically reflect on the research structures that uphold power imbalances, and to action the principles through practice, in attempt to mitigate these imbalances. Indeed, to ignore these ethical obligations could lead to destructive research practices that impact relationships with communities and individuals and potentially affect the validity of the research itself (Awekotuku, 1991).

As established, due to centuries of exploitation many Indigenous scholars highlight that the relationship between researcher and Indigenous Peoples has been one of distrust (Smith, 1999; Lee-Morgan, 2019). Consideration of this historic power imbalance between researcher and Indigenous participants required that I actively sought to break down any of these perceptions prior to the whakawhitinga kōrero. Furthermore, from exploring literature, rangatahi Māori have been repeatedly silenced in research processes with adults (Kidman, 2018), adding another layer of consideration regarding power.

Being a Māori researcher, and further, being a rangatahi, allowed me to position myself as an insider and further a teina, a peer, within the whakawhitinga kōrero. Through this positioning, the embedded processes of whakawhanaungatanga, and the use of semi-structured questioning, allowed a facilitated space for the rangatahi participants to “tell their stories in ways that uplifts them and does not trample on their mana” (Cram, 2009, 317). These practices of *Kia mahaki* were utilised to mitigate the aforementioned historic power imbalances and ensure the rangatahi felt their mana was maintained throughout the research process.

Whakarāpopoto | Chapter Summary

Established in this chapter is the foundational role that Kaupapa Māori research, methodology and ethical practices played in shaping the research processes followed in this thesis. Although Western methods of semi-structured interviews, thematic analysis, and case studies have been utilised, they have been repurposed through Pūrākau methodology to support the Kaupapa Māori research agenda and to give voice to rangatahi Māori.

Chapter Four: Ngā Kitenga Presentation of Findings

The following chapter presents the case studies developed from the whakawhitinga kōrero that occurred with each of the rangatahi participants. As explained in Chapter Three, each of the case studies will focus on one of the rangatahi and their whakawhitinga kōrero, except for Case Study Two, which is a joint presentation of the sisters Eilidh and Hannah's kōrero. The case studies are structured to introduce the rangatahi to the reader and are then split into themes that have been drawn from the analysis of the kōrero shared. Each theme will be explored in depth throughout the case studies, touching on the implications of each theme and finally a case summary will be presented, highlighting the key points of the entire case study.

It is important to establish that these case studies are not exhaustive of the discussion throughout the whakawhitinga kōrero, but instead explore the knowledge related to the research questions in accordance to thematic analysis (Braun & Clarke, 2021). This does not mean the rest of the whakaaro shared were not taonga, but instead could not be explored in-depth due to the restraints of this thesis.

Throughout the case studies, motivations causing the rangatahi to care about climate change and the taiao are uncovered, including the role of te ao Māori in this influence. Aspirations for a climate safe future, and barriers to achieving these, are presented with further challenges explored for rangatahi Māori who share their voices. Although barriers and challenges are explored, the rangatahi articulated potential solutions and positive experiences, including their perspectives on the role rangatahi can play in climate change.

Each of the case studies understandings of climate change, including rangatahi perspectives that are unique to being Māori. Thus, these themes present an array of rangatahi experiences on the topic of climate change, guiding the reader to responses to the key research questions: ***What are rangatahi Māori experiences and perceptions of climate change?***, ***What is the role of rangatahi Māori within climate change?*** and ***What are challenges and supportive factors that rangatahi Māori identify?***

Case Study One: Tiana (Ngāti Kahungunu ki Te Wairoa, Te Whakatōhea, Ngāi Tūhoe, Rongomaiwahine, Ngāti Pahauwera, Ngāti Hineuru, Koroātia)

Introduction and Context

Tiana described herself as a descendant of the East coast, hailing from Ngāti Kahungunu ki Te Wairoa, Te Whakatōhea, Ngāi Tūhoe, Rongomaiwahine, Ngāti Pahauwera, and Ngāti Hineuru. She is

also proudly from Koroātia (Croatia) with her Dida (Grandfather) from Vrgorac and her Baba (Grandmother) from the island of Hvar. As a tamaiti she was raised in Tūranganui-ā-Kiwa between her papakāinga in Māhia and Wairoa, and she currently resides between there and Pōneke where she is a law taura at Te Herenga Waka and an active member of the Māori student community.

Tiana does not describe herself as an 'environmentalist' or an 'activist' in Pākehā terms, but is passionate about the taiao. When discussing how she became an advocate for the taiao she shared about growing up surrounded by the ngahere and moana and fondly recalled being "*dragged along to all the hui and the hapū stuff*" by her Nan. Tiana shared that a further catalyst to be interested climate change included a drastic change at her urupā in Wairoa:

What really started me was Hurumua Marae which is one of my marae in Wairoa, down the road, 53 tīpuna had to be excavated from our urupā because it's on the bank of the river and the river was eroding to the point where the tīpuna were falling into the awa, due in part to erosion from dairy farms effluent, from E.coli, from a dam that the polluters didn't have to pay.

More recently, her experience in the taiao space has been about stepping up and figuring out what it means to be "*a modern day kaitiaki*" and the responsibility she has to her whānau, hapū and iwi.

Through her experience being a tuakana of Te Ara Whatu, Tiana was able to touch on the whakapapa of Te Ara Whatu. Te Ara Whatu was born out of rangatahi Māori experiencing the international climate change arena of the COP discussions and asking, "*Where's Māori representation, how can we bring our stories from Aotearoa and uplift rangatahi Māori into getting into these spaces*". Tiana's journey brought her to being a part of the Te Ara Whatu delegation that attended the 2019 COP25 discussions, and since then she has been an active tuakana within Te Ara Whatu, supporting the kaupapa that they organise and support. Although Te Ara Whatu is a part of her life that surrounds the taiao and climate change, Tiana established that "*First and foremost I am rooted in my responsibility and duty to people and place, so my whānau, hapū and iwi. And then Te Ara Whatu fits into that wider framework*", so our kōrero delves into her upbringing, pūrākau and her perspectives. Amongst these kōrero she framed the mahi she does with Te Ara Whatu:

My mahi with Te Ara Whatu is mostly in te ao Pākehā, being policy for the government, policy for environmental organisations, trying to figure out how can we keep the government accountable to upholding tino rangatiratanga, to giving Māori voices rather than consultation... Within Te Ara Whatu too we work in the international indigenous environmental space, so doing activities with Indigenous whanaunga from around the world.

So for example, our whanaunga in the Arctic Circle, their ice is melting, our seas are rising so our stories are inherently connected and how can we uplift and support each other.

As we shared more kōrero, it was evident her experiences within these spaces tied into her own values and framing of climate change and perceptions of rangatahi Māori. The following four themes explore Tiana's experience of being a rangatahi Māori and how this influences her understandings of climate change: Rangatahi Changemakers; Kaitiakitanga; Whanaungatanga-centric Climate Aspirations; and Colonial Structures Restrictive Grasp on Climate Approaches.

Rangatahi Changemakers

When discussing rangatahi, Tiana shared personal insights from different contexts, ranging from the roles of rangatahi in change making to the colonial expectations put on rangatahi, and the inherent power of rangatahi Māori. All of these discussions contribute to how Tiana interprets the role of rangatahi in climate contexts, as well as barriers and enablers to that experience.

Tiana's experience amongst policy and decision-making rooms has helped her conceptualise the role that rangatahi Māori have in these spaces, which is evident in the following kōrero:

Going into policy spaces, what does that mean? It means we [rangatahi] get to be a little bit cheeky sometimes, it means we get to push the boundaries on things. It means asking why, just being a pesky brat, being like "Why? That's not good enough, tell me why you've come up with this solution and tell me why we can't use this solution". It's really being able to push the boat because I mean from that too comes privilege in that I don't have responsibilities, I don't have to look after my whānau, I just have to look after myself. I've got a roof over my head, I've got kai in the fridge, it's acknowledging all of that too so I am not scared that I'm not going to have my needs met if I push the boat in policy spaces like that.

Tiana's whakaaro is two-fold. First, it highlights the role that rangatahi have within decision making environments, and advocating strongly without fear of push back, whilst secondly highlighting privilege as a factor that can play into rangatahi abilities to fulfil this role. As a rangatahi, Tiana shares that she can push boundaries as she doesn't carry the personal burden of being solely responsible for her whānau, or needing to monitor her behaviour out of fear of losing her job. This highlights that personal privilege provides can be advantage for rangatahi to be fully able to advocate for the taiao. Additionally, this comment points to a societal barrier wherein backlash is predicted when pushing boundaries in formal spaces.

Expanding more on the role of rangatahi in decision making, Tiana exclaimed "We're literally our ancestors' wildest dreams right now. We're literally doing everything they never thought that they

could do". This concept of intergenerational aspirations features throughout Tiana's understanding of the role of rangatahi. In the following quote Tiana touches on how rangatahi fit into the changemaking space as actioning the aspirations of older generations through dreaming and passion:

Pāpā Moana [Jackson], a kaumatua from Te Wairoa, he conceptualised 'Matike Mai, constitutional transformation and gave us the framework and the vehicle but being rangatahi Māori means we action that. Like we come up with the dreams and conceptualise what that means. I think being around rangatahi Māori means that you get to just inject life and passion and freshness into really scary issues that policy people and even whakaaro are potentially too scared to branch away from.

Delving further into this concept of rangatahi as intergenerational changemakers Tiana expresses a quality that supports rangatahi to be a part of intergenerational change is the ability to see beyond the systems:

How do we move away from being limited by colonisation?... At what point do we, as rangatahi Māori, as the future generations, as the future rangatira, how do we stop participating in a system that isn't serving us and at what point do we do that? Because I also think that's kind of the magic of rangatahi Māori, we see all of these things and we're like we don't want to participate in that. But we're not tied down by the traps of obligations that our parents and kaumatua are, so at what point does that change... when can I not participate in this system?

As shared within other whakaaro, being a rangatahi allows rangatahi to envisage a reality beyond the status quo, and also be active in shaping that reality. Tiana posed a question about rangatahi taking the steps away from the systems that don't serve us as they hold the vision to do so. This whakaaro highlights Tiana's understanding of the role that rangatahi play in guiding and leading the next generation. Furthermore, this notion that the systems we exist in do not serve us, and in turn limit us, is discussed more in a later theme. Touching on a limiting way of viewing rangatahi, Tiana highlighted that a strong Pākehā influence is expecting rangatahi to be 'masters' across the context of te ao Māori and climate change. Tiana states that this is a:

really Pākehā whakaaro that influences te ao Māori. Because if we go back to our ancestral wisdom everybody has a role to play, and I think also coming to the solutions in climate change and climate talk is recognising that everybody has a different role to play and everybody has a different strength.

Tiana's whakaaro consolidates that rangatahi have a role in climate change, which doesn't rely on rangatahi being 'masters', a notion Tiana identifies as residing in mātauranga tuku iho. The perceptions Tiana shared in this theme shapes how she perceives rangatahi and their role in learning and taking action in climate change spaces using the unique qualities that rangatahi possess.

Kaitiakitanga

This theme explores Tiana's understanding of kaitiakitanga and what it means to be a kaitiaki, including the co-opting of this term in environmentalism spaces within Aotearoa (Walker, 2016; Wareka, 2021). This theme picks up on the kōrero shared by Tiana about the use of the concept kaitiakitanga, how it informs her view of the taiao, and the nuances and implications of the usage of the term. The discussion highlights how Tiana connects to and understands climate change, but also sheds light into the motivating factors behind her pursuit of climate action.

Kaitiakitanga is a Māori concept which is largely framed within the relationship Māori have with the environment (Wareka, 2021). Tiana recognises that being Māori is where her relationship to climate action and being a kaitiaki begins:

I personally always start these kinds of kōrero with the inherent-ness of being Māori... "Ko au ko te taiao ko te taiao ko au, ko au ko te whenua ko te whenua ko au" I am the land, the land is me, I am the environment, the environment is me.

Tiana explained that the term kaitiaki infers 'responsibility', 'duty' and established she has had to navigate what her role as a kaitiaki means in relation to her lived experiences as a rangatahi who holds formal education and access privileges:

What does it mean to be a modern day kaitiaki now, what is my role as someone who's not ahikā, because I'm not at home but what is my role as someone that has education and responsibility and a duty, being in spaces where lots of my people can't be and trying to translate the chaos of the colonial world into the lived reality of the frontline people at home.

Sharing more about this responsibility, Tiana maintained that this aspect of kaitiakitanga looks like translating environmental policy impacts into a language her Nan or Mum can understand, providing examples of changes occurring at home, or bridging the gap between local hapū mātauranga and mitigation work.

Further expanding on the notion of responsibility and privilege, Tiana shared that the climate crisis can be considered an "inherently privileged issue to care about" wherein Tiana recognises that she doesn't have to worry "about feeding my whānau... about having a roof over my head... about my

health". She infers here that because she has the capacity and privilege, she therefore must take on the duty to take action regarding climate change. This discussion on privilege provides an insight into the responsibility associated with being a kaitiaki, and the importance of utilising privilege within in this role, both being a strong driver for Tiana to contribute to positive climate action.

This framing of being a kaitiaki is derived from kaitiakitanga, a notion embedded in a systems and interconnected view recognises contributing to the collective as preferable to individual responsibility. Although Tiana embodies this understanding of kaitiakitanga, she began to delve into the narrowing of the term which has occurred within New Zealand colonial systems and processes:

The thing that I get hōhā with is kaitiakitanga has been a term that is used in our legislation, is used in policies, is used by Pākehā organisations as guardians of the land... kaitiakitanga for me can't just be described as defenders of the land, it's how we're in relationship with each other, it's how we uphold manaakitanga, it's how we're in whakawhanaungatanga with each other, it's all of the tangas, and I guess it kind of aligns with the climate movement in that to me being a kaitiaki kind of illustrates how and why indigenous people should be forefront of climate solutions.

The restrictive role that colonial New Zealand has had on Māori views of the taiao is explored more in-depth in a following theme. Tiana's understanding of kaitiakitanga dispels one dimensional uses of the term as solely nature based, and moves towards a term that explains how we should collectively be in relationship with one another as well.

Discussing kaitiakitanga as a relationship-based term, Tiana explains that she views the current climate movement as separate from kaitiakitanga, due climate issues to not being recognised in the Indigenous context of Aotearoa; the context of tangata whenua. Tiana highlights that climate solutions that refuses to respect Indigenous Peoples relationship with the land, Māori relationship with the taiao, is not the way forward:

Indigenous environmentalism, kaitiakitanga, is rooted first and foremost in upholding the rights of nature, upholding the whenua and so what I mean by that is with the current climate era, people are like nature-based solutions is the way to go forward, renewable energies is the way to go forward which is all well and good and great but not at the detriment of Indigenous Peoples and land.

Here Tiana establishes that current solutions frame rights of Indigenous Peoples as separated from the environment, which does not align with kaitiakitanga. Indeed, kaitiakitanga advocates for

practices that grow the relationship of people and taiao, rather than separating the whenua and taiao from humans.

In summary, this theme establishes that Tiana's motivation to pursue climate action is grounded in the relationship Māori hold with the taiao, and the responsibility that arises from this relationship. Responsibility as a motivator is discussed as the concept of kaitiakitanga or being a kaitiaki by Tiana, and is a key point as to why Indigenous Peoples must be at the forefront of the climate crisis. Tiana further identified the barrier of the co-option of kaitiakitanga in Pākehā spaces and how this plays a role in diminishing the relationship and practices of the Indigenous Peoples and the environment, minimising the role Indigenous Peoples should have in climate solutions.

Whanaungatanga-centric Climate Aspirations

Throughout our whakawhitinga kōrero, Tiana expressed many aspirations she desired to see within Aotearoa climate responses. Clean waterways, domestic mitigation support for small businesses, innovating the export industry, food sovereignty, warm and safe housing, and solar roads were amongst the broader aspirations Tiana shared, which could all be incorporated into having a healthy environment for a safe climate. Alongside these broader solutions, whanaungatanga-centric climate aspirations presented across Tiana's kōrero, hence the following theme exploring the role of whanaungatanga in climate aspirations. At the heart of this theme is the need to revisit the state of our whanaungatanga with the taiao, namely restoring the relationship tangata whenua hold with the taiao, and how this relates to achieving a climate safe future for Aotearoa. As it is established in this thesis, Māori and other Indigenous Peoples around the world hold strongly symbiotic relationships with the land and the environment, often a foundational aspect that informs an Indigenous worldview.

Expanding on the aspirations and solutions shared above, Tiana relates this relationship to climate change responses by grounding herself in the aspirations of her hapū and iwi. An iwi-based aspiration that Tiana shared included the healing and cleaning of the Wairoa River to *“restore our native tuna population and how can we bring the pūrākau of our awa back because the Wairoa River was our pātaka kai, it was our transport routes”*. In this context, the iwi and hapū longstanding relationship with the awa allows them to envision their future aspirations for the use and health of the awa. This whakapapa of the awa provides a motivating factor to seek solutions, driving the hapū to restore the awa to what it once was in the past. To restore the awa to what it once was also requires restoring the relationship the iwi and hapū had with the awa prior to colonisation. As acknowledged previously, colonisation disrupted the relationship between Māori and the

environment, which supports the need to restore the relationship that exists today and thus counter the ongoing impacts of colonisation.

The whanaungatanga that tangata whenua hold with the taiao is present throughout many aspects of a Māori worldview. The term tangata whenua, or people emerging from the land, refers to the whakapapa relationship Māori have belonging to and descending from the environment. Thus, because Māori are one with the environment, through the shared whakapapa of tangata whenua and taiao that climate solutions for the taiao are people inclusive, not solely nature focussed. Tiana shares an example of people and the environment providing solutions to climate change when she discusses the aspiration of achieving “*land back*”, which Tiana explains is not solely about returning stolen Māori land:

What I'd like to see first and foremost for New Zealand te taiao is tino rangatiratanga, mana motuhake, constitutional transformation. We need to stop talking about electric vehicles and construction industries and start talking about land back. Literally it's as simple as that, because land back isn't just 'land back', it's bringing whānau to the whenua, it's helping restore the relationship between humans and the environment. Because we're so detached from the natural environment.

The way in which Tiana speaks of ‘land back’ as a solution encourages the regeneration of relationships between Māori and taiao, whereby land back encompasses the return of whānau to their whakapapa whenua as a first step towards this aspiration. As described by Tiana, land back as a concept, encapsulates tino rangatiratanga and mana motuhake- concepts that are concerned with the rights of the taiao equally as they are the rights of tāngata. Land back requires the return of land to tangata whenua, including the governing of that whenua, and promoting better relationships between Māori and the taiao by allowing Māori ways of living and being with the environment. It’s clear from Tiana’s comment that a crucial aspect of her aspirations for the climate is the repairing of tangata whenua relationships with the taiao.

Further expanding on tangible steps towards seeing the repair of relationship with the taiao, Tiana shares the importance of accessibility to necessary services when living on whenua tīpuna:

In an ideal world I'd like us all to be able to have the opportunity for services and things to be hyper localised, so we give whānau the opportunity to know where they're from and know the pūrākau of an area and place and have the opportunity to live at home, should they want to, rather than having to live in urban centres which are even more disconnected from the environment.

Here Tiana touches on the concept of the urban drift, which saw a significant number of Māori whānau moving from their tīpuna whenua; for Tūhoe it is estimated that 85% of tribal members now reside outside of the Tūhoe rohe (Tūhoe, n.d.). Because of the need for urban services, whānau have been removed from the taiao and from their whenua tīpuna. Tiana responds to this challenge through proposing a practical shift to localisation, ensuring that whānau can access what they need on their whenua, which is also expressed by other rangatahi. The solution to localise access to services is contextualised in whanaungatanga, by providing opportunity for whānau to connect to the pūrākau of their whenua and thus further connect with their whakapapa. The process of localising access to services provides another tangible step towards repairing iwi relationships with the taiao, which Tiana draws on as an essential process to achieve a climate safe future.

As tangata whenua, the need to heal our whakapapa comes from being displaced from our land, and our whanaungatanga with the taiao being violently disrupted through the process of colonisation. Therefore, we can support the regeneration of whanaungatanga through returning to our whenua, which Tiana asserts plays a crucial role in restoring whanaungatanga with the taiao. To conclude this theme, Tiana shared a simple statement *“I'd like our basic needs to be met in a way that both honours our relationship with the environment and regenerates it better for our future uri, for our chance to have future uri”*. Tiana's statement further establishes the need for climate solutions to prioritise Māori reconnecting and rebuilding whanaungatanga with the taiao, highlighting this as a necessity to protect whakapapa. Neither whakapapa nor, whanaungatanga with the environment can be removed from solutions to protect the climate.

Colonial Structures Restrictive Grasp on Climate Approaches

A question Tiana posed earlier as challenge for rangatahi sets the scene for this theme; *“How do we move away from being limited by colonisation?... how do we stop participating in a system that isn't serving us...?”*. Leading from this prompt, the following theme looks into Tiana's exploration of the limiting nature of colonial structures and systems in the context of climate change solutions. This includes exploration of structures like organisations, government and legal systems. The theme highlights barriers that Tiana has come across in her experience of climate change, including barriers to seeing climate change being addressed in ways that centre Māori and Indigenous Peoples, much like the aspirations explored in the previous theme.

Exploring her experiences Tiana points to Pākehā organisations and their responses to climate change, which Tiana maintains often further the *“perpetuation of colonial violence in modern forms”* by importing non localised 'nature-based solutions'. Furthermore, Tiana targets the inherently

Western worldview that settler institutions carry and the lack of mātauranga Māori incorporated into responses that they develop:

Coming back to the Pākehā organisations. There's not really any understanding that Indigenous mātauranga is science, that Indigenous intelligence is what's going to solve the crisis because it's not just mātauranga Māori, it's not just the practices of a rāhui or something like that but it's also our mātauranga is also inherently incorporated within our worldview, so that's our cultural practices, it's our language, it's revitalising all of those things which you can't really extract and fit into a worldview that doesn't centre those things and will never centre those things.

Tiana's comments highlight a significant barrier to the presence of authentically Māori climate responses within Pākehā institutions whereby mātauranga Māori is often cherry-picked out of a Māori worldview and applied to responses. These superficial gestures do not genuinely encompass mātauranga Māori or Māori-centric responses to climate change. Extending on this thought, Tiana recalled experiences in consultation or engagement with Pākehā institutions, stating *"quite a lot of the time it's tokenistic"* due to the inherent contrast in Pākehā and Māori worldview; *"our mātauranga's not going to work at your table. Our existence is political, so our existence is going to go against whatever's at your table and in those spaces in those rooms"*.

Reflecting on further encounters, Tiana shared an experience where she was advocating for inclusion of Indigenous Peoples within international climate change policy. During this particular experience Tiana explained that the New Zealand government didn't prioritise this stance, allowing Tiana surmise that Indigenous Peoples' survival is *"dependent on us retelling our story, of us bringing our people into the space and bringing our people up because if we don't then what?"*. This experience highlights the ways in which governing bodies do not adequately respond to the lives and realities of Indigenous Peoples, instead simply ignoring their existence.

As a member of Ngāi Tūhoe, Tiana shares whakapapa to Te Urewera, the cornerstone of the Tūhoe ecosystem, one of the few places in Aotearoa that carries the status of legal personhood. Legal personhood recognition ensures that places like Te Urewera are given the rights afforded to a human (Te Urewera Act 2014). This protects the whenua in many ways, and assists with ensuring it is protected from pollution and misuse whilst further ensuring co-management between the Crown and Tūhoe (Te Urewera Act 2014). Although legal personhood is progress to aligning with te ao Māori understandings of and relationship to the taiao, Tiana expressed critique of the process. Explained by Tiana, it is a colonial legal system that is granting these rights, whilst also adding further colonial regulations and stipulations:

It doesn't really go far enough in that it's still part of the colonial project and using colonial law to prevent the exercising... As Māori, we have an inherent nature to know, just to get enough to feed our whānau and our communities rather than rape and pillage our environment. I think that's inherently part of being Māori and living in te ao Māori, so I think when we have regulations preventing that, it's kind of like how can we exercise tino rangatiratanga and mana motuhake and what does that look like?

Tiana points to law of tikanga and kawa that Māori utilise as governing practices to safeguard the environment. When we are forced to use colonial law and governing systems to see the protection of our whenua, we cannot fully abide by our own tikanga, and therefore cannot exercise tino rangatiratanga. This is a very clear example of how colonial structures restrict Māori from creating their own solutions, and in this specific context it is an example relating to our taiao that has implications on climate change. Tiana expresses that Māori hold the right knowledge and responsibility to successfully manage our environment, but it is colonial structures that impede this. This view can be applied to other climate responses.

The restrictive grasp of colonial structures on climate change is a theme that points to existing in colonial systems in New Zealand, which are not set to empower Māori responses to climate change. Tiana's articulation of this issue highlights that Māori already have systems, structures and ways of governance that can be applied to climate responses, but colonial structures often require Māori to fit within its restrictive boundaries. What is further implied by this theme is that for Māori to create Māori-centric responses to climate change, restrictive colonial systems must be removed. Only then can Māori fully achieve tino rangatiratanga and autonomy in regard to the taiao and climate change.

Case Summary

This case study delved into the rich activism experiences of Tiana. Tiana presented her perspective on what roles, skills and responsibilities rangatahi have related to the taiao and climate change. The role of rangatahi were expressed throughout this case study as being influenced by concepts such as kaitiakitanga, and restricted due to colonial structures. Similar framings applied to Tiana's perceptions on climate change aspirations and approaches. The aspirations Tiana expressed were grounded in whanaungatanga and being a kaitiaki, whereas the barriers she expressed highlighted colonial structures hindering Māori climate responses.

Case Study Two: Eilidh and Hannah (Te Aitanga a Māhaki, Rongowhakaata)

Introduction and Context

As established, Hannah and Eilidh are sisters that share whakapapa through their Mum to Te Tairāwhiti (Te Aitanga a Māhaki, Rongowhakaata) and through are connected to the Borders of Scotland through their father. Although they currently reside in Kirikiriroa, and have lived there for the past few years, Eilidh and Hannah grew up in different places around Aotearoa and overseas. Both sisters expressed a renewed connection to their Māori culture and identity since returning and settling in Aotearoa, which informed a lot of the kōrero we shared. Although they have been journeying as whānau to understand what being Māori means to them, each of the sisters carry unique experiences of this haerenga that range from dealing with whakamā, reclamation, and learning.

Reconnecting to whakapapa has been a significant part of this journey, including returning to their marae, Takipū, in Te Karaka. Both sisters shared powerful kōrero surrounding the importance of returning to Takipū Marae and connecting to whānau there, which linked to their climate change journeys. Hannah's kōrero was prompted when asked about taonga she carried with her on her climate change journey, in which she shared:

My experience and memories of being on my marae properly, for the first time and what came from that and the inspiration that I gained from that and the grounded-ness that I felt from that and the conversations that I had with the people who actually are there on the whenua and take care of the marae and those sorts of things, and what they talked about.

This kōrero shared insight into how for Hannah, reconnecting to her whakapapa through her marae inspires and grounds her in broader spaces. Similarly, Eilidh shared a compelling pūrākau of her experience on the marae in response to how being Māori informs her understandings of climate change:

Going back to Takipū and seeing what wasn't there that used to be, that really, reconnected with my tipuna... [learning] this is what they used to do and it all worked out. And then, now they've been forced to get rid of that. For example, they had this orchard across the way and it was by the awa and people used to go swimming there... they were telling us a story of how you don't go there now... the wairua is off... And it was just, dead trees... It hurt a lot. And so again talk about intersectionality, reconnected the climate crisis with colonisation, with just the harm that has been placed on our people from people that think that their way's best.

Connecting to their marae presented a real and raw connection for Eilidh to the impacts of colonisation on her whenua, which give her a direct way to connect the history of colonisation to the issue of the climate crisis. The mamae she felt was a result of actions inflicted on her ancestors, and

she touched on how this impact on her whakapapa influences responsibility to take action in climate contexts *“whakapapa has had different experiences... You do it because you have to, not because you want to”*.

Throughout the kōrero I shared with both of the sisters, it was evident that they were passionate about climate change, as they brought their experiences in activism spaces and other roles into the conversation. Both Eilidh and Hannah mentioned the importance of whānau support within these spaces, and for Hannah this was part of what inspired her on her journey; *“I think watching my Mum care for the environment inspired me to be the same, or that resides in me, my tipuna, my wairua”*. Furthermore, Eilidh was active in environment focussed political groups (Extinction Rebellion, Friends of the Environment) throughout high school in Scotland. Hannah expressed how this also played a role in encouraging her to be involved in similar spaces. Whilst saying this, each of their taiao/climate change journeys have been unique and influenced by different factors. Eilidh and Hannah both participate in formalised spaces advocating for the environment and climate action (including *Rangatahi Voices, The Hive, Go-Eco, Waikato Wellbeing Project*), which they draw on when sharing their experiences below. As well as this, both sisters are currently students studying at Te Whare Wānanga o Waikato in Kirikiriroa.

Five shared themes will be explored in this case study, creating a broad picture of both sister’s experiences and perceptions of climate change: The Influence of Whakapapa; Understanding Climate Change as an Intersectional Issue; Māori Aspirations Embody Climate Solutions; The Nuances of Being a Rangatahi; and Aspirations for Engaging with Climate Action.

The Influence of Whakapapa

Whakapapa is a foundational aspect of a Māori worldview described as *“forming the basis of Māori ways of being, knowing, and doing”* (Burgess & Painting, 2020, p. 208). In other words, whakapapa is the origins of all things, which highlights familial relationships between humans and non-humans, and informing how we view and act towards our future. As discussed in Chapter Two, literature and ancestral knowledge highlight whakapapa as a crucial pou in how Māori interact with and view the taiao. This theme is drawn from discussions the sisters shared about the notion whakapapa and what it offers within their understandings of climate change, how reconnecting to whakapapa has played a role in their climate change journeys, and how whakapapa acts as a motivation. A quote from Hannah whakapapa as an intergenerational vision:

The whole concept of whakapapa is like being a part of a collective and being a part of the better good, or being a good role model... I think Māori can see the future, whakapapa

extends this way [forward] as well, not just backwards, I think people talk about that and because you are thinking what is the future that I'm leaving for my moko, what is the future that I'm leaving for the people all the way down my whakapapa.

Whakapapa as a Catalyst

As shared in their introduction, the sisters and their wider whānau have been on a journey of reconnecting to their whakapapa Māori. The kōrero about reconnection to whakapapa was discussed as a catalyst for the sisters on their climate change journey. Eilidh shared that reconnecting with whakapapa added another layer of depth to her climate activism, “*When it comes to climate activism and the climate crisis and working to reconnect, it's kind of been another way in which I can reconnect to my tīpuna*”. The lens of whakapapa as described by Eilidh allows a deeper connection to the climate crisis which in turn acts as a catalyst to action.

Delving further into how whakapapa has worked as a catalyst, we can explore the early stages of Hannah’s climate journey. Hannah shared a pūrākau of stumbling across activism in her whakapapa and what that meant to her:

It's interesting that at the same time as I go for this- looking at the world around me and climate change, at the same time I come to my Māori identity and how important that is to me... the climate action journey which actually extends into my whakapapa because I've a few tipuna who are land activists, who fought to secure their rights in the Native Land Courts, so that moment where it was like "Oh, yeah, this does feel like a wairua thing for me, a whakapapa thing", an inherent thing that I have to do, that I'm meant to do.

Learning about this tipuna and whakapapa was a catalyst that encouraged Hannah to continue on her journey of learning and participating in climate action. Similar to her sister’s experience, the kōrero above drew a whakapapa link to the climate work Hannah was delving into, allowing for a deeper and more meaningful connection to her mahi.

Whakapapa as a Motivation to Care for the Taiao and Climate Change

Throughout the whakawhitinga kōrero, a whakapapa framing of the taiao and climate change was explored. Whakapapa provided a strong motivation to act on climate change, as Eilidh’s kōrero in the introduction states, whakapapa demands that you “*do it because you have to*”. That is, viewing te taiao through whakapapa encouraged a unique framing of the issue, as whakapapa implies familiar and deep connections with the taiao. Hannah maintains that:

You're thinking about yourself, but also how that relates to the people around you and also the environment, and also viewing the environment as a person or just as much as you would a person, valuing them as your tipuna... I feel a spiritual connection and any harm that's caused to her harms me. And I think people genuinely experience that as Māori in a way that we're probably not prepped culturally from a Western world view.

Here Hannah clearly contextualises her familial relationship with the environment to frame climate change through a whakapapa lens. The spiritual and familial connection speaks to a unique and inherently Indigenous way of viewing the environment and how we treat it.

As indicated by Hannah, whakapapa allows us to view the environment as tīpuna; our atua Māori are not solely 'personifications' of the natural world, but are the environment itself. Connecting to atua was further key to a whakapapa understanding of climate change. Eilidh expressed that as humans we owe action to Papatūānuku as she allows us to flourish on the whenua. Furthermore, referring to the whakatauākī *Kotahi anō te tupuna o te tangata Māori ko Ranginui e tū iho nei, ko Papatūānuku e takoto nei*, Hannah explained that the whakatauākī allowed her to understand what happens to our environment; *"if we alter the environment, if we alter the chest of Ranginui, that is reflected back onto Papatūānuku which is where we people live and reside"*.

Whilst also exploring a whakapapa view of climate change Hannah was also able to draw a strong distinction between a te ao Māori and a Western view of climate change; *"With a Western world view, I would have struggled to explain why climate action's so important because I couldn't explain that connection with what's going on above here that we can't see impacts us"*. This suggests that whakapapa is key to unlocking deeper understandings of, motivations, and connections to, climate change. Furthermore, in comparison to a whakapapa lens, we can imply that Western framings of climate change lack value and depth.

Whakapapa a Source of Resilience

As it is known, climate change is one of the pressing issues facing the current generation - with dire consequences if it is not resolved. As an issue that doesn't have a clear and simple solution, it is a heavy issue requiring resilience, as rangatahi shared in our kōrero. Woven throughout our discussion the sisters shared many stories and moments of resilience as they traversed their respective climate change journey. Both sisters shared times on their journey that required resilience to continue moving forward. An example of this was when Eilidh shared about a moment that led her to step away from pursuing climate action for a period of time due to the overwhelming nature of the issue. She explained that she experienced climate anxiety, which is not an isolated experience; research is

growing surrounding climate anxiety amongst youth (Crandon et al., 2022). Hannah further shared that she experienced challenges to focus on and engage with climate action when she was dealing with prejudice, requiring her to draw on resilience to continue working on climate action.

Exploring the need for resilience when pursuing climate action, each sister expanded on how they remain resilient when facing such a huge issue, whilst dealing with the challenges of life. Throughout the many strategies they employ, resilience was found within whakapapa, via whānau or tīpuna. Hannah elaborated on this concept by sharing sources of resilience that reside in her whakapapa:

Getting outside to the environment, talking with my mum, supporting her and her reo journey so talking with my family, family is a strong foundation for me. Just going back to myself and who I am and what I know is within me and what comes through me, through my whakapapa and through my tīpuna and my experiences, and that the world will unfold for me the way it will and I'll pass that on. Reminding myself of that, it's not all on me.

Furthermore, Eilidh identifies with the resilience derived from tīpuna who allowed her to reconnect with her whakapapa:

I just think having that [whakapapa] connection, you kind of feel it, I can't explain it, but you can just see it and you can just be like, I might not have that experience myself but I feel like part of me has. Part of me definitely has... when shit gets really hard or you might feel a bit hopeless, just holding onto that and just being like, we made it through so much. And I'm here right now and I am reconnecting. There's so much power in reconnecting to your whakapapa and being like, they tried to take that away from us.

Here, both sisters share that whakapapa allows them to connect to the bigger picture of not being alone within this big issue of climate change. Hannah shares that whakapapa allows her to connect not only to her tīpuna, but also to future uri, as a source of resilience. Similarly, Eilidh expresses that reconnecting to whakapapa holds a lot of power, as it connects her to the experiences of her tīpuna and finding hope in doing so. These expressions add to our understanding of the role of whakapapa in experiencing climate change, expanding whakapapa as a frame to understanding the issue, but also as a tool to navigate its challenges.

Further speaking on resilience, Eilidh drew on the whakapapa of Māori resilience to oppressive colonial strategies, such as assimilation and attempted genocides. Eilidh shared that she is able to draw resilience from recognising how Māori have made it through many challenges to be here today, much like wider Indigenous communities:

The climate crisis is not the only source of oppression that these [Indigenous] people have faced and how they've managed to still be staunch in themselves and to keep fighting through it all... we are here and we are not going anywhere and we are not going to stop fighting for this because this matters... I find strength in that.

Through this point, Eilidh highlights the importance of experiences in whakapapa as imbuing resilience to oppressive structures and challenges. We can further draw on the spirit of activism and resistance which is carried through whakapapa. Through these kōrero, it has been shown that resilience is imbedded within our whakapapa Māori.

Understanding Climate Change as an Intersectional Issue

The following theme brings together the threads of kōrero from both sisters that discuss the intersectional nature of systems and issues that underpin climate change. Throughout this theme, intersectionality is explored as a lens of viewing the climate crisis, its impacts and its origins. Intersectionality is echoed across the many themes pulled from these interviews, exposing the strongly interconnected lens in which the sisters carry. This theme is interwoven across many of the sister kōrero, including throughout the sister's climate change aspirations, hence the importance of making this its own stand-alone theme.

When discussing how complex the issue of climate change is, Eilidh stated *"the climate crisis intersects with absolutely everything that everybody does"*. Furthermore, Eilidh explained that she views the issue across many systems; *"I'm looking at health, I'm looking at education, I'm looking at energy, I'm looking at waste, I'm looking at transport"*. These points imply that Eilidh understands climate change from an interconnected framing, that considers breadth and depth of systems that govern our lives. Discussing the impacts of climate change, Eilidh reiterated that the impacts are not confined to the natural environment. Indeed, she immediately links the impacts of climate change to communities, and how that should be thought about collectively:

I think about the effects it's going to have on our environment. I'm thinking about our people and I'm thinking about the impacts it's gonna have on individual and communities, and so when I think about the environment, I'm thinking more about... the social side of things. And so it's kind of once you care for the environment, then you also care for the people. And if you care for the people they'll care for the environment. It needs to be a holistic cycle.

To understand that climate change is an issue that intersects all aspects of life, and impacts many systems, requires solutions and responses to the issue to be an oriented in an intersectional framing. This perspective is expanded on by Hannah's perception of climate action:

Climate action looks like all sorts of things, the same way that climate action is interconnected to everything. If you're fighting any fight that's to create a better world, then you are doing climate action, at least that's how I see it.

The idea that climate action is about striving for a better future paint a very broad picture of what could be considered positive climate action. Hannah suggests that creating transformational change in society connects to climate solutions. This is clearly an intersectional framing of addressing climate change, inferring that seeking better outcomes across the many systems, much like the ones mentioned by Eilidh, can be progress for a safer climate.

In addition, too shared a moment that further reinforces the interconnected nature of climate change from an experience at wānanga on Takatāpuitanga. Although the focus of the wānanga was not climate change, Hannah expressed that the aspirations shared at the wānanga aligned with her perception of climate justice:

Everyone talked about climate justice... When they envision a better world for Takatāpui they talked about food security, they talked about everyone being housed, they talked about the environment, like them having access to the environment or a place in nature or the environment being restored.

Hannah's pūrākau pulls two threads together: climate justice and Takatāpui aspirations. Through her pūrākau we see that Hannah understands climate action through an intersectional lens that blurs the siloed lines that are usually drawn between these kaupapa. When we lean into an intersectional framing of climate change, we can see how all things are inherently linked and influence each other, which further implies the issue is a collective issue rather than an individualistic and siloed challenge. In another observation, Hannah emphasised that Māori seem more attuned to seeing through an intersectional lens, which aligns with her pūrākau about how Takatāpui aspirations inherently align with climate justice.

Intersectionality is further used by the sisters to analyse mainstream climate responses. Both sisters commented on the overall framing of climate change, and responses, explaining that it lacks an intersectional approach needed to generate transformative change:

There's no intersectionality when we think about it, but we need to be intersectional with everything that we do because otherwise you're not going to address anything. If you address just one part of the issue, you're ultimately going to make all the other bits of it worse.

Hannah further calls out the lack of intersectionality in the climate action space:

Interconnecting how all disability justice, indigenous empowerment, indigenous rights, honouring Te Tiriti o Waitangi, how they interconnect- I don't think there's a solid foundation within the climate action space for people to understand that.

Evidencing these comments, Eilidh shared her response to the Emission Reduction plan, which failed to incorporate an intersectional approach:

When we look at the Emission Reduction Plan and how it's a Ministry for the Environment kaupapa and I'm like, no, no, no. It needs to go to the Ministry of Justice, it needs to go to the Ministry of Transport, especially because transport is one of our biggest emitters, why are they not being included in this kōrero at all? Why are they not part of this? Why is it just MFE [Ministry for the Environment]? ... It's not just the environment. It's everything.

It's clear that Eilidh's critiques are targeted at how mainstream solutions often silo climate change to as an issue of the 'environment', when Eilidh clearly establishes it as an interconnected issue. Through Eilidh's comments within this section, alongside Hannah's observations surrounding intersectional aspiration, it is clear that the sisters understand that a siloed framing of climate change will reduce the effectiveness of developing transformative solutions.

Intersectional Roots of Climate Change

As examined above, the sisters explicitly state that climate change is not a siloed issue, nor should it be treated as such. Expanding on this, an intersectional framing of climate change further considers the socio-political and historical contexts at the roots of this issue. Intersectionality does not ignore the origins of climate change, and the sisters highlight these origins - which allow us to uncover ideologies we need to move away from to aspire to a climate safe world. Hannah clearly established that climate change is not rooted in te ao Māori, and is instead an issue that is entrenched in imported ideologies:

The root causes of climate change which is capitalism, neoliberalism, colonisation, that sort of thinking and ideology of viewing the earth as capital and something to be gained and accumulated and dominated and taken over which isn't a Māori way of thinking at all.

The role of colonisation was further built upon as key to understanding climate change. Expanding more on the relationship between climate change and colonisation, both sisters explore the role colonisation played within how the West views our environment as a commodity to this day:

Colonisation was coterminous with a capitalist ideology, we view the land as capital and we're just going to take it, dominate it, exploit it, accumulate it and so it results in systems

that are unequal and cause the separation between people and that's very much not a Māori way doing things.

This quote not only illustrates the colonial mindset that aligns with the root idea of climate change, but also highlights how this played a role in creating inequity, the further intersections of issues. Eilidh expanded on Hannah's point, highlighting colonisation and over-accumulation of resources sitting at the crux of climate change:

Back in the day we had this obsession with one way being the right way and exponential growth and money and profit and things. And alongside the process of colonisation, again, one way being the right way, people thought it was okay to go to other places and basically lay claim to absolutely everything regardless of the consequences. And so we're still seeing that now.

As Eilidh stated here, colonisation played a role in growing profits without consequence. Eilidh's explanation of the origins of climate change relates to how she frames the contemporary occurrence of capitalist ideology within the climate crisis; pinpointing fossil fuel CEOs as modern day 'colonialists' who are "pillaging the earth for its resources". With her intersectional understanding of the historic roots of colonisation, Eilidh is able to develop a strong analysis of current challenges of the climate crisis that identifies strong parallels to colonial ideology. This analysis identifies a root issue that needs to be addressed to tackle climate change as a whole, and this issue is heavily rooted in dismantling damaging Western ideology.

This section highlights the need to understand the role of Western ideologies, and particularly the role of colonisation, in the origins and occurrence of climate change. The ideas embedded within colonisation that view land as resources, as a capitalist resource accumulation, and as a source to exploit of power, have been established as the roots of ideologies which have led us to the development of climate change. An intersectional lens views these ideologies as relevant to addressing climate change, and further sees the need to dismantle them. To ignore an intersectional understanding of the climate crisis is to ignore the root problems that continue to cause the crisis.

Māori Aspirations Embody Climate Solutions

When discussing her aspirations for climate change solutions, Eilidh simply states "all we're asking is for things just to be done in a way that isn't going to render the world unsafe next century". In a broad sense this statement encapsulates the aspirations shared by both Eilidh and Hannah, but throughout the analysis process it became evident that there were further shared hopes for climate change solutions. Holding such an intersectional understanding of the climate crisis, as explored

previously, implies that intersectional responses are necessary when it comes to climate aspirations, solutions, and responses.

Amongst this intersectionality was a strong sentiment expressed by both sisters that climate change aspirations must support the aspirations of Māori. These sentiments were clearly expressed through statements like: *“Indigenous justice is climate justice is social justice is disability justice is labour rights justice. It's all just one big thing”*, and *“I like to say, climate justice is social justice, is racial justice, is Māori land justice, it's everything. And you can't look at it in a monocultural lens”*.

According to Eilidh, climate solutions must adequately provide solutions for those who are unfairly impacted by climate change.

Further to this, when it comes to Māori aspirations for climate change, Hannah states that Māori ways of being align with the hopes for climate change: *“Indigenous empowerment is integral to, or should be integral to how we respond to climate change and Indigenous ways of knowing, Indigenous ways of being align with a carbon neutral world”*. For Hannah, Indigenous and Māori values and ways of being absolutely align with a carbon neutral world, and further, a climate safe future:

It would be an equal society where resources are distributed fairly, where land is owned collectively and we ensure that everyone has the right to housing, everyone has the right to food, clean water, sanitation, all those things. I think that's the Māori way of doing things, Māori values. And I think it all comes from Māori cultural understanding and the pūrākau that we have and the taonga that we have.

According to Hannah, contemporarily contextualising Māori cultural ways of being looks like collective rights to accessing the things needed to flourish. Although this may seem as not explicitly addressing climate change impacts, when we understand the sister's perspective regarding the intersectional impacts of climate change, these approaches and solutions are deemed necessary for achieving a climate safe reality and future. Hannah encourages us to look to Māori values, pūrākau, taonga and cultural understandings to find these teachings and guide these approaches. As indicated by Hannah, societal disparities allow us to conclude that seeking intersectional climate solutions will broadly address issues and see better solutions for vulnerable communities.

Beginning to imagine what these climate safe realities through Indigenous solutions may look like, Hannah explores a carbon neutral world, which includes Māori being proud of our culture and language.

When Māori are fully able to be who they are, and when society allows for that and openly encourages it... when I think about a carbon neutral world or a world where we can have a safe climate future, I do imagine a bilingual nation, I do imagine where we're doing traditional Indigenous solutions to climate change, I imagine all sorts of possibilities of things.

This clearly paints a picture that according to Hannah, a climate safe world must involve the flourishing of a future Aotearoa wherein Indigenous solutions are not only celebrated, but are woven into the foundations of our nation.

Eilidh takes this another step further and touches on the broader concepts which Hannah's whakaaro sits alongside: *"Tino rangatiratanga... Honouring te Tiriti, He Whakaputanga, land back, just everything. When I think about systems changing, the systems of oppression need to be addressed and apologise and not just the verbal apology, apologising by actually fixing the problem"*. Eilidh reflects on these aspirations and understands that transformational system change must occur. This includes the dismantling of oppression, not through words, but through tangible actions. Meaningful action was further emphasised by Eilidh when discussing system change for the communities in which she is a member. The following quote elaborates on Eilidh's aspirations for systemic change which highlights and empowers communities who are already making these changes:

Meaningful action. I want our lives to change... I just want to actually be like, "oh, the system has changed, I am working within a different system" and to see that, I would just like to see life functioning differently. All these little pockets and communities doing it already, I would love to see that become the norm instead of becoming the margins.

Recognising that communities out there are already pursuing intersectional approaches to tackling climate change is important, and true. The challenge here has been identified as the mainstream and overwhelming systems that we are forced to operate within.

The Nuances of Being a Rangatahi

The following theme attempts to capture the nuances of being a rangatahi, including the role of rangatahi, the challenges that rangatahi face and how these challenges can shape rangatahi experiences. A guiding question I invited the rangatahi to respond to, asked about their thoughts on the role of rangatahi Māori within the issue of climate change. Eilidh and Hannah's whakaaro indicated the unique skills rangatahi possess, a point which was also highlighted by Tiana.

Quite naturally, this line of questioning evolved into exploring the experiences of the sisters in environments where they have been consulted as representatives of youth voice, especially in climate change contexts. Immediately the concept of assuming to be a representative of *all* rangatahi was identified as problematic. Eilidh stated, *“the kind of assumption that I'm presenting on behalf of all rangatahi is really frustrating, because this is me and I am so unique, and my experience is nothing like anyone else's”*. The experiences that we delved into shaped the sisters' understandings about the challenges that rangatahi face, whether that's surrounding sharing their perspectives on climate change, or their respective roles in broader spaces in society.

As we explored what the role rangatahi have in climate change, it was evident that Hannah and Eilidh believed that rangatahi have the skills and abilities to contribute to transformative climate action. It was established that rangatahi have a right to challenge society, and should be given the space to do what they believe is right. Fleshing out this idea, Hannah shared a powerful sentiment on the unique skills that rangatahi carry:

I think young people have the ability to see the world differently, to see all of its possibilities, all the possibilities that the future holds because they still have the rest of their life to live. And I think we aren't held down by the way things are, the way things have always been. I think we have that ability to challenge the status quo and say hey, can we do things differently, because we haven't lived in these systems for that long. We have fresh eyes to the world around us, we're like "Why is it like this? Why is it like that?" That natural curiosity and questioning.

Here Hannah speaks to the innovative value that rangatahi can bring to society, whereby age is an advantage which enables the ability to see a future of possibilities. From Hannah's kōrero we can surmise that rangatahi would add value to any space they engage in. Additionally, considering the need for innovative and fresh ideas to the challenges that the climate crisis brings, rangatahi skills can clearly contribute to these spaces.

Delving into the sisters' experiences in climate change contexts, we began to explore the nuances of being a youth who contributes to change making in Aotearoa. Eilidh shared a pūrākau that highlighted how youth who are passionate about climate change can feel taken advantage of in spaces where they anticipate being valued and heard. In this pūrākau, representatives for the Ministry for the Environment asked a collective of youth *"How can you [youth] keep the government accountable?"*. This questioning struck a chord for youth in the group including Eilidh, who responded:

What do you mean? What do you mean accountable? Everything is there for them [the government]. They don't need us. I am a 20 year old girl who just wants to do sociology and social policy and live her life safely and make sure that her whānau and everyone else around her is also safe. And they've failed that so far... I'm just over being asked how I feel about it. Over being asked what I can do about it. What am I doing about it? What can I do to make sure the government does something about it? And I'm so over that.

As both Eilidh and Hannah expressed, rangatahi should be able to be passionate and challenging, but should also be able to feel that they are “able to just grow up and be safe”. Placing responsibility on this youth collective to keep the government accountable and on track towards their commitments, caused Eilidh, and other rangatahi, to express dissent with the government's ability to do their expected job.

The experiences and aspirations of rangatahi can often be ignored within societal perceptions of rangatahi which are often shaped by preconceived notions of what it means to be youth. This is perhaps evident for Eilidh, as she is a strong advocate for rangatahi “being more than what you're expected to be”, and “challenging what it means to be rangatahi”. In her experience, societal perceptions of youth are very narrow and prescriptive:

Young people used to be seen and not heard... actually, no, it doesn't work like that. It doesn't matter how old I am. I care and I have a voice... you are born and then you are an integral part of society until the day that you leave.

For rangatahi to stand up for what they believe in, and voice their opinion, is perceived by Eilidh as differing from societal perceptions, hence her whakaaro to push the boundaries of what people expect of rangatahi. She even shared experiences of challenging these perceptions within her own whānau. Eilidh's experience is not isolated, with other rangatahi expressing similar barriers from societal perceptions held about them as youth. The following section begins to explore more of the challenges both sisters face as rangatahi in different contexts and environments.

Challenges Faced by Rangatahi

When exploring the nuances of rangatahi experiences, Eilidh began to delve into some of the challenges that rangatahi can face, which include the restrictive perceptions that society holds about rangatahi. The following section examines challenges that Eilidh and Hannah associated with being a rangatahi, including preconceived assumptions about rangatahi. For them, challenges in overcoming societal expectations, or lack thereof, are explored through the sisters' experiences.

As referred to earlier, the sisters were able to draw on their experiences in formal environments when they spoke about being a rangatahi, including the challenges they've faced. Hannah explained that she's noticed how being perceived as young, and thus inexperienced, often creates a barrier when seeking to contribute her voice. To illustrate this point, Hannah shared a pūrākau from a climate action campaign where she worked in the rangatahi collective developing the campaign:

I kept saying "The challenges should look something like how do we integrate social justice into our response for climate change? How do we honour Te Tiriti o Waitangi when we think about how we get to zero emissions in transport?"... And then people are like "Okay, cool, cool, so our five challenges are going to be transport, waste", and then they're going and saying "Yes, young people chose these challenges for us", it's like they were my first experience of being dismissed, of being a box to tick.

This experience that Hannah shared described the challenges of being authentically heard as a rangatahi in a formalised context. Not only does her experience reinforce her experience of being dismissed for being young, but her pūrākau dually highlighted the dismissal of whakaaro Māori.

The tokenism directed at rangatahi within Hannah's pūrākau expands further than a single experience within a kaupapa. Hannah shared a related observation surrounding the shift from overt and explicit exclusion to covert tokenism:

What I've noticed in the past few years is this shift from being outright "We're just not going to listen to you", to them wanting to know how to listen, but still not wanting to give things up, to see what we're seeing, to hear what we're saying, to integrate what we're saying and to value it as truth and wise and it's very similar to the way people are talking about Indigenous rights within the past year.

Although Hannah refers to a noticeable shift in orientation, she still highlights key barriers that stop rangatahi from being authentically heard. Further, Hannah draws parallels between the treatment of youth and Māori in the systems that are set up for engagement. What can be gained from Hannah's observation is that youth and Indigenous Peoples are consulted in tokenistic ways, which devalues the perspectives of both of these groups. This suggests that rangatahi Māori can experience more tokenism and dismissal due to two aspects of their identity, creating even more challenges for rangatahi Māori in certain spaces.

Additionally, alongside characteristics of tokenism, Hannah points to another face of dismissal by decision makers:

I think being young is very easily dismissed, it gives me the space to say whatever I want because there's no consequences to it... I'm a young person so they're just like "Oh yeah, it's just classic young person". So there's two sides to the coin, I can go into a council chamber and say "You're not doing good, you're failing on your targets, you're doing all this, you need to be doing better, shame on you", I can say whatever, and they'll be like "Thank you so much for coming in today Hannah, we really value the young voice, so thank you for coming in".

Hannah shares that while she gains confidence knowing that she can say whatever she wants, her voice can also be dismissed as a “classic young person”. Interestingly, this provides a lens that whilst rangatahi can be given the space and time to express their opinions, those in charge are not always willing to genuinely engage let alone listen to youth voice.

Relating to the pūrākau that she shared earlier, Eilidh further discussed the impacts that came from the interaction with the Ministry for the Environment. From this line of questioning arose the challenge of framing the issue of climate change as an individualised responsibility. This Western, individualistic framing of the issue of climate change was discussed as harmful, and a part of the “colonial greenwashing project where they’re trying to make it your fault”. Eilidh responds further when asked, “What are you doing?”:

I totally internalised that, as every young activist probably has one step of their journey, if not at the moment. What can I do to make sure that I'm... Am I going to go vegan? Am I going to bike more? Am I going to do this?... It's insane, the amount of pressure that's on us to make sure that we [rangatahi] are doing these things and engaging.

Although speaking about a specific incident, this experience highlights the challenges that the individualisation of climate change can cause, especially for rangatahi. Furthermore, this experience further evidences the government framing of climate change as individualistic, which clearly does not align with Eilidh and Hannah’s intersectional, nor Māori view of interpreting the issue. In turn, this again indicates that the sisters' perceptions on climate change issues are not strongly reflected in government approaches to climate change.

A key understanding from this theme is that rangatahi are unique, and powerful and they can choose to stand up for what they believe in without having societal pressures restricting or belittling their abilities or passion. From the sisters' discussions, we can conclude that negative societal pressures have forced rangatahi to fight to have their voices heard, yet they are still dismissed or tokenised when doing so.

Aspirations for Engaging with Climate Action

As explored throughout the previous themes, Eilidh and Hannah both carry aspirations for a safe climate change future. Throughout the exploration of these aspirations barriers to engaging in climate action or barriers to achieving transformational climate action were identified. From these barriers we explore some of the aspirations or hopes that are related to how the sisters wish to engage with climate action and contribute to climate change responses. These whakaaro, the concept of community and power-sharing, are presented as addressing some of the barriers that were identified by the sisters as being rangatahi Māori in spaces and also their observations of tangata whenua engagement in climate change spaces.

Hannah and Eilidh have both been present in different aspects of the climate movement, from formal consultation, to activism, coordinating, campaigning and frontline action. As explored previously, the journey in this space has not been without learning or challenges. Hannah expresses, that the current climate movement needs to be more accessible to have more impact:

At the moment it's [the climate movement] very inaccessible and it's very business-like and it's very draining, whereas I want to be a part of an environment that excites me, that gives me hope for the future, that is like this, sharing stories, talking about it. Sharing stories is a huge one, so a safe space for people to share who they are, why they are that way and why climate action is important to them or what future they want.

Although this comment highlights a barrier within the climate space, it also presents an opportunity to move forward. Hannah highlights that being able to share and dream in a safe space could help counter this “business-like” framework of climate change engagements. Eilidh contributes further to this business-like framing, further insinuating how inaccessible climate action is: “*all individual action, white privilege, money. You've got to have access to all these things. And there's no sense of community, no sense of honouring tangata whenua*”. The subsequent whakaaro follow along this idea of presenting alternative framings for engaging in different forms of climate action.

Community

Leaning further into her aspirations for engaging in climate action, Hannah aspires to see a movement that emphasises the role of community in climate action, whereby people are collectivised rather than working in siloed streams:

I think one of the major words is community, bringing people together to create change, to create a movement. Just that unification of people, I think climate change can be the thing that draws people together that we all care about and to say “hey this is the future we want”, and to fight for it as well, and to fight along with friends that you find along the way. I just

think it'd be about activating the groundswell so we stop being in these few people doing a lot of work in these environments that you don't really feel like you're making change but actually for everyone to be involved in every way that they can, and everyone doing everything for everyone, so fighting for everyone.

Community is described by Hannah as crucial to seeing the climate safe future she aspires for. Furthermore, this unification of people and work directly responds to the challenge of the individualisation of climate change action, as Eilidh discussed in a previous section.

Building on the vision of seeing community in action, Eilidh shares that in her experience it is through having a community of fellow rangatahi that empowers her within climate action spaces: *“It's empowering when I'm with my group and when we are talking and when we're actually engaging with other rangatahi... and actually being able to have those kōrero and hold that space”*. Eilidh describes being in community as empowering, which expands to global connections:

there is that automatic connection there with all the Indigenous Peoples across the globe, I think there's a real beauty to that. I think looking at that, I just think that it's just such a beautiful kaupapa and there are just so many beautiful voices and people and spaces that are being occupied.

What we can gauge from Eilidh and Hannah's comments is the potential to create spaces and environments where rangatahi can connect with and empower each other within work they already do. Communities and pockets of people already exist, as highlighted by Eilidh, but it's asking how can these communities be valued in mainstream climate change spaces?

Power-sharing

Reflecting on barriers, Eilidh's experience of interacting with the Ministry for the Environment highlighted specific challenges in working with government agencies in which *“there's so much disconnect”* within consultation processes. Drawing again on this pūrākau, we can understand more about the changes necessary to make engaging with the government, and other settler institutions, better for rangatahi. When referring to this experience, Eilidh stated that the structures aren't set up for rangatahi:

It is very difficult because we're kind of working within the framework of government... but we want to also do things on our own accord... and to have conversations outside of what the government might want and to say things that they might not want to hear and also demand that they listen to us.

This kōrero highlights restriction to rangatahi agency when interacting with government structures, thus leading to the need for more rangatahi led engagements that fit the needs and wants of rangatahi. For this specific experience with the Ministry for the Environment, but also for other experiences where power imbalances are present, a significant aspect of better outcomes for rangatahi requires a shift in power, as Eilidh stated:

I'm a big believer that we need that grassroots action ground up but you also need top down. You can't do ground up without the people at the top being willing to transfer that power. It needs to be a constant transference of knowledge and sharing of knowledge.

Acknowledging that all parties can learn from one another and are willing to share knowledge is a step in bridging the obvious power imbalances that are present in high level change making spaces. Hannah further commented for the need to *“extend beyond the ticking to actually power sharing, redistribution, representation, recognition of our cultural difference and values and why that's important”*. Through redistributing power comes better representation, and further recognition for Māori input, particularly the valuing Māori cultural knowledge. Seeing a shift of genuine power redistribution would radically shift how both rangatahi Māori and wider tangata whenua engage in these spaces with more reciprocal experiences. Eilidh touches on this same need, reciprocal knowledge creation supporting power-sharing, especially in the context of the government *“instead of the government asking all the questions and expecting us to have straightforward answers, they need to be answering our questions and talking to us and having wānanga ultimately”*.

These examples draw on solutions of power distribution and reciprocal relationships to mitigate power-imbalances and restrictions on the autonomy of rangatahi. Key ideas to better experiences for rangatahi include sharing the power of crafting the structures of engagement is amongst these processes, and ensuring that authentic community creation is embedded amongst these structures. These learnings and aspirations are not just relevant for governments structures, but also for other policy-makers, decision-makers, researchers and organisations that wish to engage with rangatahi authentically on the issue of climate change.

Case Summary

This case study presented the distinct, yet, interrelated whakaaro of two passionate sisters. What is demonstrated in this case study is the sisters' clear approach to understanding climate change, through a whakapapa lens and an intersectional lens. Across the themes, the sisters highlighted that their framing of climate change is not largely represented in climate change responses. This was evident in their presentation of intersectional and Māori-centric climate aspirations, and further in

their dissent of engaging in current business-like approaches to climate change. Lastly, both sisters expressed their challenging experiences of being a rangatahi across the many climate environments they've engaged in, whilst maintain that rangatahi have the right to contribute; regardless of the barriers put in their way.

Case Study Three: Julz (Ngāti Whātua, Tainui)

Introduction and Context

Hailing from Ngāti Whātua and Tainui, Julz established that she holds a *“Big passion for te taiao”*. Over the summer she was given a chance to lean into this passion through an internship with her iwi Ngāti Whātua Ōrakei in the taiao team, Toi Atawhai. She also pursues this passion through her studies at Te Whare Wānanga o Waikato. Her self-described passion for the environment did not originate spontaneously. Instead, she describes her Mum playing a strong role in fostering her passion: *“My mum, she's very knowledgeable around the whenua and te taiao”*. Further referring to her upbringing on her whenua tīpuna as influential to her connection to the taiao, and to te ao Māori being a strong reasoning behind her passion for the taiao, Julz says:

I'm living on my Poppas whenua. I've got my maunga just up the road, our urupā just around the corner. Our moana is just on the horizon. I'm very immersed in my roots. My mum, where we live, she's seen as like the kaitiaki of Kākānui. So for me, I'm just very lucky to be connected. I feel like that's due to my mum and also being brought up on our whenua.

This connection to the taiao is further fostered through Julz's love for water. Julz calls herself a *“water baby”*, where growing up she took every opportunity to connect with the moana. Her affinity with the water further extended to her pursuing water sports for most of her life, and finding solace and grounding in the moana as an adult.

Julz' passion for the environment as a guiding aspect in her life was expressed throughout our whakawhitinga kōrero. As parts of our kōrero turned to discussing climate change, Julz located herself as teina, who is in a position of learning from experts in order to understand the bigger issue of climate change. Although in a position of learning, Julz articulated strong points of connection to climate change, which will be presented across the subsequent themes: Connecting to the Taiao as a Kaitiaki; The Role and Reclamation of Mātauranga Māori for Climate Change Responses; The Taiao and Well-being

Connecting to the Taiao as a Kaitiaki

This theme covers Julz' exploration of being a kaitiaki as a practice derived from whakapapa and how that connects her, and Māori generally, more deeply to the taiao. The notion of taiao-based whakapapa practices are discussed by other rangatahi, and the implications will be further explored in this thesis. The theme reviews the kōrero shared by Julz, exploring how her learnings from kaitiaki, atua and tīpuna through whakapapa provide a foundational understanding, which she carries across to how she connects to the taiao, and in turn how she perceives climate change.

Being a kaitiaki is described by Julz as being derived from atua, and as a practice is explored as necessary to continue the connection Māori have with the taiao across generations. Referring to the connection Māori have to the taiao, Julz stated "*it just goes back to the topic of whakapapa*". As she continued to kōrero on this topic she delved into the role of atua in our relationship with the taiao, atua being the kaitiaki residing within our whakapapa Māori:

With our Māoritanga, our ancestors and all living things pretty much, they come from the gods and our gods are embodied in mountains and lakes and all our awa and moana... So I think that's why our connection and the links with land is really important for Māori culture... I feel like we get that concept of kaitiakitanga from our Māori gods because Tanemāhuta was the kaitiaki of the forest and then Ranginui, kaitiaki of the sky... So I feel like that's why Māori had that really deep connection with the whenua because it was pretty much embodied in us and it passes through all of our ancestors and to us.

In this kōrero, Julz draws her connection to the taiao through our atua as kaitiaki of the taiao. She further associates the deep connection we have to the taiao with being a kaitiaki through embodying our whakapapa Māori. Evident by kōrero from Julz introduced in the context, te ao Māori is at the foundation of her relationship to the taiao, with this deeper connection to the taiao as an influence to care for and be passionate about it.

When prompted about the role of atua Māori in her relationship to the taiao, Julz continued to build on how learning pūrākau about the atua provided connection to the elements of the taiao:

I think it's really important because that's our history [atua Māori]... it's still part of us and it's our pūrākau of how we were made and how our whenua was made... And hearing the purposes of the kaitiaki, of what they were, and how they were made and their little pūrākau of them, I think that really impacted me because it gave me a wider understanding around the elements within te taiao and that came from that specific god.

Through these pūrākau about the atua, coming to know the whakapapa of the elements of the taiao allowed Julz to further foster her connection to the taiao through tikanga and mātauranga practices.

Julz explained that connecting to the atua through karakia encourages her to share her intentions of being in the taiao, while pūrākau orient her to the whakapapa shared with atua of the taiao. It is these kaitiaki practices that Julz describes as necessary to be passed on through generations to continue the deep connection Māori hold to the taiao; “going back to Papatūānuku, Ranginui, the atua, and all those pūrākau that we pass on through our generations, having and keeping that connection to te taiao”. In a following theme, Julz further establishes the importance of upholding mātauranga and tikanga Māori for the flourishing of the environment.

After establishing the importance of intergenerational transmission regarding the value of the taiao, Julz expanded by encouraging rangatahi to learn about climate change:

I feel like it's important that rangatahi engage with climate change because we are the people of the land, we are the kaitiaki. Our environment, she's a living thing. I feel like it's very important for rangatahi to know about climate change, not only because it's going to help save the planet, but just... rangatahi, we're the future generation.

In a reciprocal way, the concept of being a kaitiaki that Julz discusses has two roles, fostering connection to the taiao and the further fostering the protection of it. We can draw from Julz’s kōrero that learning about being a kaitiaki and practicing being a kaitiaki are integral to the deep connection Māori have to the environment, further implying a deeper motivation to sustain it. These whakaaro contribute to the kōrero shared throughout other rangatahi case narratives about being a kaitiaki and its implications.

The Role and Reclamation of Mātauranga Māori for Climate Change Responses

This theme explores Julz whakaaro on the role that mātauranga plays in her hopes and aspirations for the taiao and her community. Throughout the discussion she highlights challenges to ensure mātauranga flourishes but also shares experiences she’s had that promote mātauranga. The kōrero Julz shares provides insight to how she envisions a climate safe future, including pathways to get there, and barriers that can get in the way.

Julz understands the benefits that a safe climate future will have on the physical aspect of the environment. She expanded on this aspiration and explained that she envisions a flourishing climate to extend to the aspirations of Māori, which include returning to mātauranga Māori that encompasses of our whakapapa, tikanga, reo, pūrākau and kōrero tuku iho:

One I have at the moment is seeing- picturing Māori's returning back to mātauranga Māori. Creating those connections back to where they whakapapa. Learning about the pūrākau

about atua, not being whakamā around te reo or having that little anxiety, anxious stuff about speaking our language, of turning back to... I would just say returning back to, just our ways of our ancestors.

Julz's aspiration does not stand-alone; she further linked the relationship between reclamation of mātauranga and a safe future for our taiao. Referring to the efforts of reclamation of mātauranga, Julz stated that these 'decolonisation pathways' foster Māori-centric climate responses, whereby "our ways of looking after our climate will be valued even more". This comment recognises that at this stage, Māori approaches to climate change are not entirely valued by the mainstream. These points have been threaded throughout other rangatahi narratives.

Julz noted that our mātauranga needs to be passed on and needs to flourish, both to see a safe climate future, and as a way to connect to the taiao. The idea Julz expressed surrounding the value of our mātauranga in the climate space was reiterated on when she shared some learnings:

Indigenous knowledge, mātauranga is the key for climate change. I guess because we've been here for so long and we didn't have little machines to measure the wind... Our ancestors literally just used te taiao, all the tohu around us. I think just keeping that alive and passing it on is so key and just living, living authentically... it's not about bridging, it's about growing our active practice [of mātauranga]... trying to grow that mātauranga is very important.

Here, Julz clearly establishes that our mātauranga has practical application within climate change, as our tīpuna used mātauranga throughout their time. Not only that, but the necessity of growing our mātauranga is again repeated, concurring with her previously shared whakaaro.

It is therefore clear that Julz believes we need to see our mātauranga flourish within climate contexts as it not only has a role in facilitating connection to taiao and providing solutions, but also is heavily present in her vision of a climate safe future. Throughout the exploration of mātauranga Julz identified barriers to seeing it flourish, which includes the challenge of mātauranga Māori not being normalised. Julz expressed that the challenge of not being immersed in mātauranga Māori makes it difficult to learn about it, and therefore makes it challenging to contribute to its growth. In Māori settings that embrace mātauranga, Julz shared that she "feel[s] so empowered, and you feel so happy and privileged and so grateful to be Māori", whereas in other Pākehā-centric spaces she expresses she is proud of our mātauranga but feels whakamā to share it in the fear of being judged. This is a significant hindrance to seeing growth and normalisation of mātauranga Māori, highlighting a prominent challenge that needs to be addressed to see mātauranga incorporated into climate change responses.

The fact that mātauranga needs to be shared for it to flourish was identified by Julz as one of the motivating factors for Julz to be doing the type of mahi she is for the taiao. She explains that being able to pass on knowledge to her whānau and wider community is important, which is a direct mitigation of the barriers mentioned above. As we spoke specifically on climate change, Julz explained she is a conduit of mātauranga, between the spaces of learning she is in, and her community and whānau:

I have a lot more to learn about climate change. So for me, it's about spending time with what [name of kaimahi at Toi Atawhai] calls like the tuakana-teina relationship. Spending time with people who... have a lot of knowledge in those spaces and being able to pass that knowledge onto the wider community like our neighbours, our cousins, siblings, mum, dad, so that they can also gain that knowledge and pass it on to the people that they want to.

Other rangatahi identified similar roles for themselves as they are formally educated, some highlighting that it is their responsibility to translate and share information with their community. Although Julz is still learning and absorbing mātauranga about climate change and our taiao, she understands the importance of sharing this mātauranga in the attempts to normalise it, and thus contributes to the aspirations she holds for the flourishing of our mātauranga and mātauranga based taiao solutions. Mātauranga Māori should play a strong role in climate approaches and further, flourishing of mātauranga should be amongst the climate safe futures we envision. These kōrero shared by Julz contribute to the thoughts of other rangatahi, and later discussions in this thesis.

The Taiao and Well-being

As established, a Māori lens the on environment provides many avenues to support and influence well-being. Jones (2019) summarises this sentiment by saying: “Land and its associated natural systems are connected to health through a variety of pathways, providing cultural, spiritual, social, and economic benefits for well-being” (p. 75). Throughout our conversation, Julz discussed the taiao and the ties it has to her personal well-being, explaining how the life of the whenua impacts humans. In a powerful statement, Julz expresses her strong association that the environment has with our health and well-being:

When the whenua flourishes we flourish, and I feel like the whenua only flourishes when it's being treated well... I feel like the health of the whenua and te taiao have a big tie into our one [health] as well.

Julz' previous comments about her relationship and connection to the taiao is further layered with this statement, inferring that she perceives there to be a symbiotic relationship between the well-being of the taiao and the well-being of humans.

As our kōrero continued to delve into Julz experiences in different taiao spaces, she shared that working with Toi Atawhai "*helping out the environment and seeing everything flourishing*" affects her well-being by facilitating a connection to the taiao that allows her to help and engage within the taiao. Through this expression about working in the taiao space we can start to understand more how Julz frames hauora in relation to te taiao.

Julz further shared how experiences in the environment give her an overwhelming sense of solace:

Every time I go to the moana and I have a swim, I just get this whole new feeling of cleansed, or peaceful, or like something about- It's like you jump in and then you come out and it's just like your whole aura's been cleaned.

Similarly, Julz shared a pūrākau about being alone in the ngahere for three nights, which she described as a time in which she experienced "*true whole peace*". Julz revealed that the significance of that experience was actually being in the ngahere; "*I don't think it would've been the same if I wasn't in the ngahere and surrounded by nature*". In both of these experiences, Julz describes the taiao as having a long-lasting influence on her well-being, and further building her relationship with the taiao as being positive for her hauora.

Julz' understandings, illustrated by these points, shows how important the taiao is for her health and well-being in a holistic way. Her perspectives suggest that while Julz experiences positive influences from the taiao on her hauora, this relationship also opens her up to experiencing more loss through climate change impacts on the taiao. Consequences of climate change Julz has noticed include the emotional impact that these changes have already had on her:

I would say, our connection to te taiao is even emotional. So, seeing these changes and how bad it does affect our environment, It's actually quite, to me, it's quite hurtful... Because you see the manu, and you hear about all the whales and the fish and how all their homes are just getting destroyed due to this thing that's being... knowing that it's from humans and that we are the ones that are affecting these things, these beautiful creatures on our earth and the environment in general.

Although Julz is young and healthy, we can understand how vulnerable her well-being is to the impacts and losses occurring due to climate change. Julz identifies that climate change is having a tangible impact on the taiao, which strongly influences aspects of her health, and her well-being.

Less tangible impacts from climate change on health are therefore important factors to be considered in climate responses, especially for Māori as our hauora and well-being are perceived to be connected to the health of the environment.

Case Summary

Julz established that connecting to the taiao, caring for the taiao, and responding to climate change clearly links to her understandings of te ao Māori. Her personal connection to the environment is described as residing in her whakapapa, connecting back to the atua, her maunga, awa, her whānau influence and also within her, as a kaitiaki. This grounding connects to how Julz perceives the harm of climate change on the taiao, and furthermore the harm of climate change on her hauora. Further, Julz' connection allowed her to see the importance of utilising and reclaiming mātauranga Māori for climate solutions.

Case Study Four: Ameera (Ngāti Whatua Ōrākei, Ngāpuhi, Te Rarawa)

Introduction and Context

Ameera, alongside Julz, was also a summer intern at Toi Atawhai - the taiao team within her iwi organisation Ngāti Whātua Ōrākei. Ameera is a taura living in Tāmaki Mākaurau, who is studying Engineering at Waipapa Taumata Rau and pursuing a study pathway that reflects her passion for the environment. When describing her relationship to the taiao, Ameera spoke about the influences of her whānau values. Her mother played a role in encouraging her to engage in her senses and how they tie into the taiao. About her Nan's influence, she states:

My Nan had a little garden, because I used to live at my Nan's and she had a little garden, and every time I would go out and I would just play with the garden and play with the plants and do my own little thing with it.

These influences encouraged Ameera to foster her relationship with taiao, which she further describes as pivotal in supporting her wellbeing and mood:

When I'm frustrated or when I'm feeling some type of way, like negative emotions, I always tend to go outside. I always tend to just go for a walk or just sit outside... you just take the time to be more present and take a breath and actually look at what's around you, it helps. It helps a lot to put things into perspective, or even to put yourself in a better mood.

For Ameera, her passion for the taiao is further rooted within an inherent love for the natural world, as well as her inquisitive mind that is interested in the mechanisms of our ecosystems:

I like natural kind of things, and our environment is natural. I appreciate it for what it is... It does a lot for us, even though we might not see it that way. If you look at bees, they help to pollinate our plants and our food. There's a whole ecosystem in a way that things are supposed to be. And people don't realise that our insects, like the little things play a part in that, they just think that we are the centre and it's like, no, we're not. There's like a whole big dynamic and mechanisms that is working around us that we have no idea about. And I think that's something that intrigued me as well, is when I found that out, whether it's like ants, bees, worms.

The awe, interest and respect Ameera has for the environment is present within our discussions we shared about climate change. Ameera's shared further motivations and whakaaro surrounding climate change which will be introduced throughout this case study using the consequent themes: Responsibility to Future Whakapapa; Encouraging Rangatahi to Engage; Independent and Self-sustaining Climate Solutions.

Responsibility to Future Whakapapa

Throughout the whakawhitinga kōrero, our discussion naturally turned to explore what drove Ameera to be so passionate for the environment. In the introduction to this case study, Ameera shared a natural affinity with the taiao, alongside a natural curiosity in the wonders of the environment, which encouraged her to be interested in and care for the taiao. Expanding on this spark of passion, Ameera made it clear that caring about the environment was tied to her future thinking regarding whakapapa. Ameera expressed that her future generations play heavily into her life and her passion for the taiao:

As young as I am, everything that I've done, like future-based, has honestly been with the thought of my future generations. So the career that I went into and even my passion for te taiao is based on what I hope for my future generations and what I want them to grow up.

As we spoke further about her motivations Ameera expressed how she enjoys many aspects of the environment and wants her future uri to have that experience too. She maintained that *"having that understanding and trying to protect it [the taiao] and care for it as much as you can as a way to preserve that for them [future generation]"*. These points made by Ameera recognise that having a future focus that integrates whakapapa, motivates her to take action for the taiao.

In addition to the hopes that she carries for future uri, Ameera also expressed concern regarding the impacts of climate change that her future whānau will experience:

If you think about it, rangatahi are the people who are most likely going to experience the severity if it [climate change] does go really bad and would experience it more than the people who are older than us. But on top of that, our [future] family is going to go through with that kind of hardship. And that's not necessarily something that you want. That's what really got me into looking on to our environment and ways to protect it.

Ameera asserts that considering future whakapapa is an important responsibility whereby Ameera continues to think about the lives of future generations and the hardships they may experience, as she makes decisions in her life, thereby influencing her choice to care about climate change.

Ameera's kōrero reinforces the powerful role that whakapapa plays in guiding our actions in the current day. That is, Ameera considers herself 'future-based', or inherently whakapapa-based which is a strong motivation to caring for the environment and climate change. In turn this shapes the reasoning behind Ameera's motivation to care about climate change, which is grounded in whakapapa.

Encouraging Rangatahi to Engage

Throughout our korero, and referred to in the previous theme, it was established that Ameera believes it is important for rangatahi to know, understand and engage with the issue of climate change. Adding to the discussion on the importance of rangatahi involvement, Ameera identified some challenges for rangatahi surrounding being valued and being listened to, but she also identified positive approaches to supporting rangatahi to feel heard involved. Ameera began by stating the following:

In some cases, we are valued and they do want to hear our voice, but then there's also sometimes this ignorance that we are too young and it annoys me so much. It's like, "Oh, we want you because you're our future generation". But at the same time, "You're too young. You don't know, you're not experienced", and that annoys me so much. And it has happened a few times.

This response highlights the many tokenistic and dismissive reactions towards rangatahi, which has been shared by other rangatahi throughout this rangahau; such reactions appear as widespread experiences for rangatahi. Ameera clearly identifies this as a barrier for rangatahi to feel valued and heard, and further as a barrier to getting involved in climate or taiao spaces. Following this comment, Ameera offered further whakaaro on challenges, but also highlighted how having positive encouragement and support helps her to speak up:

When you have people like [kaimahi at Toi Atawhai] and our iwi in general who encourage us to speak up and to go into what we are passionate about, that helps a lot. And what Julz said, we are pretty whakamā sometimes, but I feel like that just comes with age, especially... Because I know for myself, there's sometimes where I'm unsure and I'm indecisive. So also it comes with confidence in what you think is right or what you think or what you believe to be true.

In this extract, Ameera identifies confidence and whakamā as challenges to speaking up, but she also identified that promoting confidence in rangatahi to speak on what they are passionate, regardless of being right or wrong, is a tangible way to support rangatahi. Indeed, as stated above, when working in a supportive environment within the Ngāti Whātua Ōrākei taiao team, Toi Atawhai, Ameera's voice was nurtured as she was encouraged to speak up, and thus felt heard in these spaces.

Additionally, Ameera spoke being a rangatahi, and acknowledged that some rangatahi do not engage with the topic of climate change due to not understanding the issue. Yet rather than being dismissive towards these rangatahi, much like her experience mentioned earlier, Ameera believed it was important to start the conversation with these rangatahi to encourage them to learn or be open about climate change:

Just trying to encourage them to be more aware of what's happening around them and trying to... sort of inspire them to take it up or look more into it. It's like some people might still disagree, but as long as they're taking the time to actually try and assess the situation, I reckon that's like a good way to start. And most of that would be conversation and we'll be trying to reach out to them.

Reaching out and having a conversation with rangatahi and meeting them where they are at with their understanding of climate change is a generative approach to foster rangatahi participation. This point supports a whakaaro illustrated by another rangatahi, in which it's important not to push assumptions or expectations onto rangatahi, but rather to give them agency and mana to determine their own hopes and experiences.

Independent and Self-sustaining Climate Solutions

This theme explores an aspect of tino rangatiratanga, or self-determination, within climate aspirations, which help us to understand how Ameera perceives solutions to climate change. Relating to the root issues of climate change, Ameera shared that within climate change, a significant amount of our contribution to the problem is based on how our society functions,

including the systems embedded within it. Ameera pointed out that systemic processes that we heavily rely on in society, much like the mass manufacturing and consumption of products, dependence on fossil fuel and technology, which contributes significantly to climate change. The question Ameera poses is: how much are willing to sacrifice now for our future; how much are we willing to compromise as a society? She shares her analysis as it follows:

I'll say, products or manufacturing processes do play a hand in accelerating how much or how fast our climate changes... Now that we know, it's a bit different, people are trying. But we've built a society around those products. If you think about fossil fuels, for example, our whole society at this point is sort of based on it. Because we're living in a day and age where we're so dependent on technology... it's a question of, do we compromise and try and find ways to sort of still have this energy, but find an alternative to... an alternative in a cleaner way of going about it, which could be renewable energies for example, or do we completely abandon it. And I guess that sort of goes with how much we hold onto our way of living now.

From this kōrero, it is clear that for Ameera, things need to change for us to slow down the process of climate change. Amongst this analysis she touches on the issues of being overly reliant on these processes in place, including technology, but also engages in the nuances involved in trying to find solutions to the problems. Ameera gestures towards the need to evolve our way of living, so that we might live less dependently on problematic societal systems.

When further discussing the topic of reliance, Ameera states that in the context of climate initiatives, too much emphasis is placed on the government to hold all solutions; *“All the powers to the government. Where I don't feel like that. I feel like everyone has their own part to play. And whether it's small or not, it's still a part to play”*. Ameera's statement suggests that all members in all communities should feel empowered to contribute to climate action, which implies that we need to turn away from the government and focus on contributions everyone can participate in, in order to find solutions for climate change. When discussing aspirations for climate safe futures, Ameera returned to the point of empowered local communities:

I think my one will be self-sustainable or localisation. So for me, if you had more people who had their own māra kai and producing their own energy, I reckon that would be like a cool thing. And for everything to be more localised, locally sourced, because a lot of our society is centralised and we rely a lot on supermarkets and energy providers. And I feel like in order for us to be more green, we need to move away from that kind of whakaaro and come back to more self-sustainable way of living, where we are less dependent on them and more

dependent on ourselves and being able to provide our own food and not have to rely on someone in a different country, importing food to us.

Ameera suggests that current responses do not seem to empower communities to take on climate action, nor are the current systems set up to allow communities to take steps as Ameera suggests. Instead, responses are centralised and do not take into account local community initiatives, much-like hapū approaches, nor the diverse environments and thus the responses needed to serve different localities.

Dependence on Technology

Ameera links the challenges of dependence on societal systems, and includes the over-dependence on technology. When describing the challenges of technology Ameera expressed that *“People are so engaged with their technology, they look down, they don't look up or look around”*. Alongside the fact that technology is overly stimulating, she asserts that *“technology gives you information, but it doesn't necessarily give you the will to want to actually go out and learn it or experience it”*, generating a disconnect between gaining knowledge and truly learning and practicing things relating to the environment. This can be linked to the many tactile and experiential practices spoken about (by other rangatahi) that keep our connection alive with te taiao.

Expanding on this point, Ameera established that technology could be a potential barrier for rangatahi to engage with the taiao. In the previous theme Ameera mentioned the issue of rangatahi not engaging in climate change. She further noted that she finds it is a lot more prevalent in her rangatahi generation who have grown up in this age of accessible technology. As Ameera states, perhaps for this generation of young people technology contributes to *“why there is a disconnect between rangatahi or people in this generation and te taiao”*.

Case Summary

Ameera's case study presented the personal value she places on the taiao, and the further value she sees in it for future generations. With this future-focused orientation, Ameera presented the importance of rangatahi being encouraged to connect with climate change; being the future leaders whilst also being those most likely to carry the brunt of climate change impacts. This motivation to care for the taiao for future whakapapa further promoted Ameera to offer up her innovative analysis on current climate approaches, current barriers and potential ways forward.

Whakarāpopoto | Chapter Summary

Chapter Four presented an array of diverse findings from each of the rangatahi, highlighting respective experiences, knowledge bases, perceptions and whakaaro surrounding climate change from their unique perspectives as rangatahi. These case studies are not conclusive of the rangatahi, their experiences, nor their knowledge but rather begin to amplify the whakaaro they possess about climate change and being a rangatahi Māori. Chapter Five aims to build on these case studies by contextualising the findings within wider literature, to further develop the knowledge presented by the rangatahi, and respond the research questions of this thesis.

Chapter Five: Whakawhānuitanga Discussion

As observed in the previous chapter, the rangatahi shared diverse experiences that build a foundation of narratives in response to the main research question; ***What are rangatahi Māori experiences and perceptions of climate change.*** To answer this research question, the following sub questions are explored in this chapter by bringing the rangatahi narratives into conversation with each other, and within the wider contexts that they situate themselves. These sub questions include: ***What is the role of rangatahi Māori within climate change?*** and ***What are challenges and supportive factors that rangatahi Māori identify?***

The chapter explores the themes that have been developed across each rangatahi narrative and contemplates how these ideas might contribute to further understandings about what rangatahi Māori experiences and perceptions of climate change include. This will be done through two sections. Section One explores how whakapapa informs rangatahi perceptions and experiences of climate change, wherein being Māori plays a significant role in how rangatahi formulate understandings on the issue, and what they contribute to climate change spaces. Section Two explores being a rangatahi in climate change spaces. This section highlights the participants experiences of being a rangatahi Māori, which includes challenges they faced on the account of being a rangatahi Māori as well as further supportive factors.

Section One: Whakapapa Informing Rangatahi Perceptions and Experiences of Climate Change

Whakapapa is integral to many facets of te ao Māori, which is artfully captured by Burgess and Painting (2020, p. 208) in the following quote: “Whakapapa weaves all of existence together into an ever-expanding web of intimate relationships, forming the basis of Māori ways of being, knowing, and doing”. The diverse and extensive concept of whakapapa has been frequently highlighted across the different chapters of this thesis. Chapter One positioned my relationship to the taiao and this research as being centred in whakapapa. As a descendant of Tūhoe, *matemateāone* was discussed as a concept grounded within my whakapapa Māori, establishing me as a relation to the environment and *ngahere* of Te Urewera. Further discussion on Māori relationships with the environment was presented in Chapter Two, building the understanding of the crucial role that whakapapa plays in shaping *tangata whenua* values, lens and practices regarding the taiao and climate change (Harmsworth & Awatere, 2013). Chapter Four highlighted rangatahi articulations of the ways in which whakapapa influences their perceptions and experiences of climate change -

aligning to how whakapapa has been discussed previously in this thesis. These articulations of whakapapa were diverse, yet related, and were threaded throughout the rangatahi case studies, which are explored in the following section as central to the diverse experiences that rangatahi Māori have with climate change. Indeed, whakapapa makes rangatahi Māori perceptions and experiences of climate change so distinctive, as it is an experience unique to Māori.

The following subsections examines whakapapa in the context of climate change, as discussed by the rangatahi participants, in three interconnected ways:

- How whakapapa creates whanaungatanga with the taiao and influences how rangatahi experience climate change and understand its impacts;
- How intergenerational responsibility is embedded in whakapapa, acting as a driving motivation for rangatahi to care about climate change; and
- How whakapapa influences rangatahi aspirations for intersectional climate approaches

Exploring each of these points work towards a response to the research question; ***What are rangatahi Māori experiences and perceptions of climate change?*** The following sub-sections are largely intertwined with each other, as they are all located within the web of whakapapa Māori. Much like how one views each strand of a hāo as interwoven with one another to create one piece, this section should be read as building upon the inter-related knowledge presented in each sub-section.

Whakapapa Shaping Whanaungatanga With the Taiao

When discussing their connection and relationship to the environment throughout the case studies, the rangatahi discussed whakapapa and the notion of being Māori as essential to this relationship. At the basis of rangatahi Māori experiences of climate change is the cultural notion of whanaungatanga relationships to the taiao, which is a unique connection that relies on whakapapa Māori. The following sub-section explores how whanaungatanga whakapapa-based relationships to the taiao influences how rangatahi connect to and perceive the environment and climate change, including how they experience harm caused by climate change impacts.

Each rangatahi expressed in various ways that whakapapa Māori is their innate kinship relationship and therefore connection to the environment. Tiana clearly established her relationship to the environment as grounded in her shared whakapapa with the taiao through the well-known whakataukī, “*Ko au ko te taiao ko te taiao ko au, ko au ko te whenua ko te whenua ko au*”, which refers to the environment and land as being one with Māori. Similarly, Hannah highlighted the notion of whakapapa requiring her to view “*the environment as a person or just as much as you*

would a person, valuing them as your tipuna”, which further builds on a Māori relational or kinship connection to the taiao. Additionally, other rangatahi referred to atua Māori as clear examples of Māori whakapapa to the taiao, whilst also articulating how central the environment is to being Māori, as Julz highlights:

With our Māoritanga, our ancestors and all living things pretty much, they come from the gods and our gods are embodied in mountains and lakes and all our awa and moana... that's why our connection and the links with land is really important for Māori culture.

These examples highlight how rangatahi experience the environment as Māori-centric with relational connections, which showcases a uniquely Māori way of perceiving the taiao - and thus climate change.

Māori whakapapa-based relationships with the environment is a widely established cultural notion previously explored in this thesis as inseparable from a Māori worldview of the environment, which plays a considerable role in informing kawa and environmental ethics that govern how we engage with the taiao (Harmsworth & Awatere, 2013; Royal, 2003). Climate change literature further states that reciprocity and care for the environment is fostered when we perceive ourselves as being relationally interdependent on, and connected to, the environment (Burnett et al., 2021; Jones, 2019). These points are illustrated in the rangatahi whakaaro on whakapapa, inferring that their personal whakapapa perception of the taiao instils in them the genealogical and cultural importance of the taiao. According to further research, those who experience a better connection to nature feel more responsible for the environment (Zylstra et al., 2014), which is a relevant point for tangata whenua, and is further explored with rangatahi whakaaro in the next sub-section.

Understanding the importance of whakapapa connection in Māori relationships to the environment has further relevance to how Māori experience climate change impacts. The familial relationship to the environment prompted a discussion on experiences related to the impacts of climate change. As Hannah stated, *“I feel a spiritual connection [to the environment] and any harm that's caused to her [Papatūānuku] harms me”*, articulating the role a spiritual whakapapa relationship plays in her experiencing harm. Julz reiterates this point and says, *“I would say, our connection to te taiao is even emotional. So, seeing these changes and how bad it does affect our environment, it's actually quite, to me, it's quite hurtful”*.

Colonisation has harmed the whakapapa connection that Māori have with the taiao (Wildcat, 2009; Koroī, 2021), introducing factors to Māori society that have contributed to a disconnection from the environment - to “a rise of individualism and the erosion of community” and “increasing

urbanisation and inequality” (Burnett et al., 2021, para 10). Climate change continues to unsettle the relationship between Māori, the environment, and their whakapapa (Johnson et al., 2022; Jones, 2019). Whakapapa to the taiao is central to Māori identities, with cultural practices and notions such as tūrangawaewae, and matemateāone, embedded in this connection (Gifford, 2021; Te Awekotuku & Nikora, 2003). For that reason, tangata whenua experience a sense of cultural and spiritual harm when the environment is damaged (Morrison & Kaio, 2021; Awatere et al., 2021). This harm is a key difference to understanding the experience of climate change for Māori versus non-Māori. That is, climate change impacts are often articulated as tangible losses, when in-fact there are further intangible losses for tangata whenua (Johnson et al., 2021). These points are succinctly captured by Hannah as follows: *“With a Western world view, I would have struggled to explain why climate action so important because I couldn't explain that connection with what's going on above here that we can't see impacts us”*.

Whakapapa Conveying Inherited and Intergenerational Responsibility

As established, whakapapa sits at the crux of the rangatahi Māori experience of climate change, which includes a responsibility to act and engage with climate change. Exploring whakapapa as responsibility stems from the many times concepts embedded in whakapapa were discussed by the rangatahi as integral to their passion for climate change and including their relationship with the taiao. The whakaaro of the previous section are built on here, specifically as to how whakapapa relationships with the taiao translates into inherited and intergenerational responsibility for the taiao. This subsection includes discussion about how rangatahi are fuelled by their ancestors, whilst simultaneously being fuelled by the notion of being good ancestors to future descendants.

Whakapapa as an inter-related notion of the past, present, and future is central to te ao Māori, and promotes intergenerational discourse and relationship building (Burgess & Painting, 2020). Indeed, the care for future descendants is intertwined with our ability to look after the land (Lewis, 2021). This non-linear worldview implies a sense of shared and inherent responsibility and reciprocity that spans across generations (Hamley et al., 2022), with rangatahi describing it as acting as a powerful influence for them to engage in climate action, and care for the taiao. The way of viewing actions through whakapapa is discussed through the rangatahi whakaaro. Hannah encapsulates this worldview as follows:

The whole concept of whakapapa being a part of a collective and being a part of the better good, or being a good role model... Whakapapa extends this way [forward] as well, not just backwards. [...] what is the future that I'm leaving for my moko, what is the future that I'm leaving for the people all the way down my whakapapa

Additionally, Ameera emphasised that all her decisions are underpinned by *“the thought of my future generations”*, thus upholding her responsibility to protect future whakapapa.

Other rangatahi identified tīpuna in their whakapapa, including atua or whānau members, who passed down their passion for the whenua and taiao which implies an inherited responsibility as well as an inherited resilience to continue to advocate for the taiao. As Eilidh highlights, she is inspired by looking to the resilient, rich whakapapa of Indigenous Peoples: *“The climate crisis is not the only source of oppression that these [indigenous] people have faced and how they've managed to still be staunch in themselves and to keep fighting through it all [...] I find strength in that”*. Māori scholars discuss this whakapapa of resilience, stating that Māori *“hold a history of experiences, insights, resilience and ongoing cultural renewal”* which demonstrates capacity and capability of Māori communities to provide insightful climate solutions for the betterment of the taiao and people (Morrison & Kaio, 2021, Mātauranga in climate change research section).

Furthermore, some of the rangatahi referred to the concept of inherited responsibility as kaitiakitanga or being a kaitiaki, *“kaitiakitanga, is rooted first and foremost in upholding the rights of nature, upholding the whenua”* (Tiana). Being a kaitiaki was described as why rangatahi, Māori, and Indigenous Peoples should be well engaged with climate change: *“it's important that rangatahi engage with climate change because we are the people of the land, we are the kaitiaki”* (Julz), *“being a kaitiaki kind of illustrates how and why indigenous people should be forefront of climate solutions”* (Tiana). On this, Walker states that *“Whakapapa has allowed for the concept of Kaitiakitanga to transcend through generations by providing the idea of responsibility to the past, present and future needs of whānau and hapū”* (2016, p. 33), which highlights the generative nature of whakapapa to foster intergenerational responsibilities related to kaitiakitanga.

Whyte explains that the experiences of intergenerational responsibility that rangatahi describe is an inescapable facet of an Indigenous understanding of climate change (Whyte, 2018). In his seminal work, the notion of intergenerational action is crucial to informing Indigenous climate change approaches. Whyte maintains that *“our actions today are cyclical performances; they are guided by our reflection on our ancestors’ perspectives and on our desire to be good ancestors ourselves to future generations”* (2017, p. 160). The framing described by Whyte is represented in the rangatahi case studies when they describe how whakapapa influences their actions and further their worldviews.

Intergenerational responsibility inspired by whakapapa is specifically explored within youth focused literature. For instance, Nairn et al. (2021) interrogates intergenerational responsibility in the context of Aotearoa youth-led activism. The main argument of Nairn et al. (2021), as explored in the

literature review, established how the rōpū Protect Ihumātao experiences “non-linear, relational conceptualisations of time that incorporate human and non-human agency” (p. 264), which serve the environment better than colonial, Western linear framings of intergenerational responsibility. Winter (2020) further expands on Nairn et al. (2021) and asserts that the circular concept of whakapapa promotes intergenerational environmental justice well beyond a Western approach to intergenerational responsibility which often pits generations against each other. Gifford further supports the display of intergenerational display by Protect Ihumātao, highlighting that rangatahi stepped in on behalf of kaumatua, demonstrating how “rangatahi take seriously the obligations they have to the whenua and its preservation for future generations” (2021, p. 59).

Researchers further note that cultural differences play a role in young peoples’ perceptions of climate change, and how they engage in climate action (Prendergast et al., 2021), however, there is minimal literature that explores these cultural differences in depth from Māori and Indigenous youths points of view. This gap in literature is highlighted as problematic, perpetuating the marginalisation of minority communities and centring “wealthy, White activism”, nevertheless, this gap is yet to be addressed adequately (Neas et al., 2022, p. 7). The perspectives, experiences, and responsibilities that arise from whakapapa highlight that it is a point of cultural difference for rangatahi Māori, which establishes a distinct grounding to participate in climate change that should be explored across literature.

Whakapapa Aspirations for Climate Change

When rangatahi expressed aspirations and solutions for climate change there was often an alignment with Māori ways of being and mātauranga Māori, rather than mainstream New Zealand responses. This subsection explores the different whakapapa grounded aspirations the rangatahi express, and how they fit into the wider context of current climate change responses, frameworks and literature. To do this, the following subsection elaborates on how rangatahi Māori perceptions of climate change are grounded in whakapapa Māori, thus tying into the primary research question of this thesis.

Rangatahi established that climate responses do not adequately represent Māori aspirations, or their aspirations for the taiao and their communities, whānau, hapū and iwi. These whakaaro were expressed explicitly through direct critiques, as Eilidh stated, responses are largely “*all individual action, white privilege, money. You’ve got to have access to all these things. And there’s no sense of community, no sense of honouring tangata whenua*” (Eilidh). The dissent was also highlighted through rangatahi expressing that their aspirations were not represented in approaches. Rangatahi perspectives were not dissimilar to the consensus of Māori climate change literature, which frames

mainstream approaches as “shallow conceptions of climate change” (Koroi, 2021, p. 30) which have very “limited Māori input” (Bargh, 2018, p. 35).

These shallow conceptions refer to narrow approaches that aim to reduce carbon emissions, but refuse to address the root ideology behind the manifestations of climate change (Whyte, 2018; 2017; Koroi, 2021). On this, Koroi states: “Solutions like these may spare us in the very short term, but the harm of underlying exploitative behaviours will only re-establish themselves in other pressing environmental issues” (2021, pp. 30-31). Climate change is established here as an ideological issue, whereby if the core ideologies remain unremedied, climate responses will remain unsustainable.

In previous sections it has been established that there are contributing factors to tangata whenua detachment from the taiao, which includes colonialism (Burnett et al., 2021; Whyte, 2017). Colonialism highlights some root ideologies behind climate change that contribute to sustaining harmful actions enacted on the taiao. Rangatahi articulated these ideologies as not aligning with Māori worldview:

The root causes of climate change which is capitalism, neoliberalism, colonisation, that sort of thinking and ideology of viewing the earth as capital and something to be gained and accumulated and dominated and taken over which isn't a Māori way of thinking at all. (Hannah).

Rangatahi articulate the understanding that a shift in ideologies is necessary, which is presented in their aspirations. The rangatahi shared visions of a climate safe reality that is built upon paradigm shifts which exist in whakapapa Māori. These visions framed the fullness of mātauranga Māori being utilised, with Māori ways of being as the solution, versus ‘cherry picking’ certain aspects of mātauranga Māori, which is often how mātauranga is framed in climate responses (Ihirangi, 2021). The challenge of ‘cherry picking’ mātauranga is articulated well by Tiana, stating:

our mātauranga is also inherently incorporated within our worldview, so that's our cultural practices, it's our language, it's revitalising all of those things which you can't really extract and fit into a [Western] worldview that doesn't centre those things and will never centre those things

Further rangatahi support the need for the wholeness of Māori and Indigenous worldviews as “key for climate change” (Julz), and further that “indigenous ways of knowing, indigenous ways of being align with a carbon neutral world” (Hannah). What both literature and rangatahi highlight, is that the wholeness of a whakapapa worldview, including mātauranga, is not utilised and is instead tokenised,

which must change to ensure Māori aspirations are met in climate change approaches (Ihirangi, 2021; Awatere et al., 2021). Across Indigenous literature, holding aspirations and solutions that are beyond Western and colonial bounds is further identified as crucial for climate change; “imagining futures beyond colonial domination is not only important but imperative, because it is there, and only there, that a just climate future is possible” (Koroi, 2021, p. 23).

The necessity of shifting away from colonial ideologies to accepting Māori worldview unfolds in to intersectional aspirations for climate change. As Hannah adds to the whakaaro of others, intersectional justice exists within Māori worldview and mātauranga which aspires to:

an equal society where resources are distributed fairly, where land is owned collectively and we ensure that everyone has the right to housing, everyone has the right to food, clean water, sanitation, all those things. I think that's the Māori way of doing things, Māori values. And I think it all comes from Māori cultural understanding and the pūrākau that we have and the taonga that we have.

The intersectional nature of whakapapa aspirations include rangatahi aspiring to tino rangatiratanga; mana motuhake; constitutional transformation; reo, tikanga and mātauranga revitalisation; reconnecting to whenua tīpuna, land back; and repurposing of the taiao. Indeed, rangatahi kōrero suggests that when Māori feel confident in their Māoritanga, are connected to their whenua through whakapapa, and see mātauranga, tikanga, and reo Māori flourishing, a climate safe future is possible. Each of these whakapapa aspirations are intersectional in themselves, take Tiana’s description of land back for example: “*land back isn't just ‘land back’, it's bringing whānau to the whenua, it's helping restore the relationship between humans and the environment*”.

Māori scholars maintain that our Māori worldview guiding our interactions with the taiao and climate change (Harsmworth & Awatere, 2013). This occurs through the exploration of kaitiakitanga in biodiversity spaces (Wareka, 2020; Walker, 2016), through the application of tikanga Māori values to guide transitioning to low emission society (Bargh, 2019), in how we assess the effects of climate change on our taonga (Awatere et al., 2021), and thus how climate change and responses to climate change are viewed (Ihirangi, 2022). Thus highlighting the necessity to grow the research and existing mahi of Māori-centric climate change aspirations and responses.

Section One Summary

This section established that rangatahi Māori experiences of climate change, including climate impacts, and rangatahi climate change aspirations are grounded in whakapapa. The distinctive relationship to the environment establishes a uniquely Indigenous experience of climate change for

rangatahi Māori, posing a difference from their fellow non-Māori youth peers. Understanding and experiencing climate change through whakapapa Māori involves a significant paradigm shift away from dominant discourses of climate change as rangatahi highlight that dominant climate change approaches are disconnected from Māori worldviews, and therefore not centred on Māori flourishing.

Section Two: Being a Rangatahi in Climate Change Spaces

As established, this chapter focuses on weaving together threads of themes from across each of the rangatahi cases. This section examines what was shared about the role of rangatahi Māori in climate change, and experiences of participating as a rangatahi Māori in climate change spaces. From the rangatahi case studies, we know that within their respective journeys they have experienced engaging with many different climate change spaces, which include formalised processes of consultation, youth and adult led activist groups, environmental projects, whānau, hapū, iwi, and marae kaupapa, and even international climate change settings. The following themes will delve into kōrero surrounding their perceptions of being rangatahi and the challenges they experience interacting across these many climate change spaces, including being youth and being Māori. Lastly, this section will explore supportive factors the rangatahi have identified in response to the challenges they face. These supportive factors are explored through the model *Te Tapatoru*, which promotes whanaungatanga as a way for spaces and people to better engage with rangatahi and harness their potential (Hamely et al., 2022). Section Two thus examines the shared observations and experiences about the complexities of being a rangatahi Māori to respond the following research questions, ***What is the role of rangatahi Māori within climate change?*** and ***What are challenges and supportive factors that rangatahi Māori identify?***

It was made clear across the case studies that the rangatahi participants understood rangatahi Māori involvement in climate change as important, and offered their perspectives on the skills and experience rangatahi can bring to the table. The commentary further highlighted that rangatahi perspective and authentic involvement should be valued. Eilidh's perspective established that age shouldn't determine the ability of youth to participate fully in society; *"I care and I have a voice... you are born and then you are an integral part of society until the day that you leave"*. Tiana described the *"magic"* of rangatahi as *"inject[ing] life and passion and freshness"*, being a *"little bit cheeky"* and *"push[ing] the boundaries"*, which, she believes, are the privileges and responsibilities of rangatahi. Hannah expanded on this, and posited how rangatahi have a refreshing view on systems and the world, with *"the ability to challenge the status quo and say hey, can we do things differently, because we haven't lived in these systems for that long. We have fresh eyes to the world"*

around us". Further, Tiana's perspective contemplated how rangatahi are able to notice the systems that tie down other generations, thus allowing rangatahi to question and look beyond these systems; *"At what point do we, as rangatahi Māori, as the future generations, as the future rangatira, how do we stop participating in a system that isn't serving us and at what point do we do that?"*. Each of these perspectives suggest that rangatahi have skills and experiences to offer in climate change contexts, regardless of age, and are therefore able to contribute to the diverse knowledge of what it means to be a rangatahi Māori (Cram & Vivienne, 2010).

Indeed, youth are considered to be integral parts of Māori society and our intergenerational understandings of leadership (Moss, 2021; Tawhai, 2016), aligning with the perceptions rangatahi hold of themselves. Rangatahi have established that being young does not limit their ability to make valuable contributions to society and to challenge society to undergo transformative change (Page & Rona, 2021). Findings from Moss (2021) further emphasise rangatahi perceptions of themselves as capable, "rangatahi can adapt quickly and pick up the mantle but need a helping hand to move into those spaces" (p. 59). Understanding that rangatahi and Māori knowledge bases both express non-deficit perceptions of youth, we can begin to turn to these sources to mitigate the challenges rangatahi have shared and in so doing, support rangatahi to adapt quickly and pick up the mantle (Moss, 2021). The following sub section discusses rangatahi challenges, before exploring possible approaches to authentically engage and support rangatahi.

Challenges identified by Rangatahi – Sitting at the Intersections of Marginalisation

It has been previously established that rangatahi have the ability, passion and skills to contribute to climate change and formalise climate change responses. However, although rangatahi believe in these ideas, they also articulated challenges and barriers that come with being a rangatahi in climate change contexts. For instance, feelings of marginalisation were expressed throughout rangatahi narratives, including experiences regarding their age or being Māori, as well as feelings of dismissal such as *"You're too young. You don't know, you're not experienced"* (Ameera), or experiencing tokenism and *"being a box to tick"* (Hannah), or indeed, feelings of whakamā regarding sharing their own Māori-centric experiences and mātauranga (Ameera, Julz).

What these rangatahi describe are challenges of sitting in the intersection of marginalisation, of being young and Māori (Kidman, 2018). The challenges the rangatahi describe include being dismissed as too young, but also the dismissal of their cultural knowledge and identity as rangatahi who advocate for Māori whilst also advocating for themselves to be taken seriously as a young person (Grosse & Mark, 2020; Ritchie, 2021). Tiana succinctly stated, *"our mātauranga's not going to work at your table. Our existence [as rangatahi Māori] is political, so our existence is going to go*

against whatever's at your table and in those spaces in those rooms". Being doubly marginalised thus creates challenges when rangatahi are seeking to have their voices heard, by their non-Māori peers, by decision-makers or researchers alike (Tawhai, 2015).

Upholding rangatahi Māori identified challenges are Western perceptions and attitudes of youth, which fail to give genuine access to youth within decision making processes (Ritchie, 2021; Phillips et al., 2020). This double-edged challenge has been described as 'Adultism' or a set of beliefs that locate youth as incompetent, subordinate, and not valuable contributors to society (Ritchie, 2021). Common thoughts related to adultism include the belief that "tacit knowledge [is] to be gained only through maturity" (Moss, 2021, p. 59). Research describes the hierarchy dominating Western perceptions of youth as having manifested in youth climate groups as a "power gap" that occurs whereby adult perspectives dominate discussions (Elsen & Ord, 2021). Rangatahi express that this is a situation that occurs in experiences within non-rangatahi led forums. These deficit beliefs projected upon the rangatahi contradict Māori ancestral teachings and perceptions of rangatahi Māori, as Tiana states,

if we go back to our ancestral wisdom everybody has a role to play, and I think also coming to the solutions in climate change and climate talk is recognising that everybody has a different role to play and everybody has a different strength

It is clear that rangatahi seek to meaningfully contribute to decision-making spaces, but these spaces must transform so as not to structurally disempower rangatahi. The challenges were mostly identified from interactions in non-Māori, non-rangatahi led formalised consultation experiences. Yet, as critiques state, often rangatahi Māori voice is not equitably gathered, which highlights that more often than not power imbalances are not mitigated, the impacts of racism on youth are not interrogated, and the processes developed do not fit the needs or wants of rangatahi (Kidman, 2018; Tawhai & Cheyne, 2009). Societal perceptions of youth need to be analysed by people who wish to engage with rangatahi (Ritchie, 2021). Likewise, the desire to hear rangatahi experience and voices needs to be balanced with assurance that rangatahi will not be squashed into boxes, but instead authentically heard (Hamley et al., 2022).

Exploring Supportive Factors as Identified by Rangatahi Using *Te Tapatoru*

Although rangatahi encounter challenges on their climate change journeys, rangatahi were able to identify some nurturing experiences that have mitigated the aforementioned obstacles. The following positive experiences will be explored using *Te Tapatoru*, a rangatahi model of whanaungatanga (Hamley et al., 2022). Whanaungatanga is established in literature as crucial to

rangatahi wellbeing and resilience, which is a notion expressed by the rangatahi (Hamley et al., 2022). This model was developed alongside rangatahi Māori, with the target audience being policy makers, organisations and practitioners who are exploring ways to foster engagement with rangatahi (Hamley et al., 2022). Further literature that explores whanaungatanga in a rangatahi context includes social work, psychology, youth development, while the role of whanaungatanga when critically implemented in addressing power imbalances within relationships, is largely explored in education contexts (Bishop et al., 2014; Berryman et al., 2017).

Across the case studies, positive experiences shared by rangatahi, or responses to challenging experiences, were largely based on the need for whanaungatanga: *Te Tapatoru* as a model is thus fitting. As highlighted, the imbalance of power is a significant challenge that rangatahi have identified in environments where interactions are with decision-makers, people in authority, and non-Māori organisations. In these contexts, whanaungatanga can further be explored as an approach to mitigate this power struggle, as touched on in wider literature.

Informed by interviews and photo elicitation conducted with 51 rangatahi, *Te Tapatoru* is a model developed from rangatahi realities and understandings (Hamley et al., 2022). Realising that the intricacies of whanaungatanga and the diverse realities of rangatahi cannot be captured so simply in a single model, *Te Tapatoru* is positioned as a flexible guide highlighting situations that support the facilitation of whanaungatanga, rather than a ridged template to follow to ‘achieve’ it (Hamley et al., 2022). Although largely contextualised for practitioners and services, *Te Tapatoru* is a flexible model positioned as a wero for organisations to “reorient to prioritise the insights of rangatahi” (Hamley et al., 2022, p. 17) which is highly relevant to mitigating the challenges that rangatahi discussed when engaging with non-Māori forums.

The positive experiences expressed by the rangatahi will be explored across the following three areas of the *Te Tapatoru* model as way to shape their experiences into tangible advice for those hoping to engage with rangatahi Māori:

- *Ko wai*: “a reciprocal connection, emphasises the importance of a reciprocal connection”.
- *He wā pai*: “a genuine time/place, speaks to how contexts, time and places provided the space for meaningful connections to take root and flourish”; and
- *He kaupapa pai*: “a genuine kaupapa, considers how rangatahi desire to connect which privileges their desires and aspirations” (Hamley et al., pp. 15-16)

Each of these components are highly interconnected, and so are the rangatahi whakaaro; despite being presented as separate sections, they are all interrelated.

Ko Wai

Ko wai encapsulates the importance of reciprocal relationships in facilitating whanaungatanga, and is grounded in the understanding that rangatahi exist within intergenerational collectives of whānau and communities (Hamley et al., 2022). The *Te Tapatoru* model supports the rangatahi prioritisation of community building and interpersonal relationships as being a key component to climate action. When discussing supporting factors that led to positive experiences, developing genuine reciprocal relationships were proposed by rangatahi as alternatives to the challenges discussed previously – such as business-like, tokenistic and tick-box consultation spaces.

Furthermore, rangatahi expressed that it was the hope of building community, learning from tuakana or whānau, remembering tīpuna, and engaging with fellow rangatahi Māori that were validating experiences when engaging with climate change, and also where they gained resilience to face challenges. Eilidh summarised this sentiment by stating: *“It's empowering when I'm with my group and when we are talking and when we're actually engaging with other rangatahi”*. This notion is further evidenced by research with youth climate groups, whereby empowerment from peer groups remains a persistent theme (Elsen & Ord, 2021).

He Wā Pai

He wā pai is discussed by Hamley et al. (2022) as a response to the constraints that capitalist productivity places on growing whanaungatanga. Fostering whanaungatanga requires time and space beyond what is framed as practical in a Western worldview. In a climate change context, the rangatahi case studies articulated that the spaces they have had engaged with as “business-like” contrasts starkly with their aspirations for climate change: *“I want to be a part of an environment that excites me, that gives me hope for the future, that is like this [whakawhitinga kōrero], sharing stories, talking about it”* (Hannah).

In response to this, rangatahi highlighted possible contexts that might mitigate the barriers they experience. For instance, meeting to wānanga versus to ‘consult’ was offered as a way to mitigate power imbalances and thus foster reciprocal relationships: *“instead of the government asking all the questions and expecting us to have straightforward answers, they need to be answering our questions and talking to us and having wānanga ultimately”* (Eilidh). In other words, spaces of wānanga, or tuakana-teina relationships (Julz, Ameera), allow important methods of knowledge creation to flourish through allowing whanaungatanga based relationships to be fostered. And while such methods might be considered impractical and unrealistic according to Western ideologies that reward ‘quick fix’ systems of immediacy, reciprocal relationship building with rangatahi has the potential to produce innovative climate change responses that fulfil rangatahi aspirations.

He wā pai articulates why rangatahi feel undervalued in consultation and similar spaces – which are not generally built on the desire to accommodate a shared sense of whanaungatanga and genuine connection. *He wā pai* comes back to Tiana’s comment, “our mātauranga’s not going to work at your table. Our existence is political, so our existence is going to go against whatever’s at your table and in those spaces in those rooms”, implying these spaces are not made with rangatahi Māori in mind. Furthermore, *he wā pai* highlights the inherent paradigm difference that setting aside time and space for connection allows, thus creating spaces that underpin te ao Māori understandings of time and space, which, in turn emulates rangatahi identity in the physical environment where korero might take place (Hamley et al., 2022; Tawhai & Cheyne, 2009).

He Kaupapa Pai

He kaupapa pai refers to the importance of rangatahi-led kaupapa, whereby rangatahi have self-determination and can genuinely connect with the kaupapa at hand. By respecting this component, rangatahi can bring their own knowledge and experience to inform the engagements, thus facilitating whanaungatanga. This notion aligns with the experiences in which rangatahi are often required to fit within systems of engagement that were set up without being specifically aligned to rangatahi aspirations for the kaupapa (Eilidh). Instead, the rangatahi in this study highlighted the desire to prioritise how and what they would like to contribute to the climate change spaces they participate in.

In their research with rangatahi Māori, Tawhai and Cheyne (2009) describe the concept of *he kaupapa pai* as ‘He tangata, he mātauranga: Every person has knowledge, has experience’, which encompasses ensuring that rangatahi feel valued in engagements. Acknowledging that each rangatahi brings a wealth of mātauranga “confirmed for participants the relevance of their experiences and knowledge, and encouraged them to reflect further” (p. 60.), further ensuring reciprocal and positive experiences were maintained and rangatahi were an integral part of the kaupapa.

Berryman et al. (2017) determined that ‘Self-determining pedagogy of relations’ was key to rangatahi Māori having positive experiences in the classroom, and with teachers. This concept was based on rangatahi Māori identifying “positive relationships with teachers as those where they were not talked down to, where power was shared” (Berryman et al., 2017, p. 481). Although education based, this positive experience for rangatahi involved an analysis of power from those in authority, which aligned with the aspirations of rangatahi and allowed rangatahi to observe relational approaches from those with authority within climate change forums. As Eilidh highlights, “You can’t

do ground up without the people at the top being willing to transfer that power. It needs to be a constant transference of knowledge and sharing of knowledge”.

Section Two Summary

Section Two interwove each of the participants experiences and perspectives of being a rangatahi Māori. Rangatahi perceptions of their roles and skillsets were discussed as aligning to pre-colonial Māori notions of youth, highlighting youth as key to contributing to society. Challenges were additionally explored in this section which largely aligned to identified systemic and societal barriers for youth across literature. Although rangatahi experiences were not without challenges, their positive experiences were examined for supportive factors. A rangatahi identified supportive factor was the concept of whanaungatanga, which was contextualised the within the *Te Tapatoru* model. Framing the supportive factor of whanaungatanga around *Ko wai, he wā pai, he kaupapa pai* provided potential guidance for future researchers engaging with rangatahi Māori.

Whakarāpopoto | Chapter Summary

Chapter Five interwove the themes of each rangatahi case study into one discussion to consider how these concepts might advance knowledge of the rangatahi Māori experiences and views of climate change. Ultimately, this chapter explored the array of rangatahi experiences in response to the key research questions of this thesis.

In response to ***What are rangatahi Māori experiences and perceptions of climate change***, it was established that rangatahi Māori have a Māori experience of climate change through the concept of whakapapa. Whakapapa was woven throughout how rangatahi connected to the environment and hence climate change, sat at the foundation of the responsibility they felt for the taiao, and lastly grounded their intersectional aspirations for climate change. Whilst this whakapapa experience of the taiao, and further climate change, is expressed across some Māori literature, the fullness of intersecting aspirations of the rangatahi are yet to be fully realised within research spaces.

Furthermore, developed in Section Two of this chapter is the rangatahi understandings of ***What is the role of rangatahi Māori within climate change?*** and ***What are challenges and supportive factors that rangatahi Māori identify?*** Rangatahi participants articulated that being a rangatahi offers skills and insights to climate spaces, which is further evidenced by their perspectives and understandings presented in Section One. Whilst rangatahi expressed their innate power and skills, intersecting challenges and structural barriers were examined in this chapter, aligning with literature that discusses the marginalisation of rangatahi Māori. To not contribute to deficit literature, the final subsection of this chapter presented the role of whanaungatanga identified by rangatahi as a

supportive factor when participating in climate action. The exploration of whanaungatanga through *Te Tapatoru* model presented a potential avenue for future research. In summary, Chapter Five highlighted the uniqueness of being both a rangatahi and being Māori, particularly in the context of climate change.

Chapter Six: Kōrero Whakakapi

Conclusion

Despite the growing interest in youth mobilisation and participation in climate action, Māori youth are dishearteningly excluded from research, with rangatahi positioning on climate change yet to be adequately explored in-depth (Mackay, 2020). Scholarship states the necessity of diversifying both Indigenous climate change literature and climate youth activism research (Johnson et al., 2022; Neas et al., 2022). Despite that, work exploring diverse experiences of Māori and Indigenous youth is still needed, especially from an insider (Māori/Indigenous) research perspective. The exclusion of rangatahi Māori voice at decision making tables is recognised in literature (Tawhai & Cheyne, 2009; Kidman, 2018) and contributes to the systemic marginalisation and exclusion of Indigenous Peoples in decision making processes. In response to this continual marginalisation, and in recognition of the unique positioning of tangata whenua relationships to the taiao, and the serious impacts of climate change, this thesis asked the following three questions with the aim to amplify the voices of rangatahi Māori: ***What are rangatahi Māori experiences and perceptions of climate change?, What is the role of rangatahi Māori within climate change?*** And, ***What are challenges and supportive factors that rangatahi Māori identify?***

With the purpose of answering the primary research question, throughout this thesis we have explored rangatahi Māori experiences to further understand their perceptions of climate change. Results highlighted that rangatahi perceptions of climate change are grounded in whakapapa Māori, a very alternative positioning compared to the mainstream orientation of climate change (Koroi, 2021). The notion of whakapapa embedded in perceptions influenced how rangatahi experienced climate change impacts, the responsibility they felt towards the taiao and, furthermore, influenced the aspirations they hold for climate change approaches.

Through examining rangatahi experiences and perceptions of climate change, their aspirations for climate approaches highlighted the lack of emphasis on mātauranga and tangata whenua being centred in climate change responses. Furthermore, rangatahi noted that climate change is not a siloed issue, and that through addressing climate change, they envision a world where tangata whenua, reo, tikanga, practices and relationships with the environment are flourishing.

Rangatahi are calling for foundational paradigm shifts within how society operates, that are grounded in a Māori worldview of whakapapa, to ensure climate safe realities are attained for both tangata whenua and the taiao. A whakapapa worldview sees the taiao and people as intrinsically interconnected, therefore requiring climate change approaches to encompass intersectional solutions. The narratives shared by rangatahi contribute as further evidence and diversification of

the growing literature of Kaupapa Māori and mātauranga Māori responses to climate change (Johnson et al., 2022; Vinyeta et al., 2015)

The findings further have emphasised that rangatahi perceptions of themselves align with pre-colonial Māori perceptions; that they have an essential role in society where they are fostered to realise potential (Hamley & Le Grice, 2021) as rangatahi view themselves as capable contributors within the collective. Although findings established rangatahi as capable, the systemic challenges rangatahi expressed as a part of their experiences of climate changes often revolved around being tokenised, dismissed and overlooked due to their age, and also their worldview not being recognised. These findings largely aligned to the literature that discusses the barriers Māori and Indigenous youth face in having their voices heard, highlighting the influence these barriers have even in the climate change sector (Grosse & Mark, 2020). These experiences further establish that rangatahi sit at the intersections of marginalisation.

Amongst the challenges rangatahi identified, supportive factors were further highlighted, exploring empowering experiences rangatahi had. Exploring these factors through *Te Tapatoru* (Hamley et al., 2022) created space for future research to potentially explore how rangatahi can be given more agency to share their perspectives, and how decision making spaces can adopt whanaungatanga practices to foster empowering experiences.

Theories such as Kaupapa Māori and Indigenous standpoint theory, have established that the narratives shared by rangatahi Māori in this thesis should be considered valid constructions of knowledge and contributions to climate change (Smith, 1999; Nakata 2007). These theories highlight how exploring the realities of Indigenous Peoples allow us to actively create knowledge bases that reflect our needs and realities (Durmush et. al., 2021; Pihama, 2015); much like the exploration of rangatahi lived experiences in this thesis. For Aotearoa to address climate change in a way that is responsive to Māori, it is crucial that Māori understandings and approaches are further developed, which requires responsive engagement with Māori community members, including rangatahi Māori, who should not be left behind (Johnson et al., 2022; Tawhai & Cheyne, 2009).

Ultimately, this thesis contributes to diversifying Māori understandings of climate change and responses through amplifying the voices of Māori youth who are largely excluded from research literature. The presentation of rangatahi perspectives aimed to bridge the gap in literature wherein Māori, Indigenous and other minority youth voices are missing. This research establishes a rationale and initial foundation for incorporating the voices of rangatahi Māori in future climate change research.

Through this thesis we have been able to see the power that resides in rangatahi vision. Rangatahi have shared bold aspirations for a climate safe reality that equates to a better world, but also, climate aspirations that allow Māori to exercise mana motuhake over being Māori. These rangatahi have responded to the calls of Papatūānuku, and choose to challenge spaces that often do not want to listen to their young and staunchly Māori voices; which if heeded, the world could greatly benefit from. As the rangatahi share, climate action should not be shallowly limited to emission reductions or electric vehicles, it is instead being guided by whakapapa when advocating for a better world, for our taiao and our people by asking: *“what is the future that I'm leaving for my moko, what is the future that I'm leaving for the people all the way down my whakapapa”* (Hannah).

Ngā Tohutoro | References

- Awatere, S., King, D., Reid, J., Williams, L., Masters-Awatere, B., Harris, P., Tassell-Matamua, N., Jones, R., Eastwood, K., Pirker, J., & Jackson, A. (2021). *He huringa āhuarangi, he huringa ao: A changing climate, a changing world*. Ngā Pae o te Māramatanga.
- Awekotuku, N. T. (1991). *He tikanga whakaaro: Research ethics in the Maori community: A discussion paper*. Ministry of Maori Affairs.
- Bailey-Winiata, A. P. S. (2021). *Understanding the potential exposure of coastal marae and urupā in Aotearoa New Zealand to sea level rise* [Master's thesis, The University of Waikato]. Research Commons. <https://hdl.handle.net/10289/14567>
- Berryman, M., Eley, E., & Copeland, D. (2017). Listening and learning from rangatahi Maori: The voices of Maori youth. *Critical Questions in Education*, 8(4), 476-494.
- Bishop, R., Berryman, M., & Wearmouth, J. (2014). *Te kotahitanga: Towards effective education reform for Indigenous and minoritised students*. New Zealand Council for Education Research.
- Boulianne, S., Lalancette, M., & Ilkiw, D. (2020). "School Strike 4 Climate": Social media and the international youth protest on climate change. *Media and Communication*, 8(2), 208-218. <https://doi.org/10.17645/mac.v8i2.2768>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological*. (pp. 57-71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Braun, V., & Clarke, V. (2021). *Thematic analysis*. SAGE Publications.
- Brayboy, B. M., & Deyhle, D. (2000). Insider-outsider: Researchers in American Indian communities. *Theory Into Practice*, 39(3), 163-169. https://doi.org/10.1207/s15430421tip3903_7
- Budziszewska, M., & Głód, Z. (2021). "These are the very small things that lead us to that goal": Youth climate strike organizers talk about activism empowering and taxing experiences. *Sustainability*, 13(19), 11119. <https://doi.org/https://doi.org/10.3390/su131911119>
- Burgess, H., & Painting, T. K. (2020). Onamata, anamata: A whakapapa perspective of Māori futurisms. In A.-M. Murtola & S. Walsh (Eds.), *Whose futures* (pp. 207-233). Economic and Social Research Aotearoa.
- Burnett, S., Movono, A., & Scheyvens, R. (2021, 9 November). How Māori knowledge could help New Zealanders turn their concern for the environment into action. *The Conversation*. <https://theconversation.com/how-maori-knowledge-could-help-new-zealanders-turn-their->

- [concern-for-the-environment-into-action-168831?fbclid=IwAR3pcdfnrMKdYjLfrMoLdzIL6syXryueERuet2KSS0XINvkMfcExz56LeBk](#)
- Cavino, H. M. (2019). "He would not listen to a woman": Decolonizing gender through the power of pūrākau. In J.-A. A. Q. Q. Xiim, J. B. J. Lee-Morgan, & J. D. Santolo (Eds.), *Decolonizing research: Indigenous storywork as methodology* (pp. 95-106). Zed Books.
- Chakrabarty, D. (2016). Humanities in the anthropocene: The crisis of an enduring Kantian fable. *New Literary History*, 47(1), 377-397.
- Clarke, G. (2020). *Whānau aspirations, extracurricular activity and positive youth development: The leisure activity patterns and narratives of successful young Māori men and how they might inform urban whānau raising tamatāne* [Doctoral dissertation, The University of Waikato]. Research Commons. <https://hdl.handle.net/10289/13695>
- Climate Change Adaptation Technical Working Group. (2017). *Adapting to climate change in New Zealand: Stocktake report from the climate change adaptation technical working group*. Ministry for the Environment.
- Cox, G. R., FireMoon, P., Anastario, M. P., Ricker, A., Escarcega-Growing Thunder, R., Baldwin, J. A., & Rink, E. (2021). Indigenous standpoint theory as a theoretical framework for decolonizing social science health research with American Indian communities. *AlterNative: An International Journal of Indigenous Peoples*, 17(4), 460-468. <https://doi.org/10.1177/11771801211042019>
- Cram, F. (2009). Maintaining Indigenous voices. In D. M. Mertens & P. E. Ginsberg (Eds.), *The handbook of social research ethics* (pp. 308-322). SAGE Publications, Inc. <https://doi.org/10.4135/9781483348971>
- Cram, F., & Vivienne, K. (2010). Researching with whānau collectives. *MAI Review*, 3, 1-12.
- Crandon, T. J., Scott, J. G., Charlson, F. J., & Thomas, H. J. (2022). A social-ecological perspective on climate anxiety in children and adolescents. *Nature Climate Change*, 12(2), 123-131. <https://doi.org/10.1038/s41558-021-01251-y>
- Department of Economic and Social Affairs. (2021). *State of the world's Indigenous Peoples: Rights to land, territories and resources*. United Nations. <https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2021/03/State-of-Worlds-Indigenous-Peoples-Vol-V-Final.pdf>
- Dodson, G., & Papoutsaki, E. (2017). Youth-led activism and political engagement in New Zealand: A survey of Generation Zero. *Communication Research and Practice*, 3(2), 194-211. <https://doi.org/10.1080/22041451.2016.1228994>

- Dunlop, M. (2021). *Māori climate change advocates want more ambition from government* [Radio broadcast]. The Morning Report, Radio New Zealand.
<https://www.rnz.co.nz/national/programmes/morningreport/audio/2018816312/maori-climate-change-advocates-want-more-ambition-from-government>
- Durmush, G., Craven, R. G., Brockman, R., Yeung, A. S., Mooney, J., Turner, K., & Guenther, J. (2021). Empowering the voices and agency of Indigenous Australian youth and their wellbeing in higher education. *International Journal of Educational Research*, 109.
<https://doi.org/https://doi.org/10.1016/j.ijer.2021.101798>
- Elsen, F., & Ord, J. (2021). The role of adults in “youth led” climate groups: Enabling empowerment. *Frontiers in Political Science*, 3. <https://doi.org/10.3389/fpos.2021.641154>
- Friedel, T. L. (2015). Understanding the nature of Indigenous youth activism in Canada: Idle no more as resumptive pedagogy. *The South Atlantic Quarterly*, 114(4), 878-891.
<https://doi.org/https://doi.org/10.1215/00382876-3157402>
- Gifford, J. M. (2021). *“Ngā pakiaka a Te Rēhia, ka tipua i te ao rangatahi” An intersectional analysis of kapa haka and healing for rangatahi Māori* [Master’s thesis, Victoria University of Wellington]. Victoria University of Wellington Library.
<https://dx.doi.org/10.26686/wgtn.14413955.v1>
- Grosse, C., & Mark, B. (2020). A colonized COP: Indigenous exclusion and youth climate justice activism at the United Nations climate change negotiations. *Journal of Human Rights and the Environment*, 11, 146-170. <https://doi.org/10.4337/9781800881099.00011>
- Hamley, L., & Le Grice, J. (2021). He kākano ahau – identity, Indigeneity and wellbeing for young Māori (Indigenous) men in Aotearoa/New Zealand. *Feminism & Psychology*, 31(1), 62-80.
<https://doi.org/10.1177/0959353520973568>
- Hamley, L., Le Grice, J., Greaves, L., Groot, S., Lindsay Latimer, C., Renfrew, L., Parkinson, H., Gillon, A., & Clark, T. C. (2022). Te Tapatoru: a model of whanaungatanga to support rangatahi wellbeing. *Kōtuitui: New Zealand Journal of Social Sciences Online*, 1-24.
<https://doi.org/10.1080/1177083x.2022.2109492>
- Han, H., & Ahn, S. W. (2020). Youth Mobilization to stop global climate change: Narratives and impact. *Sustainability*, 12(10), 4127. <https://doi.org/10.3390/su12104127>
- Handford, S., & Maeder, R. (2020). The origins of School Strike 4 Climate NZ. In C. Henry, J. Rockström, & N. Stern (Eds.), *Standing up for a Sustainable World: Voices of change* (pp. 219–231). Edward Elgar Publishing.
<https://doi.org/https://doi.org/10.4337/9781800371781.00037>

- Harland, T. (2014). Learning about case study methodology to research higher education. *Higher Education Research & Development*, 33(6), 1113-1122.
<https://doi.org/10.1080/07294360.2014.911253>
- Harmsworth, G. R., & Awatere, S. (2013). Indigenous Māori knowledge and perspectives of ecosystems. In J. R. Dymond (Ed.), *Ecosystem services in New Zealand: Conditions and trends* (pp. 274-286). Manaaki Whenua Press.
- Haugestad, C. A. P., Skauge, A. D., Kunst, J. R., & Power, S. A. (2021). Why do youth participate in climate activism? A mixed-methods investigation of the #FridaysForFuture climate protests. *Journal of Environmental Psychology*, 76, 101647.
<https://doi.org/https://doi.org/10.1016/j.jenvp.2021.101647>
- Herewini, N. (2018). *Māori communities raising children: The roles of extended whānau in child rearing in Māori society*. Ngā Pae o te Māramatanga; Michael and Suzanne Borrin Foundation.
- Higgins, R. (2004). *He tānga ngutu, he Tūhoetanga te mana motuhake o te tā moko wāhine: The identity politics of moko kauae* [Doctoral dissertation, University of Otago]. OUR Archive.
<http://hdl.handle.net/10523/5193>
- Huffadine, L. (2019, 21 December). A youth perspective on climate talks: Time for indigenous leadership. *Radio New Zealand*. <https://www.rnz.co.nz/news/te-manu-korihi/406000/a-youth-perspective-on-climate-talks-time-for-indigenous-leadership>
- Ihirangi. (2022). *Insight to the rauora Indigenous worldview framework for the National Climate Change Adaptation Plan*. Ministry for the Environment.
<https://environment.govt.nz/publications/exploring-an-indigenous-worldview-framework-for-the-national-climate-change-adaptation-plan/>
- IPCC. (2021). *Climate change 2021: The physical science basis. contribution of working group I to the sixth assessment report of the intergovernmental panel on climate change*.
- James, D., & Mack, T. (2020). Toward an ethics of decolonizing allyship in climate organizing: Reflections on Extinction Rebellion Vancouver. *Journal of Human Rights and the Environment*, 32-53. <https://doi.org/10.4337/9781800881099.00006>
- Johnson, D., Parsons, M., & Fisher, K. (2021). Engaging Indigenous perspectives on health, wellbeing and climate change. A new research agenda for holistic climate action in Aotearoa and beyond. *Local Environment*, 26(4), 477-503.
<https://doi.org/10.1080/13549839.2021.1901266>

- Johnson, D. E., Parsons, M., & Fisher, K. (2022). Indigenous climate change adaptation: New directions for emerging scholarship. *Environment and Planning E: Nature and Space*, 5(3), 1541-1578. <https://doi.org/10.1177/25148486211022450>
- Jones, R. (2019). Climate change and Indigenous health promotion. *Global Health Promotion*, 26(3, Suppl.), 73-81. <https://doi.org/10.1177/1757975919829713>
- Jones, R., Bennett, H., Keating, G., & Blaiklock, A. (2014). Climate change and the right to health for Māori in Aotearoa/New Zealand. *Health and Human Rights Journal*, 16(1), 54-68.
- Jones, R., Macmillan, A., & Reid, P. (2020). Climate Change Mitigation Policies and Co-Impacts on Indigenous Health: A Scoping Review. *International Journal of Environmental Research and Public Health*, 17(23). <https://doi.org/10.3390/ijerph17239063>
- Kanawa, L. (2010). Climate change implications for Māori. In R. Selby, P. Moore, & M. Mulholland (Eds.), *Māori and the environment: Kaitiaki*. Huia Publishers.
- Kidman, J. (2018). Representing youth voices in indigenous community research. In R. Bourke & J. Loveridge (Eds.), *Radical collegiality through student voice* (pp. 55-69). Springer Singapore. https://doi.org/10.1007/978-981-13-1858-0_4
- Kimmerer, R. (2013). *Braiding sweetgrass*. Milkweed.
- King, D., Penny, G., & Severne, C. (2010). The climate change matrix facing Māori society. In R. A. C. Nottage, D. SWratt, J. F. Bornman, & K. Jones (Eds.), *Climate change adaptation in New Zealand: Future scenarios and some sectoral perspectives* (pp. 100–111). New Zealand Climate Change Centre.
- Koroi, H. (2021). In right relationship - whanaungatanga. In H. Clark (Ed.), *Climate Aotearoa: What's happening and what we can do about it* (pp. 15-40). Allen & Unwin
- Kvale, S., & Brinkman, S. (2009). *Interviews: Learning the craft of qualitative research interviewing* (2 ed.). Sage Publications Inc.
- Landcare Research. (2012). *Climate change business opportunities for Māori land and Māori organisations* (MPI Technical Paper No: 2012/43). Ministry for Primary Industries.
- Lee, J. (2009). Decolonising Māori narratives: Pūrākau as a method. *MAI Review*, 2(3).
- Lee-Morgan, J. B. J. (2019). Pūrākau from the inside-out: Regenerating stories for cultural sustainability. In J.-A. A. Q. Q. Xiiem, J. B. J. Lee-Morgan, & J. D. Santolo (Eds.), *Decolonizing research: Indigenous storywork as methodology* (pp. 151-166). Zed Books.
- Lewis, C. L. T. (2021). *Echoed silencing in te whare/tangata* [Master's thesis, The University of Waikato]. Research Commons. <https://hdl.handle.net/10289/15048>

- MacKay, M. (2020). *The importance of Indigenous peoples in climate change and energy governance* [Master's thesis, University of Alberta]. Alberta, Canada.
<https://era.library.ualberta.ca/items/5f9701df-fc89-48cd-918c-05b9e5b95aff>
- Mackay, M., Parlee, B., & Karsgaard, C. (2020). Youth engagement in climate change action: Case study on Indigenous youth at COP24. *Sustainability*, 12(16), 6299.
<https://doi.org/10.3390/su12166299>
- Mahuika, N. (2019). A brief history of whakapapa: Māori approaches to genealogy. *Genealogy*, 3(2), 32. <https://doi.org/10.3390/genealogy3020032>
- Mahuika, R. (2015). Kaupapa Māori theory is critical and anticolonial. In L. Pihama, S.-J. Tiakiwai, & K. Southey (Eds.), *Kaupapa rangahau: A reader* (2 ed., pp. 34-45). Te Kotahi Research Institute.
- McConnell, G. (2022, May 17). Iwi and experts warn against division in fight against climate change. *Stuff*. <https://www.stuff.co.nz/environment/climate-news/300589907/iwi-and-experts-warn-against-division-in-fight-against-climate-change>
- McMillan, A., Riley, H., & Dixon, H. (2021). *Climate change mitigation impact on the Māori economy*. Berl & Land Use Capability Assessments.
- Mead, H. M. (2006). *Tikanga Māori: Living by Māori values*. Huia Publishers.
- Mead, S. M., & Grove, N. (2003). *Ngā pēpeha a ngā tīpuna: The sayings of the ancestors*. Victoria University Press.
- Melbourne, H. (1999). Nga tamariki o te kohu. On *Te wao nui a Tane*. Huia publishers.
- Mika, C. (2021). Subjecting ourselves to madness: A Maori approach to unseen instruction. *Educational Philosophy and Theory*, 53(7), 719-727.
<https://doi.org/10.1080/00131857.2020.1761326>
- Mikaere, A. (1994). Māori Women Caught in the Contradictions of a Colonised Reality. *Waikato Law Review*, 6(2), 125-150. <http://www.nzlii.org/nz/journals/WkoLawRw/1994/6.html>
- Ministry for the Environment. (2007). *Consultation with Māori on climate change: Hui report*. <https://environment.govt.nz/assets/Publications/Files/consultation-maori-hui-report-nov07.pdf>
- Ministry for the Environment. (2020). *National climate change risk assessment for Aotearoa New Zealand: Main report*. <https://environment.govt.nz/publications/national-climate-change-risk-assessment-for-new-zealand-main-report/>
- Ministry for the Environment. (2022a). *Aotearoa New Zealand's first emissions reduction plan*. <https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/>

- Ministry for the Environment. (2022b). *Aotearoa New Zealand's first national adaptation plan*.
<https://environment.govt.nz/publications/aotearoa-new-zealands-first-national-adaptation-plan/>
- Ministry for the Environment. (n.d.). *New Zealand emissions trading scheme*. Retrieved January 12 from https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/ets/?limit_27365=8
- Moewaka-Barnes, H. (2015). Kaupapa Māori: Explaining the ordinary. In L. Pihama, S.-J. Tiakiwai, & K. Southey (Eds.), *Kaupapa rangahau: A reader* (2 ed., pp. 29-33).
- Moorfield, J. C. (2005). *Te aka: Māori-English, English-Māori dictionary and index*. Pearson Longman.
- Morrison, S., & Kaio, A. (2021, October 21). *Te tai uka a pia: Iwi relationships with the Southern and Antarctic Oceans*. ArcGIS StoryMaps.
<https://storymaps.arcgis.com/stories/1f5579b66f354dfdb14c84e713ebaddc>
- Moss, L. (2021). *Ngā Tuituinga o te Pōtae: Rangatahi perspectives of leadership within Ngāti Maniapoto* [Master's thesis, The University of Waikato]. Research Commons.
<https://hdl.handle.net/10289/14776>
- Murray, J. (2018, December 9). Dr Tairahia Black on whakataukī (Māori proverbial sayings) [Audio podcast episode]. In *Te Ahi Kaa*. Radio New Zealand.
<https://www.rnz.co.nz/national/programmes/teahikaa/audio/2018674573/dr-tairahia-black-on-whakatauki-maori-proverbial-sayings>
- Nairn, K., Kidman, J., Matthews, K. R., Showden, C. R., & Parker, A. (2021). Living in and out of time: Youth-led activism in Aotearoa New Zealand. *Time & Society*, 30(2), 247-269.
<https://doi.org/10.1177/0961463x21989858>
- Nakata, M. (2007). *Disciplining the Savages : Savaging the Disciplines*. Aboriginal Studies Press.
<http://ebookcentral.proquest.com/lib/waikato/detail.action?docID=838256>
- Neas, S., Ward, A., & Bowman, B. (2022). Young people's climate activism: A review of the literature [Review]. *Frontiers in Political Science*, 4. <https://doi.org/10.3389/fpos.2022.940876>
- Nissen, S., Wong, J. H. K., & Carlton, S. (2021). Children and young people's climate crisis activism – a perspective on long-term effects. *Children's Geographies*, 19(3), 317-323.
<https://doi.org/10.1080/14733285.2020.1812535>
- Noor, K. B. M. (2008). Case study: A strategic research methodology. *American Journal of Applied Sciences*, 5(11), 1602-1604.
- Orana, S. (2016). *Youth and climate change in Samoa* [Masters's thesis, The University of Waikato]. Research Commons <https://hdl.handle.net/10289/10796>

- Page, C., & Rona, S. (2021). Kia manaaki te tangata: Rangatahi Māori perspectives on their rights as Indigenous youth to whānau ora and collective wellbeing. *International Journal of Student Voice*, 7(1). <https://ijsv.psu.edu/article/kia-manaaki-te-tangata-rangatahi-maori-perspectives/>
- Pasisi, J. L. (2019). *Niue women's perspectives and experiences of climate change: A hiapo approach* [Doctoral dissertation, The University of Waikato]. Hamilton, New Zealand. <https://researchcommons.waikato.ac.nz/bitstream/handle/10289/13380/thesis.pdf?sequence=4&isAllowed=y>
- Pihama, L. (1993). *Tungia te ururuā, kia tupu whakaritorito te tupu o te harakeke: A critical analysis of Parents as First Teachers* [Unpublished master's thesis, University of Auckland]. Auckland.
- Pihama, L. (2015). Kaupapa Māori theory: Transforming theory in Aotearoa. In L. Pihama, S.-J. Tiakiwai, & K. Southey (Eds.), *Kaupapa rangahau: A reader* (2 ed., pp. 5-15). Te Kotahi Research Institute.
- Pihama, L., Campbell, D., & Greensill, H. (2019). Whānau storytelling as Indigenous pedagogy: Tiakina te pā harakeke. In J.-A. A. Q. Q. Xiem, J. B. J. Lee-Morgan, & J. D. Santolo (Eds.), *Decolonizing research: Indigenous storywork as methodology* (pp. 137-150). Zed Books.
- Pihama, L., Simmonds, N., & Waitoki, W. (2019). *Te taonga o taku ngākau: Ancestral knowledges and the wellbeing of tamariki Māori*. Te Kotahi Research Institute.
- Pirini, M., & Morar, R. (2021). Climate change and the claiming of tino rangatiratanga. *New Zealand Women's Law Journal*, 5, 86-113.
- Prendergast, K., Hayward, B., Aoyagi, M., Burningham, K., Hasan, M. M., Jackson, T., Jha, V., Kuroki, L., Loukianov, A., Mattar, H., Schudel, I., Venn, S., & Yoshida, A. (2021). Youth attitudes and participation in climate protest: An international cities comparison frontiers in political science special Issue: Youth activism in environmental politics [Original Research]. *Frontiers in Political Science*, 3(107). <https://doi.org/10.3389/fpos.2021.696105>
- Radio New Zealand. (2021, 10 August). Indigenous knowledge key to addressing climate change-rangatahi activist. *Radio New Zealand*. <https://www.rnz.co.nz/news/te-manu-korihi/448858/indigenous-knowledge-key-to-addressing-climate-change-rangatahi-activist>
- Rangiwai, B. (2018). Ko au ko te taiao, ko te taiao ko au – I am the environment and the environment is me: A Māori theology of the environment. *Te Kaharoa*, 11(1), 638-652. <https://doi.org/10.24135/tekaharoa.v11i1.241>
- Ritchie, J. (2021). Movement from the margins to global recognition: Climate change activism by young people and in particular indigenous youth. *International Studies in Sociology of Education*, 30(1-2), 53-72. <https://doi.org/10.1080/09620214.2020.1854830>

- Roberts, M. (2013). Ways of seeing: Whakapapa. *Sites: a journal of social anthropology and cultural studies*, 10(1), 93-120. <https://doi.org/10.11157/sites-vol10iss1id236>
- Royal, T. A. C. (Ed.). (2003). *The woven universe: Selected writings of Rev. Maori Marsden*. Estate of Rev. Maori Marsden.
- Seed-Pihama, J. (2019). Naming our names and telling our stories. In J.-A. A. Q. Q. Xiem, J. B. J. Lee-Morgan, & J. D. Santolo (Eds.), *Decolonizing research: Indigenous storywork as methodology* (pp. 107-119). Zed Books.
- Smith, G. (1997). *The development of Kaupapa Māori theory and praxis* [Unpublished doctoral dissertation, University of Auckland].
- Smith, H. (2020). Collaborative strategies for re-enhancing hapū connections to lands and making changes with our climate. *The Contemporary Pacific*, 32(1), 21-46. <https://doi.org/10.1353/cp.2020.0002>
- Smith, H., Allan, P., Bryant, M., Hardy, D., Manning, M., Patterson, M., Poutama, M., Richards, A., Richardson, J., & Spinks, A. (2017). *Adaptation strategies to address climate change impacts on coastal Māori communities in Aotearoa New Zealand: A case study of dairy farming in the Horowhenua-Kāpiti Coastal zone*. Massey University.
- Smith, L. (1999). *Decolonizing Methodologies: Research and Indigenous Peoples*. University of Otago Press.
- SS4C Auckland [@schoolstrike4climate.akl]. (2021, June 12). *School Strike 4 Climate Auckland is disbanding as an organisation. This is under the suggestion and guidance of the BIPOC* [Image with text]. Instagram. <https://www.instagram.com/p/CQAtpa6Nli-/>
- Stephenson, A. B. (2012). Kaua e mangere - Don't be idle: Maori perspectives on climate change. In Z. Grossman & A. Parker (Eds.), *Asserting native resilience: Pacific rim indigenous nations face the climate crisis* (pp. TBC). Oregon State University Press.
- Tapiata, R. J., Smith, R., & Akuhata-Brown, M. (Eds.). (2020). *Te kai a te rangatira: Leadership from the Māori world*. Bridget Williams Books.
- Tau, T. M. (1999). Mātauranga Māori as an epistemology. *Te Pouhere Korero journal*, 1(1), 10-23.
- Tawhai, V. (2015). Youth engagement. In J. Hayward (Ed.), *New Zealand Government and Politics eBook* (6 ed.). Oxford University Press.
- Tawhai, V. (2016). Matike Mai Aotearoa! The power of youth-led decolonisation education. In J. Hutchings & J. Lee-Morgan (Eds.), *Decolonisation in Aotearoa: Education, research and practice* (pp. 86-98). NZCER Press.

- Tawhai, V. M. H., & Cheyne, C. (2009). "Like, if it's really important, they should be saying!" Research with rangatahi Māori about local political participation. *He Pūkenga Kōrero: A Journal of Māori Studies*, 9(1), 52–63.
- Te Aho, L. (2007). Contemporary issues in Maori law and society Crown forests, climate change, and consultation- Towards more meaningful relationships. *Waikato Law Review*, 15, 138-159.
- Te Aka Māori Dictionary. (n.d.). Rangatahi. In *Te Aka Māori Dictionary*. Retrieved January 22, 2022, from <https://maoridictionary.co.nz/word/6477>
- Te Ara Whatu [@tearawhatu]. (2021, June 16). "Te Ara Whatu is (now and has always been) a group that demands no less than a climate justice that [Images with text]. Instagram. <https://www.instagram.com/p/CQKCoCrSML8G/>
- Te Ara Whatu. (n.d.-a). *Ko wai mātou? Who are we?*. <https://tearawhatu.org/who-are-we>
- Te Ara Whatu. (n.d.-b). *Where we started*. <https://tearawhatu.org/cop23>
- Te Awa Tupua (Whanganui River Claims Settlement) Act 2017. <https://www.legislation.govt.nz/act/public/2017/0007/latest/whole.html>
- Te Awkotuku, N., & Nikora, L. W. (2003). *Nga taonga o Te Urewera* (Wai 894, doc B6). Waitangi Tribunal. <https://hdl.handle.net/10289/784>
- Te Urewera Act 2014. <https://www.legislation.govt.nz/act/public/2014/0051/latest/whole.html>
- The Deep South. (2022, June 7). *Submission on the draft National Adaptation Plan* [Press release]. <https://deepsouthchallenge.co.nz/submission-national-adaptation-plan/>
- Thew, H., Middlemiss, L., & Paavola, J. (2020). "Youth is not a political position": Exploring justice claims-making in the UN Climate Change Negotiations. *Global Environmental Change*, 61, Article 102036. <https://doi.org/https://doi.org/10.1016/j.gloenvcha.2020.102036>
- Thomas, A., Cretney, R., & Hayward, B. (2019). Student Strike 4 Climate: Justice, emergency and citizenship. *New Zealand Geographer*, 75(2), 96-100. <https://doi.org/10.1111/nzg.12229>
- Thomson, P., & Gunter, H. (2006). From 'consulting pupils' to 'pupils as researchers': a situated case narrative. *British Educational Research Journal*, 32(6), 839-856. <https://doi.org/https://doi.org/10.1080/01411920600989487>
- Tiakiwai, S.-J. (2015). Understanding and doing research - A Māori position. In L. Pihama, S.-J. Tiakiwai, & K. Southey (Eds.), *Kaupapa rangahau: A reader* (2 ed., pp. 77-93). Te Kotahi Research Institute.
- Tibble, T. (2019, August 15). Mana rangatahi: Young Māori on standing with Ihumātao. *The Pantograph Punch*. <https://www.pantograph-punch.com/posts/mana-rangatahi>
- Todd, Z. (2016, January 21). Relationships: Theorizing the contemporary. *Fieldsights*. <https://culanth.org/fieldsights/relationships>

- Trow, R. (2019, 18 September). It's our whenua (and we'll tangi if we want to). *Te Ao Marama*, 82(20), 8-10.
- Tūhoe. (n.d.). *Being Tūhoe*. Retrieved February 22 from <https://www.ngaituhoe.iwi.nz/being-tuhoe>
- Vano, L. [@lourdes.vano]. (2021, April 10). @schoolstrike4climate.akl @schoolstrike4climatenz pay 4tk and pcw or istg [Images with text]. Instagram. <https://www.instagram.com/p/CNeKT0EMgDi/>
- Vinyeta K, Whyte K, & Lynn K. (2015). *Climate change through an intersectional Lens: Gendered vulnerability and resilience in Indigenous communities in the United States*. Department of Agriculture: Forest Service Pacific Northwest Research Station 72.
- Waitoa, J., Scheyvens, R., & Warren, T. R. (2015). E-Whanaungatanga: The role of social media in Māori political empowerment. *AlterNative: An International Journal of Indigenous Peoples*, 11(1), 45-58. <https://doi.org/10.1177/117718011501100104>
- Walker, E. (2016). *Reclaiming kaitiakitanga: An intergenerational perspective of kaitiakitanga within Te Parawhau* [Master's thesis, University of Waikato]. Research Commons. <https://hdl.handle.net/10289/11181>
- Wareka, M.-L. (2020). *Te Mauri o te kaitiaki - Exploring te ao Māori in environmental relations and kaitiakitanga in Aotearoa New Zealand* [Master's thesis, The University of Waikato]. Research Commons. <https://hdl.handle.net/10289/13776>
- Warmenhoven, T., Bernard, T., Pohatu, P., Garrett, L., Porou, T., Fitzgerald, G., Harrison, D., Barry, L., & Ruru, W. (2014). *Climate change and community resilience in the Waipuu catchment* (MPI Technical Paper No: 2014/25). Ministry for Primary Industries.
- Warne, K. (2016, March 16). Saana Murray — And an awakening for a Pākehā. *Etangata*. <https://etangata.co.nz/reflections/saana-murray-and-an-awakening-for-a-pakeha/>
- Weadock, C. (2020). *@GretaThunberg: Navigating critique and identity within youth climate activism on Twitter* [Master's thesis, University of Denver]. Digital Commons @ DU. <https://digitalcommons.du.edu/etd/1861/>
- Whyte, K. (2018). Settler Colonialism, Ecology, and Environmental Injustice. *Environment and Society*, 9(1), 125-144. <https://doi.org/10.3167/ares.2018.090109>
- Whyte, K. P. (2017). Indigenous climate change studies: Indigenizing futures, decolonizing the anthropocene. *English Language Notes*, 55(1-2), 153-162.
- Whyte, K. P. (2020). Against crisis epistemology. In B. Hokowhitu, A. Moreton-Robinson, L. Tuhiwai-Smith, C. Andersen, & S. Larkin (Eds.), *Routledge handbook of Critical Indigenous Studies* (pp. 52-64). Taylor & Francis Group.
- Wildcat, D. R. (2009). *Red alert! Saving the planet with Indigenous knowledge*. Fulcrum Publishing.

- Wildcat, D. R. (2013). Introduction: climate change and indigenous peoples of the USA. *Climatic Change*, 120(3), 509-515. <https://doi.org/10.1007/s10584-013-0849-6>
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Fernwood Publishing.
- Winter, C. J. (2020). Does time colonise intergenerational environmental justice theory? *Environmental Politics*, 29(2), 278-296. <https://doi.org/10.1080/09644016.2019.1569745>
- Xiiem, J.-A. A. Q. Q., Lee-Morgan, J. B. J., & Santolo, J. D. (Eds.). (2019). *Decolonizing research: Indigenous storywork as methodology*. Zed Books.
- Zylstra, M. J., Knight, A. T., Esler, K. J., & Le Grange, L. L. L. (2014). Connectedness as a core conservation concern: An interdisciplinary review of theory and a call for practice. *Springer Science Reviews*, 2(1), 119-143. <https://doi.org/10.1007/s40362-014-0021-3>

Ngā Āpitianga | Appendices

Appendix A

Information Sheet for Rangatahi Māori

INFORMATION SHEET

Title: Ka hao te rangatahi: Amplifying rangatahi Māori voices to diversify climate change responses

He tono - an invitation

E ngā mana, e ngā reo, e ngā rau rangatira mā, tēnā rā koe. As a rangatahi Māori who is passionate about the climate change space, I invite you participate in a kōrero/interview about your perceptions and experiences of climate change. This kōrero will play a large role within a Masters project at the University of Waikato, and also contribute to a larger Deep South funded project focussed on strengthening climate responses for Māori. Here is a little more information about the research and interview process.

What is the purpose of this rangahau?

Climate change is one of the most pressing issues at this time, and the understanding is that Māori are considered some of the most vulnerable to these impacts. Rangatahi Māori have been mobilising to centre Indigenous voice on climate change in the youth activism space so this research asks where are the voices of rangatahi Māori in these climate responses and policies? The aim of this Masters research is to explore and amplify rangatahi perspectives, understandings, feelings and responses to climate change. Through exploring rangatahi perspectives, this research asks whether or not rangatahi voice is considered, or valuable when generating policy related to and responses to climate change. In-turn, this research topic will consider how rangatahi voice can contribute to climate change responses in governance spaces.

We're interested in hearing your voice on the kaupapa of climate change and how this impacts you. This may include your interpretations, experiences, and understandings of climate change, why it is important to you, or where you see the role of rangatahi voice on this kaupapa. Further questions may be asked as to how this links to wider aspects of your life and community, such as notions of whānau hauora.

What do I have to do?

We ask to have **two kōrero** with you on this kaupapa at a place of your choosing. This can include via Zoom if convenient. The initial kōrero may approximately 60-90mins, including time needed for whakawhanaungatanga and formalities. The follow-up kōrero will occur later on from the initial

kōrero and will take less time, 30-60mins, with the purpose being to delve deeper into some of the kōrero you initially shared. At this kōrero you may be encouraged to bring an image, object, or have the kōrero take place somewhere that is connected to your experience of climate change. After each interview, your kōrero will be transcribed and returned to you to review and approve to be used in the research.

Who can take part in this research?

If you are between the age of 18-30 and identity as Māori, then you are eligible to take part in this study.

What are my rights as a kaikōrero/participant?

- Your participation in this research project is entirely voluntary, you may withdraw even after you have taken part in kōrero. If you wish to withdraw over two weeks following the receipt of either of the interview transcripts it is important to note that your kōrero may not be extracted in its entirety due to analysis processes.
- Your information will remain confidential, and if indicated, your identity will be anonymised within the research outputs using a pseudonym where necessary.
- You are welcome to have whānau present during our kōrero.
- Ask questions about the project at any time.
- Decline to answer any questions during the kōrero.
- You will receive an overview of the findings at the conclusion of the study.

What will be done with my kōrero?

All of the kōrero that you share will be transcribed and analysed to find common themes or narratives on the kaupapa and will be kept on a password protected computer or a secure drive. Following this project, it will be stored for 5 years within the University of Waikato, which will be the responsibility of the research supervisor.

This rangahau will be published in the Masters thesis and will also contribute to the wider research reports for the *Haumanu Hauora* project, both which you will have access to. The information may also be shared in other research outputs for project stakeholders such as Deep South and Te Ara Whatu.

Who is conducting this rangahau?

This research is being conducted by Masters student Areta Ranginui Charlton (Ngāti Ruapani, Ngāi Tūhoe) through the University of Waikato. This is being completed to contribute to the wider project titled *Haumanu Hauora: Strengthening health institution Māori responsiveness to climate change*. This project is funded by the Deep South National Science Challenge and is working alongside two DHBs (Lakes and Waikato) with the aim to develop a policy framework to better prepare for the impacts of climate change with the voice and needs of Māori at the centre. The Masters project is

being supervised by Associate Professor Bridgette Masters-Awatere (Te Rarawa, Ngai te Rangi, Tūwharetoa ki Kawerau) who is also the Project lead for the *Haumanu Hauora* project.

If at any time you feel uncomfortable, unsure, or participation in this research raises any concerns, please contact either:

Areta Ranginui Charlton (Masters student)

Email: ajc83@students.waikato.ac.nz

Bridgette Masters-Awatere (Research supervisor)

Email: bridgette.masters-awatere@waikato.ac.nz

Ethical statement of approval

This research project has been approved by the Human Research Ethics Committee (Health) the University of Waikato as HREC(Health)2021#52. Any questions or concerns about the ethical conduct of this research may be sent to the Secretary of the Committee, email humanethics@waikato.ac.nz, postal address, Human Research Ethics Committee (Health), University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Appendix B

Consent Form for Rangatahi Māori

CONSENT FORM

Title: Ka hao te rangatahi: Amplifying rangatahi Māori voices to diversify climate change responses

- I have read the Information Sheet provided, the researcher has explained to me the purpose of the research, and I have had the opportunity to ask any questions about the research.
- I know that taking part in the research is voluntary and I can withdraw at any time.
- I understand that all information will be kept confidential and will only be used for research purposes. What I say may be included in research reports, the development of a policy framework, and dissemination outputs to Te Ara Whatu and the Deep South Challenge.
- I understand the if I withdraw entirely from the research following two weeks of receipt of the interview transcript, what I said may not be able to be extracted from the data analysis entirely.
- I understand that any digital recording of interviews will be deleted, and any other data destroyed after five years.

PARTICIPANT

Name:

Signature:

Iwi affiliations:

CONTACT DETAILS

Phone:

Email:

Please complete the following checklist	YES	NO
I consent to be interviewed twice for this research study		
I agree that the interviews may be digitally recorded		
I wish my identity to remain anonymous within this research study		
I consent for any images from the process of photo elicitation to be used in this research study		

Declaration by participant

I agree to participate in this research project and I understand that I may withdraw at any time up to two weeks after I have received my interview transcript. If I have any concerns about this research, I may contact the Human Research Ethics Committee (Health) via email: humanethics@waikato.ac.nz

Statement of approval

This research project has been approved by the Human Research Ethics Committee (Health) the University of Waikato as HREC(Health)2021#52. Any questions or concerns about the ethical conduct of this research may be sent to the Secretary of the Committee, email humanethics@waikato.ac.nz, postal address, Human Research Ethics Committee (Health), University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

RESEARCHER

Name:

Signature:

DATE:

Appendix C

Interview Guide for Whakawhitinga Kōrero

INTERVIEW GUIDE FOR RANGATAHI MĀORI

Title: Ka hao te rangatahi: Amplifying rangatahi Māori voices to diversify climate change responses

Introduction

Explain the purpose of the research to rangatahi, how the kōrero/interview contributes to the wider *Haumanu Hauora* project, explain the process of dissemination, and allow time to answer any questions.

- Highlight the participants rights as outlined in the consent form, including whether anonymity is a preference and ensure that any enquires have been answered
- Make sure that participants sign the consent form and that they retain the information sheet so that they have the research contact details.

Explain the interview process

- Explain how the interview will be conducted including what type of questions will be asked of the participant, how the researcher will use prompts throughout, and that the participant can refuse to answer any of the questions asked
- Confirm that the anticipated end time of the interview suits the participant
- Ask if there are any further questions before beginning the kōrero/interview

Question guidelines

- Explain the nature of the questions, casual/conversational.

How would you describe your relationship to the environment?

Prompts

- How does being Māori come into play with this understanding?
- How does this relate to your understanding of climate change?

In your understanding, how does your lens of understanding of climate change differ from the mainstream views of climate change?

Prompts

- How has this interacted with your ability to challenge climate change?
- How does being a rangatahi Māori influence your understanding climate change

Why is climate change so important to you as a rangatahi?

Prompts

- What has led you to this understanding?
- What risks does climate change pose to you? Your whānau/Hapū/iwi?

Where is the role of rangatahi voice in the climate response space?

Prompts

- How do you see rangatahi Māori voice reflected in policies and responses?
- How important is it that rangatahi are included in these spaces?

What do you want to see included in climate change responses? Policies/Plans/Action

Prompts

- Do you believe tangata whenua are centred in these policies and responses? How so?
- What do you see needs to happen to respond to climate change?

Closing

- Wind down the discussion and ask if the participant has any closing comments for the interview topic, or if they have any further questions regarding the research
- Clarify the remainder of the research process: set up a tentative date for the follow up interview, explain the transcription and approval process, as well as dissemination and reporting timelines.
- If participant has no further questions, close of the kōrero/interview appropriately.

Appendix D

Ethical Approval Letter

The University of Waikato
Private Bag 3105
Gate 1, Knighton Road
Hamilton, New Zealand

Human Research Ethics Committee
Roger Moltzen
Telephone: +64021658119
Email: humanethics@waikato.ac.nz



5 August 2021

Areta Ranginui Charlton
Te Kura Whatu Oho Mauri
By email:

Kia ora Areta

HREC(Health)2021#52 : Ka hao te rangatahi: Amplifying rangatahi Māori voices to diversify climate change responses

Thank you for your responses to the Committee feedback.

We are now pleased to provide formal approval for your project.

Please contact the Committee by email (humanethics@waikato.ac.nz) if you wish to make changes to your project as it unfolds, quoting your application number with your future correspondence. Any minor changes or additions to the approved research activities can be handled outside the monthly application cycle.

We wish you all the best with your research.

Regards,



Emeritus Professor Roger Moltzen MNZM
Chairperson
University of Waikato Human Research Ethics Committee