NGĀ PŪMANAWA E WARU O TE ARAWA

THE EIGHT BEATING HEARTS OF TE ARAWA

Manaia Maihi Natanahira Hiha.

Pepeha

Tēnā koe,
Ko Matawhaura te Maunga,
Ko Kaituna te Awa,
Ko Houmaitawhiti te Marae,
Ko Te Arawa te Waka,
Ko Te Arawa te Iwi,
Ko Ngāti Pikiao te Hapu,
Ko Manaia Maihi Natanahira Hiha toku ingoa.

Greetings,
Matawhaura is my Mountain,
Kaituna is my River,
Houmaitawhiti is my Marae,
Te Arawa is my Canoe,
Te Arawa is my Iwi,
Ngati Pikiao is my Hapu,
Manaia Maihi Natanahira Hiha is my name.

Figure 1.
Author and sisters at
Houmaitawhiti Marae, 1999.

Acknowledgements

Firstly, I must thank my mother Wendy Hiha who has been my rock throughout my studies. None of this would have been possible without her.

Secondly, thankyou to my supervisor Dr. Rebecca Kiddle for the guidance and support over the course of this research. In addition, thanks must also go to Ngāti Whakaue as Mana whenua. This thesis would not have been possible without the assistance of the interviewees, Mercia-Dawn Yates, Ben Manley, and Monty Morrison.

To my whānau, Jamie, Tui, Jessie, Craig, thank you so much for your immense support over the course of my studies, and encouraging me to pursue a higher level of education through tertiary studies.

Finally, this would not have been possible without the aroha and tautoko of my partner, Margot Brown. This is a result of your hard work also...

Arohanui,
Manaia Maihi Natanahira Hiha

He rau ringa e oti ai - Many hands make light work

Positionality Statement

Ko wai au ? Who am I ?

As a researcher of both Māori and Pākehā descent, a bicultural understanding of Architecture, both Indigenous and Western, are important to me. My Māori identity lies in Te Arawa from my father, Craig Hiha and Ngāti Whakatohea from my mother, Wendy Takamore Hiha. My Pākehā identity lies within British roots, through my father's mother and mother's father.

Figure 2.
Matawhaura Maunga

Positionality describes how your identity influences, and potentially biases, your understanding of, and outlook, on the world (Foote & Bartell, 2011). For this research I will be undertaking, it is essential that my positionality is acknowledged to provide the reader with a means of understanding the dynamics in which I research and design.

I have spent most of my life in Rotorua, attending Malfroy Primary, Rotorua Intermediate and Rotorua Boys' High School. I then embarked on a journey to Victoria University of Wellington, to study a Bachelor of Architecture Studies.

A large proportion of my academia was steeped in Western views of the world. I felt I was producing work that should fit within an Aotearoa context, with the theory, precedents and ideologies from the Western world. Not realising at the time, I became content with this style of learning and it became normalised in my workflow. It wasn't until the final year of the undergraduate programme where I enrolled in the paper 'Pacific Designed Environments'; which is an introduction to issues relating to the design and built environments of the Pacific region with a central focus on the settlement of Aoteroa, that I became re-acquainted with Māori and Pacific perspectives.

Figure 3.
Houmaitawhiti Marae

This paper opened my eyes to the effects of colonisation on Māori land/resources, Māori settlement patterns and Māori architecture. But what affected me the most was the enduring effects colonisation have had on Māori culture and what this meant for Māori Identity.

I spent time living in Taupō and Rotorua, both within Te Arawa tribal lands. I attended Kohanga Reo in Rotorua and was in the Rūmaki class at Malfroy Primary. I then attended Rotorua Intermediate before going to Rotorua Boys' High School. This is where my passion for architecture was realised, not just subconsciously.

Coming to Wellington to study architecture was definitely a cultural shock for me, however, I embraced this with open arms and an open mind. The change of environments was evident, going from classes that incorporated Tikanga Māori in the learning experience to classes that embodied Western values and knowledge.

Figure 4.
Kaituna River

This thesis is an attempt to rebalance architectural norms/discourse to reimagine the ways in which Te Arawa identity could be privileged in Aotearoa-New Zealand architecture.

Abstract

Globalisation reduces our ‘sense of place’ through the international standardization of a ‘modern architecture’. This movement is a result of rapid urbanisation, international capital and the exchange of international values and principles among regions. Returning to a localised architecture is significant in activating the ‘identity’ of a place. To prevent a global sameness, we need to place importance on matauranga Māori in Aotearoa’s cultural landscapes and built environment. Māori, like other indigenous peoples, have had their land, language, culture and identity marginalized since being colonised by the British in 1840.

It takes a long time to heal an injured sense of cultural identity and the effects are enduring for the Indigenous Māori people of Aotearoa (New Zealand).

Figure 5.
1914, national architectures still recognisable.

Figure 6.
2014, what remains of national styles today? how did we get here?

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“In Māori tradition, **Parata** was believed to be a huge creature that lived in the deepest part of the ocean, beyond the horizon, between Aotearoa and foreign lands. Parata was the final destination of all flowing water and it controlled the tides by inhaling and exhaling the oceans waters. If a voyaging canoe was caught in a whirlpool or maelstrom and in a plate of imminent danger, it was said to be in the mouth or throat of the Parata. Ancestors travelling on the **Arawa** canoe found themselves in this exact position. They were saved from certain death only by the powerful incantations of priest Ngātoroirangi. ‘**Te waha o te Parata**’ became a figure of speech describing a person or people unexpectedly falling into a perilous situation. In some ways, the term reflects the experience of Colonisation for Māori. Like the weather and its impact on travelling the oceans, the whirlpool of colonisation and its impacts were an unexpected threat to the survival of Aotearoa and its people (Ross, 2020).

~Mike Ross (Imagining Decolonisation)

Introduction

Observations over recent years suggest a growing interest in Māori architecture and urban design. This has been a result of the inclusion of Tikanga Māori in planning and policy. The Te Aranga principles, developed in 2005, have provided a set of outcome based principles that embody the core Māori values of: Rangatiratanga, Kaitiakitanga, Manaakitanga, Wairuatanga, Kotahitanga, Whanaungatanga, Mātauranga. The principles were formulated to provide guidance to design professionals in Aotearoa.

Historically, ‘colonial’ architecture has dominated the built environment of Aotearoa-New Zealand. New Zealand was colonised by the British Empire in 1840, under Te Tiriti o Waitangi¹. The statute contained promises to protect Māori rangatiratanga and culture. However, they were broken promises. By 1900, 95% of Māori land had been sold or taken unjustly by the crown. The Native Land Court was established in 1865 as a result of the ‘Native Lands Act 1865’. This legislation allowed the conversion of traditional communal landholdings into individual titles, essentially making it easier for British settlers to purchase Māori land. The native land court required to name no more than 10 owners, regardless of the size of the land block (Ministry for Culture and Heritage, 2016). This was problematic for Māori as communal living and joint ownership was part of Māori culture. Effectively, the native land act dispossessed all other tribal members of their landholdings (Ministry for Culture and Heritage, 2016). From 1865 to 1900, 3.2 million hectares of Māori landholdings had been transferred to Pākehā ownership (Ministry for Culture and Heritage, 2016). The effects of land alienation are enduring for the Māori people, and will continue to have deeply embedded effects on the culture and identity of tangata whenua (people of the land).

Colonisation and globalisation have co-existed to produce a built environment that, for the most part, reflects a ‘colonial’ environment. Mātauranga Māori is becoming more normalised in our everyday life, and I truly believe in the prospect of architecture to reflect Aotearoa’s Māori heritage and identity.

1. The Treaty of Waitangi

Research Question:

How can **Mātauranga Māori** enhance Te Arawa **place-identity** in colonial urban Rotorua?

Matauranga Māori

Mātauranga Māori is the Indigenous knowledge system of Aotearoa (Broughton et al., 2015).

Place-identity

The quality of a place being unique, distinctive, and rooted in the local (Banerjee & Loukaitou-Sideris, 2011).

RESEARCH AIMS

1.
- This design led research develops a theoretical framework for Te Arawa urban design and architecture. The frameworks aim for this research is to enhance Te Arawa place-identity and sense of place.
2.
- The research will speculate on a series of interventions on an urban scale

RESEARCH OBJECTIVES

1.
- The research aims can firstly be achieved by building an understanding of the kaupapa that form the basis of this thesis, which are:

Māori Architecture / Urban Design
Colonisation/ Globalisation
Place-identity (Te Arawa and Rotorua)
Mana whenua values and aspirations

These will be achieved by undertaking literature reviews and precedent analysis grounded in tikanga Māori. Interviews with Mana whenua will provide a means of engagement with Mana whenua.
2.
- The series of speculative interventions will be conceived through the theoretical framework, contextual analysis and Mana whenua engagement. Mana whenua will provide guidance for the design process of the interventions.

RESEARCH METHODOLOGY.

RESEARCH METHODOLOGY

1. KAUPAPA MĀORI APPROACH

This design led research utilises a Kaupapa Māori approach. This means that the research undertaken privileges Mātauranga Māori and Tikanga Māori. The research has been done by Māori, with Māori and for Māori.

Development of Research Proposal: Kōrero¹ with Te Arawa whanau

Pepeha²
Positionality Statement
Research Proposal
Establish Research Question
Establish Aims and Objectives

2. THEORETICAL FRAMEWORK

Introduction
Interviews(s): Engagement with Te Arawa leaders
Literature Review: Relating to national mātauranga Māori values and principles
Reflection
Literature Review: Relating to local mātauranga Māori values and principles
Case Study: Relating to the implementation of mātauranga Māori in architecture/urban design
Conclusion

3. KAUPAPA MĀORI CONTEXTUAL ANALYSIS

Through conversations with interviewee/s, the appropriate Kaupapa Māori contextual analysis would consist of these three subjects: Tangata³, taiao⁴, hītori⁵.

Te Arawa Context
Te Arawa Marae and Pā⁶ analysis
Site selection process
Significant Te Arawa landmarks
Tapu⁷ and Noa⁸ spaces
Photographic Journal Narrative: representation of Place-identity
Areas of interest for design

1. *to talk, tell, read*
2. *geneology*
3. *people*
4. *environment*
5. *history*

4. PRELIMINARY DESIGN

Intuitive sketching on site

5. DESIGN

Introduction
Eight speculative design(s) steeped in Te Arawa mātauranga
Reflection through theoretical framework established
Conclusion

6. CONCLUSIONS & CRITICAL REFLECTIONS

A conclusion and critical reflection of the design led research process

Response to the research question(s)
Response to the research aim(s)
Response to the research objective(s)
Constraints and limitations
Research potential for other contexts (within Aoteroa)
Advancing the research

6. *māori village*
7. *sacred*
8. *ordinary, unrestricted*

THEORETICAL FRAMEWORK.

Introduction

Purpose of Chapter

Examining Te Aranga principles have been invaluable to my understanding of the core Māori values of Māori culture. The principles explicitly discuss how Mātauranga Māori can inform a design process. Because of this very reason, it has been deemed applicable to my research framework moving forward.

The Te Aranga principles were developed by Māori design professionals in response to the New Zealand Urban Design Protocol (NZUDP), 2005 (Yamen Jawish, 2018). These are a set of outcome based principles developed from a set of core Māori cultural values. The principles were formulated to provide practical guidance on how Mātauranga Māori can enhance the environments we live in. Māori design professionals have held a common desire to enhance Mana Whenua presence and meaningful collaboration in the design of Aotearoa spaces and places. These principles will help in developing a criteria for assessing the success of the research.

In the following tables, they discuss the values and meanings in a simple manner. They also show how these were translated into principles with potential design responses outlined. For example, a potential design response to the principle of Mahi Toi might be the use of Te Arawa narratives expressed through Pattern language embedded into local materials,

LITERATURE REVIEW 01.

TE ARANGA PRINCIPLES.

“The key objective of the principles is to enhance the protection, reinstatement, development and articulation of Manawhenua cultural landscapes enabling all of us (Mana whenua, mataawaka, tauhiwi and manuhiri) to connect to and deepen our sense of place (*Auckland Council, n.d*)”

~Auckland Design Manual

Te Aranga Design Principles

Research Objective Met: (1) Building an understanding of the kaupapa: Māori architecture/urban design.

Examining Te Aranga principles have been invaluable to my understanding of the core Māori values of Māori culture. The principles explicitly discuss how Mātauranga Māori can inform a design process. Because of this very reason, it has been deemed applicable to my research framework moving forward.

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In the following tables, they discuss the values and meanings in a simple manner. They also show how these were translated into principles with potential design responses outlined. For example, a potential design

Value	Meaning	Simplified
Rangatiratanga	The right to exercise authority and self-determination within one's own iwi / hapū realm.	Self determination / Authority
Kotahitanga	Unity, cohesion and collaboration.	Togetherness
Kaitiakitanga	Managing and conserving the environment as part of a reciprocal relationship, based on the Māori world view that we as humans are part of the natural world.	Guardianship / Stewardship
Wairuatanga	The immutable spiritual connection between people and their environments.	Spirituality
Manaakitanga	The ethic of holistic hospitality whereby mana whenua have inherited obligations to be the best hosts they can be.	Hospitality / support
Whanaungatanga	A relationship through shared experiences and working together which provides people with a sense of belonging.	Relationships and participation
Mātauranga	Māori / mana whenua knowledge and understanding.	Knowledge and wisdom

“For Māori, these values not only represent their own personal and collective beliefs and **values**, but they provide a means of asserting **identity** of self and **place**, enhancing the overall presence, visibility and participation of **Mana Whenua** in the design of the physical realm (Yamen Jawish, 2018)”

~ Jacqueline Paul

Principle	Outcome	Attributes	Potential Design Research Response
Mana	The status of iwi and hapū as mana whenua is recognised and respected.	Provides a platform for working relationships where Mana Whenua values, world views, tikanga, cultural narratives, mātauranga and visual identity can be appropriately expressed in the design.	<i>The establishment of relationships with Ngāti Whakaue at the outset of planning, to maximise opportunities for design outcomes.</i>
Whakapapa	Maori names are celebrated.	Recognises ancestral names as entry points for exploring and honouring tūpuna, historical narratives and customary practises associated with development sites and their ability to enhance sense of place connections.	<i>Mana Whenua engagement and research on the use of correct ancestral names, including macrons. Recognition and expression of place names through signage, wayfinding and the naming of designs.</i>
Taiao	The natural environment is protected, restored and/or enhanced.	Local flora and fauna which are familiar and significant to Mana Whenua are key natural landscape elements within urban and / or modified areas.	<i>Re-establishment of Te Arawa flora and fauna that reflect biodiversity. For example, Manuka, Kanuka, Mingimingi and Harakeke and Pukeko.</i>
Mauri Tū	Environmental health is protected, maintained and/or enhanced.	The wider development area and all elements and developments within the site are considered on the basis of protecting, maintaining or enhancing mauri.	<i>Landscape and building materials which are locally sourced in Rotorua and are of high cultural value to Te Arawa are explored in the design process.</i>
Mahi Toi	Iwi/Hapū narratives are captured and expressed creatively and appropriately.	Ancestral and contemporary names, local tohu and iwi/hapū narratives are creatively reinscribed into the design environment including: landscape; architecture; urban design and art.	<i>Te Arawa Narratives are established through engagement with Mana Whenua and therefore expressed creatively through pattern language in narrative architecture. Essentially, reflecting Te Arawa identity and enhancing a ‘sense of place’.</i>
Tohu	Mana whenua significant sites and cultural landmarks are acknowledged.	Celebrates local and wider unique cultural heritage and community characteristics that reinforce sense of place and identity, both traditional and contemporary.	<i>Analysis of Tohu, including Wāhi Tapu, Wāhi Tupuna, Maunga, Roto, Awa and Ancestral Kāinga. These may inform visual connection and spatial orientation to these cultural landmarks.</i>
Ahi Kā	Iwi/hapū have a living and enduring presence and are secure and valued within their rohe.	Living iwi/hapū presences and associated kaitiaki roles are resumed within urban areas	<i>Providing Te Arawa with access to natural resources (harakeke, koura, and existing waterways, etc.). Enhancing Te Arawa Kaitiakitanga and a ‘sense of belonging’.</i>

Reflection

The review of the Te Aranga Design principles established a set of Māori Design principles that will help moving forward with this design led research. The principles will also provide a criteria to judge the success of my design concepts. As these are a nationwide set of principles it was deemed appropriate to review a 'localised' set of values and principles: Te Tūāpapa o Ngā Wai o Te Arawa (Te Arawa Cultural Values Framework).

LITERATURE REVIEW 02.

TE TŪĀPAPA O NGĀ WAI
O TE ARAWA

“By using Te Tūāpapa o ngā wai o Te Arawa, Te Arawa Cultural Values Framework, the iwi has been able to ensure a te ao Māori view to improving the health and wellbeing of Te Arawa lakes and surrounding land, an approach which is already showing dividends (Rotorua Lakes Council, 2020)”

~Sir Toby Curtis (Ngāti Pikiao, Ngāti Rongomai)

Te Tūāpapa o ngā Wai o Te Arawa

Research Objective Met: *(1) Building an understanding of the kaupapa: Māori architecture/urban design and Mana whenua values and aspirations*

Te Arawa Cultural Values Framework

For Te Arawa, there are multiple cultural frameworks. The research alongside Mana Whenua, deemed Te Tūāpapa o ngā wai o Te Arawa, as the framework to use. This was the selected framework as it relates to the Te Arawa lakes and the surrounding land. The site selection process of this thesis will explore sites that have some connection to Wai or the surrounding Whenua.

The framework is a values-based Policy Statement developed by the Te Arawa lakes trust (Te Arawa Lakes Trust, 2015). It articulates Te Arawa values in relation to the long term aspirations for the Te Arawa lakes and surrounding land. These values are intrinsic and recognise the inalienable relationship Te Arawa have with their mountains, lakes, rivers, streams, groundwater aquifers and geothermal resources (Te Arawa Lakes Trust, 2015).

The framework explicitly states two guiding principles that were formulated through a set of Te Arawa Values that were determined by Te Arawa Iwi/Hapu groups. These principles are guiding principles, therefore not as explicit as the Te Aranga principles. The principles will help form a hybrid framework, alongside Te Aranga Principles, that will establish the theoretical framework for the research moving forward.

Te Tūāpapa o ngā Wai o Te Arawa

The framework was developed through a consultation process that consisted of Marae based Hui, online surveys that went through a feedback process from the Te Arawa rohe of Rotorua region (Te Arawa Lakes Trust, 2015). Common themes emerged, and an advisory group hui was a key event in the establishment of the draft values. A draft framework was then released for feedback from Te Arawa Hapū and Iwi. In June 2015, Te Tūāpapa o ngā Wai o Te Arawa was adopted (Te Arawa Lakes Trust, 2015). It is important to acknowledge that this framework does not replace any obligation to engage with Te Arawa Iwi/Hapu.

Te Arawa Lakes Trust

TALT (Te Arawa Lakes Trust), was established to represent the interest of Te Arawa Hapū and Iwi members in relation to the Te Arawa Lakes Settlement Act, 2006 (Te Arawa Lakes Trust, 2015). This includes, but is not limited to:

The promotion amongst Te Arawa of the educational, spiritual, economic, social, health and cultural advancement or wellbeing of Te Arawa and its whanau.

The maintenance and establishment of places of cultural and or spiritual significance to Te Arawa

The promotion amongst Te Arawa of mental health and wellbeing of the ages or those suffering from mental or physical sickness or disability

These interests align with the aims and objectives established within this research. These interests align with the aims and objectives established within this research. The values which will be shown in the following table are based around Wai, for Māori, water is central to life. It symbolises the lifeblood of Papatūānuku (earth mother) and the tears of Ranginui (sky father); it is the element that binds the physical and spiritual realms together (Te Arawa Lakes Trust, 2015).

“Our guiding Te Arawa values are based around Wai. Water is central to life. It symbolises the lifeblood of Papatūānuku (earth mother) and the tears of Ranginui (sky father). It is the element that binds the physical and spiritual realms together (Te Arawa Lakes Trust, 2015)”

~Te Tūāpapa o ngā Wai o Te Arawa

Value	Translation	Meaning
Wai	Water	Wai is multi-layered, multi-faceted and multi dimensional. Wai is a state and value which has a wider contextual meaning such as rhythm and flow. Wai is our ‘connector’ to our past, present and future as well as to each other.
Waiariki	Hot Spring / Thermal Pool	Waiariki is iconic as it refers to god-given empowerment (literal translation: water of the gods). Waiariki is more than water, it is the rhythm of the gods. Waiariki expresses the value of wai, regardless of type.
Waiora	Health	Waiora is the health benefits that derive from our Waimaori. As part of water classification, waiora is the purest form of water. Waiora gives life and sustains wellbeing.
Wairua	Spirit	The flow of life, the spiritual attributes of wai (and everything that entails/embodies/means). Wairua is an intrinsic quality that is ever present. Wairua is the dimension of two waters (internal and external - wai rua).
Waiata	Song, Chant, Psalm	The rhythm of wai as embodied and transmitted through waiata, including our whenua, whakapapa, hitori, wāhi tapu, kai, ngā ingoa, ngā korero / pakiwaitara, ngā taniwha kaitiaki.

Aspirations for Te Arawa Lakes and surrounding land

The cultural health and wellbeing of our lakes and everything they support is improved (eg. kai). The health and wellbeing of our people is improved including social, cultural and economic.

The connections between Te Arawa whānau, hapū and iwi and our lakes is enhanced.

Te Arawa cultural identity is celebrated. Te Arawa whānau know who they are and where they come from. Sites of significance are identified and protected.

Guiding Principle 1.

Meaning

Value the role that TALT and Te Arawa have to play regarding the Te Arawa Lakes

Te Arawa are kaitiaki / hunga tiaki of the mauri of the Te Arawa lakes. Lakes management, guided by science and technology, can benefit from intergenerational knowledge and experience of Te Arawa, in relation to the Te Arawa lakes.

Guiding Principle 2.

Meaning

Value Te Ao Māori

The Māori world view, culture and values are a core element of what it means to be Te Arawa. This means that:

Improving the health and wellbeing of the Te Arawa lakes that involves:

Reconnecting people to the Te Arawa lakes to instil a greater sense of collective responsibility. Restoring connections and relationships.

The Te Arawa lakes are more than physical water bodies, to Te Arawa, they are taonga, to be treasured. They are also multi-faceted and valued for their tangible and intangible aspects, such as:

Providing a place for healing, cleansing and inspiration. Being a place to swim, paddle and gather kai. Their landscapes and amenity. Their employment opportunities from tourism and farming on adjacent land.

The Te Arawa lakes are significant because they are central to the cultural identity of Te Arawa.

This is evident through:

The physical presence (or remnants) of historic settlements and places of significance e.g. wāhi tapu. The number of marae located on the shores of the Te Arawa lakes and the historical accounts and associations with the lakes, as expressed through waiata (song), pepeha (tribal sayings), ngā ingoa (place names), pakiwaitara (stories) and whakatauki (proverbs).

Relation to Research

This principle highlights the importance of Te Arawa as Kaitiaki of the lakes and surrounding whenua. This is reiterated throughout the framework and shows the need for Te Arawa Mātauranga and experience, in relation to the lakes and surrounding whenua. This principle doesn't explicitly have a design relevance, but stresses the value of Te Arawa as Kaitiaki.

Guiding Principle 1.	Meaning
Value the role that TALT and Te Arawa have to play regarding the Te Arawa Lakes	Te Arawa are kaitiaki / hunga tiaki of the mauri of the Te Arawa lakes. Lakes management, guided by science and technology, can benefit from intergenerational knowledge and experience of Te Arawa, in relation to the Te Arawa lakes.
Mana	The status of iwi and hapū as mana whenua is recognised and respected.
Ahi Kā	Iwi/hapū have a living and enduring presence and are secure and valued within their rohe.

Guiding Principle 2.

Value Te Ao Māori	The Māori world view, culture and values are a core element of what it means to be Te Arawa.
Taiao	The natural environment is protected, restored and/or enhanced.
Mauri Tu	Environmental health is protected, maintained and/or enhanced.

To form a hybrid theoretical framework, It was an important task to compare the principles of Te Tūāpapa o ngā Wai o Te Arawa and how they relate to Te Aranga principles. For example, the guiding principle one relates to the Te Aranga principles of Mana and Ahi Kā. The guiding principle two relates to the Te Aranga principles of Taiao and Mauri Tū. This exercise has shown the importance placed on Te Arawa placed Mātauranga, Kaitiakitanga, Wairuatanga and Rangatiratanga. Essentially, the framework’s core themes are Te Arawa: Guardianship/Stewardship, Self determination/Authority, Spirituality and Knowledge/Wisdom in relation to the Te Arawa lakes and surrounding land.

“Whatungarongaro te Tangata, Toitū te Whenua – As people disappear, the land remains”

Reflection

The review of this framework has proved invaluable for the research moving forward by achieving the research objective (1). The framework helped to understand the Te Arawa values in relation to the aspirations of Te Arawa Iwi/Hapu for the lakes and surrounding land. The values are all based around Wai , and symbolise the cultural significance of water to the Te Arawa people. The designs moving forward are to be conceptualised with Te Arawa Mātauranga from the beginning of the process, and will reflect Te Arawa as Kaitiaki of the Wai and Whenua that this design led research will speculate upon. Key architectural themes to be mindful of moving forward are: Environmentally conscious design and the cultural landscape and everything embedded within that landscape (narratives, place names, etc.) as drivers of design.

This is affirmed by the whakataukī:

Whatungarongaro te tangata, toitū te whenua

As people disappear, the land remains

PRECEDENT ANALYSIS.

AUCKLAND CITY RAIL LINK.

Auckland City Rail Link (CRL)

Research Objective Met: *(1) Building an understanding of the kaupapa: Māori architecture/urban design, Place-identity and Mana whenua values and aspirations.*

Client: Auckland Transport

Sector: Transport, Culture & Community

Discipline: Architecture, Urban Design, Landscape Architecture, Interior Design

Design Collaborators: Jasmax, Grimshaw, Alt Group, DesignTRIBE, Mana Whenua Iwi Group(s)

Mana Whenua Iwi Group(s): Te Ākitai Waiohū, Te Kawerau ā Maki, Ngāti Maru, Ngāti Paoa, Ngāi Tai Ki Tāmaki, Ngāti Tamaoho Trust, Ngāti Te Ata and Ngāti Whātua Ōrākei

The Auckland City Rail Link designs are an example of a major shift in New Zealand's Urban Environment; in which Māori values and design principles have formed a powerful indigenous expression of Architecture. In recent years, Mātauranga Māori in architecture has provided a transformation in how architects/designers think about our cultural heritage and its potential for place-making functions. The CRL will be Aotearoa's largest infrastructure and public art project, *and will provide a powerful expression of indigenous cultural identity, CRL will create an authentic and globally recognisable image of the city of Tāmaki Makaurau for the future (Jasmax, 2019).*

Mana Whenua Engagement

The station has been a collaboration between Jasmax and Grimshaw (architects), Alt Group (multidisciplinary design studio) and Māori Architect, Rau Hoskins (Ngāti Hau, Ngāpuhi) of DesignTRIBE. However, the essential piece of the puzzle in this collaborative project was the engagement with Mana Whenua, which consisted of eight Iwi group(s) from across Tāmaki Makaurau (Byrt, 2020).

Figure 7.
CRL Karangahape Station
visualisation

“with **Te Aranga Principles** like Ahi Ka (a living presence), designers can have tangible conversations with clients and **Mana Whenua** about what that looks like in a specific building, space or place”

~Rau Hoskins (Ngāti Hou, Ngāpuhi)

“The stations share those deeper stories that you don’t get anywhere else in the country, let alone the world. We as **Mana Whenua**, right from the get-go, came together, each tribe with their own mana, to express their Kaitiaki Taonga individually”

~Hero Potini (Ngāti Tamaoho)

Mana Whenua Engagement

The Eight Mana Whenua Iwi groups involved in the design of the stations were: Te Ākitai Waiohū, Te Kawerau ā Maki, Ngāti Maru, Ngāti Paoa, Ngāi Tai Ki Tāmaki, Ngāti Tamaoho, Ngāti Te Āta and Ngāti Whātua Ōrākei.

The Mana whenua engagement at the very beginning of the CRL Project was essential for the place-identity of this project. Rau Hoskins suggests that you cannot have a good process unless that first principle, that mana principle has been well handled (Byrt, 2020). This statement resonates with the engagement I have had with Mana Whenua from the outset of my thesis. As the CRL project encompassed multiple localities throughout Tāmaki Makaurau, multiple Mana Whenua groups were engaged in the process. Contrary to my research, as it looks at a site within the ‘Rotorua Township’, only one group holds Mana Whenua status: Ngāti Whakaeu.

CRL established a Mana Whenua forum in 2012, the role of the forum included:

-Developing practical measures to give effect to the principles in the Urban Design Delivery Work Plan (DWP)

-Input into, where practicable, the design of the stations

-Input into the preparation of the Construction Environment Management Plans (CEMPs) and DWPs

-Working collaboratively around built heritage and archaeological matters

-Undertaking kaitiakitanga (guardianship) responsibilities associated with the CRL project, including monitoring, assisting with discovery procedures and providing input of Maori mātauranga (knowledge) in relevant stages of the project

-Providing a forum for consultation with Mana Whenua regarding the names for the CRL stations

-The forum met monthly and as required has additional design, consent, sustainability and other workshops (CRL, Mana Whenua).

Whilst reviewing the Mana Whenua engagement process by CRL, it has become apparent when and where this engagement and Mātauranga Māori can be carefully utilised to have a meaningful contribution to a project.

Narrative Architecture

Like many indigenous peoples, the Māori are highly oratory. Storytelling was an integral part of Māori culture, and often told through Waiata, Kapa Haka, and Karakia. Māori mythology speaks of deity/gods and tribal heroes through the use of storytelling. This formed collective tribal stories and memories that speak of the iwi's people, environment and history; the basis of an iwi's identity. It is then appropriate that cultural narratives become part of the architecture, to tell stories of 'place'.

The common narrative between all stations is that of Ranginui and Papatuanuku, the sky father and earth mother. Ranginui and Papatuanuku were pressed together in embrace, when their son Tane (god of the forests) lay on his back and pushed against the sky with his feet, therefore separating Ranginui and Papatuanuku. It is a particularly appropriate metaphor for design, given that these stations break the threshold between Ranginui and Papatuanuku (Byrt, 2020).

Each station has its own atua:

Tangaroa for Britomart/Waitemata (the god of the sea- Britomart is land reclaimed from the harbour); for Aotea, Rongo-ma-Tane, the god of cultivation, alongside Horotiu, the taniwha who guards Waihorotiu, the stream that once ran where Queen Street now is; Tane-mahuta for Karanga-a-Hape (who forced his parents Rangi and Papa apart); and Mataoho at Maungawhau, the local deity for volcanic activity (Byrt, 2020).

Each station has its own unique threshold:

At Aotea (figure 9), a huge ceiling of hanging rods will create the undulating effect of flowing water, as well as suggesting raupo (bulrush) growing along a river's edge; at Karanga-a-Hape (figure 8), a carved and vaulted wood ceiling will create the negative silhouette of a kauri canopy — evoking Tane-mahuta — while tiles on the walls down to the train platforms will crimp and peel like a kauri's bark. And at Maungawhau, the main motif is carved circles and swirls that evoke the nearby volcanic cone, its kumara pits, and the lava flows that made the Auckland isthmus (Byrt, 2020).

Mana Whenua values and narratives have been creatively expressed in these station designs, Iwi identities are embedded in the forms and materials of the architecture. A refreshing element to this project, as Māori art typically serves as a facade on Pākehā building. The integration of public art throughout the stations will showcase our unique Māori heritage and create a memorable place-identity for Tāmaki Makaurau residents and visitors.

Figure 8.
Interior visualisation of
Karangahape Station

Figure 9.
Interior visualisation of Horotiu
station (Aotea)

Figure 10.
Interior visualisation of
Auckland city rail link

Figure 11.
*Pattern Language visualisation
on handrail*

Figure 12.
*CNC routed patterns on timber,
physical model at scale.*

Figure 13.
*CRL precedent images for pattern
language*

Māori Pattern Language

The unique material culture of Māori and the Pacific. Māori Pattern language has traditionally been represented through Whakairo. The patterned designs by Alt Group explore the potential of this language, through the craft, materials and details of the spaces. From subtle detailed elements such as the handrail designs (figure 11), to the patterning of the ceiling in Karanga-a-Hape, the use of pattern language to portray the Mana Whenua narratives is groundbreaking for Aoteroa. The use of new technologies to express Mātauranga Māori produces a deeply embedded design language. Not only does this provide a ‘sense of belonging’ for Tāmaki Makaurau Māori, but creates a unique precedent for how Iwi place-identity can be achieved through Mana Whenua engagement, Iwi Narratives and Iwi Pattern Language. This design language will be incorporated into my research through narratives of People, Environment and History.

Reflection

The Auckland CRL design highlights the importance of Mana Whenua engagement at the outset of the project. The engagement is key to the success of the project. This is significant in establishing meaningful engagement in my research moving forward, and how this engagement may take place.

Examining the design has proved to be a useful task, and has inspired me to use *Narrative Architecture* and *Pattern Language* techniques through the engagement with Te Arawa Mana Whenua in my own design.

Introduction

Research Objective Met: *(1) Building an understanding of the kaupapa: Mana whenua values and aspirations*

Interviews

Mana whenua engagement is a key component to this research. The following interviews were used as a method to generate an open ended response, and in turn, help with the understanding of Mana Whenua values and aspirations for Te Arawa and Rotorua; in relation to enhancing the place-identity of Te Arawa architecture and urban design. The research seeks to ask questions that will engage a meaningful response from the Ngāti Whakaue interviewees. Ngāti Whakaue leaders were carefully discussed and selected for their suitability in regards to the research proposed. A prerequisite for selection was having ancestral ties to Ngāti Whakaue. The interviewees consisted of: *Mercia-Dawn Yates, Ben Manley and Monty Morrison.*

Interview with Mercia-Dawn Yates

Ko Tiheia me Ngongotahā ngā maunga,
Ko te Awahou (Wai-mimi-o-Pekēhaua) me Utuhina ngā awa,
Ko Te Rotorua-nui-a-Kahumatamomoe te roto,
Ko Te Arawa te waka,
Ko Ngāti Rangiwewehi me Ngāti Whakaue ngā iwi,
Ko te Awahou me Ōhinemutu ngā papa kāinga,
Ko Mercia-Dawn Maraea Yates ahau.

How would you describe your relationship with Rotorua?

My relationship with Rotorua is through my whakapapa. It's in my DNA. It's my Tūrangawaewae. It's also one that I am proud of, having been raised, schooled and to return to Rotorua, to raise my own children. It's a uniquely special relationship, and one that I love.

What do you think gives Rotorua its identity?

It's a cultural melting pot. It is also steeped in history dating back to the early 1400s when our tūpuna arrived through to the advent of tourism in the 1800s. This once again was spearheaded by our entrepreneurial tūpuna, capitalising on the natural wonders of our environment. It's also one that's built on partnerships between local iwi and the Crown - Tātau Tātau.

Te Arawa didn't sign the Treaty of Waitangi. They were advised by one of the missionaries at the time, that the two documents were different and that the English version gave power to the Crown. Ngāti Whakaue later forged a partnership contract with the Crown to set aside land that would become the township. The Fenton Agreement to this day is still a binding contract which ensures that Mana Whenua still lies with Ngāti Whakaue.

What do you think gives Rotorua its sense of place?

Its history, its location and its people. Partnership with iwi, as mentioned, has also been integral to creating a natural sense of place. Our environment is a huge contributor to giving us a sense of place. Coupled with our cultural attributes it is an entertainment mecca.

Figure 14.
Portrait of Mercia-Dawn Yates

“Tūrangawaewae will be a critical component to embody, providing a greater sense of knowing who we are and where we come from.”

~Mercia-Dawn Yates

Mercia-Dawn Yates

How would you best describe the values of the Te Arawa people?

Ngā Pūmanawa e Waru - The eight beating hearts of Rangitahi. Rangitahi is one of our paramount chiefs who before meeting his death referred to his children as his eight beating hearts - Ngā Pūmanawa e Waru. Ka Awatea is a research piece by Dr Angus Macfarlane and fellow Te Arawa researchers who used the whakataukāki to describe eight qualities that epitomise characteristics of a valued leader or scholar.

What do you think gives Te Arawa its identity?

It's history and fierce determination to ensure our own mana motuhake (sovereignty). We come from a long line of entrepreneurs and navigators - there is only one way for us to succeed and that is by determining our own futures. Another distinction about Te Arawa is that we are made up of a confederation of tribes. This in itself renders itself to challenges around a united voice. But this too, adds to its uniqueness. They have usually been identified through a Crown system, like a knighthood etc.

How would you envisage a Te Arawa sense of place?

One that is: inclusive, confident, powerful, humble, respectful and blended. I would expect that it is welcoming to all. I would hope that it reflects partnership. Tūrangawaewae will be a critical component to embody - providing a greater sense of knowing who we are and where we come from. Te Arawa are well known for hospitality and manaakitanga.

What are your aspirations for Maori Architecture/Urban Design in Rotorua?

Mauri Tū - Mauri Ora! It is important that anything that is considered moving forward with urban design here in Rotorua, reflects our cultural heritage. I would love to see more of our Te Arawa stories told through spatial design across the district. I will no longer accept generic Māori models to be used to demonstrate who we are and where we come from. Te Arawa has a unique history and therefore also has one that needs to be told. Māori influenced (or dominated) architecture is a pivotal way to demonstrate this. Even more so if the architect has an affiliation with the area, or from here.

Key Findings: Mercia-Dawn Yates

The importance of Iwi Partnership in creating a 'sense of place' for Rotorua/Te Arawa.

History, Environment and People as the components for Rotorua/Te Arawa 'place-identity'.

Ngā Pumanawa e Waru - The eight beating hearts of Rangitahi. As a whakataukī to describe the eight qualities that epitomise characteristics of a valued leader or scholar. This Te Arawa whakataukī may be adopted into the research.

The challenge of finding a united voice for the confederation of tribes that make up the Te Arawa Rohe.

A Te Arawa 'sense of place' that is: inclusive, confident, powerful, humble, respectful and blended.

Tūrangawaewae as a critical component to embody in this research.

The desire for Te Arawa stories to be told through spatial design.

Interview with Ben Manley

Figure 15.
Portrait of Ben Manley

How would you describe your relationship with Rotorua?

I have a funny relationship, I wasn't brought up here. I was brought up in Sydney. I see it like a Mokopuna relationship. The Journey to learn te reo brought me home. I thought I would be here for a year or so. I used to come home, I used to spend the Christmas summers with my grandmother in Ōhinemutu. I spent a lot of time at Kuirau park and the Lakefront. It's just a slightly different relationship then someone who would've been brought up and raised here.

What do you think gives Rotorua its identity?

So for me it's a few different strands there: People, History and the Environment. The 'three unique pou'. I suppose it's the same for everywhere you go, the 'three unique Pou' you will get in any place. People: It is all the cultures they bring with them, where they're raised and where they grew. Environment: Quite specific to Rotorua as we have a unique Geothermal Environment. History: Our history is unique.

What do you think gives Rotorua it's sense of place?

I know there's this academic sense of place that you see in arts and maybe in culture. I think what doesn't give you a sense of place is a 'sameness' as everywhere else. So flipping it back around, for me, a sense of place is the uniqueness of the place that's why I related it to people, history and environment. When we had visitors they automatically got a 'sense of place' because they compare it to where they're from, whether its Europe or America they bring that sense of belonging along with them here and they are able to cast a difference.

“ for me, a **sense of place** is the uniqueness of the place that’s why I related it to **people, environment and history** ”

~Ben Manley

Interview with Ben Manley

How would you best describe the values of the Te Arawa people?

Values are interesting because as a Iwi, Te Arawa people have gone through a bit of an exercise over the past few years, so if you go to Te Arawa lakes trust which focuses specifically on our lakes, they have a specific set of values. If you go to Te Tatau o Te Arawa which is a partnership between Te Arawa and the council, they’ve got a set of values.

The values, when you look at them straight away they may look quite different, but that’s because the frame or the lenses in which they have been looked through is a little bit different. One is for the environment and one is for governance for example, so I guess there are underpinning values that you would be able to find commonalities in, such as, wairuatanga, whanaunatanaga, and a big one for Te Arawa is manaakitanga. We have had that history of visitors coming to see Rotorua.

I suppose values underpin your behaviour and your planning. Your values are a guide, they help you guide certain things. If your values are really great it helps underpin your decision making and how you interpret things as well. Values are a guideline on how we do things and how we react to things.

What do you think give Te Arawa its identity?

I want to refer back to those three Pou again, but I want to use something from my thesis again, so my first thesis was on Māori Identity. It’s what I call the three T’s: tangata, taiao and tikanga. Tangata would be individuals but iwi/hapu also, for example taiao is your natural environment and the different stories that come from each environment and then the third one is tikanga. If you do any Māori course, they talk about the differences in tikanga between different iwi and hapu, so I think if those are the three pou, you know we could talk about any part of Te Arawa and they would fit under those three pou and that’ll talk about who Te Arawa are and why we are different to any other iwi.

If I said tikanga, you know you would do things like in Te Arawa we take turns on the pie, whereas in Mātaatua they will do their side of the pie and we will do our side of the pie. If it was taiao, the one that would come to mind is our geothermal or the lakes, the lakes district, the only place that is quite like us is down south, they have their own lakes district down there. So we have our own stories wrapped into taiao and where we live. Tangata, Iwi, Hapu and individuals will be different everywhere you go.

Ben Manley

What are your aspirations for Maori Architecture/ Urban design in Rotorua?

It's quite far from what I do, but ideally to see more of it. The only place where I see they hatched out a model or a framework in particular was the Auckland City Council. It's the only framework I have seen that has actually gone into detail, it would be cool to have something similar here. Some guiding principles, even design principles, that kind of speak to the core of who Te Arawa are, that can help be fleshed out to architects, so I would like to see more of it. What I would like to see more of, would be our people taking it up, to do architecture and things like that, because it's not the one that a lot of our kids do, a lot of our kids do health, sports, or Māori, which is fine, but not many people tend to do architecture.

It's the same kind of thing you would hope for this, is that it would be taught more and the kids who would be doing would be producing a new lense, which I think is important, otherwise you get caught up in the same kind of loop and you never really get the kind of really cool designs that are out there. I would like to see it like how the kids are into arts, Toi Māori and all of that kind of stuff. I think it would be really cool, because Rotorua would be a cool place to practice it. To see more of it would be great, to see it taught would be fantastic. You need that diversity, for evolution.

Key Findings: Ben Manley

People, History and Environment as the 'three unique pou' for Rotorua/Te Arawa identity.

Te Arawa stories are wrapped into the taiao.

What doesn't give you a sense of place is a 'sameness' as everywhere else you go. So flipping it back around, a 'sense of place' is the 'uniqueness' of a place.

A big value for Te Arawa is manaakitanga, Te Arawa has a long history of visitors in Rotorua.

Values underpin your behaviour and your planning, your values are a guide, they help you guide certain things. If your values are really great, it helps underpin your decision making and how you interpret things.

The need for diversity in architecture, for the evolution of Māori architecture/urban design.

Interview with Monty Morrison

Ko Te Arawa te Waka,
Ko Tamatekapua te Tangata,
Ko Te Arawa toku Iwi,
Ko Ngāti Whakaue me Ngāti Turumakina, Ngāti Tuwharetoa oku Hapū,
Ko Ngongotaha te Maunga,
Ko Te Rotorua nui a Kahumatamoemoe Te Moana,
Ko Paratehoata Te Marae,
Ko Ōhinemutu me Te Koutu oku papa whakatipu,
Ko Monty Morrison ahau.

How would you describe your relationship with Rotorua?

Rotorua is my place of birth, the home of both my father and my mother and where my paternal grandfather James Morrison (of Scottish parents) married Ngapuia Teriana Te Tokoaitua, Ngāti Pukaki, Tuhourangi. My mother Tanira Morrison (née Kingi) is the daughter of Wiremu Atetini Te Wharepurangi Kingi (Ngāti Whakaue, Ngāti Karenga and his second wife, Erenora Te Whataiwi, Ngāti Turumakina, Ngāti Tuwharetoa. Through Wiremu Atetini (known as Koro Kihī) and his first marriage to Puti Waaka (she died young) I have links to Ngāti Pukeko, Ngāti Makino and Mātaatua Waka.

While I spent some years away from Rotorua, secondary school in Auckland. Tertiary education at Waikato and then my early professional life in Hawkes Bay, Nelson and Hamilton, I always regarded Rotorua as “home”. My whakapapa and my identity is in the footprints of my tupuna in the steam that wisps skyward, is in the water that nourishes the land from puna to Te Rotorua nui a Kahumatamomoe.

What do you think gives Rotorua its identity?

Its diverse geothermal landscape and smell. Also in its history of its people and culture.

What do you think gives Rotorua its sense of place?

Rotorua's sense of place is rooted in its Māori roots and heritage. It has been shaped by the generosity of my Ngāti Whakaue tupuna who gifted the land on which our city is built. It is further shaped and acknowledged through the naming of our streets, parks and reserves. This has been accelerated by our current mayor and council in providing Te Arawa with a voice at the Council decision-making table and being the first Bilingual city in Aotearoa-New Zealand.

Figure 16.
Portrait of Monty Morrison

“I would like to see greater use of Te Arawa/Mana whenua **storytelling** reflected in the designs.”

~Monty Morrison

Monty Morrison

How would you best describe the values of the Te Arawa people?

Tolerant yet staunch in their Te Arawatanga. While strong in their own hapū and “hapūtanga”, Te Arawa has shown by its response to the first covid-19 lockdown that it can come together. Its response is being touted by central government as a model for other Iwi to follow.

What do you think gives Te Arawa its identity?

Whakapapa. Its focused leadership mai Maketu ki Tongariro. It has a Marae. Te Papaīouru, that is acknowledged as being its paramount Whare Paremata.

How would you envisage a Te Arawa sense of place?

Providing more opportunities for Te Arawa to learn Te Arawa reo and tikanga. Expanding the opportunities for early learners to attend kura whanau, kohanga, wharekura, kura kaupapa Māori and the establishment of Te Arawa university to learn Te Arawa reo.

What are your aspirations for Maori Architecture/Urban Design in Rotorua?

I would like to see greater use of Te Arawa/Mana whenua storytelling reflected in the designs. Te Arawa now have a number of researchers who could assist with this work. Greater numbers of Te Arawa/Māori architects Influencing designs, colour palettes is to be encouraged. Ngāti Whakaue Endowment Board are keen to promote/support/students into tertiary studies/professions where NW/Te Arawa are underrepresented eg: engineering and architecture.

Key Findings: Monty Morrison

My whakapapa and identity is in the footprints of my tūpuna in the steam that wisps skyward, is in the wai that nourishes the land from puna to Te Rotorua ā Kahumatamoemoe.

The diverse geothermal landscape and smell. Also the history, people and culture, that give Rotorua it's identity.

Rotorua's 'sense of place' is rooted in its Māori roots and heritage. It has been shaped by the generosity of Ngāti Whakaue who gifted the land on which the Rotorua township was built.

Rotorua's 'sense of place' is shaped through the naming of the streets, parks and reserves. This has been accelerated by the Rotorua lakes council in providing Te Arawa with a voice at the decision making table and being the first bilingual city in Aotearoa-New Zealand.

Whakapapa as the main component for Te Arawa identity

Greater use of Te Arawa/Mana whenua storytelling reflected in architecture/urban Design.

CONTEXTUAL ANALYSIS.

Tangata

Taiao

Hītori

People

Environment

History

Introduction

Research Objective Met: *(1) Building an understanding of the kaupapa: Māori architecture/urban design, colonisation/globalisation, place-identity and mana whenua values and aspirations*

Contextual Analysis

The contextual analysis chapter explores Te Arawa's origins, migration, arrival and eventual internal migration to Te Rotorua nui ā Kahumatamoe. The analysis then looks at Te Arawa, specifically in the Rotorua region, as Rotorua will be the site of my design response. This included the analysis of Marae, Pā, Maunga, Roto, Awa and traditional Iwi/Hapu areas. The analysis then looks at the Gifted Reserves by Ngāti Whakaue for the establishment of the Rotorua Township under the Fenton Agreement of 1880. The idea of this was to decolonise a specific site that had been gifted by Ngāti Whakaue, to the Crown, but had subsequently been developed by the Crown or local council.

‘ Ko te ihu o te waka kei Maketū, ko te kei o te waka kei Tongariro ’

‘ The prow of the Te Arawa is at Maketū, and the stern at Mt Tongariro ’

Te Arawa

Origins

The Te Arawa people of the Bay of Plenty are the offspring of Pūhaorangi, a celestial being who descended from the heavens to sleep with the beautiful maiden Te Kuraimonoa (Tapsell, 2017).

From this union came the revered ancestor Ohomairangi. He was responsible for protecting Taputapuātea marae — a place of learning on the island of Raiatea or Rangiātea, in the Polynesian homeland known as Hawaiki. High priests from all over the Pacific came to Rangiātea to share their knowledge of the genealogical origins of the universe and of deep-ocean navigation (Tapsell, 2017).

By the time Ohomairangi’s revered descendant, Atuatua, was born the people were known as Ngāti Ohomairangi and lived in the village of Maketū. Atuatua married the four granddaughters of Ruatapu. A generation later, six of their sons, Tia, Hei, Rakauri, Houmaitawhiti, Oro and Makaa became the leading family group of Ngāti Ohomairangi (Tapsell, 2017).

Migration

The migration to Te Ika-a-Māui over 20 generations ago was instigated by war over scarcity of resources and land. Houmaitawhiti, one of Atuatua’s six sons, had a son, Tamatekapua. Tamatekapua took up the challenge laid down by his father: to seek a peaceful new home in a land far to the south (Tapsell, 2017).

Over 30 Ngāti Ohomairangi tribe members accompanied Tamatekapua and the tohunga, Ngatoroirangi, in the double-hulled canoe originally named Ngā rākau rua a Atuatua (the two trunks of Atuatua) in memory of their father. During the voyage they had a perilous encounter with the great ocean creature, Te Parata, who almost swallowed them. However, one story goes that they were delivered from the jaws of certain death by a mythical great shark, and the people renamed the canoe and themselves Te Arawa in its honour (Tapsell, 2017).

Figure 17.
Mapping Te Arawa origins,
aerial image: ArcGIS

Te Arawa

Arrival

On entering the Kaituna estuary beside Ōkūrei, the bow of the Te Arawa canoe was tethered to a large rock, Tokaparore, and to an anchor rock called Tūterangiharuru, which held her fast in the current of the Kaituna River. The tohunga Ngātoroirangi was the first to step off, conducting rituals beneath a pōhutukawa tree in full bloom. Today this site is remembered as Ōngātoro, and commemorated by a monument built in 1940. A pā established on the Ōkūrei headland close to the moored canoe was named Maketū, after their home village on Rangiatea, in Hawaiki ([Tapsell, 2017](#)).

Settlement

Te Arawa multiplied and spread across the geothermal zone of the central North Island, occupying lands in a continuous line from coast to volcanic mountain interior. This area became identified with Te Arawa, and is affirmed on marae with the whakataukī (proverb):

Mai Maketū ki Tongariro
Ko Te Arawa te waka
Ko Te Arawa māngai-nui ūpoko tū-takitaki

From Maketū to Tongariro
Te Arawa the canoe
Te Arawa the determined people

(Tapsell, 2017)

Figure 18.
 Mapping Te Arawa arrival and
 settlement, aerial image: ArcGIS

Figure 19.
Sketch of significant Te Arawa/
Rotorua landmarks, aerial im-
age: ArcGIS

Te Rotorua nui-ā-Kahumatamoe

Place name meaning

Roto: Lake; Rua: Two or Second; Nui: Large; ā: of; Kahumatamoe: Ihenga's uncle. It was the second lake Ihenga discovered, he named it Te Rotorua nui-ā-Kahumatamoe.

Rotorua's lake edge has been occupied by Te Arawa for centuries. In the 1400's, Te Arawa whanau migrated inland from Maketū. The Te Arawa rohe spread out across the lake, Iwi groups situated villages and settlements near natural resources, such as: Maunga, Lakes, Rivers, Streams and Forests. Most of the traditional Te Arawa settlements around Lake Rotorua were located on headlands, surrounded by scalloped bays. Headlands provided a naturally elevated form of defense for Pā. The lake's edge provides a threshold between the whenua and wai, human ecologies and natural ecologies; a utopian environment for Te Arawa Iwi and Hapū.

The lake was formed by a volcanic eruption 200,000 years ago, creating the 'Rotorua Caldera', that we know today as the Lake Rotorua.

1. Te Arawa Iwi boundaries

Tribal lands were fluidic and situational. Rotorua historian, Don Stafford, mapped major sub-tribe territorial areas around the time of settlement in Rotorua. This map helps to understand tribal lands of the separate Iwi/Hapu that make up the Te Arawa population of Rotorua, and provides a reference point in relation to the aerial image of Rotorua, 2017.

2. Rotorua Aerial Image

Aerial imagery shows the Rotorua Township on the southern shores of Lake Rotorua, established on Ngāti Whakaue tribal lands. As this research aims to select an urban site on the waters edge, this map provides the visual connection between urban Rotorua and its relation to water.

Figure 20.
Te Arawa iwi/hapū boundaries

Figure 21.
Rotorua Aerial Image: ArcGIS

3. Marae and Pā (settlements)

The lake's edge has been inhabited by Te Arawa since settlement in the early 1400s. This is evident through the locations of Marae and Pā that occupy the lakes edge.

4. Pā and Wai

Wai (water) is central to life for Te Arawa, as shown through Māori settlements' proximity to water. Te Arawa assert their identity in relation to the Wai. This analysis provides an insight into significant water bodies for the Te Arawa people of Rotorua.

Key Findings

This exercise proved invaluable to understanding the context and settlement of Iwi/Hapu groups in Rotorua and their relationship to the lakes edge. The analysis symbolises the importance of water to Te Arawa's identity. Moving forward, the site of selection must be: Urban, on the water's edge and take into account the proximity to Mārae and Māori settlements. We must now look at the colonisation of Rotorua, as this provides a means for specifying a site for 'decolonisation'.

Figure 22.
Personal map of Maraë and Pā

Figure 23.
Personal map of Pā and Wai

“In Aotearoa, **Te Tiriti o Waitangi** of 1840 cements an ongoing relationship of mutual benefit between hapū and the British crown. Signed by 400 plus Rangatira and crown representatives, it is an agreement that hapu Māori have honoured. By contrast the crown's breaches have been numerous and ongoing, resulting in **confiscation** or lack of protection of land and resources, and displacement of people (Mercier, 2020).”

~Ocean Ripeka Mercier

“Colonisation transforms a land and a society in profound ways. Its imposition of **alien** political and social structures leaves deep impressions and scars on landscapes and on peoples (Mercier, 2020)”

~Ocean Ripeka Mercier

Colonisation of Rotorua

Rotorua first attracted Europeans to the district in the 1830s. As more Europeans visited, it became renowned for its Geothermal Environment, commonly referred to by Pakeha as 'a thermal wonderland'. By the early 1850s visitor numbers escalated as Rotorua was home to the 'eighth wonder of the world', the Pink and White terraces of Lake Rotomahana.

Fenton Agreement 1880

Francis Dart Fenton, was the chief judge of the native land court. He had first discussed the proposal of a Rotorua township with Te Arawa iwi in 1877, and by 1880 he had returned on behalf of the crown with detailed negotiations for the establishment of a township with the Māori owners (Manley, 2019). Fenton negotiated with Rangatira of Ngāti Rangiwewehi, Ngāti Uenukukopako and Ngāti Whakaue for two weeks in November, 1880. These negotiations took place at the Ngāti Whakaue village of Ōhinemutu, where *"the agreement was signed by 47 persons from the three iwi"*, on the 25th of November 1880.

The Crown had two main objectives for this agreement: to preserve access to the natural thermal wonders of the district and to halt problems and arguments with Māori regarding landholding (Manley, 2017). This agreement would provide the crown with a means of land acquisition, subsequent land alienation and exploitation of Te Arawa's natural resources.

The Māori owners saw opportunities of economic return as the increase of visitors in the area would provide a stable income, without the need to sell their landholdings outright. As iwi refused to sell the land to the Crown, it was agreed the crown would *"lease lots in the township out to the public for 99 years on behalf of the Māori owners"* (Manley, 2017).

Figure 24.
Portrait of Francis Dart Fenton

Colonisation of Rotorua

Thermal Springs District Act 1881

A year later, the agreement between Iwi, the judiciary and the Government agents, was legalised by the Thermal Springs District Act 1881 (Heritage New Zealand, 2011). Under this act, an area could be declared a Thermal Springs District, where only the government could purchase land. The Rotorua township, and 20 hectares containing many medicinal thermal springs was created, 'Hei oranga mo nga iwi katoa o te Ao' (for the benefit of the people of the world) (Heritage New Zealand, 2011). "A town built on the perceptiveness, dreams, philanthropy and goodwill of the native owners was to have a long period of infancy for the Ngāti Whakaue and Te Arawa people" (Heritage New Zealand, 2011).

Clarke Agreement 1883

In 1883, the Clarke Agreement was signed by Government representative Henry Tacy Clarke and Ngāti Whakaue. The agreement amended parts of the 1880 Fenton Agreement and set out a framework for organizing individual titles within the Pukeroa Oruawhata Block and payments of lease money (Manley, 2017). This resulted in Ngāti Whakaue involvement in a lengthy process to locate the interests of different landowners throughout the block, amounting to some 200 orders by Clarke, creating a multitude of divisions and titles within the township block (Manley, 2017). Effectively making land acquisition easier for the Crown from traditionally communal Māori land ownership.

Figure 25.
Rotorua Township proposal,
1882

Rotorua Township fails

The Tarawera eruption of 1886, defaulting and non-payments of leases and a national economic downturn all resulted in negative effects for the Te Arawa people. The financial loss for Ngāti Whakaue was complemented by other pressures from surveys, land court costs and merchant debts, which were detrimental for Te Arawa (Manley, 2017). This resulted in sub tribes of Te Arawa being displaced around the Rotorua Region. Historian, Ben Manley, states that it was in this unfavourable environment that the crown, our supposed agent and trustee, approached Ngāti Whakaue in 1888 to purchase the Pukeroa-Oruawhata block. Ngāti Whakaue met with Government representatives a number of times before finally succumbing to pressure to sell (Manley, 2017).

Figure 26.
*Buried whare in Te Wairoa after
the Tarawera eruption, 1886*

From Ngāti Whakaue land to Crown ownership

Figure 27.
Rotorua Township, 1927

In 1889, a prerequisite for this sale was negotiated by Ngāti Whakaue kaumatua. The negotiation was for a certain amount of land to be returned for the benefit and future of Ngāti whakaue (Manley, 2017). The majority of the Rotorua township was sold to the Crown in 1889, with the final few Māori landholdings being acquired under the Thermal Springs Act of 1881 (Manley, 2017). The crown exercised their powers to compulsorily take land under the Public Works Act 1876. Therefore, Ngāti whakaue was left with 0.67 percent or 20 acres of their land (native reserves), from the Rotorua township which amounted to around 3000 acres. The majority of the Pukeroa Oruawhata block (Rotorua Township) has long since been sold into private hands (Manley, 2017).

Despite the alienation of Ngāti whakaue land at the hands of the Crown, Ngāti Whakaue holds firmly to the important principle of the ‘Gifted Reserves’ to the crown under the Fenton agreement 1880 (Manley, 2017). These were gifted for the purpose of public reserves in the establishment of the Rotorua township. The goodwill of Ngāti whakaue in regard to the gifted reserves, was either denied or minimised by various and successive crown bodies (Manley, 2017).

Map Key

‘Gifted Reserves’ highlighted in Green and Blue

‘Native reserves’ (20 acres) highlighted in Yellow

Rotorua Township: Gifted Reserves

Figure 28.
Rotorua Township, 1927

Ngāti Whakaue Gifted Reserves

‘Gifted Reserves’ refers to the reserve lands gifted by Ngāti Whakaue to the Crown under the Fenton Agreement 1880. Subsequently, many reserves were developed by the Crown and Local Council, despite the ‘reserve’ status. These reserves are important as they provide potential site locations for my design response. It has been deemed appropriate to look at the relationship between the ‘gifted reserves’ and the Marae/settlements of the Te Arawa people in Urban Rotorua. This will help to establish connections and relationships between the two, essentially determining the site for a design response.

Map Key

‘Gifted Reserves’ highlighted in Green and titled as ‘reserve’

Rotorua Township: Māori settlements

Urban Marae and Te Arawa settlements

The three Māori settlements on the lake's edge of Urban Rotorua have been analysed to provide context and whakapapa for each of the areas: Te Koutu, Ōhinemutu and Ngāpuna. This is important in understanding the ancestral ties and cultural landscapes for each settlement, and their locality to 'gifted reserves'.

Figure 29.
Urban Marae and Te Arawa
settlements, aerial image:ArcGIS

Te Koutu

Place Summary

Koutu is a suburb of Rotorua in the Bay of Plenty Region of New Zealand’s North Island. It is located on the southwest shore of Lake Rotorua. The landscape in which the Marae once overlooked was traditionally marshy ground covered in Manuka vegetation. The area lying to the south west of the Marae was known as Whakairikowharawhara. Part of this Māori land was cleared and fenced to accommodate horses belonging to the armed constabulary force who had taken up quarters nearby during the 1870’s following the New Zealand land wars (Stafford, 1994).

Population

Number of people	2,094
Median age	30.2 Years
Number of Māori	1,515
Māori median age	26.3
Te Reo Māori speakers	26.9%

Te Koutu Marae

Koutu (Karenga)

Whare: Tūmahaurangi
 Wharekai: Karenga
 Hapū: Ngāti Kārenga
 Waka / Rohe: Te Arawa
 Maunga: Ngongotaha
 Roto / Awa: Te Rotorua-nui-a-Kahumatamoemoe / Utuhina
 Iwi / Rūnanga: Te Ure o Uenukukōpako, Ngāti Whakaue

Figure 30.
Te Koutu, aerial image:ArcGIS

Summary

Koutu will not be analysed further in this research as the site is not within the boundaries of the original ‘Rotorua Township’ and has been deemed suburban rather than urban. None of the ‘gifted reserves’ are located within Koutu and nor does the landscape reflect a dominant colonial environment.

Figure 31.
Te Koutu, aerial image:ArcGIS

Figure 32.
Karenga Marae

Ōhinemutu

Place Summary

Ōhinemutu is a suburb of Rotorua in the Bay of Plenty Region of New Zealand’s North Island. It is located on the southern shores of Lake Rotorua and is home to the living Māori village and the original Māori settlement of Rotorua. Ōhinemutu is the main settlement of the Ngāti Whakaue people and has the prominent Te Arawa marae of Te Papa i Ouru Marae (Tamatekapua).

Population

Number of people	1,065
Median age	33.9 Years
Number of Māori	669
Māori median age	33.6
Te Reo Māori speakers	24.8%

Figure 33.
Ōhinemutu, aerial image:
ArcGIS

Figure 34.
Ōhinemutu, aerial image:
ArcGIS

Ōhinemutu Marae

Te Kuirau (Utuhina)

Whare: Te Roro-o-Te-Rangi
Hapū: Ngāti Te Roro-o-Te-Rangi
Waka / Rohe: Te Arawa
Maunga: Ngongotaha
Roto / Awa: Te Rotorua-nui-a-Kahumatamoemoe / Utuhina
Iwi / Rūnanga: Te Ure o Uenukukōpako, Ngāti Whakaue

Figure 35.
Te Kuirau Marae

Para te Hoata (Tūnohopū)

Whare: Tūnohopū
Wharekai: Rukuwai
Hapū: Ngāti Tūnohopū
Waka / Rohe: Te Arawa
Maunga: Ngongotaha
Roto / Awa: Te Rotorua-nui-a-Kahumatamoemoe / Utuhina
Iwi / Rūnanga: Ngāti Whakaue, Te Ure o Uenukukōpako

Figure 36.
Para te Hoata Marae

Te Papa i Ouru (Tamatekapua)

Whare: Tamatekapua
Wharekai: Whakatūria
Hapū: Ngāti Pukaki, Ngāti Taeotu, Ngāti Te Rangiwhao
Waka / Rohe: Te Arawa
Maunga: Ngongotaha
Roto: Te Rotorua-nui-a-Kahumatamoemoe
Iwi / Rūnanga: Ngāti Whakaue

Figure 37.
Te Papa i Ouru Marae

Figure 38.
Ohinemutu Village, circa 1860s

Figure 39.
Sunken Muriika Pā, Ohinemutu

Summary

Ōhinemutu will be analysed in relation to the gifted reserves. The Ōhinemutu settlement was the first Māori settlement in Rotorua and is the home of Ngāti Whakaue. The village is on the lakes edge and is on the boundary of the Rotorua lakefront reserve which is currently being developed by Isthmus. Ōhinemutu is the most urban Māori settlement in Rotorua and has therefore been subject to effects of

Ngāpuna

Place Summary

Ngāpuna is a suburb of Rotorua in the Bay of Plenty Region of New Zealand’s North island. It is located on the southern shores of Lake Rotorua, lying on the edge of the Puarenga stream near the rivermouth at Sulphur Bay.

Population

Number of people	357
Median age	34.2 Years
Number of Māori	315
Māori median age	31.9
Te Reo Māori speakers

Ngāpuna Marae

Hinemihi (Te Paparere-a-Rātōrua)

Whare: Hinemihi
 Wharekai: Hinewai
 Hapū: Ngāti Hinemihi
 Waka / Rohe: Te Arawa / Waiariki
 Maunga: Makatiti
 Roto / Awa: Ōkataina
 Iwi / Rūnanga: Ngāti Tarawhai, Tuhourangi

Figure 40.
Hinemihi Marae

Ngāpuna (Hurungaterangi)

Whare: Hurungaterangi
 Wharekai: Whaingarangi
 Hapū: Ngāti Hurungaterangi, Ngāti Kahu, Ngāti Taeotu
 Waka / Rohe: Te Arawa
 Roto / Awa: Te Rotorua-nui-a-Kahumatamomoe
 Iwi / Rūnanga: Ngāti Whakaue

Figure 41.
Ngāpuna Marae

Summary

Analysis of the Ngāpuna area has been a valuable task. The research won’t look at the specific area of Ngāpuna as a potential site but will take into account its proximity to ‘gifted reserves’. As it lies on the edge of the Rotorua township, it has been deemed as suburban. Ngāpuna is also located on the waters edge. The research will now analyse the ‘gifted reserves’ that are in close proximity to Ōhinemutu and Ngāpuna, that are on the water’s edge.

Lakefront Reserve or Sanatorium Grounds

Site Selection

The two 'gifted reserves' which fall within the criteria for my site selection are: The Lakefront Reserve and the Sanatorium grounds. As this research is engaging with Mana Whenua (Ngāti Whakaue), it has been deemed a conflict of interest to use the lakefront reserve as the site of this research. Ngāti Whakaue are currently working alongside Isthmus for the Lakefront development, therefore, the area known by Māori as Paepaehakumanu Motutara (Sanatorium Grounds or Government Gardens) will be the site for my design responses.

Figure 42.
Potential sites, aerial image: Arc-
GIS

Site Analysis

Paepaehakumanu Motutara

Paepaehakumanu Motutara was selected as the site for this thesis. Located at Sulphur point between the eastern outskirts of the Rotorua Township and the southern shores of Te-Rotorua-nui-a-Kahumatamoemoe, the area is known to tangata whenua as Paepaehakumanu Motutara, and to Pākehā as the sanatorium reserve, or more commonly, the Government Gardens (Heritage New Zealand, 2011)

Paepaehakumanu Motutara is sacred in the spiritual and traditional sense for Te Arawa, and in particular for Ngāti Whakaue, who hold Mana Whenua status over the area (Heritage New Zealand, 2011). The area comes under Wahi Tapu status, where according to Māori mythology the geothermal features were created by tohunga, Ngātoroirangi. It is where the great battle of Tawharakurupeti was fought, and where kōiwi deposited (Heritage New Zealand, 2011). The area has traditional values as a rich source for Kai (birds) and Harakeke/Muka (fibres), with rocky outcrops for the preparation of weapons and tools. Paepaehakumanu Motutara is known mostly for the value of its Ngawha and Waiariki, combined with Rongoa Plants that were used for medicinal purposes. Hence, the area being subject to development by the Crown and its colonising agents as “an antipodean version of a great European spa town” (Heritage New Zealand, 2011).

Figure 43.
Selected site of Paepaehakumanu
Motutara

Figure 44.
Viewshaft to Ngongotaha

Figure 45.
Viewshaft to Mokoia Island

Cultural Landmarks of Paepaehakumanu Motutara

1. Te Papa o Te Arawa

A large, flat, sinter outcrop near Te Papa-a-Tamarangi, now almost at lake edge and adjacent to a popular walking track. It was once a sacred place where the bones of revered ancestors were placed.

2. Motutara Islet

A tiny islet off the northernmost point at the eastern end of the Rotorua City lakefront area. The islet is considered tapu to the people of Te Arawa.

3. Te Ikiiki

A small settlement situated on the extreme north east point of the area generally referred to as Motutara.

4. Te Repo

Swamp covering much of the Arawa-Kauanga subdivision at Motutara. A site for bird snaring for Te Arawa.

5. Hapuati

Marshy area surrounded by Te Repo swamp.

6. Te Kopua

A thermal pool within Hapuati.

7. Te Maunga o Te Kiritere

An outcrop of rock towards the eastern side of Motutara and within the public golf course, around which was once a cultivation belonging to Te Whakaruru. A urupā named Tamakomako once existed here.

8. Tamakomako

Small Urupa amongst the rocks on the southern edge of Te Maunga o te Kiritere. While quarrying was carried out here during April, 1884, remains were uncovered which ended operations immediately.

9. Te Pupu o Hinepa

Described as an extinct ngāwhā, this was a pool located within a rocky outcrop named Te Maunga-o-te Kiritere, South of Motutara. Development of this area has resulted in the pool being filled in, with no trace of it remaining now.

10. Timanga Island

Small islet standing on the eastern shoreline of Motutara peninsula, Tradition indicates that this was once a much larger piece of land sufficient, in fact, to allow a living area for a number of families. Described as the site of a pā belonging to Ngati Korouateka, the only known and named occupant was Atarea (father of Mohi Atarea) who resided there during the 1860's.

Figure 47.
Significant Te Arawa landmarks
of Paepaehakumanu Motutara,
aerial image: ArcGIS

Cultural Landmarks of Paepaehakumanu Motutara

11. Te Rua a Waitapu

A former thermally active area, now a sulphurous patch north west of Te Parakiri-o-Hinemaru. Waitapu meaning 'sacred waters'.

12. Te Parakiri o Hinemaru

Point of land and small area of cultivation on the eastern edge of Arawa Kauanga, midway between Motutara and Te Kauanga.

13. Te Kopana a Pareao

An outcrop of rock almost on the lake edge, part of which was quarried for such uses as chimneys, during early European settlement.

14. Hinemaru

A waiariki near the cultivated crops of Te Parakiri o Hinemaru on the mainland. Hinemaru was the mother of Hinemoa.

15. Te Kauanga

A thermal area to the north-east shoreline of Motutara. It is the place where Hatupatu (an Te Arawa ancestor) dived into the lake and swam underwater as far as Mokoia Island. This story added another name, Te Kauanga-a-Hatupatu, to the rocky point. Te Kauanga's importance lay in the medicinal value of its several hot springs, used for centuries as bathing places where remarkable cures were said to have occurred. In addition, the adjacent flat, hot rocks in the vicinity were used for drying tawa berries etc.

16. Taungatara

Sulphurous point of land slightly south and west of Te Kauanga.

17. Omarumatua

Lake edge rocky bay on the south eastern part of the Sanatorium Reserve. Now part of a wildlife refuge, it was a small urupā in which Katikati and Paea were buried.

18. Whangapipiro

Large boiling pool within the Sanatorium Reserve. A temporary kāinga nearby was used by parties while snaring birds in that area.

All of the descriptions above were sourced from Don Staffords, Landmarks of Te Arawa (Stafford, 1994)

Figure 48.
Significant Te Arawa landmarks
of Paepaehakumanu Motutara,
aerial image: ArcGIS

Tapu and Noa

Tapu is one of the strongest forces in Māori culture. Tapu translates to: 'sacred' or defined as 'spiritual restriction'. A person, object or in this case a place that is tapu may not be touched, or in some cases not even approached. Tapu holds the history of the past which is fundamental to Te Arawa tribal identity.

For the purpose of this exercise, the concepts in relation to this project are established below:

Tapu

Being spaces that are for wildlife and exclude humans

Noa

Being profane spaces that are mostly for humans, i.e, environmental infrastructure

Shoreline change

Rising lake levels have altered the shoreline of Paepaehakumanu Motutara considerably. The shoreline highlighted in blue is the shoreline of 1880 (Stafford). This is important to analyse as it highlights the topography of the site which is low-lying and historically swampy. The 1945 image shows some of the areas within the site, clothed with native species of Kanuka, Manuka and Mingimingi around the lake's edges.

Figure 49.
Tapu and Noa spaces of
Paepaehakumanu Motutara,
aerial image: ArcGIS

Figure 50.
Retrolens aerial image, 1945

Figure 51.
Retrolens aerial image, 1972

Sites of Interest

These sites have been circled in black to reveal potential sites of interest as they are 'noa' spaces. These are not defined as the sites I will use, nor are they limited to just these areas. However, they provide cultural context for situating the interventions and analysing the site.

Figure 52.
Sites of interest

Figure 53.
Photographic journey through
site in yellow

1. Mānuka, Mingimingi and Kānuka trees line the streets edge. A viewshaft appears looking out toward Sulphur Bay and Ōwhatiura headland.

Remnants of a geothermal landscape near Te Kauanga

Rocky and pumice ground conditions revealing historical landscape elements.

2. Opening in viewshaft toward surrounding landscape. A rocky outcrop lies within Sulphur Bay.

Viewshaft looking south over Sulphur Bay toward Ngāpuna and Puarenga stream.

Mānuka, Kānuka and Mingimingi cloth the road edges

3. Viewshaft toward eastern shores of Motutara. The Te Arawa landmark of Te Kopana a Pareao can be seen on the right hand side of the photo.

An outcrop of rock (Te Kopana a Pareao), within the current landscape.

A Māori sculpture sits next to the walking track heading southwest toward the area known as Te Kauanga.

4. Non-native trees appear. A viewshaft toward Timanga Island and Ōwhata presents itself.

The sweet smell paired with the detail and verticality of the Mānuka shall inform architecture qualities of design responses.

A Māori sculpture sits next to the walking track heading southwest toward the area known as Te Kauanga.

5. Native plants line the lakes edge, along with the walking track to Motutara point.

A viewshaft toward Timanga island (foreground), Ōwhatiura headland (midground) and Ōwhata (background).

Viewshaft looking toward Te-Parakiri-o Hinemaru, historically, a point of land and area of cultivation on the eastern edge of Arawa Kauanga, midway between Motutara and Te Kauanga.

Figure 54.
Houmaitawhiti Marae

6.

Motutara golf course to the left, occupying the historical, Te Repo swamp.

Pūkeko in the grasslands that were historically the Te Repo swamp. The vegetation of in the background is situated within Hapuati, which was a slightly raised landform that sat in the swamp. This is evident through the Mānuka/Kānuka vegetation which are swamp plants.

Viewshaft toward Timanga Island and Ōwhatiura Headland.

7.

10-15m Eucalyptus trees line the roads edge. Providing interesting lighting qualities within the shadows. Mokoia island appears in the distance.

The verticality, repetition and density of the trees shall inform architecture qualities of design responses.

Trees as shelter, dancing in the wind.

8.

Viewshaft toward Te Repo and Hapuati. The grassland is part of the Motutara golf course.

Viewshaft with Ngongotaha in the background. The current site of a public carpark which is under used and has no real significance to Motutara point.

Viewshaft of Mokoia Island in the background, Lake Rotorua in the midground and the historical settlement of Te Ikiiki was located in the grassy area of the foreground.

9.

Ngongotaha in the background, Public toilet on the left, Carpark in the foreground.

The end of the lakefront walk to Motutara point. Raupo located on the right side of the image. A lake margin and swamp plant.

Motutara Point showing the visual connection to the very important Te Arawa landmarks of Ngongotaha and Mokoia Island.

Figure 55.
All images in photographic sequence from google maps.

PHOTO JOURNAL.

Photo Journal

This photojournal exercise consisted of fieldwork throughout different seasons of the year. Highlighting different conditions and taking into account the changes in the environment. These images seek to extract elements of the surrounding landscape that can be reflected through the architectural response.

Reflection

This exercise proved to be invaluable as they helped gain an understanding of the more intricate details of the site that provide for a sensory experience. The key themes extracted from these photographs from Paepaehakumanu Motutara were: texture, light, shadow, surface, colour, materiality and form. These themes will help drive my conceptual designs.

Conclusion of Contextual Analysis

The contextual analysis that was undertaken proved to be an invaluable task and a very lengthy process. As the site selection was based off a kaupapa Māori approach, a careful selection process was needed. This is because of the cultural sensitivities in regard to mapping of significant Te Arawa landmarks with the help of Mana whenua and Don staffords, 'Landmarks of Te Arawa'. As the cultural maps from the 1880s were not completely to scale, it proved a strenuous task to overlay these historical maps with new maps. This meant double checking and back and forth with Mana whenua with confirming cultural landmark locations etc. The kaupapa Māori analysis helped to analyse the site in a Māori manner, essentially providing sites of interest that are based on Te Arawa mataūranga. Moving forward, the contextual analysis and theoretical framework have provided a solid base for speculation of design.

DESIGN.

**NGĀPŪMANAWAEWARU
O TE ARAWA.**

1 - Te Heketanga a Rangi / Waharoa

2 - Shelter belt
Provides a visual barrier to the peninsula beyond. This keeps the sense of intrigue of what's beyond the vegetation and acts as a threshold between spaces.

3 - Geothermal Hangi Pit
Acts as a social amenity which in turn promotes sociality as well as cultural use and education.

4 - Hinemaru - Geothermal Baths
Thermal heated baths are located in a quite space within the site, this intervention allows users of the space to relax in a tranquil environment and absorb the lakefront esplanade.

5 - Wetland
The natural wetland that existed pre-colonisation will be restored and protected for future generations.

6 - Te Korokoro o Te Parata
The infinite observation deck gives the user of the spaces a final destination within the site but its design means that you will never really reach the end. This plays into the Maori design principles as life has no end.→→

7 - Observation Tower
The deck sits out on the inner peninsular of the wetland land and provides the users of the space with the opportunity to observe the surroundings from the perspective of the adjacent axis of the second observation tower.

8 - Rongoa Whare
Rongoa Maori are the traditional Maori healing practices, knowledge and systems that originate from and are unique to tribal communities throughout Aotearoa. This amenity provides the local iwi with cultural infrastructure that will educate future generations.

9 - Te Arawa Wharewaka (Ohomairangi)
This is the traditional house of the Waka. it is located on the shoreline of the lake and will provide the opportunity for youth to experience and learn the lake from a differing and traditional perspective.

Ngā Pūmanawa e Waru o Te Arawa The Eight Beating Hearts of Te Arawa

Research Objective Met: *(2) Speculative interventions conceived through the findings of the theoretical framework and contextual analysis. Mana whenua engagement in the design process.*

The whakataukī of Ngā Pūmanawa e Waru was selected as the name of the eight speculative designs as it worked with the number of concepts that are being proposed. Through engagement with Mana whenua, this proverb has provided a name for my eight designs and a name that is also being used as the thesis title. The significance of Ngā Pūmanawa e Waru is immense for Te Arawa, as it is where Te Arawa traces their origins.

Rangitahi was one of the paramount chiefs of Te Arawa, who before meeting his death referred to his children as his 'eight beating hearts' - Ngā Pūmanawa e Waru. Rangitahi is who Te Arawa tribes trace their descent from.

This genealogy is highlighted in the whakapapa table on the following page.

The following designs seek to speculate on what was discovered through the theoretical framework and contextual analysis, as these are speculative at their core, the designs are not intended to be 'final' but instead seek to capture the imagination of the viewer, and to question their own speculations of my architectural design. A process that is open to speculation and will continue to be after this research has finished. The designs seek to creatively respond to the findings of theoretical framework and contextual analysis, in a speculative manner.

Te Arawa Whakapapa

Table from: carved houses of Te Arawa book (Phillipps, 1946).

‘HEAVENLY’ ORIGINS.

TE HEKETANGA A RANGI.

Te-Heketanga-a- Rangi

Waharoa/ Entrance

Design Aim

To provide an entrance/waharoa to my selected site of Paepaehakumanu Motutara.

Site Requirements

Highly accessible from the Rotorua Township, Rotorua Lakefront and Ōhinemutu

Clear sightlines and unobstructed space

Link with the existing boardwalks along the shoreline

Existing carpark for visitors to Paepaehakumanu Motutara

Narrative

Through Mana Whenua engagement with Ngāti Whakaue, the story of the atua Pūhaorangi was advised as a main design driver. The narrative is explored through creative expressions of form, and pattern language, guided by research's case study of the Auckland City Rail Link. The narrative is told on the following page.

Figure 56.
Mapping of specific site for
entrance

“**Pūhaorangi**, an atua (god) of the heavens was overwhelmed by the beauty of **Te Kuraimonoa** (precious treasure) and he fell in love. During the nights he would descend from the heavens to be with her. At first Te Kuraimonoa believed it was her husband Toi but then realized it was in fact the atua, Pūhaorangi. Te Kuraimonoa became pregnant and the next time Puhaorangi came to her he said, if our child is born a boy call him ‘**Ohomairangi**’ (heavenly awakening: born of the heavens).

So it was that Kuraimonoa gave birth to a son, Ohomairangi from whom our Te Arawa whakapapa links with our atua, Pūhaorangi. Our kaumatua today still speak of our people as ‘**Te Heketanga-a-Rangi**’, those who descend from the heavens, in proud remembrance of the origin of our tūpuna Ohomairangi”

~Te Arawa Stories

Narrative

Te Aranga Principle: Mahi Toi

How will this Te Arawa narrative be creatively and appropriately expressed ?

Pattern Language

Pattern Language will be explored to express ‘Te-Heketanga-a-Rangi’, or those who descend from the heavens. Through Mana Whenua engagement, the pattern that was deemed appropriate for this narrative and concept was the tukutuku, ‘Poutama’ or ‘stairway to heaven’. The Poutama pattern has significant spiritual and educational meanings. The tukutuku shows a stepped poutama pattern, signifying the growth of man, striving ever upwards.

Form

Architectural elements of form shall be explored through the expression of Pūhaorangi and Te Kuraimonoa’s relationship, with the visual and bodily connection to the sky as one of the primary design drivers. The connection to the sky and toward ‘*heavenly origins*’ provides a symbol for Ohomairangi who was ‘*born of the heavens*’.

Figure 57.
Poutama Tukutuku

Figure 58.
Poutama Tukutuku variation

Preliminary Sketching on Site

Intuitive sketching on site helped to plot down ideas whilst surrounded in the context of 'place'. This exercise was valuable in establishing a preliminary base for the concept before moving forward in a sketching/digital modelling process. I felt the spiritual connection to the whenua, and this contributed to the overwhelming sense of belonging. This experience made me question the essence of turangawaewae and how this may be reflected in design of the Waharoa to Paepaehakumanu Motutara.

SCALE 1:200

SOUTH ELEVATION

SECTION A-A

WEST ELEVATION

SECTION B-B

SCALE 1:200

ISOMETRIC STRUCTURE

ISOMETRIC STRUCTURE SECTION

STRUCTURE SECTION

GEO THERMAL HĀNGĪ.

NGĀWHĀ HĀNGĪ.

Figure 59.
Houmaitawhiti Marae

Ngāwhā Hāngī Geothermal Hāngī

Design Aim

To provide a Te Arawa Urban Hangi Pit for Te Arawa whānau.

Site Requirements

Geothermally active area

Existing topographical landscape for sitting

Whanau friendly (e.g. near a playground for Rangatahi)

Existing carparks for Te Arawa whanau

Site Description

As this site is located on the urban/pedestrianised part of the site, the opportunity for reflecting Te Arawas place identity is paramount. It is surrounded by rolling grasslands and clothed in Manuka and Kanuka. A playground is located to the south, allowing for the connection/accessibility for the whanau. The concept for the Geothermal Hangi was more values based rather than having a Te Arawa narrative as the design driver. However, pattern language is still utilised as this intervention has cultural landmark potential.

Design Drivers

The Geothermal Hangi pit design drivers were value based. The core Māori values that were of importance to this specific intervention were discussed with Manu Whenua and established as: Manaakitanga, Wairuatanga, Kotahitanga, Whanaungatanga and Matauranga.

Rolling grasslands looking east from Oruawhata.

Existing carpark for Te Arawa whanau and playground for Rangatahi.

Road edge lined with native Manuka and Kanuka vegetation.

Figure 60.
Houmaitawhiti Marae

Figure 61.
Houmaitawhiti Marae

Figure 62.
Houmaitawhiti Marae

Figure 63.
Urban Hangi

Figure 64.
Geothermal Areas on my site

Figure 65.
Te Ara Tukutuku

Urban Hangi

Hangi have been set up temporarily in New Zealand Urban spaces for decades. A strong symbol of Māori culture in colonised urban landscapes. However, these have been largely temporary. The difference for the Geothermal Hangi design is the natural access to geothermal energy and the permanence of the intervention for the benefit of Te Arawa and all manuhiri.

Geothermal Field

Rotorua sits on a geothermal system which is part of the Taupo volcanic zone. Figure 64 shows the significant geothermal features within the Rotorua Township. As this concept is for a Geothermal Hāngi, the natural access to Geothermal energy was a primary concern for site selection.

Pattern Language

Through engagement with Mana Whenua, the tukutuku pattern called Te Ara (figure 65), has been selected to be incorporated in this concept. The turupa pattern, Te Ara, is unique to Te Arawa; “It symbolises the voyage of the canoe Te Arawa from Taputapuātea to Maketū 26 generations ago” (Tapsell, 2017).

Preliminary Sketching on Site

Intuitive sketching on site helped to plot down ideas whilst surrounded in the context of ‘place’. This exercise was valuable in establishing a preliminary base for the concept before moving forward in a sketching/digital modelling process.

GEO THERMAL BATH.

HINEMARU.

Figure 66.
Houmaitawhiti Marae

Hinemaru Geothermal Bathing

Design Aim

A place for healing, cleansing and inspiration. Reconnecting with whānau, whenua and wai.

Site Requirements

Geothermally active area

Close to lakes edge

Private from general public

Viewshafts of Te Kauanga and Sulphur Bay

Site Description

The site is located on the eastern shores of Motutara overlooking Sulphur bay to the East. The site provides connections to significant Te Arawa landmarks such as Timanga Island, Te Kauanga, the sunken Motutere Island, Ōwhatiura headland and Mokoia Island. The site is surrounded by sandy/pumice ground conditions and clothed in Manuka, Kanuka and Mingimingi. Fumaroles have a distinct presence in this specific area.

Figure 67.
Mapping the site for Hinemaru

Figure 68.
Personal images of Hinemaru
site viewshafts

Figure 69.
Google images of site

Viewshaft from Te-Parakiri-o-Hinemaru. Mokoia Island (left), Timanga Island (mid-right), existing stream (foreground).

Viewshaft looking north-east toward Ōwhata point.

Viewshaft looking east from Te-Parakiri-o-Hinemaru over Sulphur Bay toward Ōwhatiura Headland, the burial place of some significant Te Arawa Rangatira.

Native plants line the lakes edge, along with the walking track to Motutara point.

A viewshaft toward Timanga island (foreground), Ōwhatiura headland (midground) and Ōwhata (background).

Viewshaft looking toward Te-Parakiri-o-Hinemaru.

“Hinemaru was a Waiariki on Motutere Island, known for its remedial properties. When Ngahihi, a noted Tohunga of Ngāti Whakaue, took ill as an older man, he was taken each day from his house at Motutara to the waiariki on Motutere island while his whānau cultivated crops on the mainland. These cultivations were close to a thermal pool bearing the same name, Hinemaru. Ngahihi eventually died while bathing on Motutere island, inside of Hinemaru (Stafford, 1994)”

~Don Stafford (Rotorua Historian)

Narrative

This narrative provided the programmatic function of the intervention which is a waiariki. The significance of this specific part of the site revolves around the wai, specifically the geothermal springs that have dotted the Motutara eastern shores for hundreds of years. The form will be conceptualised with regard to surrounding cultural landmarks that have been established through research and Mana Whenua engagement.

Preliminary Sketching on Site

Intuitive sketching on site helped to plot down ideas whilst surrounded in the context of ‘place’. This exercise was valuable in establishing a preliminary base for the concept before moving forward in a sketching/digital modelling process. Sketches involved master planning, orientation, massing and questioned how the form may respond to the connection with Te Arawa landmarks.

Value	Meaning	Simplified
Rangatiratanga	The right to exercise authority and self-determination within one's own iwi / hapū realm.	Self determination / Authority
Kotahitanga	Unity, cohesion and collaboration.	Togetherness
Kaitiakitanga	Managing and conserving the environment as part of a reciprocal relationship, based on the Māori world view that we as humans are part of the natural world.	Guardianship / Stewardship
Wairuatanga	The immutable spiritual connection between people and their environments.	Spirituality
Manaakitanga	The ethic of holistic hospitality whereby mana whenua have inherited obligations to be the best hosts they can be.	Hospitality / support
Whanaungatanga	A relationship through shared experiences and working together which provides people with a sense of belonging.	Relationships and participation
Mātauranga	Māori / mana whenua knowledge and understanding.	Knowledge and wisdom

Hinemaru
Design Framework

Te Aranga core māori values

The core māori values were discussed with Mana whenua. The values deemed the most relevant for the Hinemaru are: Kotahitanga, Wairuatanga and Whanaungatanga. These values are highlighted in the table (fig).

SOUTH ELEVATION

NORTH ELEVATION

EAST ELEVATION

SCALE 1:100

218.

219.

TE WHARE TAPA WHĀ.

MĀORIHEALINGWHARE.

Whare Rongoā

Meditation, Mirimiri and Yoga Whare

Design Aim

To create a space that is an enabler for reflection, introspection, healing and cleansing.

Site Requirements

Proximity to the waters edge and Hinemaru

Secluded from busy areas of site

Surrounded by Native vegetation (Manuka, Kanuka, Mingimingi)

Site Description

The site is located on the eastern side of Motutara. The site sits on the threshold of the Hapuati and Te Repo swamp, surrounded by vegetation on the western side. This part of the site is relatively quiet, which is ideal for the programme specified. For example, a quiet environment surrounded by natural elements will help as an enabler for meditation.

Figure 70.
Mapping of site for Whare
Rongoā

Figure 71.
Site images from google maps

Rolling grasslands looking east from Oruawhata.

Existing carpark for Te Arawa whanau and playground for Rangatahi.

Road edge lined with native Manuka and Kanuka vegetation.

Value	Meaning	Simplified
Rangatiratanga	The right to exercise authority and self-determination within one's own iwi / hapū realm.	Self determination / Authority
Kotahitanga	Unity, cohesion and collaboration.	Togetherness
Kaitiakitanga	Managing and conserving the environment as part of a reciprocal relationship, based on the Māori world view that we as humans are part of the natural world.	Guardianship / Stewardship
Wairuatanga	The immutable spiritual connection between people and their environments.	Spirituality
Manaakitanga	The ethic of holistic hospitality whereby mana whenua have inherited obligations to be the best hosts they can be.	Hospitality / support
Whanaungatanga	A relationship through shared experiences and working together which provides people with a sense of belonging.	Relationships and participation
Mātauranga	Māori / mana whenua knowledge and understanding.	Knowledge and wisdom

Whare Rongoā

Design Framework

Te Aranga core māori values

The core māori values were discussed with Mana whenua. The values deemed the most relevant for the Whare Rongoā are: Kotahitanga, Wairuatanga and Whanaungatanga. These values are highlighted in the table to the left.

SCALE 1:1000

SCALE 1:100

WEST ELEVATION

EAST ELEVATION

SOUTH ELEVATION

NORTH ELEVATION

ISOMETRIC SECTION CUT
(SOUTH-EAST)

ISOMETRIC STRUCTURE
(SOUTH-EAST)

ISOMETRIC PLAN SECTION
(SOUTH-EAST)

SCALE 1:100

TE PŪHARA O TE ARAWA.

OBSERVATION TOWER.

Te Pūhara o Te Arawa

Meditation, Mirimiri and Yoga Whare

Design Aim

To provide a space to observe the natural environment of Paepaehakumanu Motutara

Site Requirements

Viewshafts of Mokoia Island and Ngongotaha

Located close to Motutara point

Surrounded by Native vegetation (Manuka, Kanuka, Mingimingi)

TE ARAWA WHAREWAKA.

OHOMAIRANGI.

Ohomairangi

Te Arawa Wharewaka

Design Aim

To provide a whare for the Te Arawa waka.

Site Requirements

Close to the waters edge

Flat topography

Located close to Te Korokoro o te Parata

Site Description

The site is located at Motutara point where the current car park is located. This current site is under utilised. Motutara point once consisted of a natural landscape without the hard surfaces of concrete etc. This design seeks to reintroduce the original landscape which was patchy grass over pumice, and clothed in Mānuka, Kānuka and Minigimingi. The waters edge was a primary driver in site selection and provides a fitting context for a whare that is sheltering a waka.

Form and Narrative

Te Arawa (the shark) housing the current waka, the organic roof form (Te Arawa-the shark) presents itself as Kaitiaki to the Te Arawa waka from Te Korokoro o Te Parata (the throat of the Parata) - the infinite bridge that sits on the threshold of Papatuanuku and Tangaroa (land and water).

The pattern language utilised on the roofs surface is that of Te Ara, a tukutuku pattern unique to Te Arawa, that symbolises the journey from Hawaiki to Aotearoa over 26 generations ago. The other use of patterns will be that of Niho Taniwha Tukutuku, triangular shapes depicting the sharks teeth.

The axis of this building is informed by the Te Arawa proverb: Mai Maketu ki Tongariro which translates to 'from Maketu to Tongariro' which shows the boundary of where the Te Arawa rohe settled. The stern of the Te Arawa waka is facing toward Tongariro, while the prow of the Waka is facing toward Mokoia island and Maketu (where the Te Arawa waka arrived) , whilst paying homage to Hawaiki and Polynesia beyond.

**THE THROAT OF THE
PARATA.**

**TE KOROKORO O TE
PARATA.**

Te Korokoro-o-te-Parata

The throat of the Parata

Design Aim

To provide an entrance/waharoa to my selected site of Paepaehakumanu Motutara.

Site Requirements

Located on the waters edge around Motutara point (Final intervention)

Clear viewshafts toward Mokoia Island and Mt Ngongotaha

Narrative

Ngātoro-i-rangi was the high priest who navigated the Arawa waka on their eventful journey from Hawaiki to Aotearoa. He started his journey on board the Tainui waka and was persuaded by his cousin Tamatekapua into sailing to Aotearoa aboard the Arawa waka.

This journey would take a turn for the worst. During their voyage Tamatekapua decided to seduce his cousin's wife Kearoa. On discovering what Tamatekapua had done, Ngātoro-i-rangi in his rage performed a karakia creating a great whirlpool named Te-Korokoro-o-te-Parata.

As the waka descended into the whirlpool, the people aboard, realising their fate cried out to Ngātoro-i-rangi pleading for their lives. Eventually Ngātoro-i-rangi felt sorry for the people, reciting a powerful karakia to stop this catastrophe from occurring (Rotorua, n.d.).

Form

The porowhita form symbolises the circle of life, and that there is no beginning or end, rather a reflection of the cyclical pattern of nature, inherent to indigenous cultures. The porowhita is then infinite and eternal. The form of the porowhita has been elevated on the northern end to provide an opening to Te Rotorua-nui-a-Kahumatamoe. Similar to the throat of the parata, the porowhita mimics the form of a whirlpool, providing a viewscape of Mokoia Island, a significant cultural landmark to the Te Arawa people.

Vertical and circular timber elements form organic screens which reflect the verticality of the trees in the surrounding context, whilst providing a unique abstraction of the Manuka fences of Māori pa that once inhabited the Motutara whenua.

A duality is created between Te Arawa Wharewaka and Te Korokoro o Te Parata.

The tension of the two structures is shown through the narrative of the Kaitiaki (guardian), the shark (Arawa) who is kaitiaki of the Te Arawa Wharewaka, protecting the Waka from Te Korokoro o Te Parata (the throat of the Parata).

Design Reflection

This process of design was only possible with the engagement of Mana whenua. Through engagement, narratives were discussed and pattern language was iterated to form a sense of place. Each of the eight designs is significant in this research as each design has its own strengths and weaknesses. This provided a series of design responses that explore a multitude of themes relating to matāuranga Māori and its application to Te Arawa architecture. Through the representation of Ngā Pūmanawa e Waru, the research highlights how matāuranga Māori might enhance iwi place-identity. The research has its constraints but I think I achieved success with the resources available for a speculative project.

CONCLUSION.

REFLECTION.

Conclusion

The decision to undertake a kaupapa Māori research was largely due to the personal desire to reconnect with my roots. My Māori identity has been challenged over the years and I wanted to know more about my Māori heritage and culture. This desire combined with the observations of Māori architecture over the recent years made me curious about a kaupapa Māori thesis topic. At first I was hesitant as I thought I would be another Māori doing a thesis on a Māori topic.

As I started the research, the more fascinated I got with Māori architecture and urban design. I began to get very intrigued by the use of Matāuranga Māori in architecture. Discourse suggested the importance of Mana whenua engagement in the success of a Māori architecture. The main components I learnt from this research were:

Mana whenua engagement is important from the outset of the design process

Mana whenua hold matāuranga that has been specific to their specific area for many of generations

Te Arawa mātauranga Māori concepts and principles can inform design process and enhance their place-identity

Colonisation and globalisation has caused a ‘generic’ or modern architecture that reflects international styles, rather than architecture that is rooted in the ‘local’.

That despite the growing interest in matāuranga Māori in architecture, many designers/architects use Māori architecture as a ‘facade’ to a Pākeha building.

This research provided a framework and a process in which other architects/ designers would be able to follow. The process of mana whenua engagement, site selection, narrative and patter language are all applicable to other sites and projects. The designs are meant to leave the viewer questioning possibilities of space and also helps the reader to imagine, or to speculate on what could be possible through the exploration of identity in architecture.

Response to Research Question

How can Mātauranga Māori enhance Te Arawa place-identity in colonial urban Rotorua?

Through completing this research it was found that Te Arawa place-identity can be enhanced in urban colonial Rotorua. One of the key factors to enhancing place-identity would be the involvement of Mana whenua at the decision making table, rather than just providing matāuranga. Through the design process, I addressed the use of Te Arawa narratives through Mana whenua engagement. This required careful design thinking and proved to be a lengthy but very rewarding process.

Response to Research Aims

1. This design led research develops a theoretical framework for Te Arawa urban design and architecture. The frameworks aim for this research is to enhance Te Arawa place-identity and sense of place.

2. The research will speculate on a series of interventions on an urban scale

All research aims were achieved through objectives specified. The theoretical framework allowed for a body of knowledge to situate my research within, providing valuable insight into similar research. The second research aim of a speculation of designs was achieved through the basis of knowledge that research aim one provided.

Advancing the Research

Through this research a relationship was formed with Ngāti Whakaue that has the potential to be ongoing. Though this has not been discussed, the relationship has been formed and I would not hesitate to work with Ngāti Whakaue as Mana whenua in relation to architecture and urban design projects.

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APPENDICES.

Sketch Process Boards

A0 boards with sketch development