TALES TO TELL

Weaving Indigenous Narratives in Te Awarua-o-Porirua Harbour

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Many years ago, long before any human footprints appeared on the mudflats, Awarua decided that he would like to fly as his friends the birds did.

Storytelling is a characteristic of Indigenous Pacific cultures; an oratory means of passing on traditions throughout generations — a living narrative. Contemporary New Zealand architecture provides an opportunity to voice Indigenous Pacific stories, establishing an architectural identity that resonates with a diverse community.

Early Polynesian navigators actively sought knowledge by exploring their environment, trading across the Pacific Ocean, and contact with the first Europeans. Learning new concepts and carefully integrating them with their own is what has dramatically changed the Pacific landscape.

The arrival of early European settlers to the Pacific, has seen new developments desecrate sacred Indigenous islands, ignorant of Indigenous values, leading to a degenerating of Indigenous knowledge in modern society. New Zealand has seen a diversity of cultures arrive at its shores, many of which have contributed traditions to a new diasporic movement, each seeking to find community identity in a contemporary multi-cultural setting.

Indigenous Pacific values have a core place in society today. Dismissal of Indigenous Pacific values has hindered the development of Indigenous Pacific architecture in New Zealand, one that could potentially provide critical solutions to issues in modern society.

There are many sciences to discover, treasures to uncover, rituals to perform — lost in translation, which the ancient guardians of the Pacific embodied. This study takes a journey to seek these origins in conjunction with today's contemporary understanding that challenges both Indigenous Pacific's architectural stereotypes and the role of Indigenous cultural narratives in a modern environment — a journey that is worth voyaging.

Heart full of gratitude to my supervisors:

Robin Skinner and Geoff Thomas

Grateful for all the support given through this thesis, especially during the birth of our first-born son.

For Dad and Mum

Polaiuamea and Faleupolu Leiataua

For raising me to break barriers as a young Samoan kid,

My Wife

Keiulani Roslyn Waimirangi Leiataua

A strong Māori woman, for supporting me in all my aspirations,

And to our first-born son,

Kahiona Polaiuamea Leiataua

May you be the creator of your circumstances, and not let
your circumstances create you.

How does one design a contemporary Indigenous Pacific architecture? Can the structure of Indigenous narratives of multiple Pacific cultures reposition the space of contemporary architecture?

This thesis primarily drives Indigenous Pacific narratives as a catalyst for multi-cultural identity in a contemporary setting. Te Awarua-o-Porirua harbour presents environmental dysphoria due to cultural indifferences, poor harbour health, and disconnected harbour spaces contemplating a script for a resilient harbour.

In response, this thesis argues for a multi-cultural architecture speculating an intervention that converges Indigenous narratives of a diverse city — particularly Māori and Samoan to suggest a “harbour settlement” that reflects the harbour’s intrinsic socio-cultural and historical context.

This thesis develops a design that characterises Māori and Samoan cultural narratives by exploring the context of narrative creation — a series of exercises transcribing a repositioning of Indigenous ideals into narratives. In doing so, the study invests in translating Porirua’s most prominent Indigenous identities to their urban architecture.

In opposition of the current environment that fails to recognise Indigenous treasure — urban development that has failed to recognise iwi Ngāti Toa Rangatira as its kaitiaki (guardians) — this thesis contemplates an amphibious settlement to mediate a community-harbour relationship. The design aims to create a series of architectural segments termed ‘*Ngā Kaitiaki e Whitu: The Seven Sentinels*’ that take the form of a harbour settlement.

Indigenous Pacific narratives have frequently translated through architecture as an ornament or façade, offering an opportunity to capitalise on an alternative repositioning of Indigenous narratives as a framework to develop contemporary Indigenous spaces.

By introducing a new Indigenous harbour settlement, this study explores a spatial concept known as Va in Samoan or Wā in Māori — a concept of space interwoven throughout the fabric of the Pacific regions, proposing new criteria for Te Awarua-o-Porirua Harbour.

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>| Chapter 1.0

Introduction

He got so carried away with his flight he forgot about the hill at the north end of the harbour, and he crashed into it in an ungainly heap. Undaunted, he tried again, this time facing the open sea.

I.O

Introduction

The well-known legend of Awarua is unique to Porirua, one that can metaphorically recount controversial historical events. Carried away with the flight of urban development and neglecting the hill of Indigenous Māori values ahead, a crashing of environmental, cultural and community relationships disrupted the natural growth of Porirua city.

Porirua city presents an opportunity to advance Indigenous values in today's contemporary setting, demanding the identity of culture, context and community. Te Awarua-o-Porirua Harbour, which was once waged by war between iwi over its fortress-like and abundant environment, is now stricken with environmental and social issues due to careless urban development that turns its back to the harbour.

This thesis advocates an architecture of resilience, investigating the design of a new harbour settlement that encourages the preservation and evolution of Indigenous Pacific identity. Porirua's diverse population speculates a multi-cultural intervention celebrating Indigenous Pacific values consisting of Māori and Samoan cultural values. The search for Porirua's architectural identity comes in layers converging culture, community, environment and opportunity.

This thesis discusses applications of multi-cultural Indigenous narratives, generally interpreted as decoration or façade, frequently ignoring the opportunity to embody the values inherent in its Porirua's context. Experimental drawing and iterative making explore possible repositioning of Indigenous identity; using the design of the harbour settlement as a tool to illustrate key findings. In doing so, this thesis demonstrates Awarua's persistence — undaunted, Porirua tries again, this time facing Te Awarua-o-Porirua Harbour.

1.1 Problem Statement

The colonisation of Porirua by the early Europeans has vastly shaped the natural and built environment. Their contribution, some valuable, has mostly disassociated itself from Indigenous Māori values. Their demise of Indigenous Māori knowledge and values prevented careful development of Porirua, denying Ngāti Toa Rangatira as the rightful kaitiaki (guardians) of their taonga (treasure).

This thesis strives to summon Indigenous values and narratives that repositions Indigenous Māori and Samoan identity in Porirua's urban architecture.

1.2 Aims and Objectives

The initiative has two primary aims: the first is to challenge the stereotypes of Indigenous Pacific cultures in contemporary architecture, raising awareness of the difficulties faced by Indigenous cultures, particularly of Māori and Samoan.

Secondly, it focuses on nurturing relationships between Indigenous Pacific cultures and contemporary architecture, one that supports the preservation and evolution of Indigenous principles. It envisions the opportunity to develop Indigenous values to apprehend a core part of New Zealand's built environment lost in architectural translation.

Every culture has experienced sustained trial and error processes that can enhance our understanding as collaborating designers.

1.3 Research Questions

How can contemporary urban environments better reflect Indigenous values?

With increasing diversity in New Zealand, how can architecture appropriately interweave multi-cultural identities?

How can Indigenous values translate to design narratives as a way to preserve Indigenous identity in contemporary architecture?

1.4 Scope and Limitations

Although Porirua has several Indigenous Pacific populations, this thesis takes two of the most prominent Pacific cultures of Porirua to define a scope that straightforwardly illustrates a multi-cultural Indigenous architecture. Defining a broad scope of all Pacific cultures can take away from the aims and objectives by accounting for more extensive material. These two Pacific cultures will be Māori — the indigenous people of Porirua, specifically iwi Ngāti Toa and their Indigenous values. Secondly Samoan — the Indigenous people of Samoa and the diasporic people who migrated to Porirua during the 1960s onward.

Due to the nature of oral traditions, it is not possible to record all existing ideologies and narratives within the framework of this research. A single design project does not need to provide answers to all the challenges facing Indigenous Pacific culture nor provide in-depth detail on architectural construction. The thesis investigation takes a theoretical approach to architectural design with an emphasis on empowering Indigenous identity in contemporary society.

The outcome will provide an opportunity for people to document, evaluate and develop Indigenous Pacific identity in contemporary architecture. Thus, bringing attention to actively participate in the preservation of Indigenous Pacific identity and encouraging solutions to their current and future needs.

>| Fig. 001

Methodology
Diagram

1.5 Methodology

The chosen methodology (Fig. 001) is primarily about discovering relationships in Indigenous values and narratives that hopes to resolve practical and social issues of Te Awarua-o-Porirua Harbour. Execution of the methodology undergoes three phases — '*soul searching*', '*to feast and digest*' and '*the harvest*'. Each stage is essential to unpacking, making connections and repositioning architectural ideas.

This investigation begins with '*soul searching*', a rediscovery through literature that extracts important Indigenous values and narratives, setting a contextual tone for the investigation.

Secondly, '*to feast and digest*' is an immersive series of narrative experiments that investigates the art of narrating through mediums of literature, art, making, and modelling — a process of engagement that enlightens and repositions Indigenous stereotypes in contemporary architecture.

Thirdly, '*the harvest*' concerns itself with the relationships made through the prior two sections that invite speculation into an architectural intervention for Te Awarua-o-Porirua Harbour.

The overall composition is not strictly linear but a dynamic schema that values Indigenous relationships inherent to Porirua city.

Thesis Structure

2.0 Context

This chapter focuses on providing a broad understanding of Porirua's Indigenous history, providing a historical overview of significant events that changed Porirua. It includes a dismissal of Ngāti Toa's Indigenous values, the diasporic nature of the Samoans and the impact it had on society. It also seeks to understand the emergence, practical and social issues concerning the harbour. It discusses the importance of *Wā-Va* — an essential Pacific concept for the development of this project upon which further investigation and experiments of the design predicate.

3.0 Strategy

This chapter outlines strategies based upon macro-assessments that are vital to the harbour's development. It summons four central bodies of community structure that is important to Porirua — *Environment, Culture, Community and Opportunity (E.C.C.O)*. These four bodies seek to set the perimeters of design for Porirua's harbour architecture.

4.0 Precedents

This chapter comprises two parts of literature reviews (*Indigenous Ideology*) and project reviews (*Contemporary Repositioning*), providing an understanding of Indigenous principles and current applications to contemporary architecture.

The literature reviews examine Indigenous Māori and Samoan ideology according to critical scholars and writers, the dismissal of Ngāti Toa's values and current architectural and environmental issues in Porirua.

The project reviews examine the application of Indigenous narratives in contemporary New Zealand architecture. It unpacks architectural processes that express Indigenous identity in contemporary New Zealand architecture.

5.0 Repositioning

This chapter comprises of two narrative experiments of *Wā-Va* that intends to provide a grounds of exploration into local narratives of Porirua and Indigenous Pacific ideologies. The iterations assist in gathering ideas to form a repositioning of Indigenous architectural ideas. The narrative creation experiments develop through different mediums, adding depth, texture and understanding of each expression.

6.0 Design

This chapter comprises a design outcome based on findings in the ‘*Precedents*’ and ‘*Repositioning*’ chapters, converging an intervention for Te Awarua-o-Porirua Harbour. The design attempts to encapsulate Indigenous identities of Māori and Samoan cultures and re-engage the Porirua community back to the harbour — a story of ‘*Ngā Kaitiaki e Whitu: The Seven Sentinels*’ of the contemporary rectification and resilience for Te Awarua-o-Porirua Harbour.

7.0 Conclusion

The seventh chapter concludes the thesis and critically reflects on the process and results of ‘*Ngā Kaitiaki e Whitu: The Seven Sentinels*’ and the research objectives. It evaluates findings from the investigations, the importance of the research questions to resolve through design and its effectiveness. It concludes the investigation by reflecting on the constraints and limitations of the findings, and the potential advancement of this thesis had it expanded beyond its original scope.

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>| Chapter 2.0

Context

In order to save himself from ridicule, Awarua practised his flying at night.

2.0

Context

This chapter focuses on providing a critical understanding of Porirua's historical events divided into four key sections.

2.1 Historical Context provides a historical overview of significant events involving Māori land wars in Porirua history.

2.2 Indigenous Identities acknowledges two of Porirua's largest Indigenous Pacific population — Māori and Samoan; intending to provide an understanding of the dismissal of Indigenous Māori identity, the diasporic nature of the Samoans and the impact it had on Porirua today.

2.3 Te Awarua-o-Porirua Harbour seeks to understand the harbours environmental emergence and the practical issues it faces today.

2.4 Porirua Community seeks to understand the community social issues concerning the harbour.

Comprehending a rich tapestry of Porirua city's history is imperative to one's understanding of Indigenous Māori values of Ngāti Toa and Indigenous Samoan integration with a colonised Porirua; upon which further investigation and experiments will develop in this project.

2.1 Historical Context

This section seeks to provide an understanding of historical events which have left Indigenous Māori culture both under-represented in today's contemporary society and vulnerable to further identity loss.

Porirua city has undergone significant changes throughout history, including the arrival of the first Polynesians, Ngāti Toa's conquest, erecting of whaling stations, colonising of Porirua, the establishment of Marae, urban developments that have lacerated today's environment, and the diasporic nature of the early Samoans who migrated to Porirua.

Although not in chronological order, the historical context will illustrate the many displacements of Indigenous Māori values concerning iwi Ngāti Toa and Te Awarua-o-Porirua Harbour.

Early Polynesian Settlement

Kupe, believed to be the first to arrive at Paremata Point, called it “Parirua” meaning ‘the two flowings of the tide’. He did not settle in the area but continued to pass through the region, naming important sites like Te Mana o Kupe ki Aotearoa (Mana Island).¹

The region’s early settlement was reportedly founded at Paremata Point as early as 1200 AD.² The first humans to arrive on the harbour’s shores discovered a significant food larder. Fish and shellfish scattered the coastline, and the bush reaching the water’s edge inhabited many species of birds, including the moa that roamed Paremata’s lowlands.³ Early Polynesian Moa-hunters were able to visit Pāuatahanui Inlet due to its abundant supply of vegetation, ocean and estuaries.⁴

Since 1450 AD Paremata Point was established by several iwi and hāpu due to its fortress-like location that dominated the eastern and western territory and later became a significant trade route.⁵ These unidentified settlers left proof of their existence through midden, excavated sites, sometimes found around the harbour shores, revealing the shellfish and other food the early Māori exploited.⁶

Several generations later, known iwi occupied Paremata Point. Ngāi Tara and Ngāti Ira existed on Porirua and Mana Island until 1800 AD. Muaupoko, Rangitāne, Ngāti Apa, Ngāti Kahungunu and Ngāti Hotu were also said to reside in the region.⁷ In approximately 1820, a territorial invasion displaced tribes led by Ngāti Toa’s Te Rauparaha and allies Ngā Puhi who provided muskets for their raids.⁸

Ngāti Toa

The region now called Porirua experienced a significant change in the 1820s and beyond. In the mid-1820s, upon his return home, Te Rauparaha led the Ngāti Toa migration from their ancestral home of Kāwhia, where they were under immense pressure from their well-armed Waikato neighbours.⁹ However, Ngāti Toa were not welcomed in Porirua by Ngāti Ira, and it became clear that the two iwi could not coexist peacefully.¹⁰

¹ Keith, *They Came on the Tides*.

² The Guardians of Pāuatahanui Inlet, “Early Polynesians and Arrival of the British,” para. 1.

³ Day, *The Bountiful Harbour*, 4.

⁴ The Guardians of Pāuatahanui Inlet, “Early Polynesians and Arrival of the British,” para. 1.

⁵ Stodart, *Paremata Point*.

⁶ Paraka Education, “Teacher Notes | Mana Island,” 2; Day, *The Bountiful Harbour*, 4.

⁷ Paraka Education, “Teacher Notes | Mana Island,” 2.

⁸ Mawer, *Historical Snapshot of Porirua*, 1.

⁹ Sheehan, *An Introduction to the History of Porirua*.

¹⁰ Keith, *They Came on the Tides*.

Instead, Ngāti Toa used force to claim the land. They displaced them despite being a small group, and Ngāti Ira had to retreat to the Wairarapa.¹¹ Porirua provided Ngāti Toa with sustainable food supplies and access to European ships that often passed through the Cook Strait. Ngāti Toa was able to gain muskets from these warships to help capture new territories on the South Island.¹²

From then on, Ngāti Toa used its position to create a firm grip on a significant trading path.¹³ By 1840, Ngāti Toa had exercised tino rangatiratanga over this land and, through their long occupation in this area, had “established take whenua” or land rights.¹⁴

Marae Establishment

From the beginning of the Ngāti Toa settlement in 1823, there were twelve main pā settlements in Porirua; now, only two remain — Takapūwāhia (fig. 1) and Hongoeka (fig. 2).¹⁵ The street names surrounding these pā settlements (Takapūwāhia in particular) show that the city has grown around them.¹⁶

Takapūwāhia

Takapūwāhia, named after a former settlement in Kāwhia (Homeland of Ngāti Toa) was one of Ngāti Toa’s established settlements.¹⁷

The pā was initially founded at Te Uru Kahika today known as Prosser St (see Appendix A).¹⁸ In the 1850s, the inhabitants of Takapūwāhia mainly originated from deserted pā settlements, such as Taupō (now known as Plimmerton), and Pukerua Bay.¹⁹ Widely cultivated, the land produced harvest such as kūmara, wheat and maize.²⁰

From the late 1880s until today, Takapūwāhia has been the centre of the Ngāti Toa community.²¹ It now includes a significant number of Pacific and Asian residents.²² Christian missionaries supported Takapūwāhia in pursuing their land rights leading it to become the main area for The Church of Jesus Christ of Latter-day Saints (the Mormons).²³

¹¹ Keith.

¹² Day, *The Bountiful Harbour*, 5.

¹³ Keith, *They Came on the Tides*.

¹⁴ Ngāti Toa Rangatira, Toa Rangatira Trust, and The Crown, “Ngāti Toa Rangatira, Toa Rangatira Trust, & The Crown Deed of Settlement 2012,” 12; Ngāti Toa Rangatira, “Iwi Information.”

¹⁵ Stodart, “Pā in Porirua: Social Settlements,” 12, 15.

¹⁶ Stodart, 15.

¹⁷ Mawer, *Historical Snapshot of Porirua*, 3.

¹⁸ Keith, *They Came on the Tides*.

¹⁹ Mawer, *Historical Snapshot of Porirua*, 3.

²⁰ Mawer, 3.

²¹ Keith, *They Came on the Tides*.

²² Mawer, *Historical Snapshot of Porirua*, 3.

²³ Mawer, 3.

Hongoeka Marae

The other Ngāti Toa pā is Hongoeka which is still actively located in Plimmerton.²⁴ It extends through an urupā, at the end of Moana Road toward Haukopia (See Appendix B). The area believed to inhabit rich marine and land resources since the beginning of the Ngāti Toa era, made it a fertile settlement.²⁵

Evidence compiled by the Māori Land Court recognises that Te Rauparaha gave Hongoeka to Nohorua (Ngāti Toa Rangatira) and Ngāti Haumia hāpu of Ngāti Toa.²⁶ Hongoeka is an important historical site due to the search for Te Rauparaha during his capture in Taupō village.²⁷ It was subsequently set aside as one of three reserves for the Porirua Deed in 1847 after the crown had obtained Porirua.²⁸

>| Fig. 1

Takapūwāhia Marae

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>| Fig. 2

Hongoeka Marae

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list for further details.

²⁴ Stodart, "Pā in Porirua: Social Settlements," 12; Ngāti Toa Rangatira, Marae.

²⁵ Mawer, Historical Snapshot of Porirua, 4.

²⁶ Stodart, "Pā in Porirua: Social Settlements," 12.

²⁷ Stodart, 12.

²⁸ Ngāti Toa Rangatira, "Iwi Information"; Ngāti Toa Rangatira, Toa Rangatira Trust, and The Crown, "Ngāti Toa Rangatira, Toa Rangatira Trust, & The Crown Deed of Settlement 2012."

Whaling Stations

Explorers from New South Wales, Australia and European sealers began arriving on the New Zealand coast in the 1820s.²⁹ By the late 1820s, Pākehā merchants lived in Ngāti Toa territory marrying Ngāti Toa women.³⁰ In the early 1830s, Ngāti Toa traded with whalers establishing small shore stations at Kāpiti and Mana Islands, Paremata, Porirua, and near Titahi Bay.³¹ Pigs, goats, potatoes, and flax exported to Sydney in exchange for European goods such as arms, blankets, tools, tobacco.³²

Mana Island Whaling Station

In 1822, American whaler Independence visited waters around Mana Island. However, it was in 1832 that American George Ross set up a whaling station on the shore north of Te Rangihaeata's pā.³³

Paremata Point Whaling Station

Whalers arranged with Ngāti Toa, and whaling stations were eventually set up on both sides of the strait to create the area's first Māori and Pākehā settlements.³⁴ Joseph Toms founded Paremata Point's shore-whaling station in 1835 (fig. 3).³⁵ These new arrangements included the Pākehā men and the Māori women and "created new cultural and economic relations".³⁶ Whaling was an essential industry in Porirua for a short time, employing Māori and European whalers.³⁷

Colonising of Porirua

In 1839, Captain William Wakefield came to purchase land for the New Zealand Company.³⁸ Disputes over the purchase of property began to spread, known as the Waitangi Agreement. This did not settle well with the Ngāti Toa's chiefs as they were not prepared to give up their lands.³⁹

In the late 1930s, Pākehā settlers who benefited from land sales came in high numbers when rumours began to spread that New Zealand was the newest nation to be absorbed into the British Empire.⁴⁰ It became relevant to Ngāti Toa's rohe, as the agreement involved their properties becoming purchase for the intending settlers.⁴¹

29 Keith, *They Came on the Tides*.

30 Keith.

31 The Guardians of Pāuatahanui Inlet, "Early Polynesians and Arrival of the British," para. 2.

32 Keith, *They Came on the Tides*.

33 Paraka Education, "Teacher Notes | Mana Island," 6.

34 Keith, *They Came on the Tides*.

35 Day, *The Bountiful Harbour*, 6.

36 Keith, *They Came on the Tides*, 12.

37 Day, *The Bountiful Harbour*, 6.

38 The Guardians of Pāuatahanui Inlet, "Early Polynesians and Arrival of the British," para. 3.

39 The Guardians of Pāuatahanui Inlet, para. 4.

40 Keith, *They Came on the Tides*.

41 Keith.

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Disagreements over which property settlers were to acquire posed problems. Ngāti Toa's interpretation was that they sold the land now known as Nelson.⁴² However, Wakefield claimed that their deal was for more land.⁴³ Wakefield's interpretation was due to wishful thinking as the official interpreter at the time did not confirm his belief.⁴⁴ It was this phase of the agreement that began friction and open conflict between tangata whenua and the Pākehā settlers.⁴⁵

As more Europeans reached Wellington, conflicts began to escalate over settlements as land reserves started running out, and settlers began to look towards Porirua.⁴⁶ Roads to Porirua caused further tension and conflict when access was limited by a tapu region declaration, hampering those who travelled through.⁴⁷ Many incidents occurred as settlers prohibited from the area tried to set up residence.⁴⁸ What Pākehā saw as Māori being difficult was Māori determination to keep control of their lands and customs.⁴⁹

⁴² Keith.

⁴³ Keith.

⁴⁴ Keith.

⁴⁵ Keith, 17.

⁴⁶ Keith, *They Came on the Tides*.

⁴⁷ Keith.

⁴⁸ Keith.

⁴⁹ Keith, 20.

This conflict came to a head in Wairau Valley when Ngāti Toa refused to surrender properties, and the dispute intensified, resulting in the deaths of settlers and Ngāti Toa members.⁵⁰ British soldiers deployed in retaliation forming a militia and arming themselves.⁵¹ Ngāti Toa consolidated their communities around the harbour and Taupō pā to maintain control of their areas.⁵² British soldiers demolished a Māori village, and several weeks later, Māori retaliated in a series of attacks.⁵³ Te Rauparaha was kidnapped and held for eighteen months without trial. A rescue party organised by Te Rangihaeata (Ngāti Toa Rangatira) to restore their chief proved unsuccessful.⁵⁴

The Crown's apologies in the Ngāti Toa Settlement Act, notify that this takeover of powerful Ngāti Toa Rangatira was a calculated attempt to reduce power and their influence, allowing the Crown to force them to consent to land sales.⁵⁵ These incidences seen as a relatively peaceful conclusion by the European settlers were a land-purchase agreement that enabled Pākehā settlers to enter the area either by leasing or by merely inhabiting it.⁵⁶ Ngāti Toa was massively displaced and largely estranged by unjust land sales and forced acquisitions.⁵⁷

Displacement of Urban Development

As Porirua and Pāuatahanui developed, demands to fill parts of the harbour bed began to rise. In the 1940s, despite opposition from Ngāti Toa, the Public Works Department launched a land reclamation plan at the southern end of the Porirua Harbour (fig.4).⁵⁸ This scheme included depositing soil into the harbour created from beaches and mudflats.⁵⁹ It also caused widespread deforestation resulting in sediment, flooding and silt build up in the harbour.⁶⁰ The plan demolished the treasured Ngāti Toa seabed, and with it, their mahinga kai (natural food resource). Ngāti Toa requested compensation from the government to no avail.⁶¹

In the 1960s, further plans of a city centre were in motion. Ngāti Toa re-appealed to the Council, but the reclamation continued.⁶² Its estranged relationship to the harbour is proof of lacerations in its historical context (compare fig. 5 and 6).

50 Ngāti Toa Rangatira, Toa Rangatira Trust, and The Crown, "Ngāti Toa Rangatira, Toa Rangatira Trust, & The Crown Deed of Settlement 2012"; Stodart, Paremata Point.

51 Stodart, Paremata Point.

52 Keith, *They Came on the Tides*.

53 Stodart, Paremata Point.

54 Keenan, "New Zealand Wars: Wellington and Whanganui Wars, 1846–1848," para. 3; Keith, *They Came on the Tides*.

55 Ngāti Toa Rangatira and The Crown, "Ngāti Toa Rangatira & The Crown: Ngāti Toa Rangatira Settlement Summary."

56 Keith, *They Came on the Tides*; Stodart, Paremata Point.

57 Ngāti Toa Rangatira and The Crown, "Ngāti Toa Rangatira & The Crown: Ngāti Toa Rangatira Settlement Summary."

58 Day, *The Bountiful Harbour*, 13.

59 Keith, *They Came on the Tides*.

60 Keith.

61 Day, *The Bountiful Harbour*, 13.

62 Day, 13.

>| Fig. 4

Plan:
Land reclamation
project

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<| Fig. 5

1942
Location Plan
- Pre urban
development

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>| Fig. 6

2020
Locationa Plan
- Post urban
development

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2.2 Indigenous Identities

This section seeks to provide an understanding of two of Porirua's largest Indigenous Pacific population — Māori and Samoan; intending to give an understanding of the dismissal of Ngāti Toa's Indigenous values, the diasporic nature of the Samoans and the impact it had on Porirua society.

Indigenous Māori identity has dramatically become under-represented in contemporary society, and it is unclear how it will be present in the future. It begs such questions as — How has Porirua's identity evolved? How has migration impacted Porirua's identity? How are integrated Indigenous identities represented today?

Ngāti Toa (Māori)

*Ko Whitireia te maunga
Ko Porirua te awa
Ko Raukawakawa te moana
Ko Ngāti Toa te iwi*

*Whitireia is the mountain
Porirua is the river
Raukawakawa (Cook Strait) is the sea
Ngāti Toa is the Tribe.*

The Porirua Harbour is of utmost concern to Ngāti Toa, due to the cultural and historical significance, as well as being precious resources that once supported rich flora and fauna.⁶³

Due to a lack of engagement with the iwi, poor public policies and inadequate investment in local infrastructure, Te Awarua-o-Porirua and its catchment—including all related ecosystems — were negatively affected. It has affected the natural way Ngāti Toa people lived, learned and developed in the Porirua rohe.⁶⁴ The inability of Ngāti Toa to practise aspects of their culture, such as gathering kaimoana meant that skills and knowledge could not pass to later generations.⁶⁵

Ngāti Toa has consistently sought to uphold its customary harbour and resource rights. The inability to monitor and harvest kaimoana from the harbour has affected the ability of the tribe to fulfil cultural practices, teach cultural values, and meet the physical needs of the people.⁶⁶

Ngāti Toa sees the current state of the harbour as compromising the “iwi mana and harbour mauri”.⁶⁷

*We mourn the loss of our mahinga kai and live through the memories of our kaumātua (elders), hoping that one day we will be able to feast from the waters of Te Awarua-o-Porirua and share our knowledge and practices of cultural harvest with our people once again.*⁶⁸ (fig. 7)

⁶³ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, “Ngāti Toa Rangatira Statement April 2019,” 10.

⁶⁴ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, 10.

⁶⁵ Mawer et al., “A Political Snapshot of Porirua,” 3.

⁶⁶ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, “Ngāti Toa Rangatira Statement April 2019,” 10.

⁶⁷ Mawer et al., “A Political Snapshot of Porirua,” 3.

⁶⁸ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, “Ngāti Toa Rangatira Statement April 2019,” 10.

<| Fig. 7

1988
Ngāti Toa kaumātua,
Akuhata Wineera,
gathering shellfish
on the mudflats of
Porirua Harbour.

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list for further details.

<| Fig. 8

P.A.C.I.F.I.C.A in the
community.
Members of
P.A.C.I.F.I.C.A taking
part in a parade

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Samoan Diaspora

Samoan ethnicity makes up the largest Pacific group in Porirua city.⁶⁹ The early Samoans moved to Porirua East, mainly occupying Cannons Creek and Waitangirua suburbs. During the 1960s and 1970s, Samoan families moving to Porirua worked in factories, seeking better opportunities for their families. Life was not simple for them, given an immersion into new workplaces, education, and social culture.⁷⁰

While men and children attended work and school, women were often left isolated. The Pacific women in the Porirua area set up a branch of the national organisation called P.A.C.I.F.I.C.A. (Pacific Allied (Women's) Council Inspires Faith (in) Ideals Concerning All), known today as *Pacifica*.

The Porirua branch comprised of many Pacific women, half of whom were of Samoan descent.⁷¹ Porirua P.A.C.I.F.I.C.A taught women how to adapt to a new culture while retaining their own. They learned health benefits, report writing, and established a curriculum vitae - a foreign concept to these women.⁷² Men were often the only ones with a public voice; however, their ideas and thoughts originated from the women. P.A.C.I.F.I.C.A meant they had a voice themselves and the Porirua community benefited from these influential Pacific women who voiced their concerns in government councils.⁷³

The formation of P.A.C.I.F.I.C.A follows an established characteristic of bonding between Pacific people in a diasporic movement (fig. 8). Cluny Macpherson, in his observance of the Samoan migration notes, "*some argue that the nation as a 'unit of analysis' is a poor reflection of Pacific reality*". Instead, Pacific people are part of "*meta societies*" that extend boundaries encompassing former residence and those with family ties living elsewhere.⁷⁴ A shared Pacific narrative of diaspora that echoes the words of Epeli Hau'ofa, "*... it is in their blood to be mobile*".⁷⁵

⁶⁹ James and Southwick, "Pacific People in Cannons Creek/Waitangirua: Movement and Attachment," 7.

⁷⁰ O'Callaghan, P.A.C.I.F.I.C.A in Porirua, 5.

⁷¹ O'Callaghan, 4.

⁷² O'Callaghan, 5.

⁷³ O'Callaghan, 5.

⁷⁴ James and Southwick, "Pacific People in Cannons Creek/Waitangirua: Movement and Attachment," 23.

⁷⁵ James and Southwick, 32.

2.3 Te Awarua-o-Porirua Harbour

Te Awarua-o-Porirua Harbour analyses the quality of the physical environment. Indigenous practices are harmonious with a sustainable ecology, hence why the ancient civilisations thrived on the harbours Paunama beds - an essential source of kaimoana (seafood). Their excellent knowledge of the cosmos, environment and atmosphere afford them the proper guardianship of these lands. This section comprises of environmental research by Porirua City Council and associated organisations intending to define current issues and addressing relevant solutions to the harbour's degradation.

Physical Environment

Te Awarua-o-Porirua Harbour (fig. 9) is the largest estuary in the lower North Island with two arms, Pāuatahanui Inlet, the greater of the two, and the Onepoto Arm at half the size.⁷⁶ Porirua's landscape has experienced dramatic changes from land reclamation around the harbour for infrastructure, urban development and stream channels to reduce flood risk.⁷⁷ The harbour is a valued identity as a cultural, recreational, economic and ecological resource. It has an abundant seagrass and cockle population essential to the ecology of Porirua and the wider region.⁷⁸

> | Fig. 9
A calm scenery of Te
Awarua-o-Porirua
Harbour

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Please consult the figure
list for further details.

⁷⁶ Ammundsen, "The Physical Geography of Te Awarua-o-Porirua Whaitua," 3.

⁷⁷ Ammundsen, 3.

⁷⁸ Ammundsen, 3.

Sedimentation

Sedimentation is a process that occurs naturally in estuaries; however, the sediment accumulation rates of the harbour are six times the rate of a healthy estuary.⁷⁹ Sedimentation caused by mass deforestation, erosion, and land reclamation are significant contributors as “*many thousands of tonnes of soil were deposited into the harbour*” during early developments.⁸⁰ As a result, it destroyed spawning and feeding grounds due to the harbour and stream modifications (fig. 10).⁸¹ Sedimentation is detrimental to marine life, causing concern for the fostering of healthy fish populations⁸² by reducing the amount of water that moves in and out of the harbour, hindering the harbour’s ability to flush out pollutants.⁸³ Sedimentation has further decreased recreational use of the harbour losing much of its visual appeal and ability to navigate boats in some areas.⁸⁴

<| Fig. 10

Built up
sedimentation in the
Porirua Harbour

This content is unavailable.
Please consult the figure
list for further details.

79 Mawer and Arona, “Poriruas Physical Environment,” 2.

80 Mawer and Arona, 2.

81 Mawer and Arona, 2.

82 Mawer and Arona, 2.

83 Baker, Gow, and Anstey, “Te Awarua-o-Porirua Harbour Scorecard - 2017,” 2.

84 Mawer and Arona, “Poriruas Physical Environment,” 2.

Pollution

Pollutants frequently discharge into streams that lead to the harbour from infrastructures such as State Highway 1 and the railway line. As a result, pollution from vehicle exhaust fumes travels via stormwater into the harbour, making it unfit for swimming.⁸⁵ The Porirua Hospital, at its peak of 2,000 patients, also pumped raw sewage directly into the Porirua stream, which led to the harbour. Contaminated shellfish and sea resources in certain parts of the harbour became incompetent for human consumption.⁸⁶

Pollutants identified in the harbour include elements of “*heavy metals, pesticide residue (such as DDT), litter, chemicals (such as those from vehicle exhausts) and often excess nutrients (from agricultural runoff)*” (fig. 11).⁸⁷ Excess nutrients have also led to the growth of ‘nuisance’ algae which deplete the harbour of oxygen, impacting fish and invertebrate populations.⁸⁸

>| Fig. 11

Pollution along the
edges of the Porirua
Harbour

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Please consult the figure
list for further details.

⁸⁵ Blaschke, Anstey, and Forsyth, “Ecological Restoration Priorities for the Porirua Stream and Its Catchment,” 16.

⁸⁶ Mawer and Arona, “Porirua’s Physical Environment,” 2.

⁸⁷ Mawer and Arona, 3.

⁸⁸ Mawer and Arona, 3.

Ecological Degradation

Ngāti Toa's attempts to have their interests recognised came to no avail in the management of the harbour (Native Land Court order 1883, Petition in 1960).⁸⁹ Instead, they watched as essential breeding grounds degraded and their communities plagued with sickness due to contaminated kaimoana. Compensation was sought and ignored by the government. Porirua Harbour is the main site for seagrass currently declining in the lower North Island. Seagrass *“provides a habitat which is important to feeding, spawning, and acts as a nursery and refuge for marine invertebrates, fish and birds”* (fig. 12).⁹⁰

Improvement of the harbour's ecological health is possible with immediate action as research has shown that the harbour still maintains the ability to regenerate. *The Porirua Harbour and Catchment Strategy* aim to reduce sedimentation rates, pollutants, and restore the ecological health of the harbour.⁹¹

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list for further details.

<| Fig. 12

Seagrass inhabitance
for Inanaga
(whitebait) to feed
and spawn

⁸⁹ Mawer and Arona, 2.

⁹⁰ Mawer and Arona, 3.

⁹¹ Mawer and Arona, 3.

Terrestrial Biodiversity

From the 1850s onwards, much of the biodiversity loss resulted from settlement, development and deforestation, propelled initially by increasing demand for timber. Porirua was home to various vegetation such as forest canopies and flood plains, but almost all of the forest in the lowlands turned into farmland and urban areas.⁹²

Pockets of biodiversity are regenerating native timber and bush in sites such as the Porirua Scenic Reserve, with reports that they are significant to bird habitats. While the majority of the original vegetation is lost, “*the catchment is showing some promising signs of recovery of terrestrial biota*”. It is evident in the greater variety and quantity of birds arriving in the area, increasing commitment for land to be set aside for native vegetation to regenerate.⁹³

Areas of the coast also provide habitats for threatened species of birds, geckos and plants (fig. 13).⁹⁴ Predator control is often carried out by community groups funded by the *Greater Wellington Regional Council* targeting pests such as possums, rabbits and invasive plants such as blackberry.⁹⁵

>| Fig. 13

Pāuatahanui Wildlife
Reserve (left) and
royal spoonbill (right)

This content is unavailable.
Please consult the figure
list for further details.

⁹² Blaschke, Anstey, and Forsyth, “Ecological Restoration Priorities for the Porirua Stream and Its Catchment,” 1.

⁹³ Blaschke, Anstey, and Forsyth, 20.

⁹⁴ Steer, “Biodiversity of Te Awarua-o-Porirua Whaitua,” 1.

⁹⁵ Blaschke, Anstey, and Forsyth, “Ecological Restoration Priorities for the Porirua Stream and Its Catchment,” 12.

Waterways

The Porirua catchment is between the Wellington and Ohariu faults and the Wellington and Porirua Harbour, in a low lying valley (see Appendix C).⁹⁶ The Porirua Stream is a critical part of catchment feeding into the harbour's Onepoto Arm. It includes Indigenous ecosystems that provide habitats for endangered Indigenous fish species.⁹⁷ In 2008, water quality within this stream relinquished due to high levels of faecal bacteria, nutrient concentrations and water murkiness.⁹⁸ Stormwater was a significant reason the stream had contaminants such as heavy metals and pesticides, which often built up at harmful levels and flowed into the harbour.⁹⁹ Urban development often meant that back of buildings faced the streams, making them areas where accumulated litter, invasive plant species and pests thrive.¹⁰⁰

Urbanisation reduced the permeability of the land, meaning that flood barriers are needed to minimise the potential of flooding. Physical flood barriers implemented on natural flood plains catered for infrastructure built on low lying areas creating narrow paths for the stream to flow through.¹⁰¹ These flood barriers caused changes in the stream habitat, hindering fish migration, the direction of streamflow, and where water resides, degrading habitats available for certain species.¹⁰²

96 Blaschke, Anstey, and Forsyth, 1.

97 Blaschke, Anstey, and Forsyth, 13.

98 Blaschke, Anstey, and Forsyth, 15.

99 Milne and Watts, "Stormwater Contaminants in Urban Streams in the Wellington Region," 1.

100 Blaschke, Anstey, and Forsyth, "Ecological Restoration Priorities for the Porirua Stream and Its Catchment," 1.

101 Blaschke, Anstey, and Forsyth, 42.

102 Blaschke, Anstey, and Forsyth, 15,18.

2.4 Porirua Community

This section comprises of research by Porirua City Council and associated organisations, identifying the makeup of the current community fabric of Porirua, including cultural diversity, economic growth, sports and recreation and access routes. Porirua relishes in a strong sense of community and looks to internalise this identity into their architecture which currently faces its back towards an essential part of their community growth — Te Awarua-o-Porirua Harbour. This section looks to resolve the community issues highlighted in this thesis.

Culture and Ethnicity

Porirua leads the way in multi-culturalism with a population that suggests the highest percentage of diversity in the greater Wellington region (fig.14). By 2013, 60% of Porirua's population identified as European; 19.6% identified as Māori, and 24.6% identified as Pacific Peoples. Smaller groups followed 6% Asian, 1.2% New Zealander, 0.7% Middle East / Latin American / African and 0.1% Other.¹⁰³

Population born outside New Zealand rose slightly from 21.6% in 2006 to 22.8% in 2013; slightly lower than the wider Wellington region, 24.0%. The United Kingdom was the most common birth country for 5.9% of Porirua residents, followed by Samoa at 5.4%.¹⁰⁴ 88.5% of Porirua's population spoke and understood English; however, the range of other languages spoken is another indicator of cultural diversity. Samoan was the most common Indigenous Pacific language spoken by 9.4% of the population, followed by Māori at 4.9%.¹⁰⁵

In light of this diversity, it is clear that the people of Porirua must keep their multi-cultural identity which unites cultural backgrounds, building healthier communities that will learn to accept and celebrate differences.

>| Fig. 14

2013
Māori and Pacific
Islanders highlighted
by density of red

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Please consult the figure
list for further details.

¹⁰³ .id, the population experts, "Ethnic Groups."

¹⁰⁴ .id, the population experts.

¹⁰⁵ .id, the population experts.

Economy

Porirua's critical areas have some uninviting public environments.¹⁰⁶ My examination of the city has identified these issues:

Lack of an identifiable city 'heart' and attractive urban spaces with high amenity values with safe, legible connections.

Necessary pedestrian access is not well-established, e.g. between Te Awarua-o-Porirua Harbour and the city centre.

No shelter from the elements, making it an unattractive experience for shoppers, pedestrians and cyclists.

The city centre lacks active street edges such as retail and pop-up stations.

Private vehicles dominate in-city shopping behaviour and general transit. Lack of city centre amenities discourages investment in residential development (apartments).

Addressing the city centre shopping experience and public areas will increase the chance of casual pedestrians and shoppers, activating the area and increasing passive surveillance.

Recreation

Porirua has twelve walking tracks and a variety of cycling and mountain biking tracks.¹⁰⁷ The council also encourages various activities, such as organic gardening and calligraphy.¹⁰⁸

Disconnection from the harbour is a significant barrier to developing a community integrated with its environment. This is due to:

Historic developments around Te Awarua-o-Porirua harbour, meaning that buildings face away from the harbour edge¹⁰⁹. As a result, the city centre is underused and does not capitalise on the natural advantages offered by its proximity to Te Awarua-o-Porirua Harbour. The view of the harbour, the green spaces, and opportunity for intriguing spaces between land and sea has the potential to create amphibious spaces that connects the city centre and harbour — a lost opportunity for the Porirua community.

¹⁰⁶ Porirua City Council, "Make Your Mark - District Plan," 2,7.

¹⁰⁷ Mawer and Arona, "Porirua's Physical Environment," 6.

¹⁰⁸ Tonkin, "Something Exciting Is Happening in Porirua."

¹⁰⁹ Porirua City Council, "Make Your Mark - District Plan," 6.

New Zealand's most road-ringed estuary impedes activities such as walking and informal recreation around the waterfront. The road reducing recreational space also limits pedestrian access to Te Awarua-o-Porirua Harbour.

Historical disregard for iwi values when making decisions regarding Te Awarua-o-Porirua meant cultural recreation are limited.

Access Routes

The main transport routes around the harbour edge are State Highway 1, Titahi Bay Road, Wi Neera Drive, Onepoto Road and the railway line. Transmission Gully Motorway (see Appendix D) currently under construction, will provide an alternative link from the Kāpiti Coast to Southern Porirua on the State Highway 1 harbour edge once completed.¹¹⁰ Transport access is a crucial factor in providing services and access to employment for Porirua's population. Public transport is a crucial factor in providing access to employment for Porirua's population. However, Porirua's household number of cars highlight high carbon emissions.¹¹¹

A plan for a balanced transportation network through various modes of public transport are imperative for well-connected communities; serving residents, businesses, and visitors. Public access to quality parks, harbour and waterways are essential for the following reasons:

A lack of park, river, stream and coastal environment access reduces recreational activities such as walking, swimming, fishing, and boating.

Community benefits such as health and well-being due to access to quality reserves and parks (green spaces) for recreation, community activities, and leisure needs.

Low-quality public access that does not meet local community needs will leave reserves and parks underutilised. Whereas, quality public access to parks and open spaces will encourage high utilisation for adequate circulation around the harbour.

The demand for recreational space will increase as the city grows, requiring quality public access to nullify congested city centre and harbour areas.

¹¹⁰ .id:The Population Experts (2013), "Porirua City: 2013 Census Results."

¹¹¹ .id:The Population Experts (2013).

>| Chapter 3.0

Strategy

Beginning at the end of the harbour he would race along until he reach the other end.

3.0

Strategy

This chapter outlines strategies that the author has derived from initiatives of Ngāti Toa Rangatira, Porirua City Council and associated organisations that aim to improve harbour restoration and sensitivities, Indigenous identity, recreational activities, harbour access, and economic growth. These strategies categorised into four critical groups are essential measures to the Porirua community — environment, culture, community and opportunity — which are indicated by the acronym E.C.C.O in this project.

E.C.C.O intends to integrate an architectural programme based upon macro-assessments of the harbour and user needs that are vital to the harbour's sensitive developments. This programme aims to summon Indigenous Māori and Samoan values to articulate a multi-cultural community identity. It also addresses environmental and community issues that yearns for an architectural resolution.

3.1 Environment

Environment addresses Te Awarua-o-Porirua Harbour's environmental issues through compartmentalising a programme dealing with each harmful factor.

The main harbour-causing factors are excessive sedimentation rates and pollutants, resulting in the harbours ecological degradation. Various authorities have developed plans to prioritise these factors in partnership with Ngāti Toa Rangatira and the community, offering support to upstream and stormwater channels to prevent these issues from arising before they reach the harbour.¹¹³

With action plans already put together by various territorial authorities, this thesis will deal primarily with downstream environmental issues, directly in the harbour. The programme will focus on:

Pollution reduction:

A space that helps purify contaminated harbour water promoting water-sensitive design and maintains water quality for recreation activities.¹¹⁴

Active ecological restoration:

Spaces that promote and protect nature, landscapes and ecosystems that actively contribute to the unique character, identity and biodiversity of Porirua. Vegetation spaces need to be normalised to create a sense of nature in urban environments with health benefits.¹¹⁵

Community education:

Opportunities to educate and support the community on harbour health will be critical to increasing awareness of community habits around the harbour.¹¹⁶

Sensitive Developments:

Urban developments can have significant adverse effects on landscapes, particularly in highly visible or highly valued areas. The programme aims to identify and protect the natural environment from inappropriate modification, ensuring urban developments undertaken are in a manner that avoids or minimises insensitivity to people, culture and environment.¹¹⁷

113 Mawer and Arona, "Poriruas Physical Environment," 2.

114 Porirua City Council, "Annual Report," 3; Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3.

115 Porirua City Council, "Annual Report," 3.

116 Porirua City Council, 3.

117 Porirua City Council, "Make Your Mark - District Plan," 2; Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3.

3.2 Culture

Culture addresses a programme representing Porirua's Indigenous identities of Māori (Ngāti Toa) and Samoa; forming a multi-cultural representation of Indigenous Pacific principles.

The programme speculates an integration of Māori and Samoan homogeneous and heterogeneous cultural principles, relishing the ability to harmonise two distinct cultures. The programme implements the following:

Protect Ngāti Toa Rangatira values, rights and interests by exercising customary practices including food and water harvesting without fear of harm. Through their relationship with *Te Awarua-o-Porirua Whaitua*, Ngāti Toa will continue to exercise kaitiakitanga in ongoing harbour monitoring and protection. Their kaitiakitanga also extends through their community relationships and partnered organisations, an essential part of achieving Te Awarua-o-Porirua's community vision.¹¹⁸

Reflect Māori and Samoan Indigenous identities through the built environment in Te Awarua-o-Porirua Harbour, primarily influenced by a Ngāti Toa narrative. Indigenous Māori narratives of Ngāti Toa are essential to the basis of the harbour design as it will set the tone for how the Samoan narratives relate and integrate cohesively.¹¹⁹ Integrating Samoan and Māori narratives reveal the multi-cultural relationship of modern society and how an intertwining of identities can represent a diverse community.¹²⁰

Cultural spaces that allow Indigenous Pacific practices to continue, particularly the respectful use of the harbour — an instrumental part of sustaining the physical and cultural needs of the people. These spaces will also feature unique architectural elements that tell the stories of ancestral ties, myths and legends..¹²¹

¹¹⁸ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, "Ngāti Toa Rangatira Statement April 2019," 4.

¹¹⁹ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, 4.

¹²⁰ Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3.

¹²¹ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, "Ngāti Toa Rangatira Statement April 2019," 4; Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3.

3.3 Community

Our Leisure

Our Leisure is a programme that increases recreation around the harbour, promoting community health and well-being and rejuvenating the harbour's urban vibe. The programme will implement the following:

Water recreation:

Recreational spaces that promote water activities with limited impact on the environment, such as swimming and waka ama.¹²²

Loop tracks:

Implement walking, running, cycling and rowing routes that connect all edges of the harbour.¹²³

Green spaces:

Create green spaces that invite gatherings such as picnics and recreational activities and implementing greenfield developments that demonstrate recreational affordances.¹²⁴

Our Leisure aims to locate these recreation facilities with accessible routes to increase public access along the harbour, improving the range of available activities and activating harbour edges.¹²⁵

Our Journeys

Our Journeys is a programme that improves community access, activity, and flow in and around the harbour. It will strengthen the connection of both harbour edges, link important sites and activate the harbour edges. The programme will respond by:

Providing alternative non-vehicular transport:

Non-vehicular transport opportunities such as walking, biking, and rowing become a priority along specific routes — alternative transportation around the harbour to minimise carbon emissions and increase pedestrians in a high-quality, walkable environment.¹²⁶

Connecting importing sites:

Provide connecting routes to all recreational areas, ecological corridors, and coastlines for community recreation.¹²⁷

¹²² Porirua City Council, "Make Your Mark - District Plan," 6.

¹²³ Porirua City Council, 6.

¹²⁴ Porirua City Council, 6.

¹²⁵ Porirua City Council, 6; Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3.

¹²⁶ Te Awarua-o-Porirua Whaitua Committee and Greater Wellington Regional Council, "Ngāti Toa Rangatira Statement April 2019," 15; Porirua City Council, "Make Your Mark - District Plan," 6.

¹²⁷ Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3; Porirua City Council, "Make Your Mark - District Plan," 6.

3.4 Opportunity

Opportunity addresses an economic enhancing programme, providing sufficient spaces that support Porirua's small businesses. The programme will respond by implementing the following:

Create a vibrant and active business space for small businesses through the implementation of shared offices and pop-up spaces. It aims to enable economic growth by integrating formal and informal business spaces, promoting the harbour as a location for social, communal and cultural experiences. As an extension of Porirua city centre, it hopes to support the employment and economic needs of the city as well as the 'heart' of the city identity. It also aims to make the harbour an attraction for visitors, shopping, and leisure.¹²⁸

Turn buildings and activities towards the harbour, enabling the harbour to take advantage of its natural features and becoming part of the city centre by softening the harbour edges.¹²⁹

Ensure that urban developments have high-quality and sensitive design outcomes. It aims to recognise that urban developments achieve sustainable management for continual economic growth.¹³⁰

3.5 Strategic Concept

The integration of E.C.C.O with Indigenous Pacific narratives offers an opportunity to incorporate a series of dispersed architecture throughout selected harbour sites, much like the dispersed settlements of Indigenous Māori pā and Samoan villages.

This project looks to design a series of architectural sentinels known as *Ngā Kaitiaki e Whitu: The Seven Sentinels* — a community-based harbour settlement founded on core Indigenous Māori and Samoan narratives and E.C.C.O strategies.

The E.C.C.O strategies are essential to the next chapters comprising '4.0 Precedents' and '5.0 Repositioning', in the discovery of Indigenous Māori and Samoan ideologies through literature and narrative experiments. Altogether, they will attempt to resolve a potential design outcome for Te Awarua-o-Porirua Harbour.

¹²⁸ Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3; Porirua City Council, "Make Your Mark - District Plan," 7.

¹²⁹ Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3; Porirua City Council, "Make Your Mark - District Plan," 7.

¹³⁰ Porirua City Council, "Make Your Mark on Our Draft District Plan | Part 3 - Strategic Direction," 3; Porirua City Council, "Make Your Mark - District Plan," 7.

>| Chapter 4.0

Precedents

After much practising Awarua felt his body lifting off the water.

Soul Searching

This chapter comprises of two parts — literature reviews (*Indigenous Ideology*) and project reviews (*Contemporary Repositioning*), — both providing an understanding of Indigenous principles and their applications to contemporary architecture, respectively.

4.1 *Indigenous Ideology* section is a rediscovery of Indigenous beliefs that allowed Indigenous Māori and Samoan to practise their customs. Indigenous representation is scarce in today's contemporary society, due to a colonised Porirua that rejected Ngāti Toa Rangatira — who understand their environment — to support environmental issues in Porirua. Uncovering Indigenous ideologies will play a significant role in resurrecting Porirua's once-dominant identity, community vibrancy, and ensure a safe harbour ecology.

4.2 *The Contemporary Repositioning* section examines the application of Indigenous Māori and Samoan narratives in contemporary New Zealand architecture and its impact on its surroundings. It aims to unpack the essential architectural processes that afford Indigenous representation in contemporary New Zealand architecture. An analysis of their applications is necessary to understand how to implement Indigenous narratives to the design of Ngā Kaitiaki e Whitu: *The Seven Sentinels*.

4.3 *Reflections* is a contemplation of the overall chapter. It analyses the findings that support the continuation of the thesis to design outcomes of Ngā Kaitiaki e Whitu: *The Seven Sentinels*.

4.I Indigenous Ideology

This section investigates the literature of Indigenous Māori and Samoan principles and social structures in architecture. It illustrates four Indigenous Pacific ideologies, both common to Māori and Samoan discussed by selected scholars and writers. The literature review seeks to uncover Indigenous principles that will later formulate a design narrative for *Ngā Kaitiaki e Whitu: The Seven Sentinels*.

The *Wā-Va* section examines an Indigenous Pacific scheme that creates the nucleus of many Pacific values inherent in Māori and Samoan cultures. It discusses the concept of Wā-Va evident in ocean relationships and settlement configurations.

A Sacred Vessel reviews valued boat architecture and how it influences Pacific land architecture. It discusses the boat as a floating architecture stimulating the possibilities of an amphibious architecture.

Beyond the Reef considers Indigenous Pacific navigation and wayfinding in pursuit of more opportunities, economic growth, and exploration — becoming the Pacific's ancient highway. It further explores Pacific diaspora and the transitions Pacific people made to New Zealand pursuing further opportunities.

Comprehending the Environment examines Indigenous environmental knowledge of Indigenous Māori and Samoan. It considers their ability to understand their environment by living harmoniously with natural resources and maintaining an ecology that supports their cultural practises and community.

Wā-Va

There is a schema that has long lived in the Pacific, hardly known in modern society. To the unfamiliar mind, it can seem unusual, unconventional or random, but in Indigenous Pacific living, the schema keeps customs grounded and united; bringing another meaning to the word 'space' that makes much sense.

This concept is renown in the Pacific, recognised in “*Māori and Hawaiian as wā, [in] Samoan, Tongan and Tahitian [as] va, the Marquesan [as] ava and the Japanese [as] ma*”.¹³¹ For practical purposes, this thesis will refer to it as ‘Wā-Va’ in, integrating both the Māori and Samoan meaning.

Early European contact with Wā-Va was an order unfamiliar to them. Their uniform, straight-lined and gridded schema were not relatable to the fluidity of the Indigenous Pacific schema. It may be a reason the early Europeans dismissed Indigenous Pacific customs enforcing their ideals in the Pacific. There are many references to Wā-Va in Pacific customs which brings harmony and balance to Indigenous Pacific cultures.

This section examines literature that discusses the principle of Wā-Va by the following scholars and writers:

The Space that Relates:

Albert Wendt in *Tatauing the Post-Colonial Body* (1996).

Albert Refiti in *Making Spaces: Polynesian architecture in Aotearoa New Zealand* (2002).

Mike Austin and Anne Milbank in *Archipelego Architecture: Housing for Polynesians in Auckland* (2012).

Amanda Yates in *Oceanic Spaces of Flow* (2012).

Sea of Islands:

Epeli Hau'ofa in *Our Sea of Islands* (1994).

Albert Refiti in *Making Spaces: Polynesian architecture in Aotearoa New Zealand* (2002).

Amanda Yates in *Oceanic Spaces of Flow* (2012).

Settlement Schema:

Mike Austin and Anne E Guernsey Allen in *Polynesia and New Zealand* (1997).

Mike Austin in *Pacific Buildings: The Construction of Tradition* (2002).

Albert Refiti in *Making Spaces: Polynesian architecture in Aotearoa New Zealand* (2002).

¹³¹ Yates, “Oceanic Spaces of Flow,” 68.

The Space that Relates

Albert Wendt explains the Samoan notion of va. He writes:

Important to the Samoan view of reality is the concept of the Va...Va is the space between, the betweenness, not empty space, not space that separates but space that relates, that holds separate entities and things together in the Unity-in-All, the space that is context, giving meaning to things.¹³¹

A well-known Samoan proverb used to describe va is “*ia teu le va*” which means to nurture the relationships.¹³² This ideal is essential to communal societies such as Porirua that value unity, community and relationships that hold society together. Developments made to the harbour must embody the Wā-Va characteristics of Indigenous Pacific cultures and the Porirua community.

Albert Refiti characterises wā through the Indigenous Māori architecture alluding that it begins with “*the art of locating, of identifying where one stands, or tu, in relationship to/before the ancestors and community...of looking after one’s relationships with others and the community with respect*”.¹³³ Māori architecture embodies ancestral ties with rituals that nurture the relationship of one’s position with others and their environment. Ngāti Toa’s demise came as they fought to uphold these values at the hand of early European settlers looking to develop early Porirua. With no success, a determination to rectify contextual relationships is pertinent to Ngāti Toa’s relationship to their ancestors, people and environment.

Refiti continues onto the Samoan va as a spatial ordering concept (fig. 15) “*that exists between things and administers a code of good (ideal) behaviour, an invisible language that enables space and things to be configured in a positive manner*”.¹³⁴ Refiti has also referred to the va as a “*point of extreme transparency where the private individual becomes obliterated*”.¹³⁵ The first addresses the architectural language when implementing the va, which establishes positivity in community behaviour and space. The second addresses transparency that reduces privacy and increases unity of spatial relationships; serving as extrovert spaces for open engagement. Both accounts by Refiti are essential to establishing the vibrancy of *Ngā Kaitiaki e Whitu: The Seven Sentinels*, one that initiates healthy public relationships.

¹³¹ Wendt, “Tatauing the Post-Colonial Body.”

¹³² Wendt.

¹³³ Refiti, “Making Spaces: Polynesian Architecture in Aotearoa New Zealand,” 209.

¹³⁴ Refiti, 209.

¹³⁵ Schnoor and Taliva’a, “Samoan Village Space in Transition,” 5.

Mike Austin and Anne Milbank argue – “*the space between entities is not a void but an armature that locates and binds individual...a ‘negotiated space’...*”¹³⁶ Austin and Milbank’s insight of Wā-Va pinpoints the vacantness of space, meaning the ability to be flexible, to adapt and accommodate daily life — an essential part of supporting shared business spaces for local businesses in Porirua. Furthermore, providing an opportunity for economic growth to flourish in the community.

Amanda Yates argues that the Wā-Va concept is one of motion and event through an “*embodied experience, an idea of spatiality as a profoundly active and shifting condition*”.¹³⁷ Her interpretation is one that recommends participation in real-time to understand the dynamics of space, time and betweenness. A sentimental experience is pertinent to providing a nostalgic feeling that connects people back to Te Awarua-o-Porirua Harbour.

Wā or Va literally translates as space — however, its definition is far more sophisticated. Wā-Va is weaved throughout the Pacific’s cultural fabric, suggesting the notion of space that is neither void nor empty, but one that identifies connecting relationships. The Wā-Va becomes an essential part of *Ngā Kaitiaki e Whitu: The Seven Sentinels*, which Yates alludes to as being a “*fundamental principle of the island mentality – for without space the islands do not exist*”.¹³⁸

>| Fig. 15

Albert L. Refiti
Relationship
Cosmogram

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list for further details.

¹³⁶ Austin and Milbank, “Archipelego Architecture: Housing for Polynesians in Auckland,” 758.

¹³⁷ Yates, “Oceanic Spaces of Flow,” 68.

¹³⁸ Yates, 68.

Sea of Islands

The ocean is a primary part of Pacific traditions and highly valued as a way of living. Epeli Hau'ofa discusses two world views of the Pacific, one being a more appropriate representation:

There is a gulf of difference between viewing the Pacific as 'islands in a far sea' and as 'a sea of islands'. The first emphasises dry surfaces in a vast ocean far from the centres of power. When you focus this way you stress the smallness and remoteness of the islands. The second is a more holistic perspective in which things are seen in the totality of their relationships.¹³⁹

In the same way, there is a world of difference when examining Pacific settlements and context as a group of separate bodies rather than a unification of bodies that correlate in harmony. The first places architecture separate from its context, stressing the disconnection of architecture and environment. The second is a comprehensive understanding in which architecture and setting are present together in a totality of their relationships. Such a relationship is essential to the values of Ngāti Toa that stress harmony between the harbour and urban development; recognising one body in Wā-Va.

Amanda Yates quotes Lemi Ponifasio and Albert Refiti who address the fluid element of the ocean and its dynamic existence:

To be located in and around the Pacific is to confront the undifferentiated abyss that is the ocean. Of all grounds it is the most insubstantial because it has no particular identity, no fixed position(s), and if anything the sea severs the will to identify and tends to multiply and confuse the specificity of location – the oceanscape always pushes you hither and thither and one literally floats on it. Thus Pacific theatre reflects the disparity of fixed identification and tends to deal with the moment, the temporal environment that is filled with (e)motion.¹⁴⁰

Yate's insight into a 'disparity of fixed identity' is evident in Indigenous Māori and Samoan architecture, known to have temporary states. Its influence mirrors the ocean flow in present identity, the ability to decay and rebuild, to be mobile and transition to new positions — again changing its identity.

Yate's experiences 'filled with emotion', is one that Te Awarua-o-Porirua Harbour aspires to liberate, an architecture that has a dynamic relationship with its environment and society. Like the ocean, the tides position Indigenous cultures in societies that find new positions in space — a result of diaspora intermixing cultures in new lands and time.

¹³⁹ Hauofa, "Our Sea of Islands," 7.

¹⁴⁰ Yates, "Oceanic Spaces of Flow," 69.

Albert Refiti discusses the thresholds of the sea and island boundary; he states:

Islands enabled the location of identity and the boundary of cultures, but the sea, with its changing currents facilitating migration and exchange, also meant that boundaries were often dissolved and redrawn. The ocean provided separation and connection, an in-between space where commonality and difference coexist. The ocean is the single most powerful architectural device in the evolution of Polynesian architecture and culture.¹⁴¹

Refiti's contrast of a static island and a mobile sea represents a co-presence of architecture and space. Buildings – like islands – stand firm in their location becoming sentinels that watch over the dynamic movement occurring around them. In contrast, space like the sea, is dynamic, allowing movement between buildings. However, architecture like boats become amphibious structures that change identity based its current state, meaning that both architecture and space can have a dynamic and evolving relationship.

The ocean's movement is one that Ngā Kaitiaki e Whitu: The Seven Sentinels can embrace by resembling opportunities for dynamic architecture and construction of thresholds. Such an opportunity for the harbour can change the dynamics of harbour interactions when taking into consideration the relationship of surrounding space to each sentinel structure. In many cases, the ocean is an essential identity to Ngā Kaitiaki e Whitu: The Seven Sentinels, merely as a vast expanse of water, but as a space of fluid transitions.

¹⁴¹ Refiti, "Making Spaces: Polynesian Architecture in Aotearoa New Zealand," 209.

Settlement Schema

Dispersed Settlements

Indigenous Māori pā (fig. 16) and Samoan village (fig. 17) settlements usually follow a grouping, concentric, water-edge schema. The introduction of the road that cuts through the Māori pā and Samoan village meant that some settlement configurations mirrored the road.¹⁴² No matter their schema, Māori pā and Samoan villages with a central open area, provided the socio-political nucleus for the community.¹⁴³ Both settlements had a sense of openness with spaces that supported communal living.

Openness

Spatially, European architecture emphasises enclosure compared to the Pacific's openness. Mike Austin states:

*The very idea of rooms as closed boxes is a strange idea in Oceania, as is the combining of these together. The separation of the rooms by subdivision as if adjacent spaces are absent, is a peculiar practice from a Pacific point of view and there are mythical and pragmatic prohibitions against walls as partitions in Polynesia. Instead there is the construction of emptiness.*¹⁴⁴

Openness is an essence in Māori and Samoan settlements. With no internal walls of separation, Indigenous Pacific architecture creates a unique relationship with the natural environment. Walls are only used on Māori whare as their colder environment differs from the tropical island of Samoa. However, the walls made of reeds were porous, allowing the space to breathe. Samoan fale use blinds known as pola that “*breathe and are permeable as fences and screens*”.¹⁴⁵ They often enclose the fale temporarily but are typically suspended.

The layout of a Māori pā or Samoan village compares to the spatial arrangement of a European house at a macro scale. Where a European house has rooms divided for living, eating and sleeping in one enclosure, Māori and Samoan villages have these “rooms” dispersed separately throughout the settlement that connects them as a whole. Mike Austin and Anne Milbank reiterate that its openness is because “*on islands closure is provided by the tilt of the horizon and the dome of the sky*”.¹⁴⁶

¹⁴² Oliver, “Polynesia and New Zealand,” 1222.

¹⁴³ Oliver, 1222.

¹⁴⁴ Austin, “Pacific Building: The Construction of Tradition,” 7.

¹⁴⁵ Austin, 7.

¹⁴⁶ Austin and Milbank, “Archipelego Architecture: Housing for Polynesians in Auckland,” 757.

>| Fig. 16

circa 1875-1910
Māori Pā Settlement

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>| Fig. 17

Samoaan Nu'u
Settlement

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Malae and Marae

Albert Refiti describes the similarities between the Māori marae (fig. 18) and Samoan malae (fig. 19) saying:

Located in front of the meeting house, the marae is a space open to the sky but closed on its boundaries and is thought to be the courtyard of the war god Tumatauenga. The marae has a similar function to the malae as the meeting place for the community, where one stands in a place among the community. It is now generally used to receive visitors. A complete marae contains a meeting house, dining hall, food stores and utility sheds. The wharenui or meeting house is dedicated to the ancestors, who are often represented by carvings or paintings on the columns inside the house. The orientation of the marae and its meeting house is similar to that of the Samoan malae, tending to face the openness of the landscape - usually the sea or river - with its back turned to the hills and mountains. The mountains provided a landscape of closure, while the horizon of the sea is a landscape of openness.¹⁴⁷

The core feature of a marae or malae is the open ceremonial ground, the heart of the settlement.¹⁴⁸ It is neither a “courtyard or square carved out of the solid enclosure, as it is often interpreted, rather it is the construction of openness”.¹⁴⁹ This space best represents the spatial makeup of Wā-Va. This social and ritual space open to the sky is typically perimeter bounded by the meeting houses of chiefs.

The schema of Pacific settlements is one that is held together by Wā-Va — an essential concept in the dispersed and openness of Māori and Samoan architecture. The design for harbour settlement seeks relationship-based ideas that are sensitive to cultural and communal living. The harbour settlement influenced by pā and village settlement also aims to consider relationships between landscapes, location and the ocean.

¹⁴⁷ Refiti, “Making Spaces: Polynesian Architecture in Aotearoa New Zealand,” 211.

¹⁴⁸ Refiti, 209.

¹⁴⁹ Austin, “Pacific Building: The Construction of Tradition,” 7.

>| Fig. 18

Māori Marae

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>| Fig. 19

Samoa Malae

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<| Fig. 20
circa 1910
Samoan Va'a tele or
'alia

A Sacred Vessel

Boats are sacred architecture to Māori known as waka and Samoan as va'a. One account recalls ancient American boat artisans navigating the Pacific Oceans becoming who we now know as Polynesians. Another account describes the migration from South East Asia to the Pacific Ocean, becoming the Polynesian people. Beyond belief, both accounts agree on the reputation of vessels carrying them across the Pacific Ocean.

Today, these vessels are sacred in Indigenous Pacific cultures. The early Polynesians would have spent much time on these boats, making it their home on the ocean. Many origins of ancient Pacific civilisations show appreciation of the boat more than the house. While they eventually warmed up to the house, they first built shelters for their boats (fig. 20).

This section examines the literature of the Pacific's sacred vessel according to the following scholars and writers:

Symbols in Architecture:

Ronald Lewcock and Gerard Brans in *The Boat as an Architectural Symbol* (1975)

Floating Architecture:

Mike Austin in *Watery Ground: Island Architecture* (1997)

Symbols in Architecture

Ronald Lewcock and Gerard Brans mention the vessel's influence on Pacific architecture:

*The boat as a shelter implies a very tight social organisation, as on a ship. This is clearly exemplified by the use of the boat as a symbol. Here there is represented a distinct way of thinking and conceptualising about social organisation and the pattern of living, from birth to death. The symbol is not merely a visual analogy, but is integral with the very concepts of the village and the dwelling.*¹⁵⁰

The boat as a symbol is evident throughout Indigenous Pacific architecture not only appearance but as a social structure (fig. 21). Although symbols of the boat may not be understood, the Indigenous people of the Pacific used boat symbolism to express these architectural forms.

It is crucial to the programme of *Ngā Kaitiaki e Whitu: The Seven Sentinels* that the intervention is not a repetition of Indigenous décor imprinted as a façade with no apparent intention of Indigenous conception. Instead, the use of Indigenous concepts and narratives can alleviate space from cultural appropriation and express the true essence of Indigenous spatiality.

Architectural symbolism is vital in a psychological sense. As physical shelter protects from the elements, symbols of this protection can offer a psychological shelter. *Ngā Kaitiaki e Whitu: The Seven Sentinels* hopes to provide a psychological refuge to the community, by preserving its Indigenous Māori identity that acknowledges Porirua's past, present and future.

There is a very intimate connection between architecture and symbol. *Ngā Kaitiaki e Whitu: The Seven Sentinels* seeks to connect relationships described by Lewcock and Brans: "...between sea and land, man and community, the individual and his ancestors, death and the perpetuation of life and so on..."¹⁵¹. Thus, giving spiritual symbols to the sentinel structures, individually and collectively as a settlement.

¹⁵⁰ Brans and Lewcock, "The Boat as an Architectural Symbol," 116.

¹⁵¹ Brans and Lewcock, 116.

Floating Architecture

In the Pacific, the influence of boats of the water-based culture influenced the land-based culture. The rounded hull of vessels intersects the fluid ground, whereas on land houses as Mike Austin suggests is influenced by the “*upside down canoe section*”¹⁵², and is inadvertently suspended as a roof over solid ground. The houses also took on nautical construction methods of “*stays and guys, lashing and binding...in these buildings rather than the mud and mortar of the earth*”.¹⁵³ It was not unusual to see nautical methods translated to building methods.

In the Western tradition, there is a tendency only to see the ground as land, a stable plane to erect buildings. However, in the Pacific, the relationship to the sea is inverted. When one examines the higher ratio of ocean compared to earth, it is evident that there is a fluid ground of the sea which Pacific build on. Austin discusses the architectural notion of the floating, which “*does not seem to be taking very seriously because actual floating architecture has disappeared*”.¹⁵⁴ Although there is still some floating architecture in the smaller islands like Papua New Guinea, there has been an overall decrease in floating architecture in the Pacific.

Ngā Kaitiaki e Whitu: The Seven Sentinels seeks an amphibious component, integrating the ocean scape and re-engaging Indigenous practices centred around the sea.

> | Fig. 21

Va’a tele of Ulua’i
Tui-Manu’a and Ulua’i
Tui-Atua

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¹⁵² Austin, “Watery Ground: Island Architecture,” 9.

¹⁵³ Austin, 9.

¹⁵⁴ Austin, 11.

Pacific Diaspora

Pacific mobility is part of what some argue is the Pacific urge to seek beyond the reef. The colonisation of Aotearoa has attracted the smaller Pacific islands to their shores in hopes for better lifestyle opportunities.

Since the Pacific diaspora, many have found themselves in an in-between space where they live their cultural values in a different country. Those born of a multi-cultural descent also struggle to find their place between the two cultures they represent. As Aotearoa has evolved into an interracial country, cultural diversity and multiculturalism have its place to express an in-between space in society.

This section examines literature that discusses the diasporic nature of the Pacific, through the following scholar and writer:

Living Beyond our Homelands:

Albert Refiti in *Mavae and Tofiga* (2015)

Cultural Dysphoria:

Marata Tamaira in *The Space Between: Negotiating Culture, Place, and Identity in the Pacific* (2009)

Living Beyond our Homelands

The search for cultural identity has become an integral part of contemporary architecture in the last two decades. Albert Refiti discusses the attempts of keeping Indigenous identities that give a sense of belonging to those living in the diaspora.

Thus attempting to offer alternatives to the 'geography of power/knowledge' dominated by Western thought, Indigenous populations (first nations' subjects and migrants) in New Zealand and the wider Pacific region have created concepts that reflect their own desires for a common space of belonging, based on mutual respect. They highlight the desire to create a collective 'space for relations' that directly challenges the dominant Western modes of governmentality, which produces hegemonic spaces.¹⁵⁵

Ngā Kaitiaki e Whitu: The Seven Sentinels seeks to embody the 'space of relations', which Refiti discusses; representing cultural and community identities. It expresses a sense of space, place and belonging to those living outside of their homelands. Refiti explains that such concepts can be challenging to replicate in new lands, he says:

In the diaspora, cultural traditions can no longer be activated from their proper locations and places. They are now being reinvented and reconstituted on new 'grounds' and therefore the notion of a subject is also evolving in new ways. It is in this context that Albert Wendt's rendition of the vā – in his 1996 essay 'Tatauing the Postcolonial Body' – became the foundational text for reimagining the vā in the diaspora.¹⁵⁶

In creating an Indigenous identity, *Ngā Kaitiaki e Whitu: The Seven Sentinels* pursues an opportunity to imagine, to dream to push the boundary of Indigenous narratives in space and form. Refiti mentions a reinvention and reconstitution of cultural representation in new grounds which this project will reflect. Without recreating the Māori wharenui or Samoan fale tele, *Ngā Kaitiaki e Whitu: The Seven Sentinels* reimagines these spaces to express the same essence. It is important to note that Indigenous Pacific cultures such as Māori and Samoan sought careful progression of their people. Thus, the development of new forms in architecture is inevitably part of that course.

¹⁵⁵ Refiti, "Mavae and Tofiga," 14.

¹⁵⁶ Refiti, 16.

Cultural Dysphoria

In her contemplation of place, Marata Tamaira describes the difficulty of bicultural identities, she says,

During the early 1970s when I was growing up, the ethnic divide between Māori and Pākehā was still clearly evident. Prejudice existed on both sides and, more often than not, the offspring of Māori-Pākehā unions bore the brunt of those strained relations. The pejorative term halfcaste...used to describe those of mixed descent. The label implied a certain inadequacy or deficit as far as our identities was concerned, and connoted a cultural limbo. The stigma of being labeled half-caste muddled peoples' ability to self-identify and precipitated for many, including myself, a sense of cultural dysphoria.¹⁵⁷

In contemplating a multi-cultural settlement, cultural dysphoria may arise for the traditionalist who insists that cultural architecture needs to resist any variation from the traditional. Although Ngā Kaitiaki e Whitu: The Seven Sentinels respects the traditional, it aims to be inclusive of cultures rather than override it. Pacific cultures have evolved in new societies, and are respectful of other cultures without the need to overpower and colonise them.

¹⁵⁷ Tamaira, *The Space Between*, 1.

Comprehending the Environment

An underrated gem of Pacific people is their ability to build according to the environment they inhabited by reading climate conditions. After all, they made multiple navigations across the largest ocean in the world using sophisticated techniques and learning construction techniques that suited their lifestyle.

This section examines literature that discusses the ability early Polynesians had to comprehend the environment, through the following scholars and writers:

Reading the Patterns:

Mike Austin in *Other Architecture: Consumption and production of the Indigenous architecture in the Pacific Islands* (2011)

Mike Austin in *Pacific Buildings: The Construction of Tradition* (2002)

Mike Austin and Anne Milbank in *Archipelego Architecture: Housing for Polynesians in Auckland* (2012).

Shelters that Decay:

Mike Austin in *Other Architecture: Consumption and production of the Indigenous architecture in the Pacific Islands* (2011)

Mike Austin in *Pacific Buildings: The Construction of Tradition* (2002)

Reading the Patterns

A tradition or way of doing things in the Pacific has a lot to do with what Mike Austin describes as “a range of environmental characteristics that shape the culture and architecture”.¹⁵⁸ These environmental characteristics have affected the configuration of settlements (fig. 22 and fig. 23) which “...tend to be organised around a centre to sea polarity, with respective directions of landwards [inland] as against seawards [seaside]”.¹⁵⁹

The colonial axes and grids are foreign to the Pacific ways of organising space. Austin exasperates the organisation of colonial space saying, “The crudeness of the straight line of the street and of building is apparent as more sophisticated organizations are made possible by the computer”.¹⁶⁰ His analysis describes the colonial space as one that is more concerned with placing people in a controlled system. In contrast, the Pacific has a more natural organisation of space that considers the relationship between the environment and the community.

Mike Austin and Anne Milbank refer to island aesthetics as a consequence of their environment, which is very distinct from a land-based aesthetic saying,

*A particular way of life, and an island aesthetic follows from this that is very different from a land-based aesthetic. Life is always on the edge on islands where edges are continuous. Common to all islands is the surrounding sea and boats are more necessary than houses for survival. The sea, which separates and yet connects islands, has been (until the advent of air travel) the means by which everything arrives and departs.*¹⁶¹

It is valuable to understand the threshold of edges, in particular, the threshold of land and sea. Māori pā and Samoan villages that exist on the edges experience a regular portal which they pass through daily that combines the fluidity of the sea and the solidity of the land. These boundaries may allow the overflow of one side to the other, interweaving two separately distinct spaces. Austin and Milbank describe how these thresholds vacate a village settlement:

*Territorial division on Pacific islands is divided into slices of land in pie like fashion radiating out from the centre, and even extending in some cases into the lagoon and out to the reef. This means that each group has access to a range of ecological conditions. While islands might be thought to be homogenous they are always divided into sides. Opposing sides of islands can be different in environment, culture and even language.*¹⁶²

¹⁵⁸ Austin, “Other Architecture: Consumption and Production of the Indigenous Architecture in the Pacific Islands,” 7.

¹⁵⁹ Austin, 7.

¹⁶⁰ Austin, “Pacific Building: The Construction of Tradition,” 7.

¹⁶¹ Austin and Milbank, “Archipelego Architecture: Housing for Polynesians in Auckland,” 757.

¹⁶² Austin and Milbank, 757.

Careful consideration of the environment is significant to Indigenous Pacific people. In persevering the environment of Te Awarua-o-Porirua harbour, it is essential that Ngā Kaitiaki e Whitu: The Seven Sentinels strongly considers Ngāti Toa's Indigenous values to improve harbour health.

>| Fig. 22

Model of a Māori
Village and Pā

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A. Kāinga or village with houses of various kinds	F. Stage for drying sharks and eels	L. Ruas or store pits for kūmara
B. Earth works of an old fortified pā - with a canoe memorial to a chief	G. Mōrere or swing overhanging a pool	M. Storehouses for food
C. Graveyard with tombs	H. Entrance to and outworks of fighting pā\	N. Tihi or citadel
D. Canoe shed	K. Stage overhanging approach to upper part of pā	O. Pahū or alarm gong
E. Hut for storing fishing nets		P. Fighting stage
		R. Cultivations

>| Fig. 23

Model of a Samoan
Village Settlement

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Shelters that Decay

Rebuilding as a method of preservation is a well-established practice for the Pacific people who accept decay as an architectural process. Mike Austin explains this by saying,

*Preservation is a way of keeping tradition alive throughout generations but also a way to connect generations throughout time. Learning ideals and re-learning them means we are emerged in them. Such is building and re-building architecture, there is a way of preservation present during this preservation phase.*¹⁶³

The rebuilding of Samoan fale involves a community effort (fig. 24). In doing so, opportunities for the community to rally together to rebuild is an event of strengthening relationships (fig. 25). New tufuga fai fale (builders) have the chance to showcase their skills in an apprentice-like work under a matai-tufuga (master builder) passing on traditions to younger generations.

Austin recognises that this difference in approach by Pacific Island cultures and others is in the conceptions of time, life and death, writing:

*Usually in the Pacific, buildings are allowed to die so that there are remnants of dead buildings everywhere, which is often characterised by observers as a 'lack of maintenance'....Death is incorporated in the architecture.*¹⁶⁴

Ngā Kaitiaki e Whitu: The Seven Sentinels aims to approach this concept of decay in an architectural and metaphoric sense. It is important to note that Indigenous peoples value ancestral ties, which they see as living on in their architecture when they pass on; a form of death rebuilt in architecture. In terms of re-learning construction methods and techniques, *Ngā Kaitiaki e Whitu: The Seven Sentinels* will mostly reveal its construction methods like the traditional Pacific architecture, which is appreciated by the avid learner. Vegetation draped over the sentinel structures allow the architecture to morph and decay with each season.

¹⁶³ Austin, "Other Architecture: Consumption and Production of the Indigenous Architecture in the Pacific Islands," 3.

¹⁶⁴ Austin, "Pacific Building: The Construction of Tradition," 7.

>| Fig. 24

Samoan men building
a Samoan fale

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>| Fig. 25

Samoan women
weaving thatching
and pola (screens)

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4.2 Contemporary Repositioning

Contemporary Repositioning reviews the current approaches to Indigenous narratives in New Zealand contemporary architecture. This section contemplates the architectural process and outcomes that are critical to *Ngā Kaitiaki e Whitu: The Seven Sentinels*.

The project review will comprise of three chosen architectural projects based on context, challenges, Indigenous narrative translations and community engagement relevant to the design of *Ngā Kaitiaki e Whitu: The Seven Sentinels*. The projects are:

Tūranga (Christchurch Central Library) located in Christchurch offers a new architectural movement in Christchurch. It expresses an architectural response to the earthquake aftermath, that identifies with local Māori narratives.

Tē Ara a Tāwhaki based in Otaki is a facility of *Tē Wānanga o Raukawa* that rises from the ashes of a previously burnt library. Its new form that capitalises on learning Indigenous Māori knowledge through its architecture is part of the design of the new learning hub.

Samoan Consulate Complex is a renowned work of architecture in the heart of Māngere, expressing a new fale inspired form. Its form embodies Indigenous Samoan values by incorporating a Samoan narrative that unifies New Zealand's largest Samoan population in Māngere.

The project review seeks to unpack the successes and challenges of integrating Indigenous narratives in a contemporary setting, the public response and the impacts on public identity.

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Tūranga

Year of completion: 2018

Location: 60 Cathedral Square, Christchurch

Designers: Architectus and Schmidt Hammer Lassen Architects

Iwi: Ngāi Tūāhuriri

This project has been selected based on its ability to incorporate Indigenous Māori narratives into architecture. Tūranga builds around issues which are crucial to the design of *Ngā Kaitiaki e Whitu: The Seven Sentinels*. Looking towards the third movement in a post-quake Christchurch, an opportunity arises for sensitive rebuilding in a city not known for Indigenous Māori responses to architecture.

Once considered a “culturally dead zone”,¹⁶⁵ Cathedral Square has a new architectural attraction for local residents in Christchurch’s new central library – Tūranga (fig. 26). Christchurch has been the site of significant architectural movements: the Gothic Revival of the 19th century and post-war modernism. Sadly, with the demolition of many buildings due to the earthquakes, some await to see a third architectural movement for the city — one that represents something more relevant to the Indigenous Māori culture.

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<| Fig. 26

The aerial view looking south illustrates Tūranga and its shifting context, with Christchurch Cathedral, Cathedral Square and the Convention Centre.

¹⁶⁵ Khouri, “The Third Place,” para. 5.

According to Barnaby Bennett and Jessica Halliday, Architectus and Schmidt Hammer Lassen Architects boast a “culturally responsive and place-based architecture” that is “the first truly architecturally and socially significant civic building” in Christchurch.¹⁶⁶ Tūranga’s cultural response benefits from a design process that was “meaningfully participatory and involved serious, sustained engagement with...local iwi designers”.¹⁶⁷ Architects selected by interview rather than a tender or design competition ensured that the relationships with Indigenous stewards could be purposeful. Integration of Indigenous narratives of Ngāi Tūāhuriri (subtribe of Ngāi Tahu) the local hapū and mana whenua of the area coupled with the Matapopore Trust ensured the realisation of hapū’s interests.¹⁶⁸

Unlike other buildings that superficially use Indigenous Māori aesthetic, Tūranga’s engagement with Matapopore at the commencement of the design process meant that the values and narratives of mana whenua accurately informed the design of Tūranga. The Indigenous narratives began with the Peninsula Banks and Mount Gray navigation reference points which Architect Carsten Auer of Architectus elaborates,

If you overlay the greater geography with the plan for Tūranga, you will see that some of the terraces and subtle shifts in the façade are orienting towards those points. In some instances, those are implied and, in other areas, they are very literal because you can actually see Mount Grey or Aoraki.¹⁶⁹ (fig. 27)

>| Fig. 27

Cultural points of reference.

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¹⁶⁶ Bennett and Halliday, “Outside Opinion,” 38.

¹⁶⁷ Bennett and Halliday, 38.

¹⁶⁸ Bennett and Halliday, 41.

¹⁶⁹ Khouri, para. 10.

The golden screen (fig. 28) wrapping the building references both “*the folded shadows of the Port Hills*” and blades of harakeke, “*without the cardinal sin of being treated literally*”.¹⁷⁰ Artwork painted by artist Morgan Mathews-Hale extends from the ground floor through the elevator surroundings to the top-level representing “*the journey of Tāwhaki, who, according to Māori legend, ascended through the heavens to obtain knowledge*”.¹⁷¹ This is a fitting metaphor for the lifts.

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<| Fig. 28

Ostensibly, the building is a glass box. From outside, the building is striking with its folded golden aluminum façade, which references the colours of the Port Hills.

Bennett and Halliday ask the question, “Is this a great work of architecture?” The critique of Tūranga’s design in light of the aims of this thesis are in three responses:

The first is the innate ability to introduce a new movement to what may seem a foreign concept to Christchurch architecture. The new Māori inspired movement may take some public backlash; however, Christchurch’s Tūranga appears to have created a public space that is “already well loved”¹⁷² by the public, according to Bennett and Halliday. *Ngā Kaitiaki e Whitu: The Seven Sentinels* will take on the challenge of a new movement towards contemporary Indigenous spaces. Although Indigenous Pacific people and traditional architecture are not foreign to Porirua, the development of these ideas that repositions Indigenous designs are. Eventually, as in the past, the community learns to grow and understand architectural decisions, and in some cases, become the iconic symbol of the community. Architecture, as understood by Architects and the public can be vastly different; however, the design process which engages both community and Architect closes this gap, providing something that both parties can proudly identify.

¹⁷⁰ Bennett and Halliday, “Outside Opinion,” 41.

¹⁷¹ Khouri, “The Third Place,” para. 19.

¹⁷² Bennett and Halliday, 43.

Secondly, the engagement process inclusive of Indigenous stewards, community, local authorities and Architects initiate a relationship that cherishes the Wā-Va in the city. These relationships which have long been absent in the past have found its place in Christchurch's Civic Square. Such relationships are crucial to *Ngā Kaitiaki e Whitu: The Seven Sentinels*, where the voice of the Indigenous cultures, community, and Architect are evident through planning and design.

The third is the design decisions reflecting Indigenous Māori narratives. The translation of Māori narratives through its overall shape keeps a relatively uniform building which some may read as a customised rectangular box with a few different elements to add variety. However, the application of Indigenous narratives, in particular, the aluminium folded screens that change tone dependant on the skylights are robust features that express the narrative of harakeke and context in a non-literal way.

The expression of Indigenous narratives may be challenging to read by some; however, much of that relies on the public's Indigenous Māori knowledge. In Tūranga's case, the architectural features seem to be invasive, refreshing rather than repetitive and literal. After all, it is part of Christchurch's third movement that seeks to diversify the Cathedral Square. The use of Indigenous Māori narratives and box-like form reflecting the surrounding buildings seem to merge heritage and culture by creating an identity of its own. *Ngā Kaitiaki e Whitu: The Seven Sentinels* also aims to design a multi-cultural identity of its own that is as invasive as it is familiar.

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Te Ara a Tāwhaki

Year of completion: 2018

Location: 144 Tasman Road, Otaki

Designers: Tennent Brown Architects

Iwi: Ngāti Toa, Te Ātiawa and Ngāti Raukawa

This project is selected based on its approach to teaching Indigenous Māori narratives using its architecture. In contrast to Christchurch, Otaki's populous Indigenous Māori residents make traditional Māori architecture familiar in this community. Its Māori identity is a combination of three different iwi — Ngāti Toa, Te Ātiawa and Ngāti Raukawa.

Previously destroyed in a fire, Guy Marriage describes Te Wānanga o Raukawa's rise from the ashes erecting a new learning facility inspired by the story of *Te Ara a Tāwhaki* (*The Pathway of Tāwhaki*). Tennent Brown Architects and the wānanga had to "fulfil many roles to help the three different iwi grow and prosper",¹⁷³ not as easy a feat Marriage related. With each iwi having its own marae facilities, there was no need for a new marae, but a new focus towards a commonplace of learning. New forms took root and blossomed into *Ngā Kete Mātauranga e Toru* (*the three baskets of learning*).¹⁷⁴

Marriage describes the application of Indigenous Māori narratives in the three forms, writing:

*A tiered teaching space, Te Kete Uruuru Rangi, takes pride of place in the centre, wrapped on each side with another structure – on one side, Te Kete Uruuru Matua (library: the basket of knowledge) and, on the other, Te Kete Uruuru Tau (the student hub). Tennent Brown describes the sides of the building as 'saddlebags', referring both to their slightly sandwiched shape, as well as (perhaps) to their contents: storage for learning along the road ahead.*¹⁷⁵ (fig. 29)

The overall form tells the stories of each iwi involved, implementing Te Wānanga o Raukawa's strategy of learning. The design incorporates a range of Indigenous Māori narratives that overlap meanings. The overarching narrative of *Te Ara a Tāwhaki* wraps itself using crisscrossing timbers around *Ngā Kete Mātauranga e Toru* (fig. 30). The facility displays contemporary forms with undertones of Māori stories that unfold as one learns and experiences its architecture.

¹⁷³ Marriage, "Poipoiā Te Kakano Kia Puawai," 57.

¹⁷⁴ Marriage, 57.

¹⁷⁵ Marriage, 57.

>| Fig. 29

Northern elevation
(top) and eastern
elevation (bottom).
Connection over the
middle like saddle
bags.

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>| Fig. 30

The student hub
opens out to a sunny
courtyard space.
Crisscrossing timbers
wrap around Ngā Kete
Mātauranga e Toru

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Marriage describes the interior of the building — a traditional carved frontage encased inside a glass frontage (fig. 31) — in what some may consider controversial to the traditional, writing:

At first glance, you may think of the building as a whare whakairo (carved meeting house) suspended inside a glass-fronted box. Criss-crossing timber crosses and infilled colours pattern the outside, a tukutuku panel writ large on the walls. At night, the carved frontage of the tekoteko, maihi and raparapa shine out, softly illuminated behind the mahau at the glazed frontage. By day, under the bright sun, the carvings are almost invisible behind the smoky glass frontage. This is not a marae, not a wharenui; it is a place of learning unlike any other.¹⁷⁶

One argument against the building is that the encompassing whare whakairo inside the glass-front structure can construe disembodiment of cultural identity by mimicking a display of artefacts rather than an Indigenous Māori presence. The carvings (fig. 32) around the walls of a tiered lecture room which has far more space than in a typical wharenui create a disconnection arising from the detached carvings that do not touch the floor or the ceiling. The Māori carvings appear to be like floating wall panels instead of the more conventional whare whakairo where these representations of ancestors stand firm on the ground and reach the ceiling above.

However, as Marriage stated, *“this is not a marae, not a wharenui; it is a place of learning unlike any other”¹⁷⁷* It is a response of preservation by displaying the sacred carvings of the whare whakairo in a glass casing for people to learn from continually. The interior carvings take the form of a wharenui, with reassuring parallels to typical marae designs. The building keeps a balance of the traditional and the evolving Māori identity that provides cultural learning through exploration.

Critical to Ngā Kaitiaki e Whitu: The Seven Sentinels is the ability for the architecture embody a spiritual connection with the user. A synchronisation of the senses that pierces the soul with an appreciation of Indigenous cultures.

¹⁷⁶ Marriage, 57.

¹⁷⁷ Marriage, 57.

>| Fig. 31

The outline of a
wharehau sits behind
the building's glazed
frontage.

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>| Fig. 32

The multi-purpose
lecture space has
carved family
portraits hanging on
the lecture theatre
walls.

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Samoan Consulate

Year of completion: 2015

Location: 141r Bader Drive, Māngere

Designers: Walker Group Architects and Stephenson & Turner

Client: Government of Samoa

This project is selected based on its ability to incorporate Indigenous Samoan narratives in contemporary architecture. Since its relocation from Karangahape Road where it survived since the 1970s, the Samoan Government decided to shift its consulate to Māngere. Its belated acknowledgement of Samoans residing in the southern suburbs meant the relocation also provided an opportunity with a formal declaration of the Samoan identity in Auckland.

The Government of Samoa required a new office and community-based fale exploring the cultural needs of a growing Samoan community in Māngere. The buildings form an integral part of future Māngere Town Centre consisting of two buildings. A three-level consular office and a traditional fale building — the largest one in the world. It boasts a malae area — a traditional formal meeting area between two buildings. Like Māngere, Porirua pursues to nurture the growing Samoan identity in the community. The Samoan language is the second most spoken language after English, with Samoan people making the most extensive Indigenous Pacific identity in Porirua after Māori.

There is a provoking juxtaposition in observing these two buildings in parallel to each other (fig. 33). One provides a sense of the traditional fale principles (or a modern version of it) and the other a contemporary translation of the fale.

The fale was a groundbreaking event for construction company Haydn & Rollett, combining elements of traditional Samoan craftsmanship with modern engineering and construction methods while following New Zealand building and seismic regulations (fig. 34).¹⁷⁸ As the building approached completion, a group of Samoan craftsmen set the sennit lashings around the columns and beams.¹⁷⁹

¹⁷⁸ Haydn & Rollett, *Samoan Consulate*, para. 3.

¹⁷⁹ Haydn & Rollett, para. 6.

>| Fig. 33

Samoan Consulate
Fale and Office
Complex

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>| Fig. 34

Samoan Consulate
fale interior

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In contrast, the design of the offices is relatively straightforward compared to that of the fale. It includes traditional and contemporary features like glazed curtain doors, GRC panels and exposed timberwork (fig. 35).¹⁸⁰ Where it differed from the fale was the aesthetic details the Architects incorporated from the Samoan tapa as geometric penetrations through the concrete panels (fig. 36).¹⁸¹ The consular office followed motifs inspired by tapa cloth and the Samoan tatau (tattoo).¹⁸² These became the engine for choosing fabrics, finishes, and patterns along with other building façade components (fig. 37). To tie the two designs together, they both wear the same wooden cladding on parts of its exterior.¹⁸³

The consulate offices use subtle expressions of Samoan aesthetics on the façades without being too dominant. It is a complimenting piece next to the fale, providing undertones of Samoan heritage and similarly imagines possibilities of Indigenous narratives in contemporary architecture.

The comparison of the consulate fale and office is appreciated when designing architecture in the proximity of marae or heritage buildings in Porirua. The subtle expressions give a sense of paying homage to heritage and tradition. However, heritage is not always recognised, especially when designing something architecturally invasive to the site. The ability to link traditional architecture of two different cultures, such as Māori and Samoan, can take a subtle approach that neither imposes its identity, but compliments their relationship.

180 Haydn & Rollett, para. 7.

181 Litecrete, “Government of Samoa, Māngere,” para. 4.

182 Litecrete, para. 4.

183 Haydn & Rollett, Samoan Consulate, para. 7.

<| Fig. 35

Office complex
interior

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>| Fig. 36

Triangular concrete
panel penetrations

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>| Fig. 37

Samoan tattoo motifs
in concrete panels

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4.3 Reflections

In rediscovering Indigenous principles and their applications to contemporary New Zealand architecture, it has provided an opportunity to evaluate theoretical concepts and project applications that are relevant to the design of *Ngā Kaitiaki e Whitu: The Seven Sentinels*.

Indigenous Ideology

By uncovering Indigenous ideologies, in particular Wā-Va, relationship-centric concepts have become central to the design of *Ngā Kaitiaki e Whitu: The Seven Sentinels*. Its contribution is valuable to Indigenous identity, community vibrancy, and preservation of the harbour ecology.

Wā-Va is a concept that reoccurs in the literature review, highlighting the potential to heal broken relationships in Porirua. For a community that seeks to rectify its cultural and contextual relationship is pertinent to Ngāti Toa's future.

Wā-Va mirrors aspects of the E.C.C.O programme, which makes it easy to integrate an Indigenous Pacific value with the yearnings of the Porirua community. Wā-Va is an undeniable concept that will set the foundation for the design. *Ngā Kaitiaki e Whitu: The Seven Sentinels* will look to explore the following aspects of Wā-Va:

Space that relates

The relationship between space and form are critical to expressing the physical and the spiritual sense of Indigenous architecture. Further experiment will seek to understand schema relationships to provide a narrative for space that does not necessarily have to be cohesive but have a form of relationship that expresses the Wā-Va.

Ocean fluidity

The fluidity of the ocean provides a dynamic narrative to the design promoting thresholds and boundaries that shift. Further exploration of the ocean as an in-between space will provide an understanding of the 'construction of space'.

Laws of nature

The natural laws of the environment take a commanding narrative that intrudes and shapes forms. A further experiment into contextual relationships of force and reaction will offer different narratives that intrude the natural-made with the man-made and vice versa.

Contemporary Repositioning

Reviewing the application of Indigenous narratives in contemporary New Zealand architecture reveals successful architectural processes relevant to the design of *Ngā Kaitiaki e Whitu: The Seven Sentinels*. Narrative experiments in the next chapter will further explore the translation and repositioning of Indigenous narratives and their design possibilities.

Tūranga

Sensitive responses after tragic and disruptive events are no easy feat where the erection of new architecture seems to stand as an icon for recovery and new beginnings. Colonisation has hindered the Indigenous development of Porirua but now has the opportunity to look towards a new architectural movement for the city. In Tūranga as with the other projects, the use of symbolism to express Indigenous values makes it less literal, keeping clear of flippancy or cultural appropriation.

Using the symbolism creates more opportunities to overlap narratives. This project will further explore the combination of Indigenous narratives and through symbolism that can overlap both Māori and Samoan narratives.

Te Ara a Tāwhaki

Creating an appropriate atmosphere requires the consideration of human senses in the design processes. Atmospheric qualities can generate an experience of Indigenous values and narratives. *Ngā Kaitiaki e Whitu: The Seven Sentinels* will look to explore Indigenous narratives by creating an atmosphere that appeals to the human senses, an essential method to comprehend Indigenous knowledge and understanding.

Samoan Consulate

“Same difference” is an expression given to two things that are both the same as they are different. The Samoan Consulate complex treasures the juxtaposition of traditional and contemporary styles. This project will explore variations of Indigenous aesthetics and expression by juxtaposing both the traditional and contemporary style.

The background of the entire page is a black and white marbled paper pattern. It features intricate, swirling, and veined designs in shades of gray, white, and black, creating a complex, organic texture.

>| Chapter 5.0

Repositioning

Delighted by his success, he called together all the birds to watch him fly.

5.0

Repositioning

To Feast and Digest

This chapter comprises of two Wā-Va narrative experiments through drawing, making and digital manipulation. It intends to provide a grounds of exploration into local Porirua narratives and Indigenous Māori and Samoan ideologies to produce a narrative that inspires design ideas for *Ngā Kaitiaki e Whitu: The Seven Sentinels*. The iterations gather momentum as new relationships start to form repositioning Indigenous architectural ideas. The art of narrating takes a turn through different mediums, adding depth, texture and nuance of each expression.

These experiments will explore local narratives and undergo two narrative experiments:

5.1 Local Legends explores the Indigenous tales of Porirua. Porirua is rich with Indigenous narratives not outwardly expressed through architecture. *Ngā Kaitiaki e Whitu: The Seven Sentinels* has the potential to reveal a monumental connection to origins and cultural identity through architectural design.

5.2 Narrating Wā-Va 1.0 will investigate the notion of Wā-Va through iterations of spatial relationships, ocean fluidity, and laws of nature. These iterations will articulate spatial composition and form — each one providing an expression of Indigenous identity that repositions architectural ideas.

5.3 Narrating Wā-Va 2.0 is another layer of the experiment in response to reflections made in *Narrating Wā-Va 1.0*. Further investigations of Wā-Va through iterations of spatial relationships, ocean fluidity, laws of nature will articulate spatial composition and formal design through different mediums and matured ideas.

5.1 Local Legends

Local Legends explores the Indigenous tales of Porirua. Porirua is rich with Indigenous narratives not outwardly expressed through its architecture. Te Awarua-o-Porirua harbour has the potential to reveal a monumental connection to origins preserving Indigenous identity through Ngā Kaitiaki e Whitu: The Seven Sentinels.

By using these narratives to explore design, architecture becomes a voice that tells the stories of significant Indigenous stories not inherently heard in society today. Architecture that tells a story of time and place becomes a connection to the past, present and future generations. As Indigenous cultures evolve through time, their narratives evolve with them. Modern societies have become more diverse, and the charge to continue Indigenous heritage is left to those in the community.

Amongst the many stories of Porirua and its inhabitants, the two stories told in this section will add a layer of local expression moulding the experiment towards a familiar context. These are *Awarua, the taniwha of Porirua* and *Matariki and her Six Daughters*.

Awarua, the taniwha of Porirua

In Māori tradition, the Porirua Harbour is home to the taniwha Awarua, now known as Te Awarua-o-Porirua. The legend tells of how Awarua's ambition shaped the harbour:

Many years ago, long before any human footprints appeared on the mudflats, Awarua decided that he would like to fly as his friends the birds did.

In order to save himself from ridicule, Awarua practised his flying at night.

Beginning at the end of the harbour he would race along until he reach the other end. After much practising Awarua felt his body lifting off the water.

Delighted by his success, he called together all the birds to watch him fly. As he sped along the water, he was cheered by the birds.

He got so carried away with his flight he forgot about the hill at the north end of the harbour, and he crashed into it in an ungainly heap. Undaunted, he tried again, this time facing the open sea.

His great body rose into the air but not high enough. Again he crashed, and the impact removed the top of mana Island. Soon after this embarrassing accident, he fulfilled his ambition and gained flight without further mishap.¹

¹ Grace, "Awarua, the Taniwha of Porirua."

Matariki and her Six Daughters

Ngāti Toa Rangatira tells the origins of Matariki and her six daughters. During Matariki (Māori New Year), these stars represent a renowned ancient tale of Matariki's visits to Papatūānuku with her daughters and their relationships in harmony with one another:

During the coldest time each year, the Matariki star cluster comes rising up for the first time in the eastern sky. This always happens in the early morning just before the sun gets out of bed. We keep a lookout for this happening because it marks the beginning of an important time of the year. The Māori New Year.

This is the time for coming together with our whānau (family) to think about the past year, plan for the future, to take action. In doing this, we come to understand how each member of our whānau plays their own special part. And how sharing in the wisdom of our family members, especially our grandparents, mums and dads, and appreciating what they do, can help us shape what we do; for and in the world.

Did you know did you know that seven stars of Matariki are a family? According to the iwi Ngāti Toa star, Matariki, is the mother, and she has six daughters.

Tupu-ā-nuku, Tupu-ā-rangi, Waipunarangi, Waitī and Waitā, and Ururangi.

The journey they take with their mother each year across the sky was to come and visit their tupuna wahine (their grandmother) Papatūānuku (the earth). During their visit, they helped Papatūānuku to prepare for the year to come. Using their unique qualities to bring mauri (life principle) to her different environments. Whilst spending time with their kuia; they also learned new skills and gained new knowledge from her, which they guard and pass on to others. Now let's learn more about each of these stars.

Tupu-ā-nuku is the eldest of Matariki's daughters. She spends her time with Papatūānuku tending to plants. She pays special attention to making sure they have everything they need to grow big and strong so they can produce kai food, rongoā medicine, and kākahu clothing materials. When we see her shining, we are reminded that we all have our own special time and place, and that we should spend time growing our pūkenga (strengths), as well as that of our friends.

Tupu-ā-rangi

Tupu-ā-rangi loves to sing. Papatūānuku takes her to sing for te wao nui the great forests, and all the children of Tānemahuta. Her beautiful voice revives the forest and all the other creatures, including the manu birds, and mokomoko lizards. They share their waiata (song), which fills the world with joy. Tupu-ā-rangi learns these songs and holds them close to her heart. We learn from her the importance of sharing our gifts with others and appreciating those shared with us.

Waipunarangi accompanies her grandmother to the waters – the oceans, lakes and rivers – where she prepares the children of Tangaroa (god of the sea) to feed the people. Papatūānuku also teaches her about how the water that spills down from Ranginui (the sky father) collects together to provide drinking water for the people, animals and plants. She also watches how the water is evaporated by the heat of Tama-nui-te-ra the sun into the clouds that cloak Ranginui, so that it may rain once again.

Waipunarangi knows that if you give to others, all that kindness will come right back to you, and it is this lesson that she shares with us.

Waiti and Waitā are Matariki's twins. Papatūānuku knew that they would be able to care for the smallest and fastest of creatures – because they too know about being a team. When insects work together, they can do amazing things. Ngā pi (bees), for example, pollinate all the flowers so that the plants grow, and we have air to breathe. Ngā pōpokoriki (ants) build huge, complicated tunnel cities underneath the ground, and carry many times their body weight. When we see these two stars in the sky, we are encouraged to join in and support each other.

Ururangi enjoys racing all of her sisters to get to her kuia first. She claims the best spot on her grandmother's lap and wraps herself in her arms, settling in for her favourite stories. Her tenacity and excitement, along with the awhi (hug) and her (aroha) love, helps Papa to get into the right mood after the cold and darkness of takurua (winter), to prepare with her older mokopuna (grandchildren). Ururangi reminds us that a good attitude is always key to success.

But what about Matariki you may ask? Well, she's doing what all good mothers (and other caregivers) do – watching over and helping out her tamariki children. With her support, encouragement, and supervision, they will be able to do their very best.¹

¹ Museum of New Zealand Te Papa Tongarewa, Matariki and the Six Sisters – Story by Ngāti Toa Rangatira; Museum of New Zealand Te Papa Tongarewa, "Matariki and the Six Sisters."

5.2 Narrating Wā-Va I.O

Narrating Wā-Va 1.0 will experiment with the notion of Wā-Va using iterations of spatial relationships, ocean fluidity, and laws of nature. These iterations will articulate spatial composition and formal design, repositioning the traditional style.

Space that Relates will explore spatial relationships found in Pacific schemas and cosmology through drawing and making.

Ocean Fluidity will explore the fluidity of the ocean through drawing and lashing. It will concentrate on lines of fluidity and nautical techniques inspired by the sea.

Laws of Nature will explore the symbols of natural forces and their impact on the environment. It is an experiment that seeks to understand forces and reactions.

Reflections is a contemplation on the overall experiment analysing the findings that support the design aims and objective of *Ngā Kaitiaki e Whitu: The Seven Sentinels*.

These narrating exercises intend to provide three things:

Objective

It is the intention of each iteration supporting a narrative and the artistic medium used.

Relationship

It is the observation and analysis of each iteration, inspiring design opportunities.

Reflection

It is a reflection on the experiments and the relationships drawn to inform an architectural design for *Ngā Kaitiaki e Whitu: The Seven Sentinels*.

Space that Relates

Space that relates will explore spatial relationships found in Pacific schemas and cosmology through drawing and making. Academic Albert L Refiti's cosmograms and diagrams tracing va relations inspire this experiment to reposition the Indigenous identity of spatial representation.

Drawing:

Objective

The objective of these iterations is to articulate Wā-Va relationships in a pā and village settlements through drawing in the plan view.

Relationships

The iteration has a sense of webbed connection which is reliant on the intertwining of each line. The lines which cross through the centre become darker as lines cross over multiple times symbolising a strengthening of connection. Each circular bubble situates a role, where no one part is more significant than the other. By eliminating a bubble, connection lines will be lost, creating a hole in the webbed-like drawing — a connection that is interdependent on each bubble.

Reflection

In planning for *Ngā Kaitiaki e Whitu: The Seven Sentinels*, it is essential to note the role of each space and how it impacts the settlement as a whole. A settlement should provide spaces that support each aspect of the community, rather than spaces that compete against each other. It is essential to note that each space plays a vital role in the structure of the settlement that holds the community together.

>| Wā-Va. 1.11D

Pencil and Charcoal

>| Wā-Va. 1.12D

Pencil, graphite and
charcoal

>| Wā-Va. 1.13D

Pencil, graphite and
charcoal

Making:

Objective

The objective of these iterations is to articulate the relationship between materials (wood, twine and nail) to describe a three-dimensional schema through making.

Relationships

The materials used together create an intriguing connection between the natural and the man-made — a juxtaposition that coexists well together. The twine wrapped around the wood creates a porous skin which is aesthetically pleasing. The integration of all three materials enhances the texture and architectural potential of each model — one of form, light and shadow.

Reflection

In planning for *Ngā Kaitiaki e Whitu: The Seven Sentinels*, it is vital to imagine architectural forms and relationships from these models. The imagining of space through making can provide an understanding of its potential presence.

>| Wā-Va. 1.11M

Wood, twine and Nail

>| Wā-Va. 1.12M

Wood, twine and Nail

>| Wā-Va. 1.13M

Wood, twine and Nail

Ocean Fluidity

The fluidity of the ocean captured in these iterations explores the fluid motions of Pacific living inspired by the sea. It illustrates fluid lines in drawings and binding of objects. Artwork of fluid contemporary Māori planning and design by artists John Bevan Ford and Tawera Tahuri inspire these iterations by seeking to create fluid transitions between the traditional and contemporary.

Drawing:

Objective

The objective of these iterations is to articulate fluid strokes using various mediums of drawing.

Relationships

The lines have an organic stroke that transitions effortlessly. They travel loosely in parallel and intertwine cohesively, taking ownership of their desired destination — they are lines of desire.

Reflection

Lines of desire can reflect the journey around *Ngā Kaitiaki e Whitu: The Seven Sentinels* by creating one's desired path to travel. It imagines pathways around the sentinels that reflect the fluidity of community desires of Indigenous identity.

>| Wā-Va. 1.21D

Charcoal and graphite

>| Wā-Va. 1.22D

Pen, graphite and
charcoal

>| Wā-Va. 1.23D

Pen, pencil, graphite
and charcoal

Making:

Objective

The objective of these iterations is to create traditional Samoan lashings (see Appendix E) – a type of fluid connection – that naturally binds Samoan architecture (house and boats).

Relationships

The binding process was unusual in that, at first glance, it would not appear to be a secure connection. It appeared that multiple tying was needed to lock the lashings securely. Surprisingly, the tying method is of most important, as this is where the strength lies. By following lashing methods correctly, meant that precise tying require less sennit to lock securely.

Reflection

In reflecting on these principles, it is vital to note the architectural notion of '*less is more*'. Architectural space may bind communities with the simplest of ties that may seem flimsy and insignificant but may make the most significant impression on society. A reflection of simple Indigenous values that the early Europeans dismissed, but made a substantial difference to the environment.

> | Wā-Va. 1.21M

Wood and harakeke
(flax)

> | Wā-Va. 1.22M

Wood and harakeke
(flax)

> | Wā-Va. 1.23M

Wood and harakeke
(flax)

Laws of Nature

The natural forces of the environment have meant Pacific living have been able to adapt and harness the elements to suit their living conditions. Their way of life has made them appreciative of their environment by seeing the beauty that these conditions provide. The iterations in this section investigate forces and effects using mediums that act and react through drawing and making.

Drawing:

Objective

The objective of these iterations is to articulate a charcoal drawing that is controlled by the texture of wood, concrete and plaster materials. It is a rubbing art, that intends to imprint the surface of these materials onto fine paper.

Relationships

The charcoal as it rubs over the paper picks up various imprints and shades dependant on the distance of the texture underneath - the closer being a darker shade. An imprint of these surfaces brings out the genetic makeup of the texture, an inscription of surface quality and depth that enriches the drawing.

Reflection

Ngā Kaitiaki e Whitu: The Seven Sentinels intends to have certain qualities that make an imprint on the user's minds and hearts. Atmospheric qualities enrich spaces through textures that leave a psychological engraving in the mind, heart and soul.

>| Wā-Va. 1.31D

Stick and powder
charcoal rubbed on
wood

>| Wā-Va. 1.32D

Stick and powder
charcoal rubbed on
concrete

>| Wā-Va. 1.33D

Stick and powder
charcoal rubbed on
textured plaster

Making:

Objective

The objective of these iterations is to articulate the art of mending, intrusion and removal through terracotta carving.

Relationships

Carving is a process of removal that requires precision and technique to mould and create. Carving involves an understanding of the third dimension that accompanies the volume rather than the area. It requires one to move around, with a vision of what the potential object can become. It requires a connection to study all its faces to make the right engraving.

Reflection

Designing *Ngā Kaitiaki e Whitu: The Seven Sentinels* envisions narratives from all perspectives in its form. Designing in the third-dimension instead of plan or elevation requires a design that extends the parameters of Indigenous narratives to encompass all angles.

>| Wā-Va. 1.31M

Carved terracotta

>| Wā-Va. 1.32M

Carved terracotta

>| Wā-Va. 1.33M

Carved terracotta

Reflection

Narrating Wā-Va 1.0 has produced a much needed preliminary concept to design *Ngā Kaitiaki e Whitu: The Seven Sentinels*. Translating Indigenous narratives to contemporary architecture is not entirely straightforward. It requires careful consideration of thematic associations to Indigenous principle. For instance, how does one draw Wā-Va? It requires that one reaches beyond the conventional without dismissing the principle in design.

The experiments have produced unprecedented findings which have influenced each iteration as the experiment has proceeded forth. Each narrating medium provided a different experience of storytelling — a two-dimensional drawing being much different from a three-dimensional model. In the next set of experiments, a change of physical making to digital making will provide another medium of storytelling, imagining design ideas in a virtual environment.

5.3 Narrating Wā-Va 2.0

Narrating Wā-Va 2.0 is another layer of the experiment in response to reflections made in *Narrating Wā-Va 1.0*. The next Wā-Va iterations of spatial relationships, ocean fluidity, laws of nature will articulate previous findings of spatial composition and formal design through new mediums and narrative ideas.

Space that Relates will investigate Wā-Va in three-dimension drawing and digital manipulation, discovering spatial relationships through light, shadow and texture.

Ocean Fluidity investigates Pacific nautical ideals of the vessel, navigation and wayfinding through three-dimension drawings and digital modelling of dispersions.

Laws of Nature will explore the concept of reading and reacting to environmental conditions. It will investigate space and form that articulate openness, dispersion, edges, intrusion and decay.

Reflections is a contemplation on the overall experiment and analysing the findings that support the design aims and objective of *Ngā Kaitiaki e Whitu: The Seven Sentinels*.

These narrating exercises intend to provide three things:

Objective

It is the intention of each iteration that supports a narrative and artistic medium.

Relationship

It is the observations, analysis and reaction to each iteration and the findings thereof.

Reflection

It is a contemplation on the iterations and how they can inform architecture space and form particular to *Ngā Kaitiaki e Whitu: The Seven Sentinels*.

Space that Relates

This section investigates Wā-Va in the third-dimension, discovering spatial relationships through drawings and digital space. Artist John Pule's dispersive artwork inspire this experiment to reposition the Indigenous identity of architectural representation.

Drawing:

Objective

The objective of these iterations is to articulate Wā-Va relationships into the third-dimension via loose drawings, by adding depth to line drawings to begin the formation of space.

Relationships

When considering the iterations in the third-dimension, it changes the dynamics of space where lines are no longer the measure of space, but its faces. The ability to narrate this way tells a story that provides atmosphere by using light and shadow.

Reflection

The dispersed planning of *Ngā Kaitiaki e Whitu: The Seven Sentinels* provides an opportunity for the user to experience the sentinels in their atmospheric element. By doing so, it tells the story of each sentinel, offering a personalised story of the harbour to users.

>| Wā-Va. 2.11D

Charcoal, pencil and
erasing

>| Wā-Va. 2.12D

Charcoal, pencil and
erasing

>| Wā-Va. 2.13D

Charcoal, pencil and
erasing

Digital:

Objective

The objective of these iterations is to articulate local narratives of Porirua through a digital format. To imagine a story, scene or moment in time and express it through a digital image.

Relationships

The iterations compiled in layers tell multiple stories of place and time. The construction of the image allows narratives to make suggestions, to lead the mind into a trance of wonder, and romanticise the story of the image.

Reflection

The ability to dream and envision an Indigenous Porirua is at the heart of this project. The repositioning of ideas and the layering of narratives will be vital to the composition of space and form, allowing the architecture to tell the story of Indigenous Porirua.

>| Wā-Va. 2.11M

Digital compositions
and manipulations

>| Wā-Va. 2.12M

Digital compositions
and manipulations

>| Wā-Va. 2.13M

Digital compositions
and manipulations

Ocean Fluidity

Ocean fluidity investigates Pacific nautical ideals of the vessel, navigation and wayfinding through drawings and digital modelling of dispersions. Paintings of artist John Pule's hiapo which depicts contemporary cartographic and architectural like drawings and Japanese artist Takashi Matubushi with melted Styrofoam inspire these iterations.

Drawing:

Objective

The objective of these iterations is to articulate drawings by cartographic mapping through memory.

Relationships

Memory mapping around the harbour creates a temporary account of each place. It concentrates the memory on particular landmarks, events and people that attach our memories to site.

Reflection

Memory mapping is how the ancient Pacific inhabitants navigated. To recount journeys are a way of understanding the impression space has on the user. By creating certain moments in the architecture *Ngā Kaitiaki e Whitu: The Seven Sentinels* invites the user to engage in a memorable experience.

>| Wā-Va. 2.21D

Pen and pencil

>| Wā-Va. 2.22D

Pen, pencil and soft
charcoal

>| Wā-Va. 2.23D

Pen, pencil, graphite
and soft charcoal

Digital:

Objective

The objective of these iterations is to articulate dispersion tides through digital modelling in RealFlow digital software. Simulation of digital neurological dispersions determines the liquid-forms.

Relationships

The digital simulation of dispersed liquid creates a network of neurological paths that are affected by the area that encloses it. Whereas, when placed in open space, it grows in a random path.

Reflection

The ocean moving in its desired rhythm has a strong influence in the way early Polynesians navigated. In reflecting on the simulation of RealFlow, a consideration of sustainability that minimises environmental issues of the harbour is a critical response to preserving harbour health.

> | Wā-Va. 2.21M

RealFlow liquid flow
in cube

> | Wā-Va. 2.22DM

RealFlow dispersion
and liquid flow

> | Wā-Va. 2.23M

RealFlow dispersion
tide

Laws of Nature

The ability of the ancient Pacific inhabitants to read and react to natural conditions meant that space and form articulated openness, dispersion, edges, intrusion and decay. The iterations in this section are mixed mediums that act and react through drawing and digital manipulation.

Drawing:

Objective

The objective of these iterations is to articulate paintings controlled by external forces, whether they are by the environment, an instrument, or movement. Each force causes a reaction which alters the art in a certain way. Acrylic paint and mineral turpentine will form actions and reactions in this experiment.

Relationships

The reactions of paint to turpentine create fluid, organic explosions. There is an organic movement as the paint transitions between colours shifting threshold boundaries. The scratching of the paint with a sharp instrument adds another layer of force which the paint adapts too.

Reflection

Architecture can relate to the aspect of reaction as the environment it inhabits has forces of its own that buildings. *Ngā Kaitiaki e Whitu: The Seven Sentinels* will use these external forces to its advantage by allowing the environment and user to be a part of how the architecture evolves.

>| Wā-Va. 2.31D

Paint pouring and
scratching

>| Wā-Va. 2.32D

Paint pouring and
turpentine

>| Wā-Va. 2.33D

Paint pouring,
turpentine and
scratching

Digital:

Objective

The objective of these iterations is to articulate a manipulation of digital models in Rhinoceros software. The challenge is to take an original model and digitally transform it into a new Indigenous contemporary form using the existing components. It is purely a process of form manipulation that imagines ideas of Indigenous narratives.

Relationships

This experiment requires creative imagination to envision possibilities before manipulating its form. It requires the imagination of the Indigenous aesthetic to a contemporary style before attempting to manipulate its form.

Reflection

In designing *Ngā Kaitiaki e Whitu: The Seven Sentinels*, some restrictions may present itself during the design of form. However, the ability to envision the Indigenous in the modern world requires an imagination that can identify the traditional style within the contemporary style.

> | Wā-Va. 2.31M

Rhinoceros CAD
manipulations:
Hand gun to sentinel
model

> | Wā-Va. 2.32M

Rhinoceros CAD
manipulations:
Elevator shaft to
sentinel model

> | Wā-Va. 2.33M

Rhinoceros CAD
manipulations:
Plant beds to sentinel
model

Reflection

Narrating Wā-Va 2.0 has produced a repositioning of the design envelope. A discussion of architectural elements through re-materialising Indigenous principles has provided successful iterations to inform a conceptual design for Ngā Kaitiaki e Whitu: The Seven Sentinels.

Digital creation of space through digital simulation has provided potential tectonics that represents an organic Indigenous identity. The development of digital sentinels and layering of narratives on-site connects ideas that are important to E.C.C.O.

The reflection in each iteration has provided a catalyst for designing *Ngā Kaitiaki e Whitu: The Seven Sentinels*. Using a combination of narrating methods provides a palette to begin working digitally in a virtual environment.

>| Chapter 6.0

Design

As he sped along the water, he was cheered by the birds.

6.0

Design

The Harvest

This chapter comprises of design outcomes of Indigenous narratives, ideologies and narrative experiments for Ngā Kaitiaki e Whitu. A developed design which attempts to restore Indigenous identities, multi-culturalism and re-engage the Porirua community back to the harbour.

6.1 Contextual Relationships identifies important sites around Te Awarua-o-Porirua Harbour and how the Wā-Va concept weaves into the Porirua harbour context. It examines the harvesting of narratives from contextual relationships around the harbour concerning cultural and community practises.

6.2 Ngā Kaitiaki e Whitu articulates a narration of seven sentinels that embody Indigenous narratives and repositioned design outcomes. It implements E.C.C.O with design decisions that support community well-being and growth. It re-imagines Te Awarua-o-Porirua Harbour with guardian structures that stand resilient of Indigenous values.

6.3 Reflections is a contemplation of the overall chapter. It analyses the design decisions and evaluates their impact on the outcome.

PAREMATA

Karanga mai Paremata

Te Tupungatahi o Whitireia and
Te Tupungatahi o Onepoto

TITAHI BAY

> | *Te Awarua-o-Porirua Harbour*

6.I Contextual Relationships

Wā-Va interweaves Pacific ideologies and narratives, inspiring *Ngā Kaitiaki e Whitu's* dispersed configuration. *Ngā Kaitiaki e Whitu* locates seven sentinels in significant sites of Te Awarua-o-Porirua Harbour that tell the stories of Indigenous and community values of Porirua. These sites are Paremata, Te Onepoto Bay, Aotea, Porirua Rowing Club grounds, Wī Neera Drive and the central open area of the Porirua Harbour. The sentinels have taken on Māori names which give reverence to values important to iwi Ngāti Toa. These sentinels are guardians that have stories to remind us of Wā-Va and to nourish the relationships of the community.

Paremata

The site located near Paremata Point is a significant place to Porirua's early history. It is a renowned area where colonisers set up a militia base during the war against Ngāti Toa over their lands.

Te Onepoto Bay

Te Onepoto Bay is a crease in the hills that lead to the maunga Whitireia through a walking track. This crease is said to be the remnants of taniwha Awarua's attempts to fly but crashing denting the harbourscape and creating valleys.

Aotea

Aotea has new subdivisions in Porirua which overlooks State Highway 1 and the harbour. Its location is centred around recreational activity with the Adrenaline Forest in the same vicinity and the Aotea Lagoon nearby. An area for recreational activities with a high school (Aotea College) across the road, it is a place for leisure that introduces a new thrill-seeker to Porirua.

Porirua Rowing Club grounds

Porirua Rowing Club grounds is a renowned area for waka ama and a launching point into the harbour for water sports and recreation. It is a place that is surrounded by boating clubs and houses stilted on the harbour edges.

Wi Neera Drive

Wi Neera Drive is a road built as part of the reclamation plan that in Ngāti Toa origin was once the seafood larder of Awarua. It is now part of the Porirua Central Business District and is an underutilised public space with minimal engagement with the harbour edge.

Centre of Harbour

The centre of the Porirua Harbour is the openness of the ocean – the space that relates. An area casually overlooked has the opportunity to become the ‘heart’ of Porirua healing broken relationships of the past and nurturing relationships of the future.

6.2 Ngā Kaitiaki e Whitu: The Seven Sentinels

This section narrates *Ngā Kaitiaki e Whitu* and their Indigenous origins which have evolved primarily from the tale of *Matariki and her six daughters*. This section presents the design outcomes as a result of in conjunction with previous contextual research, community strategies, literature and project reviews, and narrative experimentation. Indigenous narratives are the stories and voices for these sentinels providing a community identity in an architectural form that expresses a romantic possibility of Te Awarua-o-Porirua Harbour.

> | *Karanga mai Paremata*
A call from Paremata

Karanga mai Paremata

Karanga mai Paremata loves to sing praises as she greets and farewells those who enter and leave the harbour on every occasion. Her voice sings out like a Karanga — a call from the heart — a Powhiri presenting the arrival of guests to the tangata whenua. Her voice warms the initial contact that is made between the host and guest whether arriving by boat, journeying across her spinal bridge or her gaze from State Highway 1. Her voice reaches and nurtures our journeys, filling the harbour with a sense of unity.

Plan

Karanga mai Paremata's plan is reminiscent of a fish where the tail becomes a vegetation bed on the eastern end, and the lifting bridge becomes the fish's fins providing a passage for boats. The bridge which extends across the harbour is the spine that connects both sides of Porirua from Paremata to Shelly Bay. The members extending off the spine like ribs are jumping pads for water recreation.

Elevation

Karanga mai Paremata's vertical members are reminiscent of the barriers around a Marae that fortifies the sacredness of the harbour. When the bridge lifts, the four sentinels stand tall, watching over guests as they pass through. Those who occupy its spine add a resemble tangata whenua receiving guests as they wait until it lowers again in a Powhiri like fashion — taking a moment to acknowledge their guests as they pass through. It is a greeting that shares the breath of life reminiscent of the Māori hongi.

^ | Plan

v | South Elevation

Community

Karanga mai Paremata provides a connection to Shelly Bay from State Highway 1 and is the main entrance into the Onepoto arm of the harbour via boat. Part of the bridge lifts momentarily to allow boat thoroughfare. The bridge allows non-vehicular transport and recreational activities promoting sustainability and well-being in an underutilised part of the harbour. During summer, the platforms become jumping pads for recreation as an alternative to the Paremata bridge, which the public use regardless of its prohibition.

Te Tupungātahi o Whitireia | <
Nurturing together of Whitireia

> | *Te Tūpungātahi o Onepoto*
Nurturing together of Onepoto

Te Tupungātahi o Whitireia and Te Tupungātahi o Onepoto

Te Tupungātahi o Whitireia and *Te Tupungātahi o Onepoto* are *Te Kahurangi o Porirua's* twins. They spend their time with Tāne Mahuta (god of the forest) tending to plants in Te Onepoto Bay. They are both paying particular attention to having what they need to grow big and healthy so that they can produce kai (food), rongoā (medicine), and kākahu (clothing materials).

Te Tupungātahi o Whitireia faces towards Whitireia watching over the growth and preservation of Whitireia's green spaces. *Te Tupungātahi o Onepoto* faces towards Te Onepoto Bay guarding the growth and protection of the harbour. Both hold a responsibility of guardianship which they work together to maintain, suggested by the bridge they hold up together.

As we see them shine, they remind us that we all have our own unique time, place and season. They also remind us to spend time developing our gifts and talents as well as that of our community. When we see these two sentinels in the distance, we are encouraged to join together and support one another.

Plan

Inspired by weaving used in traditional Māori and Samoan practices, the plan suggests the motif of unity and togetherness. This pattern is evident by the weaving of the structural tension cords extended from each sentinel to support the bridge that connects them. The crossing of the tension cords forms a lattice that is similar to the weaving of Samoan fala (fine mats) bound tightly. The tension cords also create a diamond-like figure that represents the Māori tāniko — a traditional weaving technique of Māori. During the day when the sun travels across the sky, the tension cords cast these patterned shadows across the landscapes.

The twin sentinels in their efforts to preserve vegetation, dress in flora and fauna which grows around its structures. Their design intentions of watchtowers are reminiscent of the ancient watchtowers built in pā settlements during Māori land wars that warned of enemy attacks. Thus, *Te Tupugātahi o Whitireia* located on the southern end of *Te Onepoto Bay* and *Te Tupugātahi o Onepoto* on the north are both watching each watching over essential areas, a form of passive surveillance through the user.

Elevation

The twin sentinel in their efforts to grow and preserve the natural vegetation and edges of the harbour are dressed in flora and fauna that grows around the structures of both sentinels. Each sentinel has its arms stretched out under the bridge to support this notion of care and preservation of green spaces. The twin sentinels provide a pathway for occupants to travel to the peak of their structure where a lookout oversees Porirua. As occupants make these journeys up the sentinels and across the bridges green corridor, it intends to capture a moment of appreciation of natural resources surrounding the harbour. Its separation from the land as one travels to higher altitudes reminisces the ancient biodiversities of Porirua. A moment to reflect on deforestation that once ignored relationships to *Papātūanuku* (mother earth) and *Tāne Mahuta* (god of the forest) now with sentinels standing as guardians against environmental harm.

v | East Elevation

Environment

Te Tupungātahi o Whitireia and *Te Tupungātahi o Onepoto* provide a lookout space as part of a hiking track which connects to the northwestern end of Whitireia. It is a space where flora and fauna flourish encompassing a learning hub that educates the preservation of native species. The tall structures resemble watchtowers becoming the guardians of Te Awarua-o-Porirua Harbour.

> | *Rangatahi o Aotea*
Youthfulness of Aotea

Rangatahi o Aotea

Rangatahi o Aotea is *Te Kahurangi o Porirua*'s youngest daughter who enjoys racing all of her sisters to get to her mother first. She claims the best spot on her mother's lap and wraps herself in her arms, settling in for her favourite stories. Her tenacity and excitement, along with a hug and her love, help her mother get into the right mood after the cold season of Porirua winter.

Rangatahi o Aotea reminds us to stop and enjoy the journey of life and that a good attitude is always key to success.

Plan

Rangatahi o Aotea, located on the one end up the bank of Aotea and the other immersed in the harbour tip-toeing over State Highway 1, speaks volumes of *Rangatahi o Aotea* as she is the youngest and most curious out of all the sentinels. She is in the phase of her life, where she is beginning to comprehend the world, learning to walk on her own. She takes a risky step over State Highway 1 up the Aotea bank; however, her body is still partially immersed in the harbour of her mothers care. Her long body begins up the hillside, the platform at the top is her head — a lookout to the harbour. As now and again, she gazes back to her mother for assurance.

Elevation

Rangatahi o Aotea's form is not as sophisticated as the other sentinels, showing her youthfulness. Her revealing ribbed-like structure and partially enclosed architectural skin express her undeveloped form — a testament of the beginning of life.

^ | Plan

v | North Section

Community

Rangatahi o Aotea provides a recreational activity quite similar to its neighbour, the Adrenaline Forest. Its connection to the harbour comes via a water slide that bridges over State Highway 1 from the Aotea bank into the harbour waters. Like the Adrenaline Forest, it is a recreation activity for the thrill-seeker.

> | *Ngā Mautere o te Moana*
The Sea of Islands

Ngā Mautere o te Moana

Ngā Mautere o te Moana accompanies *Tangaroa* (god of the sea) to the waters where she prepares the children of *Tangaroa* to feed the people. *Tangaroa* teaches her about the relationships in the environment such as the water that spills down from *Ranginui* (sky father) collected together to provide drinking water for the people, animals and plants. She also observes how the water is evaporated by the heat of *Tama-nui-te-rā* (the sun) into the clouds that cloak *Ranginui*, so that it may rain once again. She also teaches her about the importance of the sea as a spatial relationship that ties our lands together.

Ngā Mautere o te Moana knows that if you give to others, all that kindness will come right back to you and that associations within the community strengthen through meaningful relationships.

Plan

Like *Karanga mai Paremata*, *Ngā Mautere o te Moana* has fish-like form with its tail providing the main office buildings. Its two large ribbed-like piers extending outward to the ocean, have smaller fin-like platforms extruding perpendicular, where the vessels dock. The fin-like platforms resemble the weaving motif as they intersect the large piers in the central connection and the layout of the docks crossing each other. The head of the ika cantilevers out from the two-tier spectator shelters, forming a lookout to the water like a tauihu at the head of a Māori waka. The vessels come in and out freely as non-vehicular transport across the harbour.

Elevation

At the furthestmost part of the ika head, extended out to the ocean resembles nautical expressions of ancient Polynesian vessels. The hull-like structure rises from the underbelly becoming a backbone structure similar to a *taurapa* on a Māori waka. The shoulders of the ika are the spectator shelters that run perpendicular to the lookout platform, offering balance and support to the structure. It is reminiscent of the *paopao* on a Samoan va'a (vessel) that provides support to the main structure of the boat.

Environment

Ngā Mautere o te Moana promotes water safety and water sensitivity by protection and preservation activities that affect harbour health.

Community

Ngā Mautere o te Moāna shelters are the main housing for canoes used as a non-vehicular transport across the harbour. The community can hire out vessels for recreation and travel the harbour. It is the only form of transport to get to *Te Kahurangi o Porirua* in the centre of the harbour. These vessels can be docked at any of the seven sentinels but mainly reside at *Ngā Mautere o te Moāna*. This space will continually support the waka ama sports team who use the harbour as part of their grounds of training.

^ | Plan

> | West Elevation

> | *Ngā hauhake o Wi Neera*
The Harvest of Wi Neera

Ngā hauhake o Wi Neera

Ngā hauhake o Wi Neera is *Te Kahurangi o Porirua*'s eldest child. *Te Kahurangi o Porirua* knew that she would be able to lead and care for her sisters — because she too knows how to follow. Her ability to work together with her sisters means they can accomplish any task.

When we see *Ngā hauhake o Wi Neera*, she reminds us to take every opportunity to build up the people in our community, for it is our relationships with one another that shape our society.

Plan

Ancestral ties inspire *Ngā hauhake o Wi Neera*'s form. A colonnade-like structure along the bridge reminiscent of the *pou* in a Māori wharenui or Samoan fale tele. It embodies several guardian-like structures wrapped with a screen. The *pou* not only operates as a structure but represents an ancestor of the past, acting as a sentinel that one can still remember. The screen that wraps the exterior resembles a Māori tukutuku panel found in the wharenui with its crisscross patterns. The screen also acts like Samoan pola screens by suspending when needed.

Elevation

Ngā hauhake o Wi Neera implements a similar narrative as the Māori whare whakairo. The *amo* (legs), *raparapa* (fingers), *maihi* (arms), *koruru* (guardian) and an invisible *tekoteko* (figurehead) that represent ancestral ties using the concept of Wā-Va. Traditional Māori and Samoan architecture inspire the openness of the structure.

Opportunity

Ngā hauhake o Wi Neera is an opportunity space for anybody who wishes to shape the growth of the economy. It includes a design that consists of pop-up space for markets, business spaces and shared offices over the harbour water that connects the city centre to the harbour.

^ | Plan

> | West Elevation

> | *Te Kahurangi o Porirua*
The Jewel of Porirua

Te Kahurangi o Porirua

But what about *Te Kahurangi o Porirua* one may ask? Well, she is doing what all good mothers do — watching over and helping out her daughters who provide for the environment and community. With her support, encouragement, and supervision, they will be able to do their very best.

Plan

The plan inspired by the Wā-Va concept has a central atrium space. It has three arms that protrude from the centre outwards, forming the exhibition and storage spaces. *Te Kahurangi o Porirua*, as well as her daughters, are water-sensitive works of architecture constructed to support harbour health.

Elevation

Te Kahurangi o Porirua has an internal purification system which cleanses the harbour water by sucking water in through pipes up to the purifying chamber at the head of the sentinel (peak of the structure). It purifies the water and then releases it through a separate pipe back into the harbour. This process is what makes the mother of all sentinels one that gives back to her children.

When we see *Te Kahurangi o Porirua*, she reminds us that she has a unique attribute that only mothers have, and that is homemaking to protect and care for her daughters and children of Porirua.

Culture

The crowning jewel of Te Awarua-o-Porirua Harbour is an Inter-Pacific cultural centre. Its museum houses historic and Indigenous treasures of the Pacific such as artefacts, art, and sacred belongings to the Pacific. *Te Kahurangi o Porirua* is a central monument in the harbour that stands as an icon for Porirua. Its location in the centre of the harbour can only be visited via boat, keeping it a sacred place that only those who dare to go through the travel will find their efforts rewarded.

> | Plan

v | North Section

6.3 Reflections

While reflecting on the developed design, it is evident that there have been significant decisions to narrate *Ngā Kaitiaki e Whitu*. A repositioning of Indigenous design, that neither voices one culture, but integrates a summation of Māori, Samoan and contemporary culture in Wā–va. The design has a multi-layered narrative, meaning that pure space and form are merely the product of design, but the voices of Indigenous narratives. The sentinels become a timeless piece of architecture that continues to tell an evolving story of Indigenous people.

>| Chapter 7.0

Conclusion

His great body rose into the air but not high enough. Again he crashed, and the impact removed the top of mana Island.

7.0 Conclusion

People of Polynesia — particularly Māori and Samoan — always could adapt to new environments. Hence, their travels across the Pacific Ocean in search of new islands had influenced their cultures with every foreign contact. Historically, early Polynesians would not have become Polynesians if they would not have left their previous inhabitation. Early Polynesians would not be recognised by each of their island (i.e. Aotearoa, Samoa, Tonga) had they not dispersed from their first inhabitant in Polynesia. It was part of their cultural practice to voyage and evolve with time and place. People of the Pacific adapted to new environments, new methodologies and new cultures.

Nowadays, Indigenous Pacific values continue to evolve in the same fashion through diasporic movements and familiarisation with the advances of contemporary society to meet the demands of Indigenous values. The “traditional” culture that we know today may have been different from what the early Indigenous people viewed as “traditional.” When questioned about the evolution of the “traditional”, the elderly — who have lived to see the advances of society — respond with a well-known phrase saying, “if my ancestors had what you have today, they would have also used it to their advantage.” By experimenting with Indigenous Pacific values neglected in New Zealand architecture, an opportunity to tell stories of Aotearoa in a contemporary lens is possible through architecture. It is a means to express the many Indigenous stories left untold.

In response to the demise of contemporary Indigenous architecture in Te Awarua-o-Porirua Harbour, this thesis has attempted to intervene by expressing Indigenous narratives, ideology and community voices through a convergence of narrative research and explorations. The process has resulted in a design intervention which repositions the contemporary Indigenous architecture of Te Awarua-o-Porirua Harbour. It challenges stereotypes of Indigenous cultures in contemporary society, an awareness of systematic injustices endured by Indigenous Pacific cultures since the colonisation of Aotearoa. It becomes a driving force to express and celebrate cultural inclusion in contemporary architecture, particularly of Ngāti Toa and their treasured harbour.

The E.C.C.O programme, which is an accumulation of iwi Ngāti Toa vision, the Porirua City Council and Porirua community, is essential to the design process in uniting the disparities of past events that left the oppressed Māori voiceless in their own land and harbour. These relationships are essential to community structure, ensuring the representation of Indigenous Pacific cultures in Porirua that neither compromises their values and environment. The early Europeans failed to nurture a relationship with Indigenous Māori people which led to the destruction of the Te Awarua-o-Porirua harbour. The Porirua territorial authorities today have come a long way since then, mending broken ties and providing a voice for Indigenous Māori and Pacific cultures in society - but now they need to have the same impact in their architecture.

The integration of cultural identities in architecture does not necessarily mean a compromise in design, but an implementation of a systematic expression that allows normalisation of Indigenous values in the architectural process. To interweave Indigenous identity in a contemporary architectural design is to accept that the “traditional” may not always be recognised in conventional space and form, but will remain in principle that satisfies the Indigenous narratives of the people. By doing so, the representation of Indigenous identity and narratives in architecture are sophisticatedly told, rather than two separate cultural stories mashed into one design. The difference is designing architecture from similar principles in unison, rather than two different cultural aesthetics put together awkwardly.

Indigenous Pacific identity is essential to Porirua’s new character as it nourishes the Wā-Va — relationships in the community. The dismissal of Indigenous Māori knowledge during colonisation has degenerated the Indigenous identity of Porirua — a vital part of sustaining the people and the environment. The dismissal of Indigenous Māori values contributed to the poor standard of Porirua’s early urban development. Nurturing the relationship between Indigenous cultures and contemporary society is one that is essential in preserving and cultivating Indigenous architecture. Establishing a network of authoritative organisations and community to create an Indigenous identity in Porirua’s architecture is a necessary part of the design process that provides an architecture that is unique to Porirua.

This thesis has been successful in captivating Indigenous Māori and Samoan principles and developing them through an exploration of narrative design, resulting in an Indigenous contemporary architecture that stands as a voice for the Porirua harbour and community. The spaces are successful in their translation of an Indigenous narrative, telling of Indigenous stories told in every structure and design of its architecture. The details of interior space require further improvements to realise the atmospheric quality and sciences of the architecture fully. However, the overall design has made a significant feat to translate important Indigenous narratives into a new contemporary architecture that carries the same Indigenous principles and narratives as the “traditional” — repositioned for a multi-cultural society.

This investigation has proven to be a development system for Indigenous narratives that further explore Indigenous identity in architecture. This thesis has explored ways that Indigenous values missing in society can reform, not a re-creation of the “traditional”, but envision a repositioned form that takes advantage of the “traditional” principles in a new era. It proposes ways that architecture can include and treat Indigenous design with the modern advances for generations to come. In doing so, preservation of cultural identity regenerates over time inviting society to embrace our precious Indigenous Pacific cultures.

The constraints and limitation of the thesis came in the extraction of Indigenous oral traditions, making it difficult to source specific accounts and stories told by elders passed down through generations. The project reviews did not fully reveal the architects thought process in terms of narrative development through to final form. Although there was some success, the information found was limited and left one to imagine how it arrived at its final form. It can be due to the lack of information on the Indigenous collaborations of the design process or architecture that still uses Indigenous motifs as “Indigenous design” rather than translating Indigenous principle to space and form.

Potential advancement of this study for the future can extend to other colonised Indigenous cultures who are voiceless in their own lands. Indigenous storytelling through architecture can narrate a specific set of values, ideology or principles relevant to context and architecture. By developing contemporary Indigenous architecture through a narrative design, this thesis implores the use of narrating new and Indigenous relationships to build societies in a way that voices stories of under-represented cultures.

>| Chapter 8.0

References

Soon after this embarrassing accident, he fulfilled his ambition and gained flight without further mishap.

8.0

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8.2 Glossary

Māori	
amo	(noun) bargeboard support - upright supports of the lower ends of the maihi of the front of a meeting house.
Aotearoa	(location) North Island - now used as the Māori name for New Zealand.
hapū	(noun) kinship group, clan, tribe, subtribe - section of a large kinship group and the primary political unit in traditional Māori society.
harakeke	(noun) New Zealand flax, <i>Phormium tenax</i> - an important native plant with long, stiff, upright leaves and dull red flowers. Found on lowland swamps throughout Aotearoa/ New Zealand.
ika	(noun) fish, marine animal, aquatic animal - any creature that swims in fresh or salt water including marine mammals such as whales.
iwi	(noun) extended kinship group, tribe, nation, people, nationality, race - often refers to a large group of people descended from a common ancestor and associated with a distinct territory.
kai	(noun) food, meal.
kaimoana	(noun) seafood, shellfish.
kāinga	(noun) home, address, residence, village, settlement, habitation, habitat, dwelling.
kaitiaki	(noun) trustee, minder, guard, custodian, guardian, caregiver, keeper, steward.
kaitiakitanga	(noun) guardianship, stewardship, trusteeship, trustee.
kākahu	(noun) garment, clothes, cloak, apparel, clothing, costume.
koruru	(noun) carved face on the gable of a meeting house, often representing the ancestor after which the house is named.
kuia	(noun) elderly woman, grandmother, female elder.
kūmara	(noun) sweet potato, kūmara, <i>Ipomoea batatas</i> .
mahau	(noun) porch, verandah.
mahinga kai	(noun) garden, cultivation, food-gathering place.
maihi	(noun) bargeboards - the facing boards on the gable of a house, the lower ends of which are often ornamented with carving, or a house so adorned.
mana	(verb) to be legal, effectual, binding, authoritative, valid.

mana whenua	(noun) territorial rights, power from the land, authority over land or territory, jurisdiction over land or territory - power associated with possession and occupation of tribal land.
manu	(noun) bird - any winged creature including bats, cicadas, butterflies, etc.
marae	(noun) courtyard - the open area in front of the wharehau, where formal greetings and discussions take place. Often also used to include the complex of buildings around the marae.
Matariki	(personal noun) Pleiades, Messier 45 - an open cluster of many stars in Te Kāhui o Matariki, with at least nine stars visible to the naked eye. The brightest star in the centre of the cluster, also known as Matariki (Alcyone), married Rehua (Antares) and is the mother of the other eight stars of the Pleiades known to Māori. The other eight stars are: Tupuārangi (Atlas), Waipunarangi (Electra), Waitī (Maia), Ururangi (Merope), Tupuānuku (Pleione), Waitā (Taygeta), Pōhutukawa (Sterope) and Hiwa-i-te-rangi (Calaeno).
matua	(noun) father, parent, uncle.
maunga	(noun) mountain, mount, peak.
mauri	(noun) life principle, life force, vital essence, special nature, a material symbol of a life principle, source of emotions - the essential quality and vitality of a being or entity.
mokomoko	(noun) lizard, skink, gecko - a general term. Because of their spiritual association with the atua Whiro, whose realm was of things evil, tuatara and geckos were feared.
mōrere	(noun) swing, swinging.
pā	(noun) fortified village, fort, stockade, screen, blockade, city (especially a fortified one).
pahū	(noun) gong - usually made of wood. Some were semi-hollowed logs suspended between trestles, some were made from semi-hollowed trees, while slabs of pounamu were suspended from trees and beaten.
Pākehā	(modifier) English, foreign, European, exotic - introduced from or originating in a foreign country.
Papatūānuku	(personal name) Earth, Earth mother and wife of Ranginui - all living things originate from them.
pou	(noun) post, upright, support, pole, pillar, goalpost, sustenance.
pūkenga	(noun) specialist, expert.
rangatahi	(noun) younger generation, youth.

rangatira	(noun) chief (male or female), chieftain, chieftainess, master, mistress, boss, supervisor, employer, landlord, owner, proprietor - qualities of a leader is a concern for the integrity and prosperity of the people, the land, the language and other cultural treasures (e.g. oratory and song poetry), and an aggressive and sustained response to outside forces that may threaten these.
Rangi-nui	(personal name) atua of the sky and husband of Papa-tū-ā-nuku, from which union originate all living things.
raparapa	(noun) the projecting carved ends of the maihi of a meeting house.
rohe	(noun) boundary, district, region, territory, area, border (of land).
rongoā	(noun) remedy, medicine, drug, cure, medication, treatment, solution (to a problem), tonic.
Tamanuiterā	(personal name) Sun - personification and sacred name of the sun. Sometimes written as Tama-nui-te-rā.
Tāne-mahuta	(personal name) atua of the forests and birds and one of the children of Rangi-nui and Papa-tū-ā-nuku.
Tangaroa	(personal name) atua of the sea and fish, he was one of the offspring of Rangi-nui and Papa-tū-ā-nuku and fled to the sea when his parents were separated. Sometimes known as Tangaroa-whaiariki.
tangata whenua	(noun) local people, hosts, Indigenous people - people born of the whenua, i.e. of the placenta and of the land where the people's ancestors have lived and where their placenta are buried.
tāniko	(noun) border for cloaks, etc. made by finger weaving.
taniwha	(noun) water spirit, monster, dangerous water creature, powerful creature, chief, powerful leader, something or someone awesome - taniwha take many forms from logs to reptiles and whales and often live in lakes, rivers or the sea. They are often regarded as guardians by the people who live in their territory, but may also have a malign influence on human beings.
taonga	(noun) property, goods, possession, effects, object.
tapu	(stative) be sacred, prohibited, restricted, set apart, forbidden, under atua protection
tauihu	(noun) bow, prow, figurehead (of a canoe).
taurapa	(noun) stern-post (of a canoe).
tekoteko	(noun) carved figure on the gable of a meeting house, figurehead (of a canoe).
tihi	(noun) summit, top, peak, point, apex, maximum.

tino rangatiratanga	(noun) self-determination, sovereignty, autonomy, self-government, domination, rule, control, power.
tukutuku	(noun) ornamental lattice-work - used particularly between carvings around the walls of meeting houses. Tuku-tuku panels consist of vertical stakes (traditionally made of kākaho), horizontal rods (traditionally made of stalks of bracken-fern or thin strips of tōtara wood), and flexible material of flax, kiekie and pīngao, which form the pattern. Each of the traditional patterns has a name.
wā	(noun) area, region, definite space.
waiata	(noun) song, chant, psalm.
waka	(noun) canoe, vehicle, conveyance, spirit medium, medium (of an atua).
waka ama	(noun) outrigger canoe.
wānanga	(noun) tertiary institution that caters for Māori learning needs - established under the Education Act 1990.
whaea	(noun) mother, aunt, aunty.
whaitua	(noun) side, region, space, designated area, territory, domain.
whānau	(noun) extended family, family group, a familiar term of address to a number of people - the primary economic unit of traditional Māori society. In the modern context the term is sometimes used to include friends who may not have any kinship ties to other members.
whare	(noun) house, building, residence, dwelling, shed, hut, habitation.
whare whakairo	(noun) carved house, meeting house.
wharenui	(noun) meeting house, large house - main building of a marae where guests are accommodated.
wharenui	(noun) meeting house, large house - main building of a marae where guests are accommodated. Traditionally the wharenui belonged to a hapū or whānau but some modern meeting houses, especially in large urban areas, have been built for non-tribal groups, including schools and tertiary institutions. Many are decorated with carvings, rafter paintings and tukutuku panels.

Samoan	
fala	(noun) weaved mat
fale	(noun) house, building, residence, dwelling, shed, hut, habitation.
fale tele	(noun) meeting house, large house - main building of a malae where guests are accommodated.
malae	(noun) courtyard - the open area in front of the fale tele, where formal greetings and discussions take place. Often also used to include the fales around the malae.
Matāi Tufuga	(noun) master builder
nu'u	(noun) Samoan village
paopao	(noun) outrigger canoe.
pola	(noun) screens on a fale. Able to open and close as desired
pou	(noun) post, upright, support, pole, pillar, goalpost, sustenance.
tapa	(noun) cloth made from tapa, used in the Pacific islands
tatau	(noun) Samoan tattoo
Tufuga fai fale	(noun) builder
va	(noun) relationships, gap, area, region, definite space.
va'a	(noun) canoe, vehicle, conveyance, spirit medium, medium (of an atua).
va'a tele	(noun) a large canoe, vehicle, conveyance, spirit medium, medium (of an atua).

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Figure 20. Louis John Daroux, *Va'a*, 2019, Photograph. https://commons.wikimedia.org/wiki/File:Va%27a_tele_or_%27alia_at_Mulinu%27u,_Samoa,_circa_1910.jpg

Figure 21. Christian Teoteo Fonoti Brown, *Toa o Samoa*, 2009, Photograph. <https://www.abc.net.au/news/2013-11-20/samoacropped.jpg/5105738?nw=0>

Figure 22. Te Papa Tongarewa, *Model of a Māori village and Pā* / Collections Online - Museum of New Zealand Te Papa Tongarewa, Drawing. <https://collections.tepapa.govt.nz/object/240401>

Figure 23, 24 and 25. UNESCO Digital Library, *The Samoan fale*, 1992, Drawing. <https://unesdoc.unesco.org/ark:/48223/pf0000139897> (See Pg. 4-5, 39, 16 respectively)

Figure 26, 27 and 28. Adam Mørk, *Outside opinion: Christchurch central library*, 2019, Photograph. <https://architecturenow.co.nz/articles/outside-opinion-christchurch-central-library/>

Figure 29, 30, 31 and 32. Andy Spain, *Poipoia te kākano kia puawai*, 2019, Photograph. <https://architecturenow.co.nz/articles/poipoia-te-kakano-kia-puawai/>

Figure 33, 34, 35, 36 and 37. Haydn & Rollett, *Samoan Consulate*, 2015, Photograph. <https://haydnrollett.co.nz/projects/samoan-consulate>

Chapter 2.0 Context Image. Aidan Wojtas, *State planning* in Porirua, 2009, Photograph. https://commons.wikimedia.org/wiki/File:Porirua_Harbour.jpg

ALL UNATTRIBUTED FIGURES BELONG TO THE AUTHOR

Note: Digital components from online sources, not by the author, have been integrated into the 3D modelling processes of this thesis.

8.4 Appendices

Appendix A – Te Uru Kahika (today known as Prosser St) relocation to Takapūwāhia. (Google Earth. Author manipulated image)

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Appendix B – Hongoeka Marae in relation to Takapūwāhia Marae.
(Google Earth. Author manipulated image)

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Appendix C – Porirua Harbour Catchment and stream flows. <https://www.gw.govt.nz/communityfunding/>

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Appendix D – Transmission Gully project in relation to State Highway
1. [https://en.wikipedia.org/wiki/Transmission_Gully_Motorway#/media/
File:TransmissionGully.png](https://en.wikipedia.org/wiki/Transmission_Gully_Motorway#/media/File:TransmissionGully.png)

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