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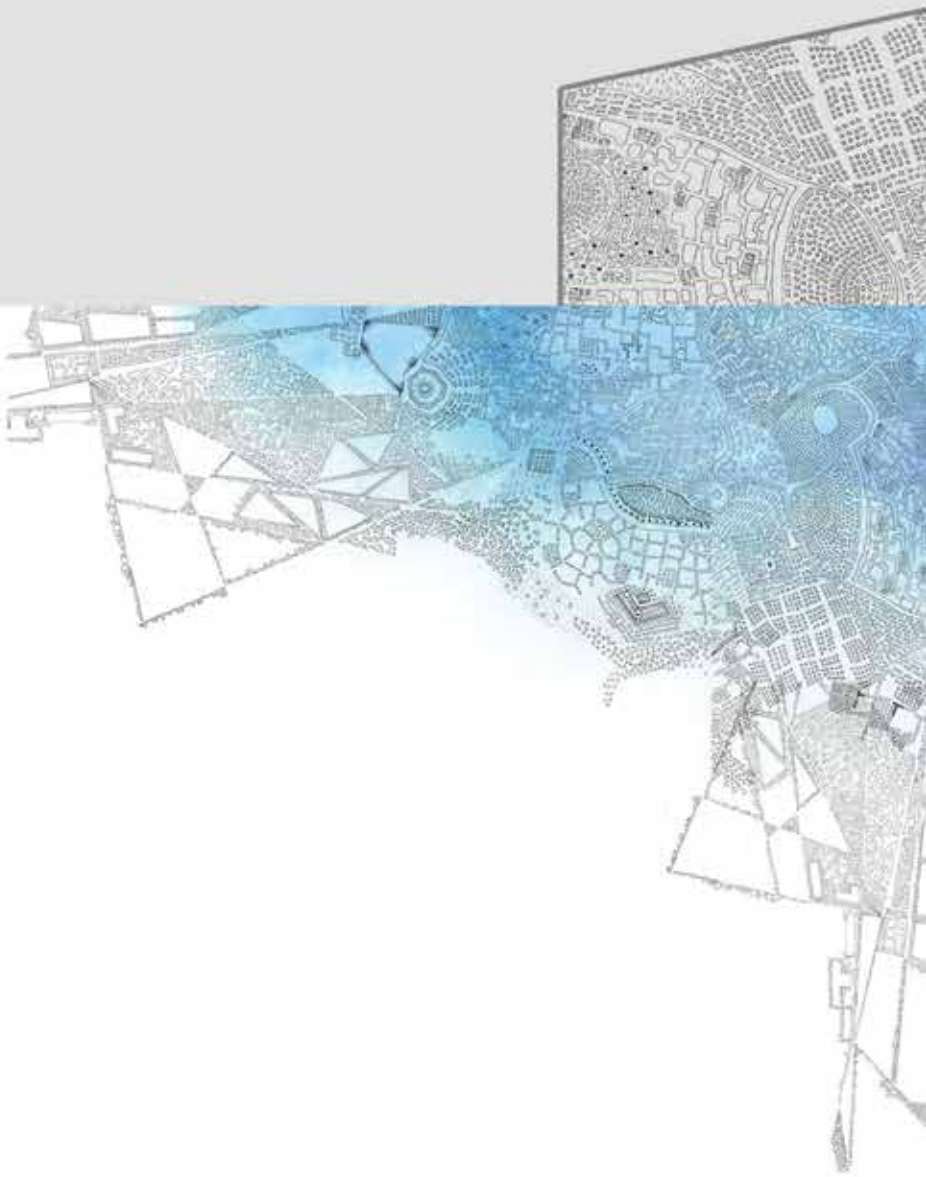
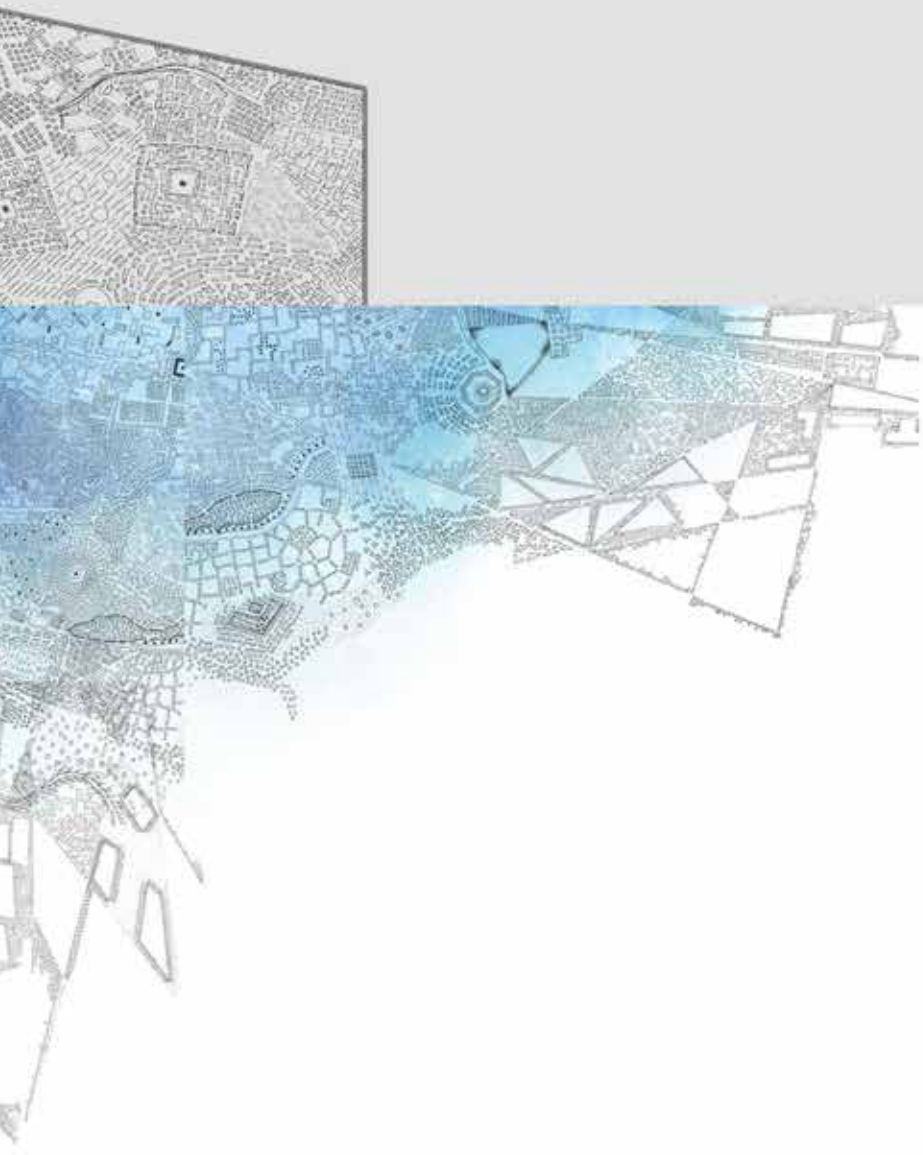




out

Inside Out

By Kudzai Pamela Furusa

A 120-point thesis
submitted to the Victoria University of Wellington
in partial fulfilment of the requirements for the degree
of Master of Interior Architecture.

Victoria University of Wellington
School of Architecture,
2020

ACKNOWLEDGEMENTS

Thank you to my friends and family for supporting me throughout my thesis. Mum and Ru, you have been my support system and I am forever grateful for you.

Thanks to my supervisors, Nat Perkins, Alice Harland Anderson and Adele Leah. I was privileged and inspired to have your guidance and perspective on Interior Architecture.

ABSTRACT

Porirua is tucked alongside a beautiful harbour and a rugged coastline. The city offers natural beauty and peaceful surroundings which are matched with a vibrant culture and the youngest demographic in the country. Unfortunately, the cultural diversity is not represented in the architecture of the city, the harbour is polluted and underutilised. Porirua Harbour is not incorporated in the city's urban design which has led to it being overlooked.

This thesis proposes interventions to revitalise the harbour, focusing on bringing people back to the neglected area and expanding social engagement. The proposition highlights the role of Interior Designers in the urban landscape of Porirua and aims to uncover the rich history of the city. Urban Interior techniques and strategies are explored in an attempt to celebrate the local history and empower communities through design. The historical narrative acknowledges the importance of past events and their impact on communities in Porirua and aims to redesign for the future.

The interior as a site has offered many opportunities for artists and designers to challenge how we inhabit and change architecture.Research involved consideration into urban interior spaces and sensorial qualities, to create a spatial experience that connects people with the past whilst addressing a contemporary setting.

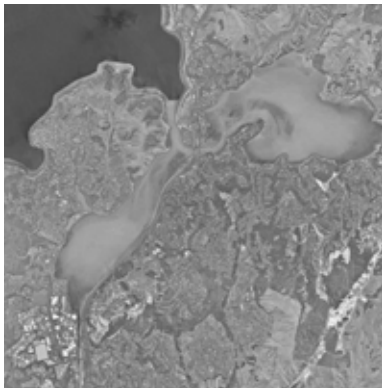
CONTENTS

CONTENTS

Me huri whakamuri, ka titiro whakamua.

-

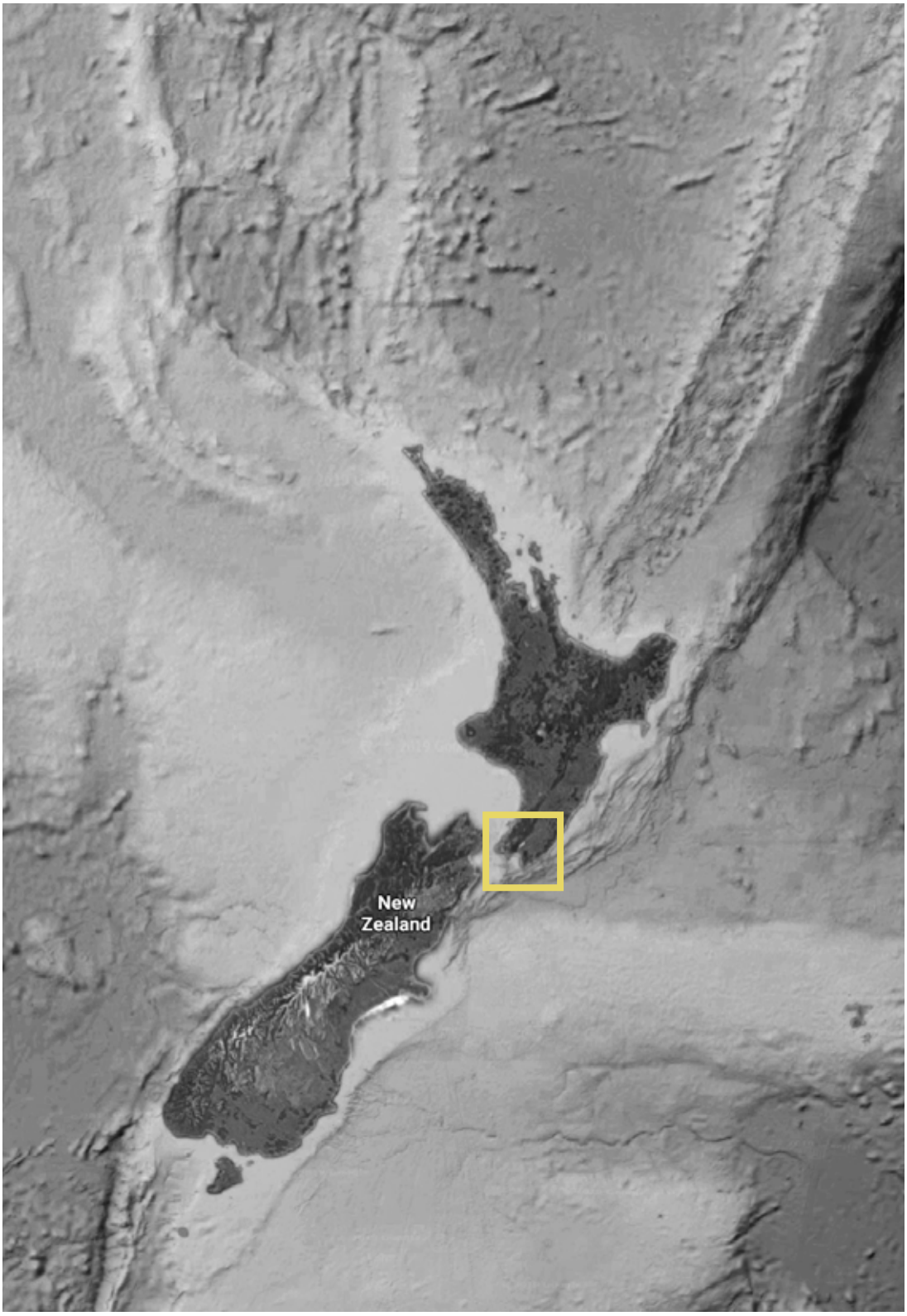
It is by remembering the past that we can plan for the future.



introduction

01

CHAPTER ONE
PORIRUA – Who, What, Where?
RESEARCH QUESTION
RESEACH OBJECTIVES
THESIS STRUCTURE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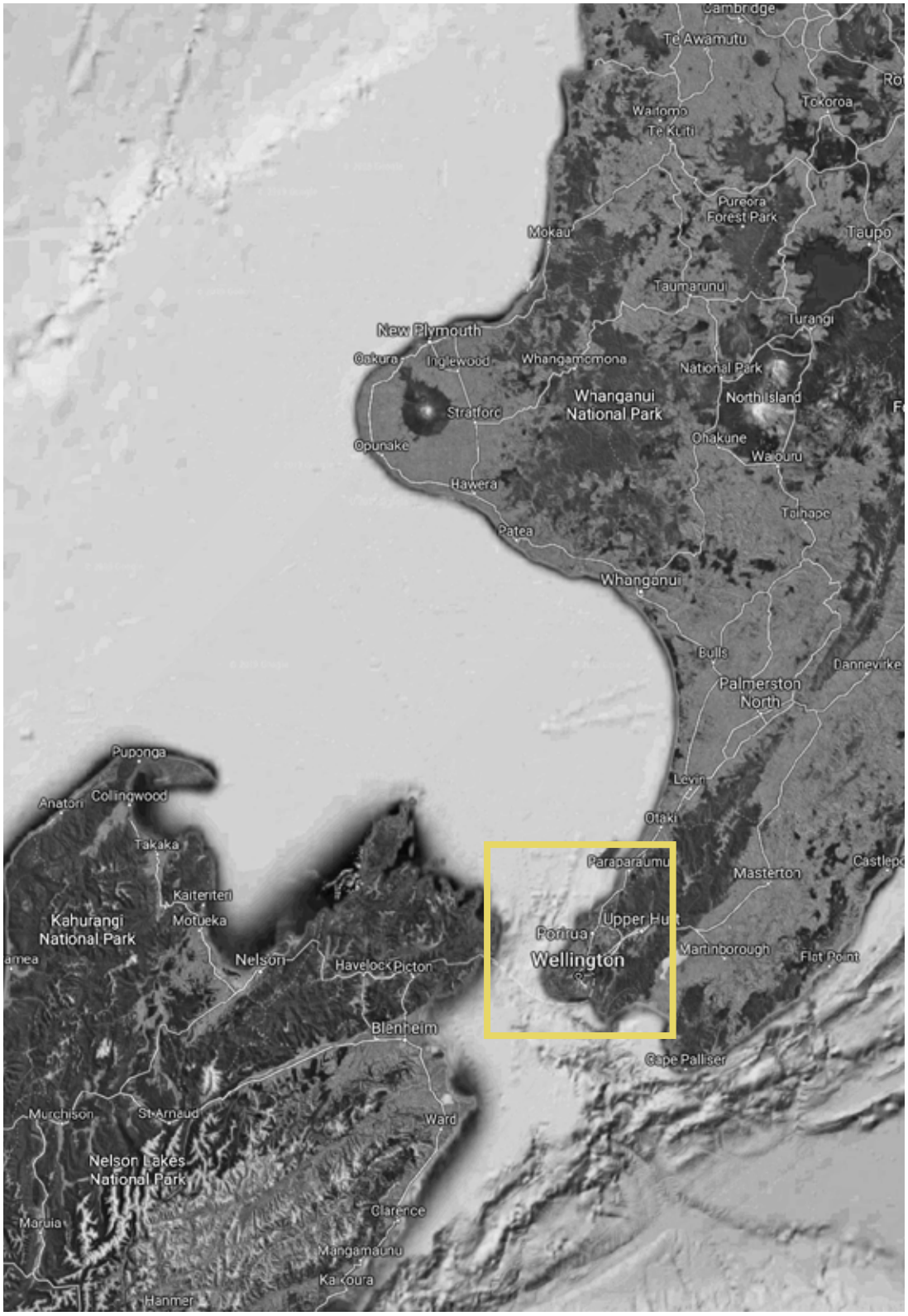
Cambridge
Te Awamutu
Tokoroa
Waitomo
Te Kuiti
Pureora
Forest Park
Mokau
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Taumarunui
Turangi
New Plymouth
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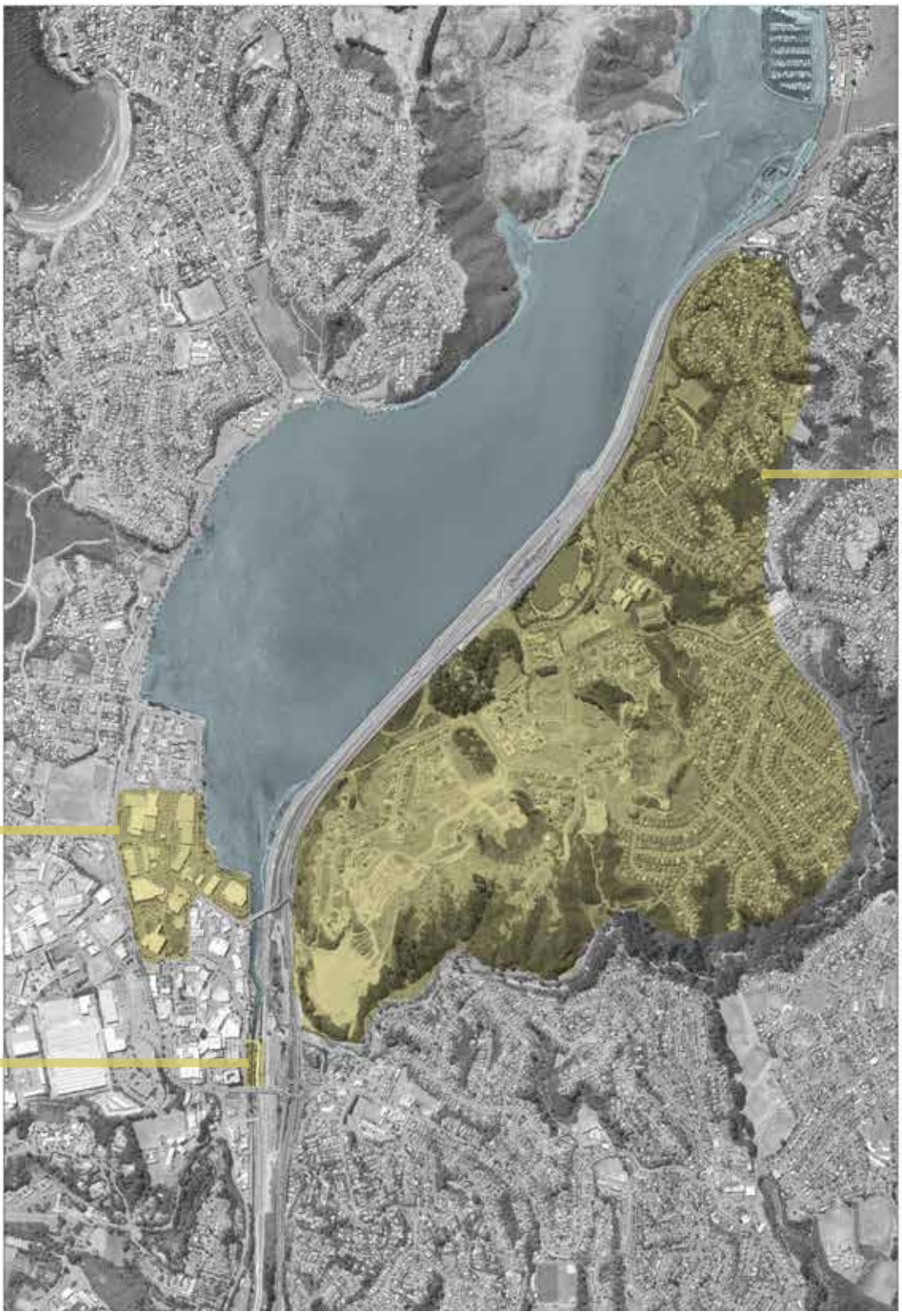
Inglewood
Whangamomona
National Park
Whanganui
National Park
North Island
Stratford
Ohakune
Opunake
Waiouru
Hawera
Tohapo
Patea
Whanganui
Bulls
Palmerston
North
Pupunga
Anatoki
Collingwood
Levin
Otaki
Takaka
Paraparaumu
Masterton
Kaiteriteri
Kahurangi
National Park
Motueka
Upper Hutt
Porirua
Wellington
Martinborough
Flat Point
Nelson
Havelock
Picton
Blenheim
Cape Palliser
Murchison
St Arnaud
Ward
Nelson Lakes
National Park
Clarence
Mangamaunu
Kaikoura
Hanmer


RESIDENTIAL
DEVELOPMENT
AREAS
The town
centre
train
station

Porirua is located 21 km north of Wellington City. It is home to around 54,000 people. Of this,approximately forty percent are under the age of twenty-five. This is the highest youth population in the country. It is New Zealand’s youngest city. Statistics New Zealand continue to project the population of Porirua to increase 0.6 percent per annum.

Porirua is a vibrant and diverse place. It has the second highest proportion of Pacific and Maori peoples in NZ. Higher proportions of the population are Maori(21%) and Pacific (27%) than the average across New Zealanad (15% and 7% respectively). Lower proportions of the Porirua population are European (57%) and Asian (5%) than the average across New Zealand (77% and 10%).

Source: https://poriruacity.govt.nz/your-council/city-planning-and-reporting/statistics-monitoring/

THE PROBLEM

PORIRUA CITY HAS DEVELOPED AROUND A BEAUTIFUL HARBOUR BUT THE WATERFRONT IS UNDERUTILISED IN THE CITY'S URBAN DESIGN. THE CITY IS CULTURALLY DIVERSE BUT LACKS A CLEAR ARCHITECTURAL REPRESENTATION OF THIS CULTURAL DIVERSITY

OBJECTIVE 1

ORIENT THE CITY TOWARDS ITS HARBOUR THROUGH THE USE OF SOCIAL ENGAGEMENT AND URBAN INTERIOR TECHNIQUES TO REPRESENT CULTURAL DIVERSITY

OBJECTIVE 2

PROMOTE PEDESTRIAN WALKWAYS AND CYCLE TRACKS THAT CONNECT RESIDENTS THROUGHOUT THE CITY

ACHIEVED THROUGH

ACHIEVED THROUGH

THE STRATEGY

LITERATURE REVIEW

URBAN INTERIOR TECHNIQUES
HUMAN SCALE
WAYFINDING
SPATIAL AGENCY
COMMUNITY ENGAGEMENT
HISTORICAL RECOUNTS
CONSTRUCTED WETLANDS
CREATING ACCESS WAYS

DESIGN EXPERIMENTATION
CASE STUDY

CONCEPT DESIGN

PRELIMINARY DESIGN

FINAL DESIGN

01 How can Porirua's neglected harbour be re-oriented through interdisciplinary design actions?

02 What is the role of an Interior Designer in providing opportunities for social and cultural change in urban planning?

01 To orient Porirua towards its harbour through the use of spatial agency and social engagement to represent cultural diversity and to empower the community through design.

02 To have a smart, walkable city, from the Central Business District to the harbour and suburbs through the creation of walkways and cycle tracks.

03 To celebrate the local character and identity of the harbour. Changing space in to place.

04 To create a pedestrian friendly place that offers a sequence of experiences to visitors through-out the city.

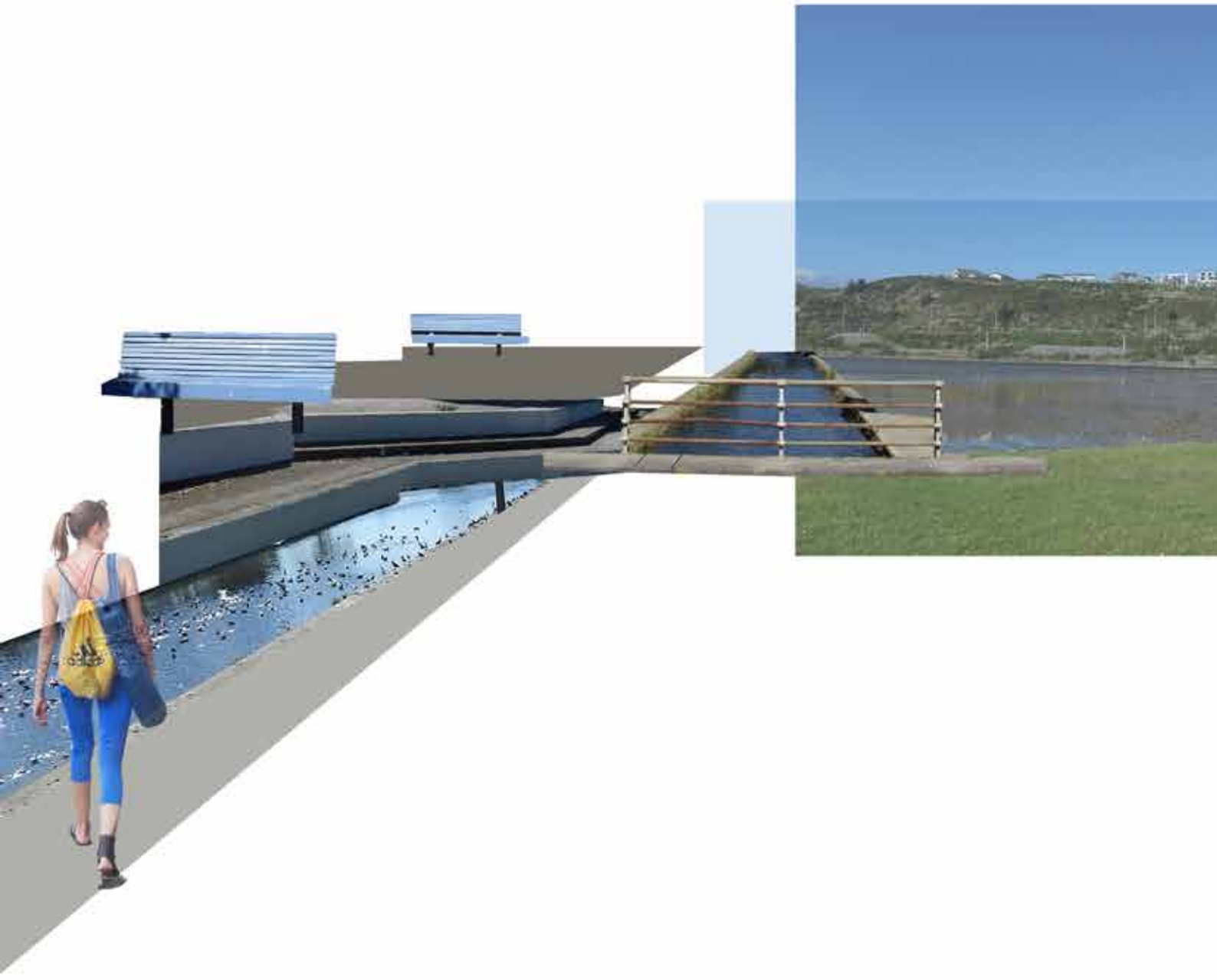
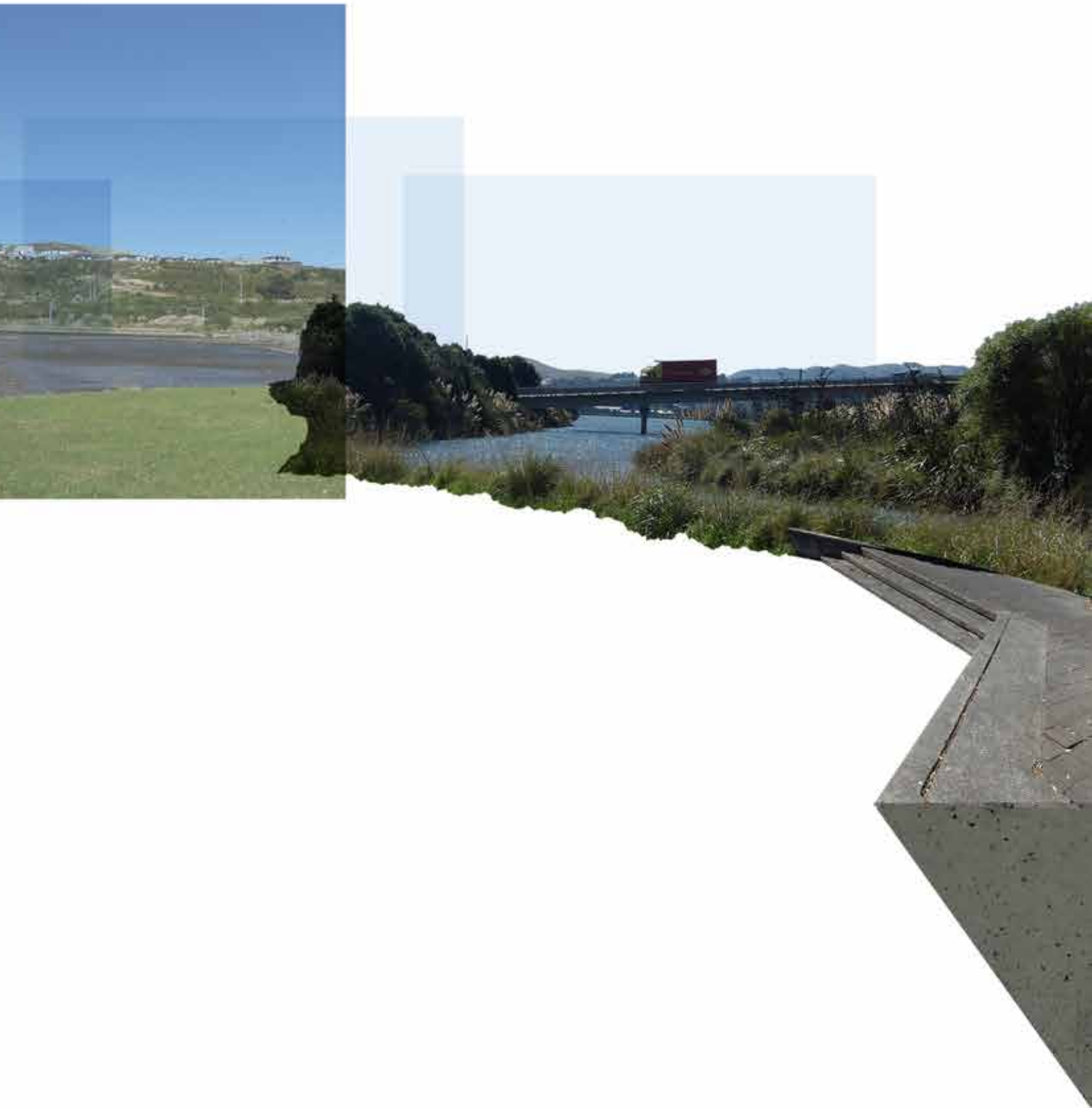


Fig 1.0



Urban + Interior

{a space which opens up to accommodate and connect people -U and I - in processes of exchange and production}

The ‘urban interior’ breaks the barrier between interior and exterior architecture and creates an extension of program, design methods and materiality into the urban

landscape.

The role of an Urban Interiorist

- To identify components that support interior thinking, whether internal or external

- Highlighting implications and potentials through supporting the narrative; knowledge of cultural and natural eco- systems.

02

CHAPTER TWO
LITERATURE REVIEW
URBAN + INTERIOR (techniques)
METHODOLOGY

Introduction

Urban planning, also known as 'city planning' is a 'technical process concerned with the development and use of land, planning permission, protection and use of the environment, public welfare, and design of the urban environment.'(Collins dictionary) It is often carried out by urban planners, landscape architects and civil engineers with the absence of professionals from the discipline of Interior Architecture. The exclusion of the interior field is influenced by set traditions. Traditionally, interiors have rarely been involved in city planning, however, the discipline is becoming prevalent. The discipline of interior architecture lacks a definitive title amongst the general public. It has often been interpreted as interior design and often referred to just as 'interiors', only existing within the context of architecture (the exterior). However, there has been a rising interest in the discipline and rediscovering "ways of speaking and designing interiors without the dominance of architecture." (Attiwill, 2007 p. 64). Attiwll argues that interiors should no longer be defined and limited to traditional definitions, however, there should be more discussions on ways of understanding interior architecture and conditions that define interiority.

The literature review aims to explore techniques and identify impacts of the interior field in urban planning. This will be carried by an analysis of explorations made by various interior designers/architects, researchers and architecture professionals. The concept of creating an interior space in an urban context is the objective of this research. This notion has been termed, the 'Urban Interior' by Dr Suzie Attiwill, an Associate Professor of Interior Design at RMIT School of Architecture and design and a member of the Urban Interior research group.

The Urban Interior

"I am interested in the conjunction 'urban and interior' in relation to the design of interiors and what a practice of interior design has to contribute to the contemporary city. The conjunction 'urban and interior' highlights the relation between interior and exterior conditions without the implication of an existing frame between the two conditions." – Suzie Attiwill

Attiwill conducts tests to provide methods of experimentation to produce potential opportunities for interior spaces to be formed within urban environments. These ideas will be explored in this research to create an urban interior that shapes the culture of the city. "The cultural dimension of development is still too often misunderstood or undervalued," states Duxbury (2016). The element of culture is usually viewed as an optional extra once the hard work of 'real development' is complete. This is unfortunate because culture is often what defines a city and adds to its' individual qualities. "As architects and urbanists, we are accustomed to describing and creating the organizational structures, layouts and physical attributes of our cities" (Mostafavi, 2012, 8) however, there are specific cultural characteristics unique to various cities that are equally important. These characteristics could be aromas, colours, texture of building materials, landscapes, diversity and behaviour of the inhabitants.

The emergence of the 'urban interior' date back to the 19th century, architectural historian, Charles Rice writes of the 19th century domestic bourgeois interior as well as the 19th century industrial city and the relation between the two. Rice presents the interior as a condition of 'doubleness' produced through a relation between space and image, as "a conceptual apparatus marked by temporal and experiential disjunctions of modernity" (Rice 2009, p.132). Maison La Roche by Le Corbusier is also presented as an example of this concept. The promenade leading to the house effected as an interior condition but was made coextensive with the existing city. Rice highlights that the relation between the interior and the urban field is a recognition of their interdependence spatially and experientially. (Rice, 2009) Rice predicts Le Corbusier's work as a speculation on urban schemes, where he aspires to link "the organization of movement and the organization of dwellings." (Rice,2009,109) This demonstrates early experiments on the concept of 'architecture-becoming-urbanism' and giving a new identity to the city. The idea of the interior extending out into the urban field has been rearticulated over the years.

Techniques for urban interiorists

It is evident that cities are now being informed by interiors. The city consists of interiors rather than exteriors and mostly lived and experienced within. This spatial inversion is grasped as an urban interior through the work of Giambattista Nolli who produced the 1748 Map of Rome which re-conceptualises the composition of interiors and exteriors. – the void is the public space and this includes exteriors
i.e. streets and the interiors of public buildings such as churches. The public buildings and streets are one continuous public interior. The 'sculpting of "negative" space rather than the production of a "positive" object' is often cited as one of the key aspects of interior design (Caan, 2010). Public spaces are becoming more common in cities and sometimes end up as dead spaces. What techniques could harness and revive a sense of interiority in these spaces? Many researchers in the interior field have assessed the potential of the urban interior and its impacts in the city.

Fig. 2.0 - Section of Giambattista Nolli's 1748 map of Rome

Attiwill conducted tests and engaged interior design students from RMIT in University of Melbourne to investigate through a series of experiments that identify 'interiority'. Students were presented with different scenarios and asked to document 'a temporal occupation and consider how it worked and transformed over time. They also observed sightlines, historical, social and cultural forces. Useful aspects of their findings include light studies, materials and immateriality, determining private and public spaces, densities of circulation, movement patterns, historical layering and programmes of spaces as well as their functions. The analysis highlighted a new way of thinking about the city and how the sightings 'might collectively re-territorialise the urban fabric and how a provisional composition can create intensification in the spaces.' (Attiwill, 2011,21). The strategies presented by Attiwill provide ideas of how 'interiority' can be achieved in absence of an exterior enclosure.

To further clarify the notion of the 'urban interior', Attiwill refers to Michael Benedikt, the chair of Urbanism at the University of Texas, who defines the interiorist as one who is 'concerned with the inside of each layer, the concaved surface and is sensitive to texture, pattern, colour, style, touch, arrangement and personality.' (Benedikt, 2002,4) The interiorist attends to the inside feeling of embeddedness', the specificity of things as produced through relation and proximity. Having discussed and defined these ideas, Attiwill concludes that ideas provided are not a set of techniques applicable in all cases. It is important to understand the individuality of each space in relation to the concept of the urban interior.

Fig 2.1 – Diagrams illustrating findings from Attiwill's research

The role of public art in creating an urban interior – Mick Douglas

Douglas presents a series of public art events that begin to challenge the assumed sovereignty of ideas and operations set forth by artists, arts funding institutions. The events discussed set a platform for an urban interior to take place and "give rise to new forms of expressive democracy." (Douglas, 2011,46) One of the events discussed is a small market which was part of LiveHouse, Melbourne Australia, summer 2009 – 2010. The micro market is set up in a shipping container that is modified to open on each side making it open to the public. This hospitable outdoor setting offers African coffee and tea, run by "women bantering in Turkish, Persian, Somali and English. Passers by enjoy an overlay of Latin Percussion onto Middle-Eastern melodies." The container is also set up with a screen and stage in preparation for an impromptu shadow- play performance. This 'event' has emerged as a regular on Friday evenings in summer. It is evident that the event inhabits a sense of interiority through social engagement and creating qualities through human senses.
We see a similar engagement in Wellington on Friday and Saturday nights. The night market opens on Cuba street, displaying cuisines from various parts of the world creating a fusion of cultures. Similar markets are seen around the world, and the energies within these markets begin to inform the urban interior.

Fig 2.2 – LiveHouse, Melbourne, Australia summer 2009 – 2010. Mick Douglas, artistic direction.

Precedent 1

Temple Street Market – Hong Kong

Described as the liveliest night market in Hong Kong, the informal market displays vibrant atmospheres, and tastes and smells. Lights and colour are prominent qualities in the market that extends from the north to the south end of the city. This market is laid out to maximise movement and create an efficient flow in the high energy environment.
The sense of interiority is formed by density, the weaving nature of movement through the narrow lanes, overhead sign posts and the artificial light which reflects a glow that only exists till the sun comes up. It is interesting to learn that the sense of interiority is non-existent in the absence of these factors.
Edibles are not the only things sold at the market, you can also shop for clothes, everyday items and find fortune tellers, herbalists and open-air Cantonese performances. (Lonely planet, Hong Kong Temple Street) The market celebrates the Chinese culture and has become a life style.

Fig 2.3 – Temple Street Night Market, Hong Kong.

Private encounters and public occupations – Rochus Urban Hinkel

"Everyday practices of individuals and collectives in public space have an impact on that space." (Hinkel, 2011,81) Hinkel states that public spaces are constantly changing because they are shaped by atmospheres created by ongoing practices. Urban environments are created by activities and programmes run within the space itself.
One could argue that inhabitants shape the urban interior, hence there is no need to plan it or engage interior architects in city planning.
Hinkel questions the definition of a 'public space' and what it constitutes. "Is it enough to simply pass through a space in public so it manifests as a public space?" (Hinkel p.81) Many philosophers have commented on the concept of public space, Marc Augé stresses that a public space is not defined by the mere presence of people. Airports, shopping malls and spaces where people briefly pass through are referred to as 'non-places' by Augé. (Augé 1985)
I believe this is when the role of the interior architect comes into play. Redefining the left-over space, the third landscape which cannot be defined as a private or public space. Creating interventions in these 'left-over' spaces could begin to inform the importance of a sense of interiority within the city.
Hinkel refers to concerns raised by Lefebvre which outline that "cities are becoming more like museums." (Hinkel, 2011,82) Specifically Western European cities such as Paris that have an increasing number of festivals every year and results in the cities being inhabited by tourists rather than citizens. Hinkel criticises the festivalisation of cities and explains that although they might have economic benefits for the city and foster a creative community, they do not necessarily provide a free, open space that benefits diverse communities. (Hinkel, 2011,83) Public space is constantly changing and we live in a more fragmented world with multiple communities. What roles could designers play in creating solutions for the rapidly changing and unstable urban environment?
Hinkel engaged students in a series of tests and encouraged them to become involved in the habitual practices of public spaces. The explorations were similar to those conducted by Attiwill, however, Hinkel also encouraged the students to immerse themselves in the spaces explored in order to understand the social and political space. The first concept named, Private encounter, involved active engagement with strangers in public spaces. Students were encouraged to start conversations, ask questions or even play games with passers-by. The primary task was to evoke a response or reaction from strangers. "The strategies led to a level of interaction; often conversations or reactions followed, and in turn stories were revealed about the place." (Hinkel, 2011,89)

In the second experiment, students were asked to identify spaces of potential, these could be in-between spaces, the left over or the main shopping strip. They were further encouraged to physically inhabit or occupy these spaces and explore new potential or possible activities within those areas. Some students carried out the exploration over a couple of weeks and recorded reactions, activities and incidents. These urban occupations were based on an interest in the social and political potential of public spaces. Hinkel adds that the encounters and occupations contribute to knowledge about certain localities and further advance design practice research. It is evident that research is a major tool in design practice and exploration. The experiments carried out also highlight the need for students to become activists in public space, to engage with people and draw information from the various findings. Hinkel notes that the particular methodology makes an impact on the future of design outcomes and adds that the students who participated have an increased confidence in confronting situations in the public field and critically question conventions. (Hinkel, 2011,93)
Urban planning has become increasingly difficult in the fast-changing environment. Societies have become diverse and individualised. Hinkel calls for designers to "develop diverse networks that do not allow for one understanding but multi-layered and constantly shifting practices which will further shift relationships within contemporary public space." (Hinkel, 2011,95) Hinkel's strategy for tackling the urban interior is to consistently find methods of initiating new relationships between people (individuals and communities) and public spaces. This architectural engagement is important for future design in public spaces, however, further tests and developments can be made to address the question at hand.

Fig 2.4 – Four of Hinkel's students occupy the stairs of the underground train station in Luxemburg, creating encounters. How to create a territory – Berlin design studio.

Interiority in Tokyo's urban Landscape – Marieluise Jonas

Jonas investigates the urban landscape of Tokyo and identifies prominent spatial appropriation practices that make up the integral part of the urban fabric. Tokyo is often perceived as a complex city because of its' chaotic urban fabric. "The city is a massive carpet of infrastructure – so vast and distant that a relation of spatial experience on ground level becomes unattainable." (Jonas, 2011,99) This has often led to stereotypical depictions of the city as a neon-lit capital that is too complex to understand. Jonas aims to identify the structure that lies behind the apparent fragmented structure and refers to it as a 'Hidden Order'. Historically, the city was split in two, defining the 'low city' and the 'high city'. The highland, as 'the city of fields and gardens' which was home to the upper class. The lower classes lived in a low town along the shoreline which consisted of extreme density of buildings, lacking greenery. (Jonas, 2011,101) This structure outlined a clear division in the typography of the city. Urban growth over the years has birthed the increase in residential housing and infrastructure. The high population density has caused a desire to focus on inner spaces.
Pathways and plots in Edo (Tokyo's name before 1868) were deliberately structured in non-linear ways to create diverging paths and obstruct views in an effort to obstruct potential attackers. (Jonas, 2011,101) Most western cities are organised by linear streets and avenues in contrast to Japan's cities. Tokyo is composed of areas, giving it a sense of internalisation. The inner-city neighbourhoods expose the urban interior of Tokyo, expressions of domestic space remain visible in cultural practices of spatial appropriation. Residents have created a sense of spatial ownership in alley ways and paths. Informal gardens are situated between private and public spaces, on the edges of private homes, against facades and along roads and kerbs. These gardens play a role in creating a sense of interiority within the city. The environment is shaped by the "plants' growth and decay as well as their ever-changing silhouettes of overhanging branches and leaves." (Jonas, 2011,105) In most cases the gardens are illegally placed however, Jonas asserts that this compensates for the effects of the dense concrete jungle. Japanese Landscaper, Shunmyo Masuno describes the gardens as a place where people connect with nature.
"People need a space where they can rediscover compassion and humanity. Such a space can – if nature does exist – only be the garden. The garden can therefore change people and give compassion and humanity back to them." (Shunmyo Masuno in New Garden Design – Gardens of the World 2001)

The gardens serve to beautify living environments, increase privacy, create a sense of ownership and act as an asset to the community and support communication. The practice of gardening is deeply linked to long running cultural traditions within Japan, however, the concept can still be transferable to various cities. The public gardens work to engage the community and create relationships in a way similar to the festivals (public art) discussed previously. Jonas distinguishes this unique strategy for interiorists, however, one wonders whether it can be successful in regenerating the urban interior in other mega cities.

Fig 2.5 – Tokyo's
urban interior, Japan,
2010.

Reflection

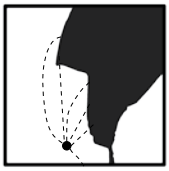
It is evident that many professionals and researchers are exploring the concept of interiority in the urban field. Each researcher discussed in this literature review explored various strategies and techniques that could inform the design process for the urban interior. A vast amount of research has been carried out, however, the question which still needs to be investigated is, how various strategies influence design processes and outcomes?

The research highlights the importance of the role of interior architects in urban planning particularly within the third landscape of the city, areas viewed as 'dead space' exhibit potential for new design interventions.

The research provided explores strategies for different cities and in most cases, those techniques work uniquely for the specific areas. Some strategies are not applicable due to varying social and cultural constrains in various cities. Each strategy discussed is unique to its location and inhabitants. One can deduce that the interior architect's role is to perform a series of tests that deduce critical findings to further inform design qualities. The urban interior aims to develop an architectural engagement that promotes diversity and social change. This research has provided me with a greater understanding of the role and scope of the discipline of interior architecture and its importance in the urban context. A starting point has been provided for designers and it is vital to develop these ideas further in order to produce alternative and additional methodologies.

Techniques (strategy) for urban interiorists

Different techniques and approaches produce different relations and solutions. The design talk of the public interior benefits from being informed by research conducted in adjacent disciplines such as anthropology and environmental psychology. 'The collaboration between social scientists and designers is crucial in terms of understanding how individuals interact with their surroundings.' (Poot, Van Acker, De Vos, 2015, 53) After analysing various techniques used by designers to create the 'urban interior', a collection of techniques and examinations was put together specifically for the Urban Interior in Porirua. These techniques are highlighted throughout the thesis.



1. Site mapping (observation, behavioural mapping, documentation of movement, materials, lighting, circulation and sound)
In her experimental studio, Urban Room, Attiwill asked students to address issues of site specificity and existing conditions, where the 'urban fabric informed and shaped the urban condition as an interior one – the exterior architectural fabric like a mould which produced a spatial inversion.' (Attiwill, 2011,18) Before designing, students conducted a rigorous analysis that included observation, documentation of public and private space; light and light conditions; materials and immateriality; movements and flows; densities of circulation and stillness; historical layerings; urban character; programs and activities for 24 hours and 7 days. (Attiwill, 2011,18) This was the first step to establishing the conditions that form an urban interior and mapping out areas of activity and movement. A similar kind of site analysis is initially undertaken before the start of any design process in the field of architecture, however, this in depth, rigorous analysis is useful in defining how the urban interior can be formed.

2. Identification of actions/aims.
This strategy focuses on the benefits that the urban interior can bring to the city, the proposal made and how this can increase engagement and community.

3. Historical narrative – function and meaning.
After identifying the aims, it was important to dig deeper into the history of Porirua and how the Urban Interior could address the stories dating back to the 1800's. Defining the historical narrative develops stories and concepts that enhance the design process.

4. The use of urban fabric to inform interior/The use of pre-existing structures which enclose an internal space.

The discipline of Interior architecture focuses on the existing and aims to develop on that. It was important to identify existing urban fabric that could potentially inform the interior, this includes finding a space/environment in the city which could be transformed in texture, pattern, style and arrangement in relation to the 'inside feeling of embeddedness' (Benedikt, 2002, 4).

5. Intentionality and reduction.

Interiority is about intentionality. The interiorist attends to the specificity of things as produced through relation and proximity – 'seeing the arrayed proximity of things around us rather than their composed shapes relative to each other' and 'environmental experience ahead of form making and tectonics' (Benedikt, 2002, 4). Author, Valerie Mace describes the urban interior as a space where 'objects of memories are curated into a reconstructed atmosphere of domesticity'. (Mace, 2015, 56) The experience of the urban interior manifests itself in our consciousness creating a phenomena where intimacy and familiarity converge across space and time to provide a more stable form of inhabitation. (Mace, 2015, 56) Interiority creates spaces and objects with intention and motive, in order to evoke emotion and reaction.

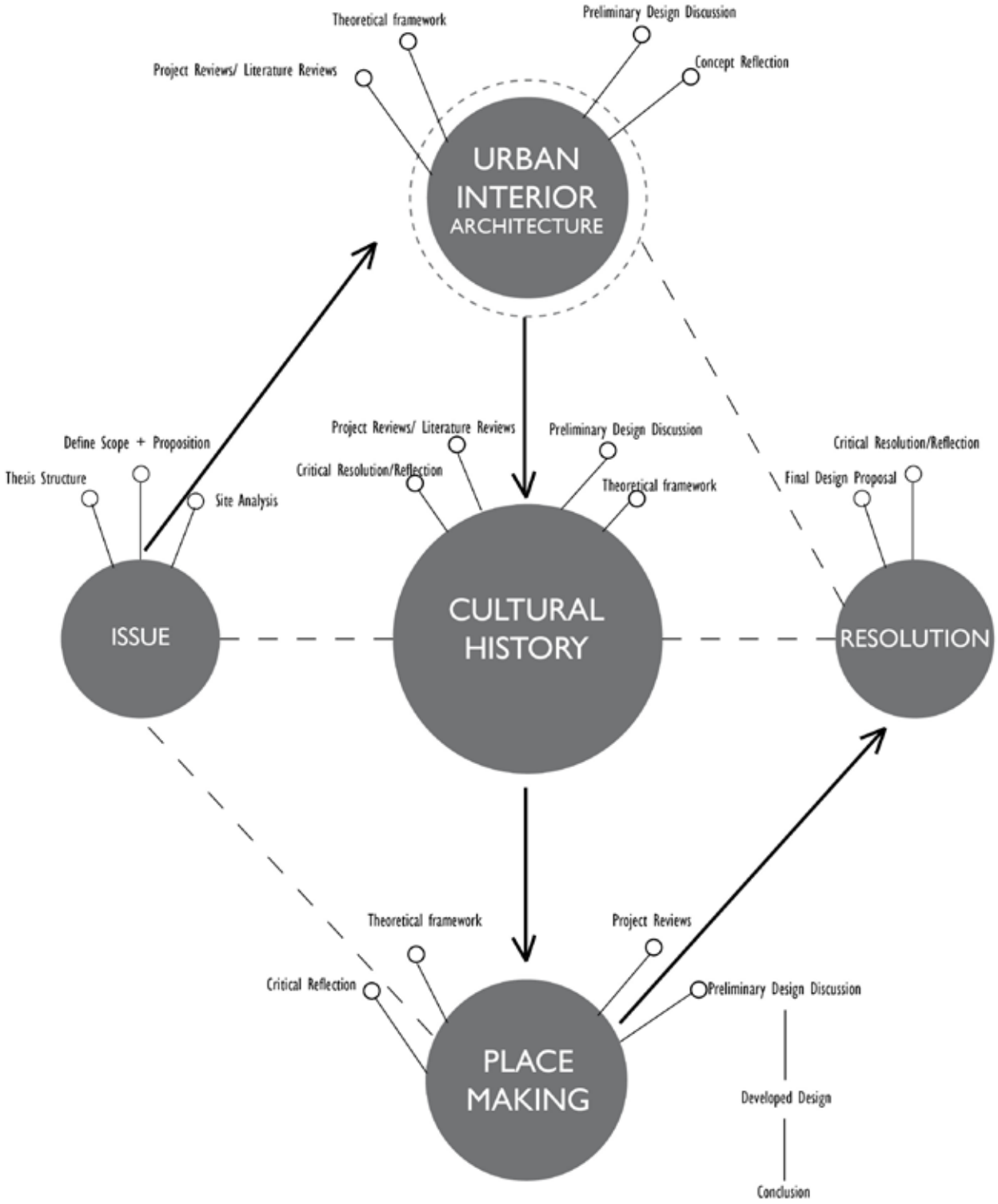

Theoretical framework
Preliminary Design Discussion
Project Reviews/ Literature Reviews
Concept Reflection
URBAN
INTERIOR
ARCHITECTURE
Define Scope + Proposition
Thesis Structure
Site Analysis
Project Reviews/ Literature Reviews
Preliminary Design Discussion
Critical Resolution/Reflection
Theoretical framework
Critical Resolution/Reflection
Final Design Proposal
ISSUE
CULTURAL
HISTORY
RESOLUTION
Theoretical framework
Project Reviews
Critical Reflection
Preliminary Design Discussion
PLACE
MAKING
Developed Design
Conclusion

Fig 2.6

Methodology

The research begins with an analysis of current theory on the discipline of interior architecture. This will identify concepts that have been proposed to define interior space or a condition of interiority. The research is grounded in selected definitions in order to build a precise conceptual framework in which to move. This in turn will produce a series of visions and a set of operational tools to facilitate both the intervention of the designer as conductor of the process and the community of users involved at present and in future. This is structured as four independent investigations; background research; cultural history (site specific); precedent analysis; design process and discussion of findings. These investigations will be followed by a discussion which examines the findings of this research and what this contributes to the discipline of interior architecture.
There are various methodologies that can be used by designers, some of these include, the Double Diamond process, Research through Design and Design led Research. Authors of Architectural Research Methods, Groat and Wang define research as 'a fact-based activity' and design as a series of subjective commitments that illustrate philosophical principles.' (Groat, Wang, 2002, 101) The writers state that research can aide the design process in many ways and the two domains are equal in intellectual significance. Design led Research is a method used by Le Corbusier in designing the roof of Notre Dame du Haut. It is said that the architect himself was 'inspired by a crab shell he had picked up on Long Island, near New York in 1946. The crab shell was next to his drawing board when the initial "birth sketches" for the project were evolving.' The natural design of the shell influenced the design process and is therefore a method of application. This example shows that it is difficult to separate a theory of design that can explain how chance occurrences can result in architectural designs. (Groat, Wang, 2002, 102) According to Downton, design is essentially a method of researching, he suggests that it is "a way of inquiring, a way of producing knowing and knowledge." The process of interpreting a thought into a distinct visual object is indeed a development of research. (Downton, 2003, 2)

The chosen methodology for this thesis is Design led Research, this involves design activities that play a formative role in the generation of knowledge. This method was selected because it requires a level of explicit understanding about how designers 'think through making.' 'Designers gain understanding of complex situations by reframing them and iteratively developing prototypes that address the situations.' (Stappers, Giaccardi, n.d) Methods used in this thesis include analysis of selected case studies which led to explorations through hand drawings, iterations, model making and classification. After the set of explorations was complete, the knowledge gained is applied and informs the design project. There are many Maori historical concepts which relate to the chosen site and therefore are significant stories that have contributed to the design process.

Cultural Awareness

Tikanga Māori is a vital part of this thesis, it can simply be translated as Maori custom. It is a very extensive topic and this thesis will address only a fraction of the topic. As a foreign student, my knowledge of Māori tikanga is simple and this thesis has provided me a learning opportunity in both design and theory.
Tikanga Māori is embedded in New Zealand legislation and it is customary for designers to consult and involve the local Iwi when carrying out projects. This ensures that Māori rights and interests are actively protected through honourable conduct, fair processes, robust consultation and good decision making. It is therefore my duty as a researcher and designer to gain an understanding of history and tikanga in order to protect and preserve the city's natural resources and connect with its' cultural identity.
Māori culture goes beyond the aesthetic of the carved pole or the wharenui, these architectural forms represent the whakapapa (genealogy) and embody the spirits of great ancestors, historical values and philosophies. The meeting houses are not only architectural forms but create experiences and in modern times, we can only imagine the reverence in which the memory of great ancestors was held. (Barrow, 1965, 13)
Architecture is often associated with cultural identity, Leach explains that architectural theorists have been "preoccupied almost exclusively with questions of form, as though cultural identity is developed by form alone." (Leach, 2005, 76) It is clear that if theorists are to connect cultural identity with architecture, they must expand their investigation beyond the mere idea of form, but explore the processes of identification. This has been identified and acknowledged by cultural theorists who state that cultural identity "emerges as a complex field of operations that engages with but is not defined by cultural artefacts such as architecture." (Leach, 2005, 76)

03

CHAPTER THREE
THE PLACE – SITE EXPLORATION
NZ HISTORY + IDENTITY
A TALE OF NEGLECT AND MISUSE
ARCHITECTURAL EMPATHY

The Place

Porirua is just 20 minutes north of Wellington City, surrounds a beautiful harbour and a rugged coastline. The city is fifty years young and is home to the youngest demographic in New Zealand. Porirua offers natural beauty and peaceful surroundings which are matched with a vibrant culture. Sadly this cultural diversity is not represented in the architecture of the city, the harbour is neglected and is not incorporated in the city's urban design.
The harbour was originally named Parirua which translates to "twin flowings of the tide". There are two arms to the harbour. Onepoto flows from the Paremata bridges south and ends at the shoreline of Porirua City. This inlet is popular with rowers, powerboats, small dinghies and personal water craft users. The second arm is Pauatahanui Inlet and stretches eastwards from the Paremata bridges past the suburb of Whitby and contains a world-class wetland reserve area, of the same name, at its head. Porirua City council are working to protect the harbour for the future through improvements to the stormwater and wastewater networks and better management of waterways.

The City Council's vision is to realise the potential for all our children and young people in a Porirua that is a healthy and beautiful place to grow up in. This is captured in five focus areas that embody all our strategic priorities :

1. Environment and place: children and young people are actively involved in the care and protection of the harbour and the environment, and enjoy living in clean and attractive neighbourhoods.
2. Safety and wellbeing: children and young people in Porirua grow up healthy, active, and safe. Public places promote health and wellbeing and strengthen connections for the wellbeing of young people.
3. Opportunity and experiences: children and young people are supported to achieve academic success at school, and to transition from formal education into a future they aspire to. They participate in the life the city, broadening their experiences and expanding their horizons.
4. Connection and belonging: children and young people feel supported by strong connections with families, each other, and the wider community. They have places to go and things to do, and enjoy seeing, hearing, and celebrating a variety of cultures in their everyday life.
5. Engaged and involved: children and young people are active participants in decision making processes and local projects to help shape the look and feel of the city. (Porirua City Council, Annual Report - Children and Young prople 2018-19)

This vision coincide with the aim of this thesis as well as the creation of space for engagement and connections – the creation of an Urban Interior.

Existing Social Spaces

The Porirua City Council is making attempts to create more social spaces in the city's centre. A 10 year revitalisation strategy birthed a new look for Cobham Court, the new construction included a children's playground, widened pavements and access ways, shaded seating and installation of a kiosk and public toilet. The space is also transformed into a night market which provides family entertainment, food trucks and a range of musicians. Overall, it has become a more open, vibrant and colourful area as opposed to the cold and dark space, it used to be. This thesis intends to create similar improvements to the harbour

Pātaka Museum is considered the 'jewel' in Porirua's cultural crown (Porirua City Council, n.d) The artistic powerhouse is situated in the city centre and is an inspiration place for many around the city. The museum exhibits Maori history, contemporary art and provides learning and researching spaces in its' library. A Japanese Garden and café in the building, allow visitors to have a break away space before and after classes, events or meetings. The museum is a cultural hub that creates a physical and historical connection between the city centre and the harbour.

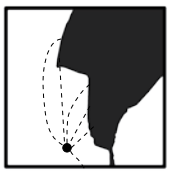
A recent development is the Harbours Edge Pop Up which provides a range of social spaces, a Bicycle café, a barbarque restaurant and an art and crafts pop store. It is believed that the intention was to create a lively social space for Porirua residents, a space that connects them to the harbour, however, the initiative has not been entirely successful. This thesis aims to enhance and explore the existing ideas. It sees the water's edge as a place for interaction, production and exchange. A place where past, present and future meet in an attempt to celebrate culture and diversity.

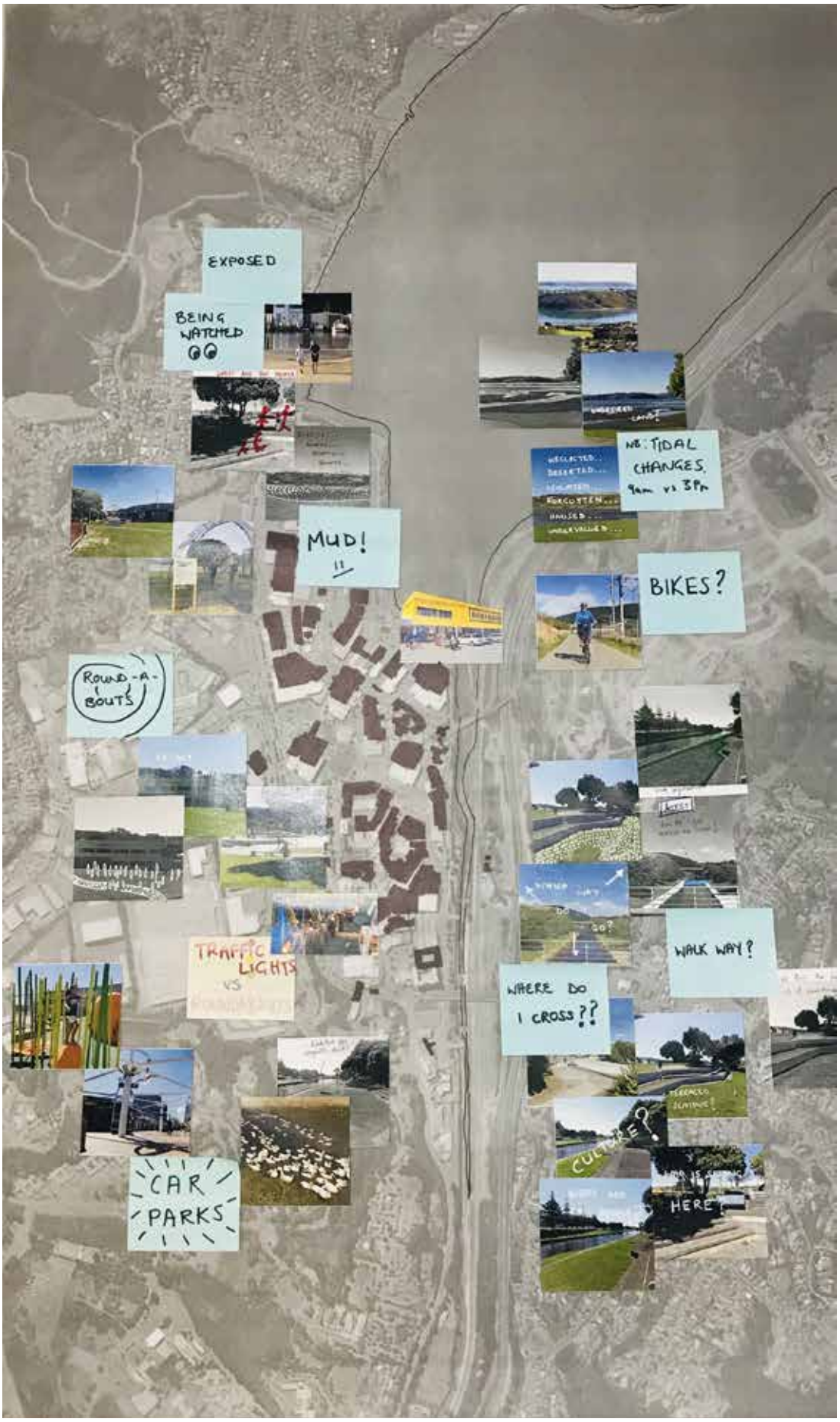
Fig 3.0

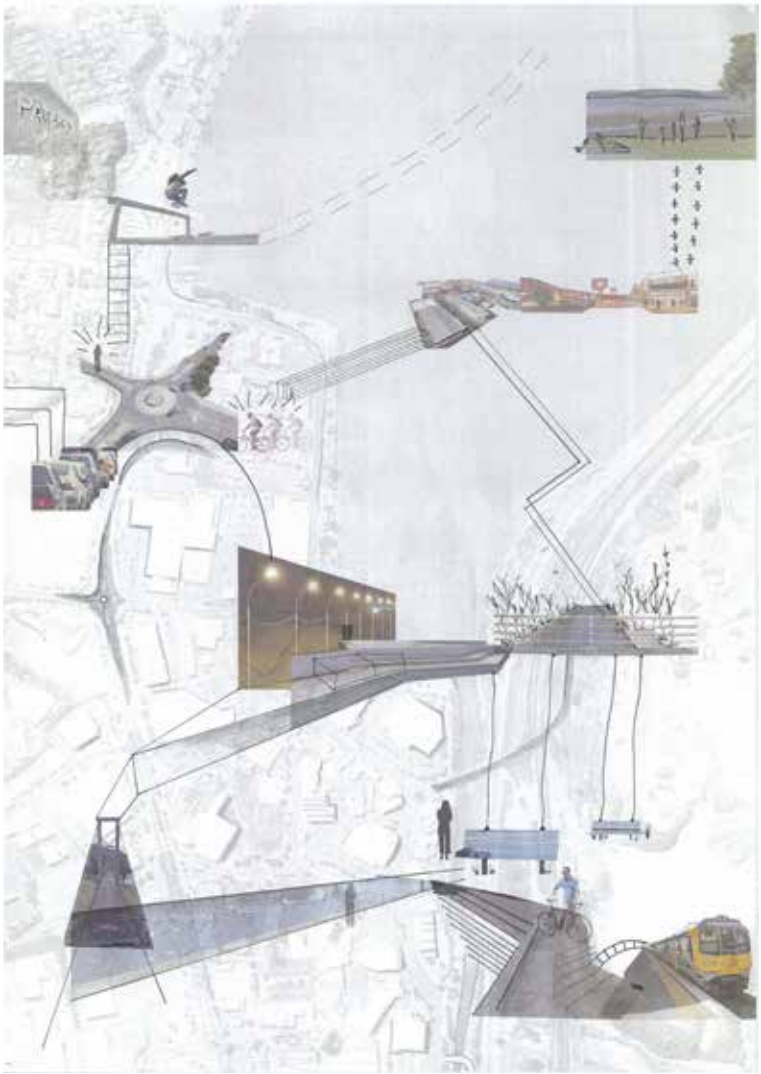
Fig 3.1 The Skatepark in Te Rauparaha Park

Fig 3.2 Playground in Cobham court.

Fig 3.3 **Opposite** Site documentation of movement, observations and experiencing while walking in the CBD and areas around the harbour.




EXPOSED
BEING WATCHED
MUD!
NB: TIDAL CHANGES. 9am vs 3pm
BIKES?
ROUND-A-BOUTS
TRAFFIC LIGHTS
WALK WAY?
WHERE DO I CROSS??
CAR PARKS
CULTURE?
HERE



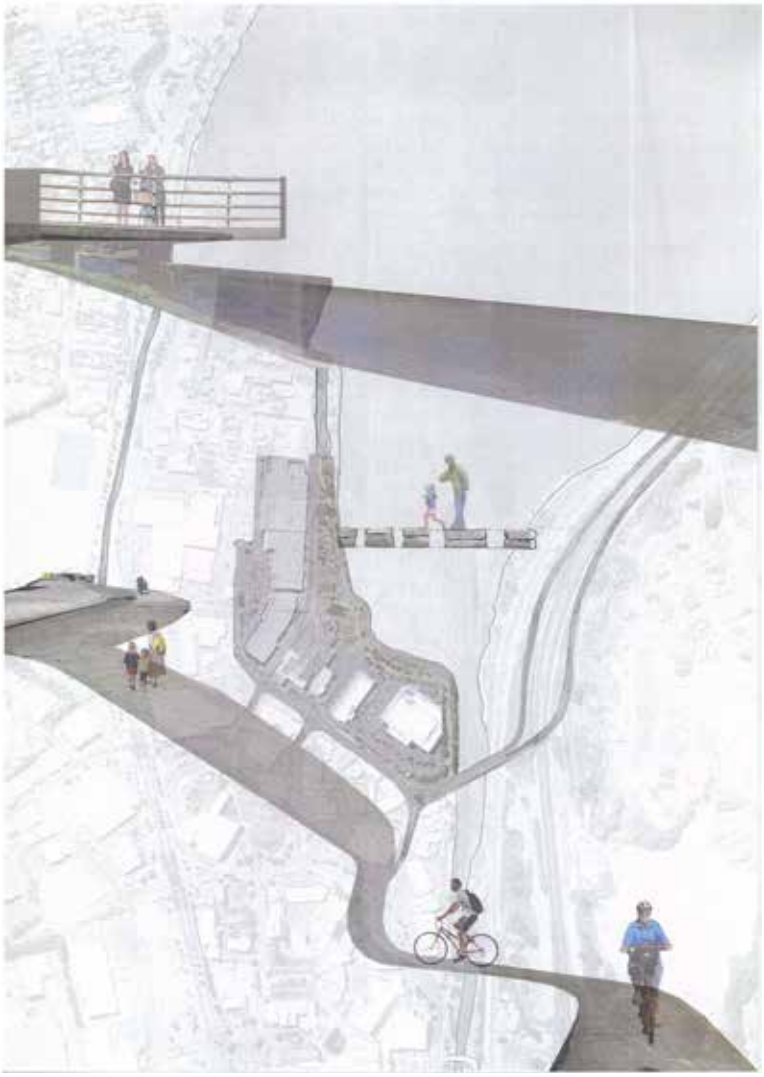


Fig 3.4, Fig 3.5, Fig 3.6. This exercise in collaging explored the possible connections and links between pedestrians and activity locations that would improve the urban environment.

New Zealand History and Identity

Indigenous Period 1250's – 1800

Before the first Europeans arrived in New Zealand, Māori had settled on the land, every corner of which came within the interest and influence of a tribal (iwi) or sub-tribal (hapū) grouping. (Ministry for Culture and Heritage, 2019) Maori lived as communities in pā, which are villages or fortified settlements. The architecture within each pā was unique to the iwi, the location and the type of dwelling.

Classification of house types may be suggested as follows (Phillipps., 1952, 15);

1. The sunken house.
2. The house with earthed up walls.
3. Bark houses.
4. Log-walled houses.
5. Tree-fern walled house.
6. Nikau-palm houses.
7. Round or oval houses.
8. Raupo houses.

There were several other types of housing that can be listed, however, this list shows the native materials mainly used in maori architecture.

Colonisation 1800 – 1974

The arrival of European settlers in the early 1800's introduced a change in patterns and ways of life. European imported plants, animals as well as technology including iron tools and muskets which dramatically and permanently changed the lives of Maori. (Derby, 2013) 'It is believed that the New Zealand settlers, builders and architects have worked to develop an architecture responding to the indigenous structures, suiting the local climate and culture.' (McKay, 2004, 2) However, it can be argued that Pakeha (New Zealanders of European descent) culture has not developed a new architecture reflecting the vernacular structures, rather, it has regenerated a known European style of architecture.

Biculturism late 1974 +

The Treaty of Waitangi was established in 1840 and it set out the arrangement of cohabitation for Pakeha and Maori in New Zealand. The details and application of this contract continue to be debated and there is ongoing discourse over the nature of the relationship between the two peoples. 'It is evident that Pakeha have always been included in discussions and construction of Maori architecture, however, it has been argued that Pakeha should not be involved due to a lack of cultural and contextual knowledge.' (McKay, 2004, 6) Over the years, both peoples have been linked through the sharing of ideas, methods, forms and technology. This trading of ideas has seen the growth of biculturism in New Zealand and this thesis aim to explore this notion.

Fig 3.7. Maori village,
New Zealand. 1913

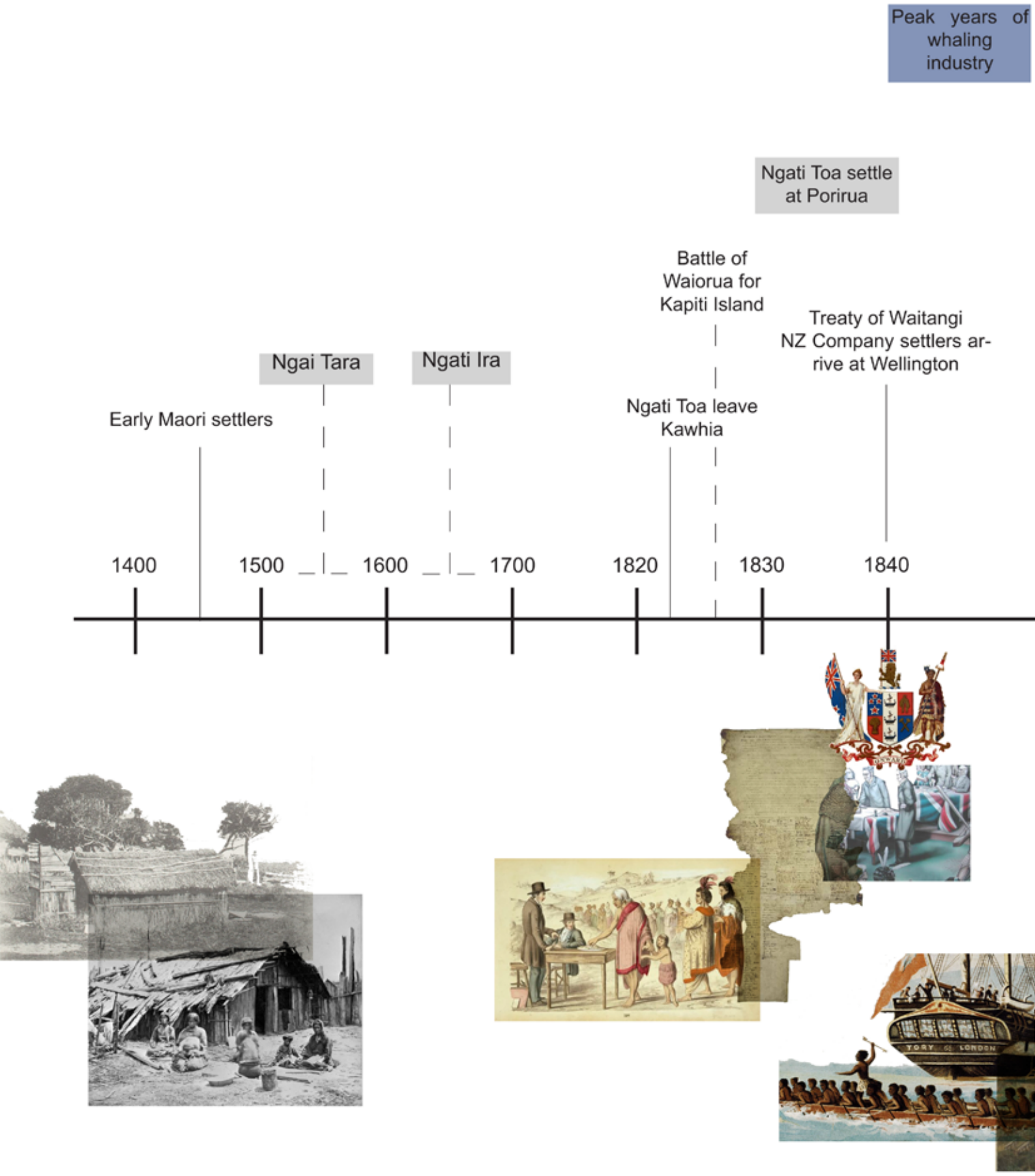


Fig 3.8 Historical timeline by author. Information Source: They Came on the Tides. Keith, Michael, 1990.

- Martial Law declared
- Te Rauparaha arrested
- Battle of Horokiwi

1846

The british army leaves the area

1852

-Major earthquake
-Death of Te Rauparaha

1860

- Crown purchases Mana Island
- Porirua Hotel
- Auty's General Store

1870

First Porirua School

1880

1890

-Ngati Toa at Te Uru Kahika move to Takapuwahia
-Titahi Bay sections for sale
- Toa Rangatira opens

1900

A tale of neglect and misuse

The Porirua harbour has not always been misused and polluted, it was once a bountiful harbour and a source of life. It is said to have been discovered by the great Polynesian explorer Kupe, who was the first man to set foot on the harbour and named it "Parirua" meaning the two flowings of the tide. The very first humans to settle on the shores of the harbours many years ago, found enormous food supplies which included fish and shellfish along the shores. The flora and fauna reached the water's edge, with dense bushes inhabited by different species of birds, and in prehistoric times, it is said that moa roamed the Paremata lowlands. For many years the Porirua region was occupied by the people belonging to the Ngati Ira tribe. They were displaced by the Ngati Toa in battle, the iwi migrated to Porirua from their ancestral home in the mid 1820's. The harbour offered Ngati Toa secure food supplies and access to the European ships which occasionally sailed through Cook Strait. Ngati Toa were able to conquer further territory in the South Island.
Early settlers described the Porirua catchment as "noble forest trees with plenteous underwood" (Best, 1965) It is reported that at least two thirds of Pauatahanui catchment was covered in native vegetation, whereas in 2001 only 6% retains native forest cover. During the 1940's pressure began to increase for areas of the harbour bed to be filled and developed. Despite opposition, the Public Works Department began a land reclamation programme at the southern end of the Porirua arm. The cherished seafood bed for the Ngati Toa was destroyed, with is a source of food and renowned delicacy among Maori. Ngati Toa claimed for compensation from the government, however the petition failed. In the 1960's more reclamation was undertaken to develop the Porirua city centre. (Day, 1992, 13) Once again petitions were made by the Ngati Toa to the Government but reclamation proceeded. Much of Porirua's light industry now occupies the reclaimed harbour bed.

The harbour itself has gradually degraded over the past 150 years, largely affecting the ecosystems that relied on clean and healthy water for survival. Industrial development increased in the early 1900's, new roads, rails and bridges created access to and through the harbour. Development of state housing and motorway expansion started in the 1950's as Porirua was being groomed as a satellite suburb to Wellington City. 'Porirua hospital peaked at 2 000 patients – its untreated sewage pumped directly to the Porirua harbour.' (Te Awarua-O-Porirua Harbour and Catchment, Strategy and Action Plan, June 2015) Porirua grew into the modern city we know today, despite significant reclamation, the city centre was built and designed with its back on the harbour. The area around the harbour developed as a transport corridor, construction of State Highway 1 and the North Island main rail line pass further increased sediment run off into the harbour. Pollution from sewerage, stormwater and roads degraded the harbour. The once celebrated harbour soon became abandoned, neglected and misused.

Reclamation works resulted in modifications of the harbour edge and this affected the feeding grounds of marine life. Many shellfish beds became contaminated and unsuitable for eating. Health warning signs were posted at various locations of the harbour in the late 1970's. Much of the cultural resources of the harbour were either lost or became unusable and many recreational activities were affected by the excessive sediment in the harbour and poor water quality, these activities included swimming, sailing, waka ama, rowing, kayaking and windsurfing.

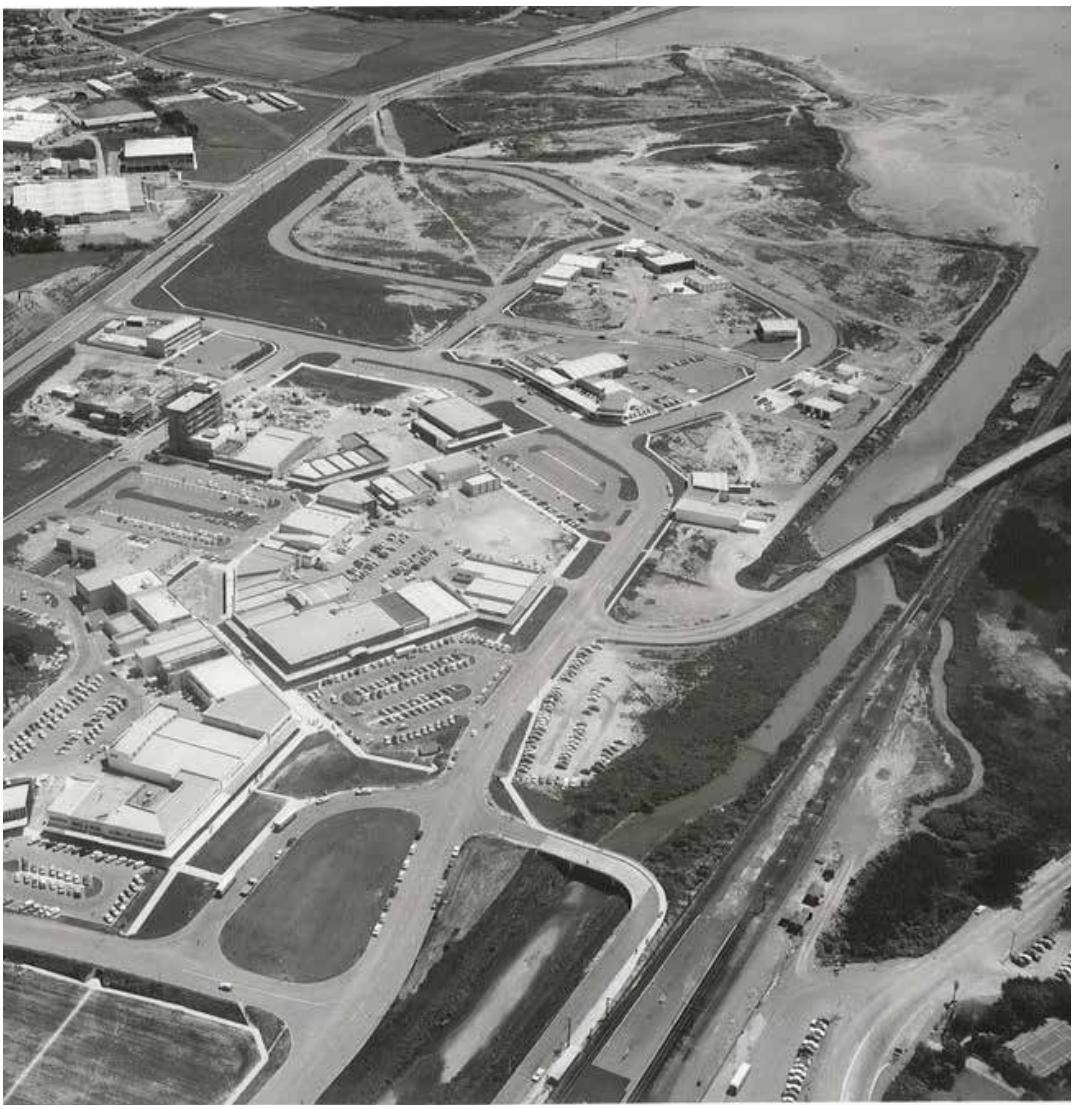


Fig 3.9

Fig 3.9 1965 Aerial view of reclaimed land being constructed.

Fig 3.10 Food gathering routines. 20th century photograph of Maori hunting for pipi and cockles. These activities were part of daily and seasonal routines.

Fig 3.10

LAND RECLAMATION
1947 - 1974

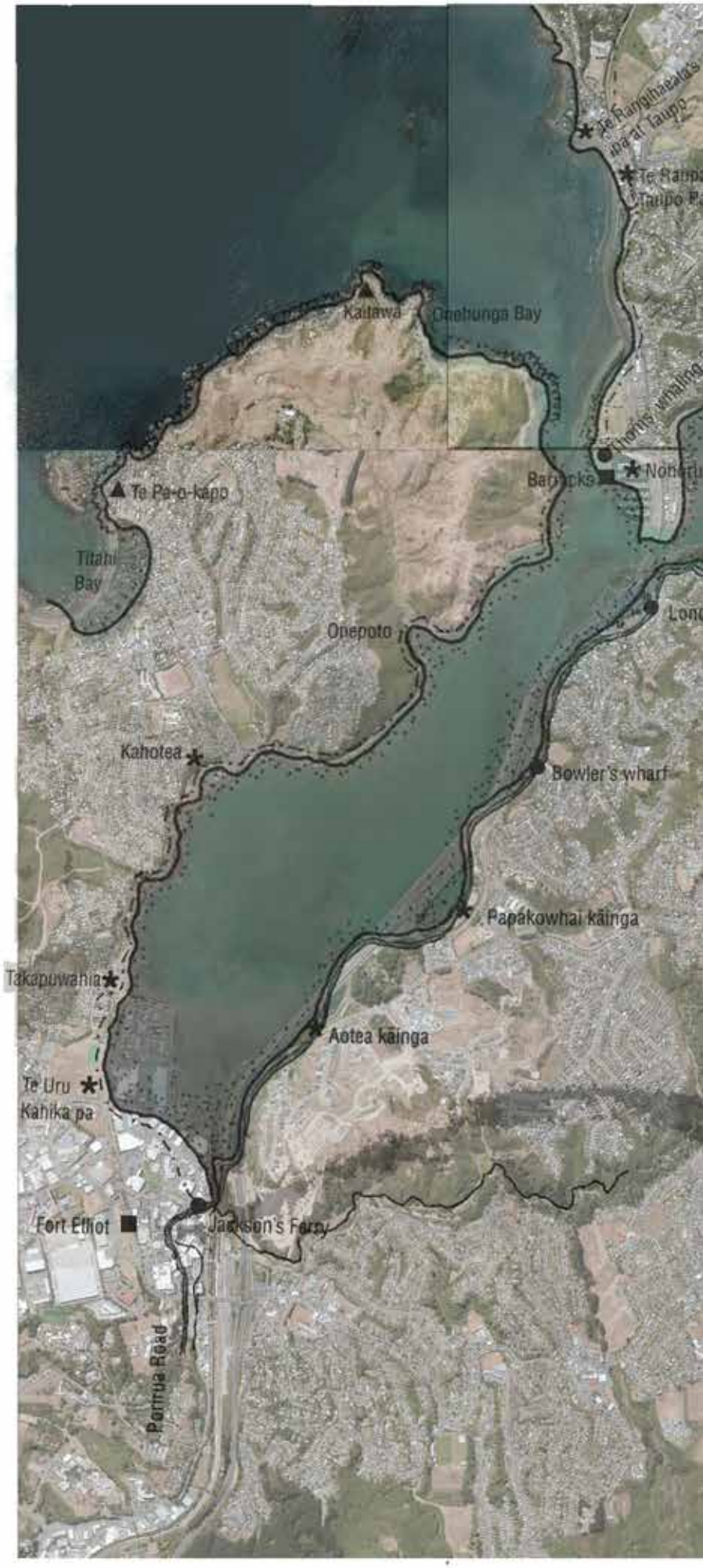
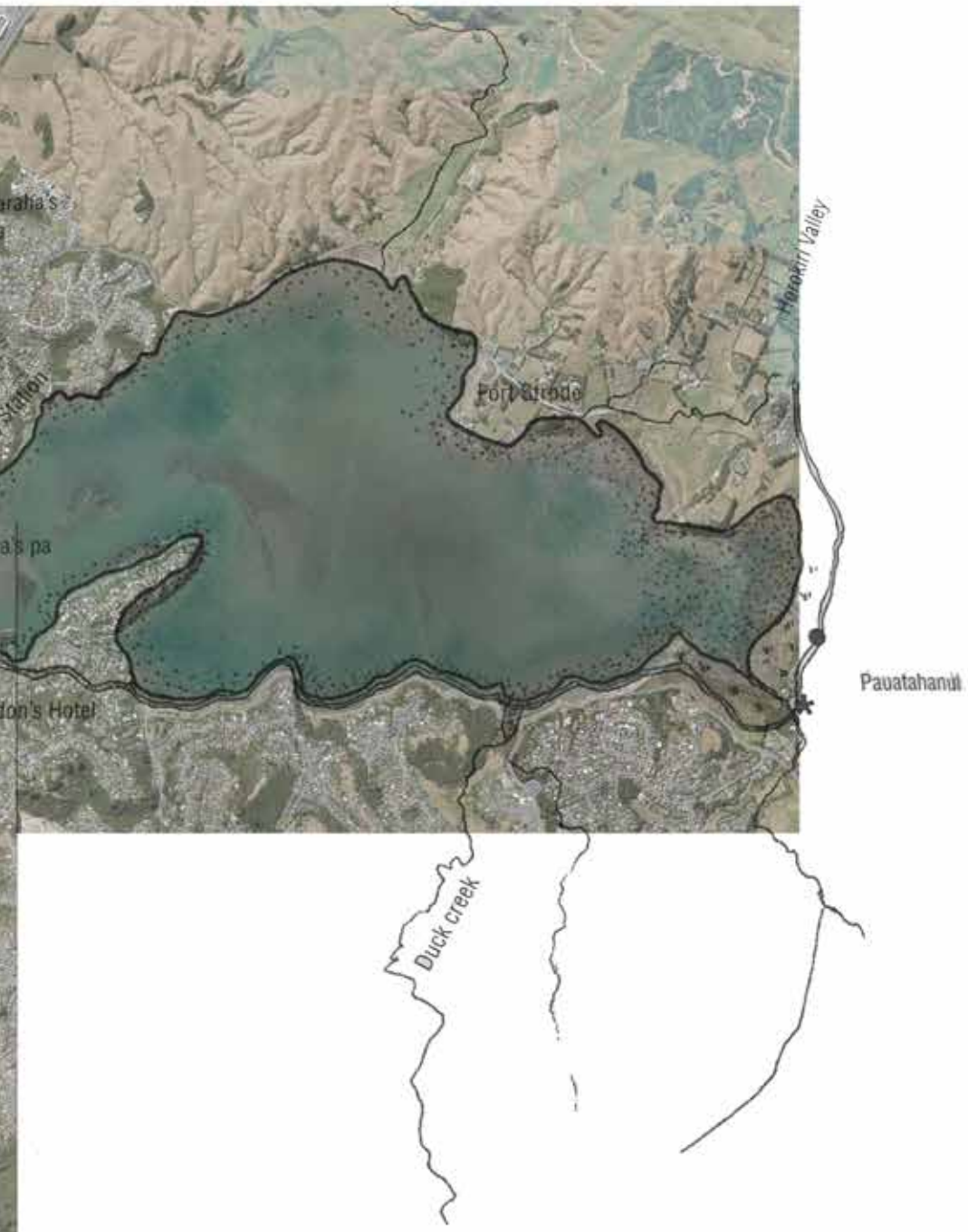


Fig 3.11 Land Reclamation 1947 – 1974. Source: Keith, Michael, 1990

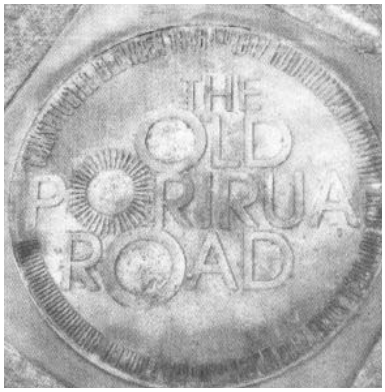

Harakiri Valley
Port Arbuthnot
Pauatahanui
Duck creek
Old fortified pa sites
Village pa sites
Stockades
Pakeha Settlements

Architectural Empathy

The loss of historical value and gradual degradation of the harbour seen in the city of Porirua begins to unearth underlying issues to do with 'artificial cities' – cities that have been deliberately created by designers and planners. Such cities have not grown organically. On the other hand, cities which have arisen more or less spontaneously over many years are 'natural cities' and these are known to be more successful because they have certain essential qualities, recognizable patterns and complexity within order. 'It is more and more widely recognised today that there is some essential ingredient missing from artificial cities.' (Alexander.,1967, 344-348) It is evident that Porirua is classified as an artificial city, which was designed in a way to lure people into the city centre, particularly people in vehicles. The city was designed to cater for the movement of cars and therefore lacks individuality, intricacy and user-friendly qualities that are seen in 'natural cities'. People are usually drawn to traditional cities particularly in European countries because they are found to be attractive, comfortable and friendly. They are usually well connected and feel smaller due to moments of interiority within the city. A question to be posed, then, is how can new developments be designed to have 'natural city' qualities without imitating them? The goal is therefore to examine how the cities work and why people like them, then to further develop new urban forms which have the same traditional qualities but clearly relate to the world today.
Francis Tibbalds states that "a sound appreciation of context of a project site or area is needed. This includes its history, existing townscape and appearance, its planning status and its social and economic role." (Tibbalds, 1992, 20) all cities are different and should reflect their time, place and culture. Many cities around the world have produced mediocre Western style development that are strikingly similar. Most of these designed city centres have become collections of individual buildings which fail to come together to form an architectural language.

Some of the best loved cities such as Paris, Florence, Chicago, Amsterdam and so on, have been planned or developed naturally, exhibit an 'order for the whole': blocks and streets, squares and courts that come together to form an interrelated pattern of buildings and circulation routes. These cities display a variety of scale and 'overlying hierarchy in the arrangement of the main uses and communications networks, yet a flexibility to move these uses within the system." (Tibbalds, 1992, 21) These characteristics as well as consistency in design and materials result in successful towns and cities.

'New development should be part of a continuing tradition of town and city building. However in a rich historical context there is an obvious danger of superficial pastiche.' (Tibbalds, 1992, 23) Tibbalds explains that new development should demonstrate a contemporary design which is subtle and relevant to the context and site.
Acknowledging historical values of the site and the existing townscape and appearance in Porirua would have been the first step in designing the city. It is evident that the building were heavily influenced by western ways of design thinking. Author, Bill Mcckay states that 'by the end of the nineteenth century, the process of transforming New Zealand into a little England was largely complete.'(Mcckay, 2012, 3) The plan was devoid of indigenous design principles and lacked empathy for Maori tikanga.
How then can we effectively manifest matauranga Maori (traditional Maori knowledge) in the urban environment? Royal (Royal, 2002) explains that over the last century, new studies of indigenous worldviews 'urge us to don a creative and poetic demeanour when considering our traditional knowledge so as to yield an enduring wisdom of relevance and meaning for 21 st century life.' (Royal, 2002) It is important to note that the significance of indigenous knowledge in Aotearoa New Zealand is being employed in new plans and policies. According to Harmsworth's (Harmsworth, 2002) research, there appears to be an authentic appreciation of indigenous knowledge and willingness to build partnerships between Māori groups and local organisations in order to facilitate transformation in the urban settings. This is a positive endeavour and is a foundation for new ways of thinking, however, it is essential to recognise that Māori interpretation of the built environment is different from Western conceptualisations.


THE
OLD
PORIRUA
ROAD

04

CHAPTER FOUR
A WALKABLE CITY
KEVIN LYNCH – 5 ELEMENTS OF A CITY

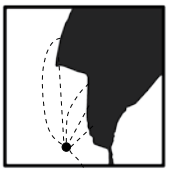
A walkable city

"Towns and cities are about human contact. One of the principal reasons why town centres are important to us is that they provide opportunities to bump in to people" (Tibbalds, 1992, 57) Tibbalds explains that urban areas should be accessible to all people regardless of age, ability, background or income. Walking leads to engagement and that eventually builds community. Being a motorist promotes the ideas of private space and seclusion. Author of Walkable cities, Jeff Speck emphasizes that 'it is only when we are outside of vehicles that bonds of community can form.' This point is further explored by Donald Apple-yard in his book, Livable Streets. He compiles his research in San Francisco about the relationship between social capital and traffic.* in the experiment, Apple-yard compares essentially identical streets but took note of the number of cars they carried. Appleyard found that people who lived on light traffic streets regarded the entire street as their "home territory" while people who lived on heavy traffic streets only felt at home within their own buildings. The people living on light traffic streets counted on average 3.0 friends, while people on busy streets averaged only 0.9 friends.

Infrastructural development in cities has made it increasingly difficult, if not impossible for people to walk around safely and comfortably. Walls, barriers, underpasses, bridges and steps have confused and complicated streets which were one easy to traverse. Author, Francis Tibbalds believes that the aim or solution is to create a 'barrier free' urban area – where people can easily see and get to where they want to go. The opportunity should always be taken to remove barriers and open up the city for better accessibility when new developments occur. This is one major problem faced in Porirua, new developments have led to a heavy traffic streets and less accessibility for pedestrians. People and communities are often drawn or attracted to nature, that is, waterfronts, harbours, beaches and water features. Cities are usually oriented around the water, giving access and taking advantage of the view and opportunities of the body of water. However, this is not the case in Porirua.
"The objective should be to use the water as a key structuring element to the central area, to let people know that it is there, to facilitate views of it and from it, to line it with appropriate uses and, generally, to exploit its visual and functional potential to the full." (Tibbalds, 1992, 65)

Tibbalds explains that often urban rivers and canals are neglected and their potential is wasted, instead, rivers running through central areas should aid to clarity and legibility in the city. Crossing the River Thames in London leaves the visitor with an idea of where he or she might be located.

Kevin Lynch's Five elements of a city



Lynch describes city design as a form of artwork, one that is constantly changing in structure and detail. An artwork that is always experienced in relation to its surroundings, creating memories and meanings for every citizen. Lynch also recognises that a 'beautiful and delightful city environment is an oddity', something that is nearly impossible. (Lynch, 1960, 2) Although most cities are far from being "a perfect model city", they have visual quality, clarity and legibility of the cityscape. In his book, 'The image of a city', Lynch highlights the importance of legibility in the city setting and illustrates how this concept can be used in rebuilding future cities. It is also crucial to note that clarity and legibility are not the only important property of a beautiful city however, they play a huge role when considering environments at the urban scale of size, time and complexity. (Lynch, 1960, 3) The imageability of a city is also discussed by the author, it is defined as the 'physical qualities which relate to attributes of identity and structure.'(Lynch, 1960,46) These qualities increase the chances of evoking a strong image in any given observer of the city. Shape, colour function or history facilitate the making of vividly identified mental images of the environment. (Lynch, 1960,46) To further define the legibility and imageability of a city, Lynch proposes 5 important elements.

1. **Paths** are 'channels along which the observer occasionally or potentially moves.' (Lynch, 1960,47) These are transit lines, streets, walkways, canals and railroads. Often people observe the city while moving through and along paths which makes them important in connecting people to places.

2. **Edges** are 'the boundaries between phases, linear breaks in continuity: shores, railroad cuts, walls.' (Lynch, 1960,47) These are barriers which a more or less penetrable, closing one region from another. Although they are not as essential as paths, edges serve an organisational importance in grouping together areas to form the outline of a city. (Lynch, 1960,47)

3. **Districts** are 'medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer enters inside of and are recognizable as having an identifying character.' (Lynch, 1960,47) Districts are often identifiable from the inside and also used for exterior reference.

4. **Nodes** are 'strategic points in a city into which an observer can enter, and which the intensive foci to and from which he is traveling.' (Lynch, 1960,47) they may be junctions, places of break in transportation, convergence of paths, street corner hangouts or enclosed squares. Some of these nodes are the focal points for districts, they are symbols or places of influence. The concept of node is related to that of path, since these are the convergence of paths.

5. **Landmarks** are 'a type of point-reference, in this case, the observer does not enter within them, they are external.' (Lynch, 1960,48) They are usually a physical object, such as 'a building, sign, store or mountain.' Some landmarks are distant ones, seen from distances away, others are local and often used as indications of identity and location, they are increasingly relied on as the journey in a city becomes more familiar. (Lynch, 1960,48)

None of the elements above exist in isolation, they are all interconnected, regularly overlap and pierce one another. It was now important to have a look at the visual form of Porirua as a city and identify the possible problems of its' image.

Fig 4.1. The visual form of Porirua as seen in the field

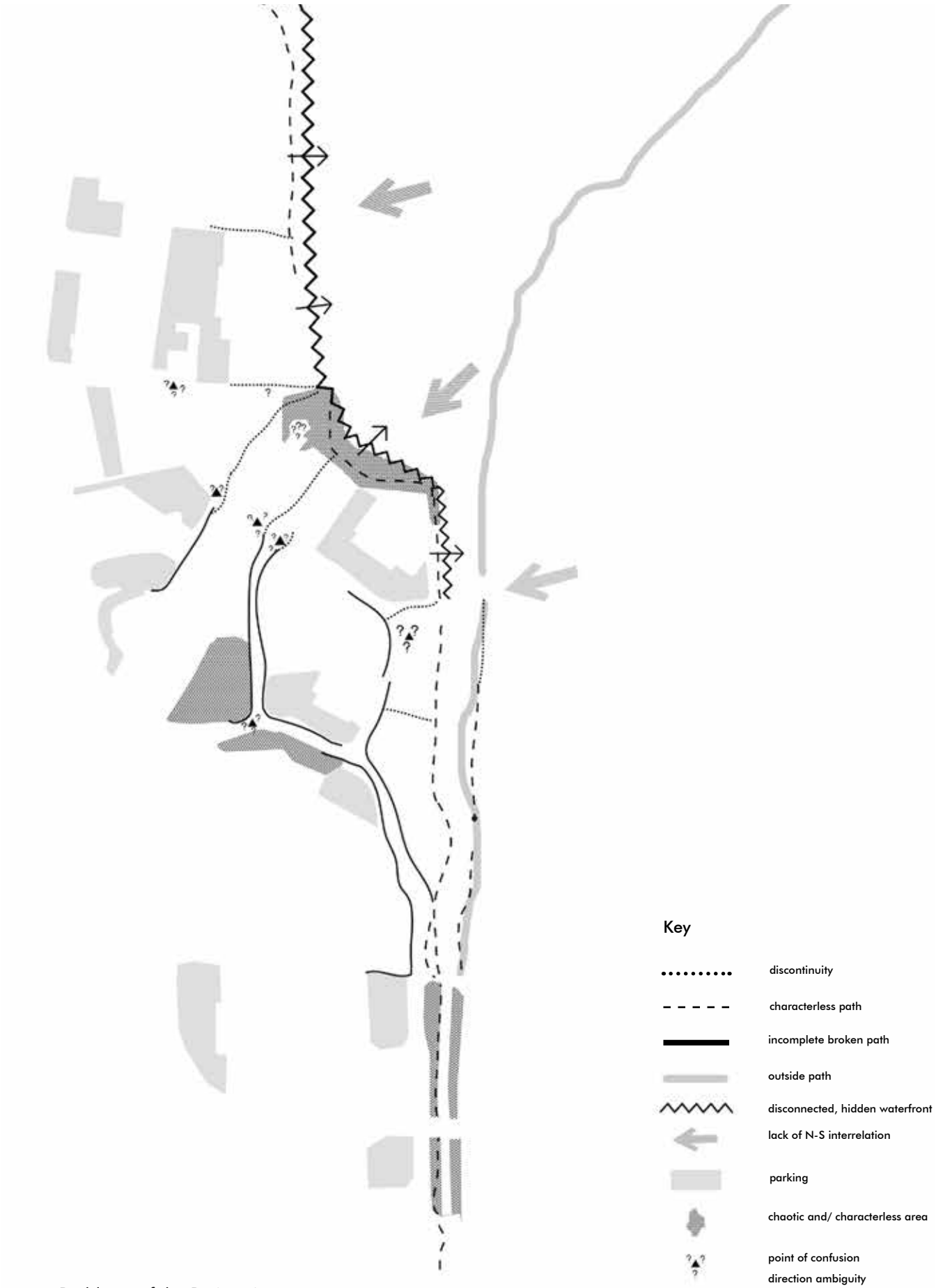


Fig 4.2. Problems of the Porirua image

Figure 4.2 is one way of summarizing the analysis of the Porirua image, the creation of these images is one of the first steps toward the formation of a design plan. It is a graphic display of some of the major difficulties in the city image: confusions, ambiguous pathway, disconnected and characterless areas, breaks in continuity, isolations. Similar to a site analysis diagram, the image does not determine a plan, however, it is the foundation upon which creative decisions can be made.

05

CHAPTER FIVE

MAORI VALUES + TRADITIONS
WAI MAORI – MAORI VALUES IN WATER
MAORI ARCHITECTURE – RECREATING A JOURNEY
A WAY OF LIFE - THE THREE PRINCIPLES

Wai Maori – Maori values in Water

'**Ko au te awa. Ko te awa ko au**'
'The great River flows from the mountains to the sea. **I am the River, the River is me**.'(A saying by the Whanganui tribe)
For Māori, water is the essence of all life, it is linked to their tribal identity and has its own mauri (life force). Water comes from Papatūānuku (Earth mother) and it embodies ancestors within the culture. "Rivers are valued as a source of mahinga kai, hangi stones, cultural materials and as access routes to important settlements or other historic sites." (Department of Conservation, Nov 2011) Water is of great importance to Iwi and enhancing the health and wellbeing of waterways is a priority for many Iwi. It is a matter of national importance under the principles of the Treaty of Waitangi and a requirement under Section 4 of the Conservation Act 1987. (Department of Conservation, Nov 2011)

Kaitiakitanga has become a significant concept in understanding Māori environmental rights. A kaitiaki is a guardian of sorts, a being that is responsibility for caring and protecting a piece of land or a body of water. It is the Maori desire and responsibility to be caregivers to the environment for the generations to come. There have been several Waitangi Tribunal claims, such as Whanganui and Waikato that have sought the remediation of Treaty breaches in relation to rivers. On a positive note, in March 2017, legislation was passed declaring that the Whanganui river and all its 'physical and metaphysical elements – is an indivisible, living whole, and henceforth possesses all the rights, powers, duties and liabilities of a legal person.' (Davison,2017)
This is one of many claims made by the Maori that has been acknowledged and amended. The Crown issued out an apology for years of historical neglect and have acknowledged the breach of the treaty, undermining the rights of the Whanganui tribes and further compromising the physical and spiritual well-being of the river. (Department of Conservation, Nov 2011)

Water is classified by Maori depending on their quality of the water-body. According to these classifications, the Porirua estuary water would be regarded as Wai-kino (polluted), this means that 'the mauri of the water has been altered through pollution or corruption and has the potential to do harm to human beings.' (Greater Wellington Council Report, 2010) However, the Porirua Council is working on reducing pollutants and improving the health of the water. The council has enforced the Storm water Bylaw which works alongside other bylaws to raise public awareness, protect and improve the water quality. Iwi are progressively seeking to protect and re-establish a range of values regarding natural resources such as waterways. These values have different purposes that add to cultural, environmental, economic and social change. Values vary between different Iwi but the main points for engagement include:

- Wai ora – health giving water as the basis for life.
- Ki uta ki tai (mountains to sea) – whole system approach to sustainable management.
- Mahinga kai species as indicators for environmental monitoring.
- Tau utuutu – reciprocity, the need to balance and restore what is taken.
- Waki tapu – the need to provide for and protect sacred sites.

(Greater Wellington Council Report, 2010)

For Ngati Toa Rangatira, some of the tohu (indicators) of a healthy waterway are water quality, swimming, sedimentation, mahinga kai and the presence of pipi, kuku, tuangi and Patiki in the Porirua Harbour. (Greater Wellington Council Report, 2010) It is important for Iwi to be involved in decision making processes and management of all natural resources. Te Upoko Taiao – The Natural Resource Plan Committee provides an opportunity for Iwi to take part in the decision making regarding natural resource management. The committee helps establish a cost effective resource management partnership that that 'recognises the interests and responsibilities of the Treaty partners in a balanced way and also provides for the broad spectrum of community interests.' (Greater Wellington Council Report, 2010)

Fig 5.0 Whanganui River

Fig 5.1 Porirua Stream

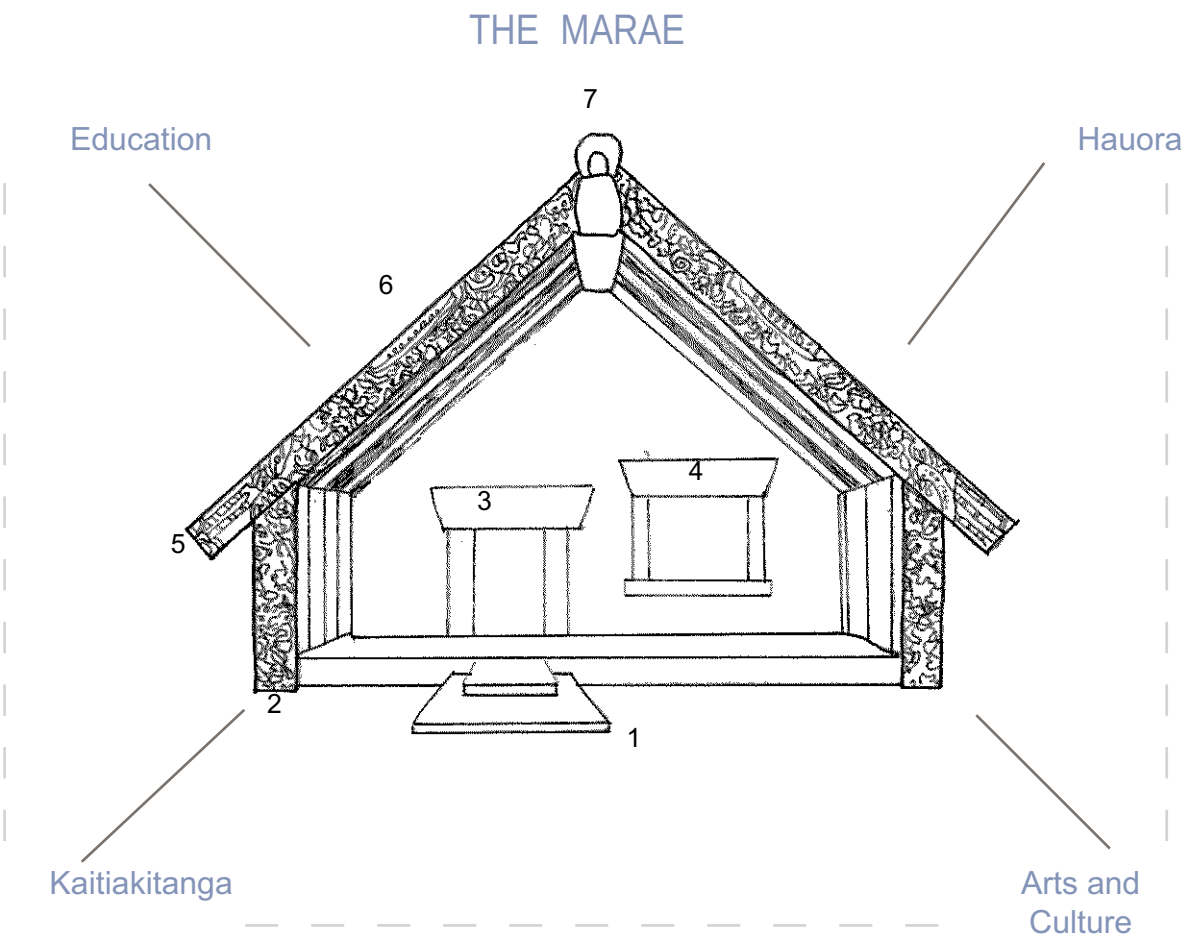


Fig 5.2

Key
1 - Marae Atea
2 - Amo
3 - Pare
4 - Matapihi
5 - Raparapa
6 - Maihi
7 - Koruru

Customs and values are strengthened by the wairua (spirit) of the marae. Much like people who go to church to express their religous beliefs, Māori people go to their marae to seek accomplishment and confirmation about their identity (H. Tauroa and P. Tauroa, 20). The marae is, to all those whom belong there, their tūrangawaewae or "place to stand" (Salmond, 2004. p 31). The building itself symbolises the body of the primal ancestor; the tahuhu (ridge-pole) as the spine, the heke (rafters) as the ribs, the frontal boards, maihihi are the outstretched arms and the koruru as the gable peak as the face. When a member of the tribe entered the house, he entered the body of the great ancestor. (Barrow 1965)

"In modern times, we can scarcely imagine the reverence in which the memory of greta ancestors was held, but we can understand that the ceremonial carved house served as a kind of tribal history for centuries before the art of writing reached the Maori"
(T.Barrow 1965 p. 13)

RECREATING A JOURNEY

Marae Procedures - Powhiri

1. Karanga - The manuhiri are called on by a kaikaranga who begins the karanga, to which the manuhiri kaikaranga responds to. The manuhiri move up slowly behind the kaikaranga, until they reach the mahau (porch). The karanga will continue until the manuhiri reach the mahau of the Marae.
2. Whaikorero - Tangata Whenua start the whaikorero. The kaikorero will stand and present their korero. This is followed by a waiata that the group sings in support of their speaker(s). The speaking role then moves to the manuhiri who follow the same process.
3. Haka Powhiri
4. Koha - After manuhiri have sung their waiata, the koha is presented, being placed in front of the tangata whenua. The process then moves back to the Tangata Whenua who close the whaikorero proceedings.
5. Hongi - The hongi is the process of sharing the breath of life. Everyone lines up and gives each other a hongi and handshake.
6. Kai - Everyone has something to eat and drink to bring things back to whakanoa and lift the tapu of the formal process.

1 THRESHOLD - WAHAROA
According to traditions, the waharoa signified the entrance to the marae or pā complex. In the modern day it is used to point out the entrance to many different spaces or areas. The waharoa is a threshold that signified you are about to enter the marae and is where the guest would wait until the locals where ready to welcome them.

2 RITUAL - KARANGA
This is a call that allows manuhiri to approach and will be reinterpreted as a transitional space for people.

3 THRESHOLD - MARAE ĀTEA
The marae ātea, as mentioned earlier, is that space directly in front of the wharenui which denotes the space where visitors are formally welcomed.

4 RITUAL - WHAIKORERO - EDUCATION
This is a place where visitors will read and educate themselves of the history of the harbour. A place to learn about the bountiful harbour and its connection with Maori.

5 THRESHOLD - KOHA - AN EXCHANGE
This is an area for Kai moana, a place where people can find food through eeling, fishing and collecting cockle. Unfortunately, in the past 150 years, the harbour has seen gradual but extensive degrading of the dynamics and ecosystems. It was once a source of kai for the community and hopefully it can be restored to that one day. Here people will learn about ways they can give back to the harbour for its' restoration and rejuvenation.

6 KAI - WHAKATO - PLANT A SEED
This space gives an opportunity for growth, it allows people to plant seeds that will eventually grow and feed the community.

Fig 5.3

- mahinga kai -

Fig 5.4

- te whakaari -

A way of life - The three principles

Other cultural values linked to historical, environmental and economical aims.

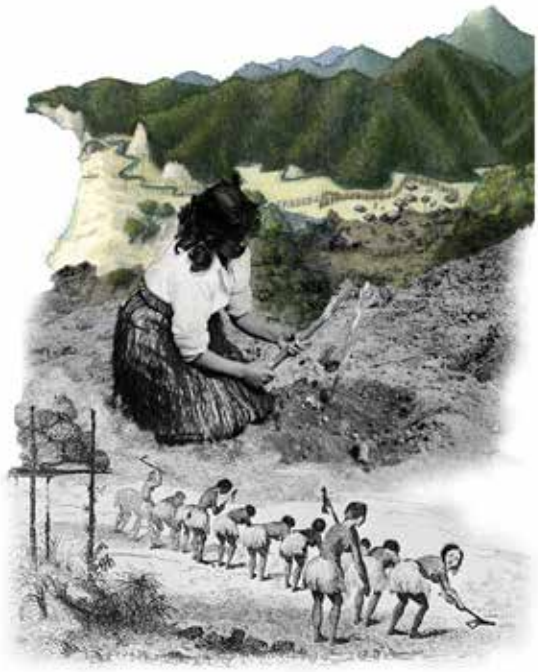
Mahinga Kai

Before land reclamation, the Porirua harbour was once a bountiful eco system that supported a large supply of 'fish such as sole and cod, eels and sting rays, seals and shell fish such as cockles and pipis' (Porirua Harbour Trust, n.d) The large range of supplies made it an ideal location for Maori settlement from as early as 1450AD. (Porirua Harbour Trust, n.d) in addition to kai moana, the harbour was encompassed by rich forests that were the source of food for many birds in the area. The local iwi, Ngati Toa established a pa very close to the water's edge, historically, it had the water 'at its doorstep.' (Porirua Council, 1900) Urban development added chemical and biological contaminants to the harbour. From the 1850's onwards, there was an increase in demand for timber and this resulted in forest clearance and made a major impact on the eco system. The notion of kaitiakitanga had been lost and cultural practises such as collecting kai on the harbour slowly became a thing of the past. Today, the council is implementing a Catchment Strategy and Action Plan in an attempt to reduce sediment and pollutant run-off and enhance the water quality. The restoration of the harbour is of great cultural importance to Ngati Toa as well as the council and this thesis takes an optimistic approach on how the harbour can be restored in the future.

Te Whakaari

Story telling in many indigenous cultures, plays an important role in tradition. In Maori, storytelling is much more than narrating stories, it revolves around composing, memorizing and performing different kinds of poems, prayers, laments as well as dance (haka). (Haka Tours NZ, 2017) Before the arrival of Europeans in New Zealand, no written language existed and all knowledge and information was transmitted from one generation to the next through the various forms of storytelling which were rarely direct. 'They used all kinds of imagery and fantastical elements to both understand their history and convey it to others, therefore, songs, myths and prayers endure as a living record of their collective tribal memory.' (Rogers, n.d) These stories and myths are often connected to certain places of importance to the particular iwi, places such as rivers, lakes and mountains. (Rogers, n.d) Te Whakaari is particularly important to Ngati Toa because the memorable war dance was composed by the iwi's warrior chief Te Rauparaha in celebration of his escape from death in battle. (Media New Zealand, n.d) This generational transmission is one that should not be lost in the Maori culture and should be passed on to future generations.

'The stories, handed down from generation to generation, convey traditional values and strategies to overcome adversity and maintain wellbeing.' (Leaman, 2019)



- whakato -

Fig 5.5

Whakato

Maori ancestors (Polynesian settlers) brought edible plants from their homelands, these included kumara, yams, taro and ti pore (a species of cabbage tree). On arrival to Aotearoa, it was evident that the climate was significantly colder than that in which these plants had evolved, and Maori developed advanced planting techniques to adapt to the new environment. The plants were cultivated in large communal mara (gardens) and sometimes sand, gravel, shell and charcoal were added to the soil to ensure drainage and retain heat. (Kaka-Scott, Royal, 2013) The acquisition of growing and gathering food was a way of life for the Maori, the search for food began early in the morning before sunrise. New vegetables and plants such as potatoes and were introduced by European settlers and these were incorporated in the Maori gardening system. Some traditional crops were replaced by superior types and these new introductions became part of the Maori culture practice of gifting and exchange. The selling of vegetables also also formed the basis of the Maori commercial economy in the early 19th century. (Department of conservation, 2006) Gardening is still a way of life in Maori communities today, however, planting ground and community land has become a problem.

75
Fig 6.1

06

CHAPTER SIX – DESIGN PROCESS

MATAU BRIDGE
THE FLOODS
FRANCIS DUFFY OFFICE DESIGN LOGIC – CLUBS, DENS, HIVES, CELLS
A POTENTIAL URBAN INTERIOR - (COMMUNITY ENGAGEMENT FEEDBACK)
RECONNECTING THE PAST WITH THE PRESENT-
STORIES OF PAST, PRESENT, FUTURE
RECAP: CULTURAL AIMS
MASTERPLAN – ACTION PLAN (TOOL KIT)
DESIGN ITERATIONS - GENERATING THE FLOOR PLAN

Fig 6.2

Fig 6.3

Fig 6.4

Fig 6.2. - 1st Iteration

Fig 6.3 - 2nd Iteration

Fig 6.4 3rd Iteration

Fig 6.5 Matau Bridge drawing with journey transitions

Matau Bridge

This recreated journey is translated into a bridge with each threshold representing a transition along the bridge. The first stages of designing the bridge was looking at various objects and tools that were used in and around the harbour. Tools that were used to make waka (canoes) or tools to plough the land. The shape of the matau (fish hook) was interesting and the various materials used to make it were bone, stone, wood and fibre. The size and materials of matau vary from region to region, however their shape is usually the same. This curved shape of the matau seemed to mimic the curved outline of the Porirua harbour and once the two were overlayed, conceptual images began to form. The design of the bridge took the shape of the matau and spanned from the opening of the Porirua stream up to the area adjacent to Tapuwahia Marae. The aim of this bridge was to connect people from the city centre to the marae whilst connecting with the harbour through a historial trail.

It was evident that the bridge alone would not be enough of an intervention to motivate communities to visit the harbour.

Fig 6.5

Fig.6.6
This pencil drawing communicates the initial concept for development around the harbour area. The wetland would address the unattractive muddy area at the shore. The idea was to have a wetland area that would serve as a park with different cycling and walking paths, as well as seating and planting areas.
The drawing was inspired by Kongjian Yu's work in 'Designed Ecologies.'

Fig 6.7
Sketch showing how the Matau bridge and wetland area.

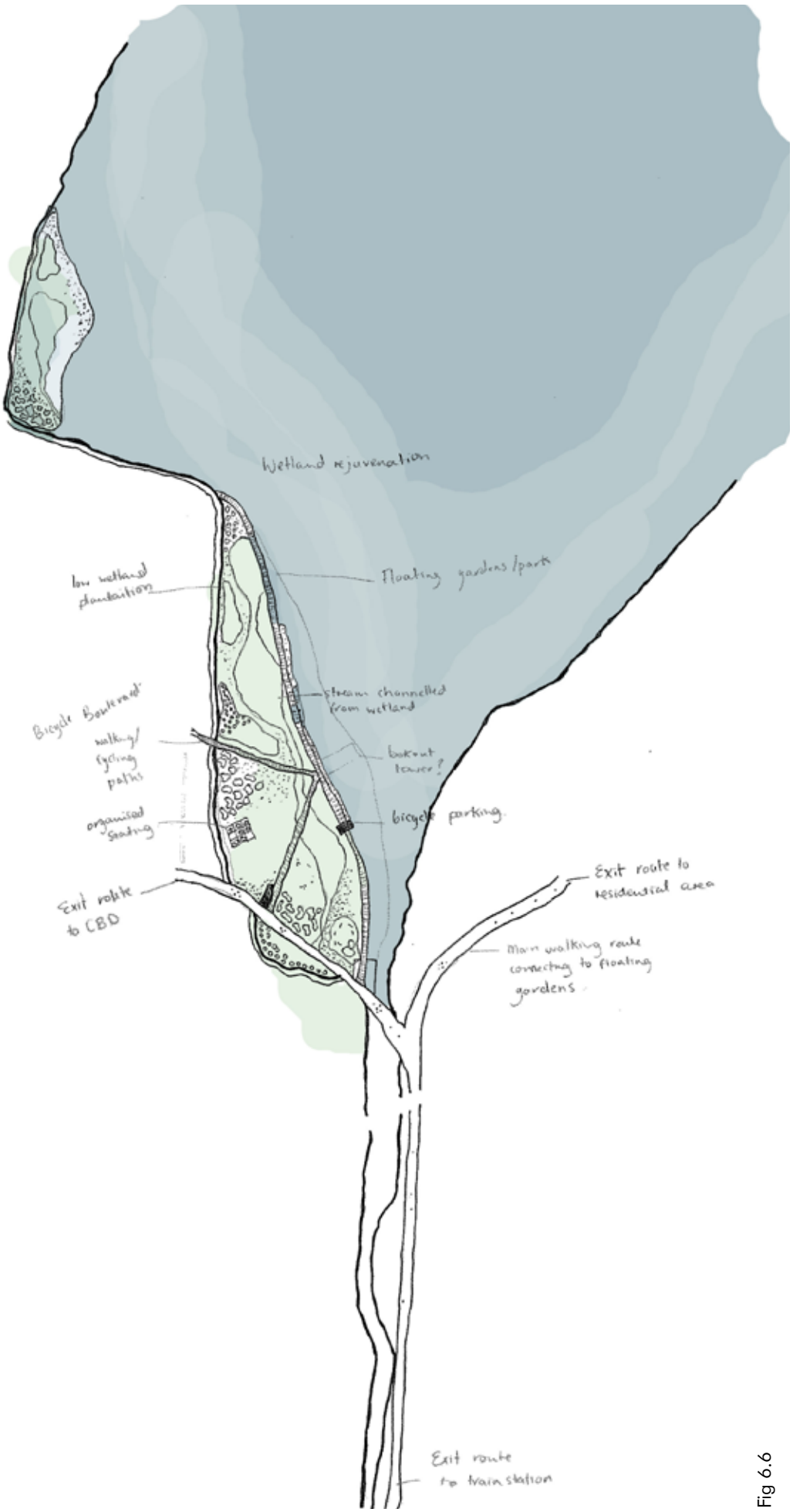


Fig 6.6

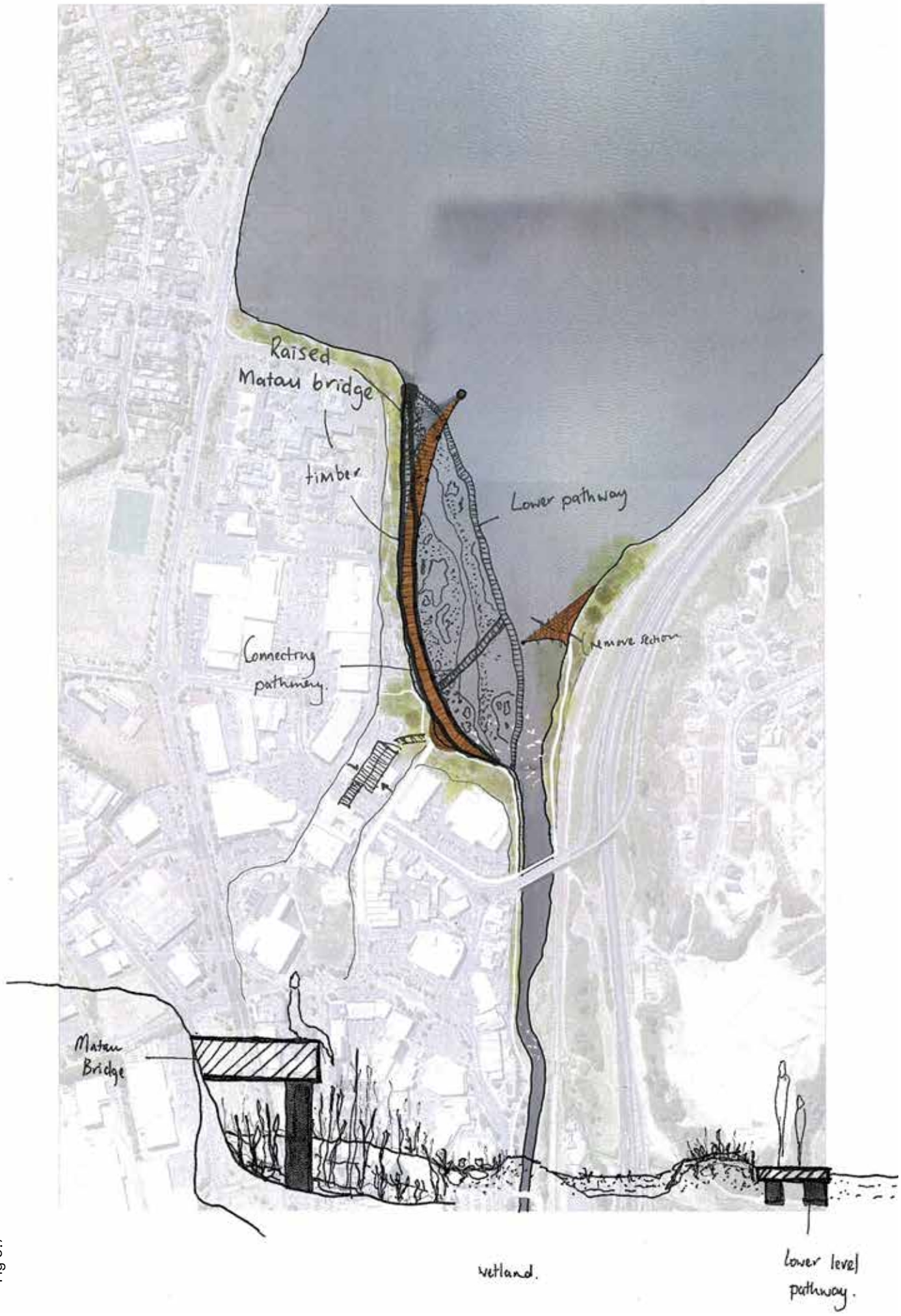

Raised
Matau bridge
timber
Lower pathway
Remove section
Connecting
pathway.
Matau
Bridge
wetland.
lower level
pathway.

Fig 6.7

CASE STUDY

Landscape as a Living System - (Houtan Park, Shanghai, China, 2009)

After more than thirty years of rapid urbanization and misinformed hydrological engineering for flood control in China, the water system has been damaged severely. '57 percent of surface water (lakes, streams, rivers, etc.) in China is polluted and half of China's coastal wetlands have disappeared in the last fifty years.' (Walker, 2012, 164) Architect Kongjian Yu criticizes water-cleansing processes that separate water from its living environment, especially the concrete channelizing of rivers. Instead of this, Yu proposes an ecological approach to address water pollution in complete natural systems that allow free flowing of water bodies with plant life. Houtan Park was a perfect opportunity for Yu to show his approach to designing landscapes as living systems that provide services. As a way to treat polluted river water, a 1.7kilometre long wetland was constructed to create a rejuvenated waterfront. A cascade wall was used to oxygenate the nutrient rich water and terraces were installed to create a treatment sequence to remove and retain nutrients. A wide range of wetland plants were selected to absorb various pollutants from the water. (Walker, 2012, 164) Similar to Porirua, the Houtan Park area experienced flooding in the past and the wetland acts as a flood protection buffer between the river and the low-lying land. Along with the wetland construction were sediment ponds, urban agriculture and hanging gardens with the use of reclaimed industrial structures and materials. These were the essential components of a restorative design strategy to treat polluted river water. The wetland construction would be beneficial to the Porirua harbour area, it has proved to be a successful way of treating polluted water naturally.

- NATURAL WATER FILTRATION SYSTEM
- RECLAIMED INDUSTRIAL STRUCTURES
- EDUCATIONAL
- URBAN AGRICULTURE

Fig 6.8

Fig 6.9

Fig 6.10

Fig 6.8. - Hanging garden (reused steel structure from a factory.

Fig 6.9. - Paths and boardwalks give visitors a sensual experience with plants and water.

Fig 6.10 - Masterplan with images of spaces and water treatment sequence

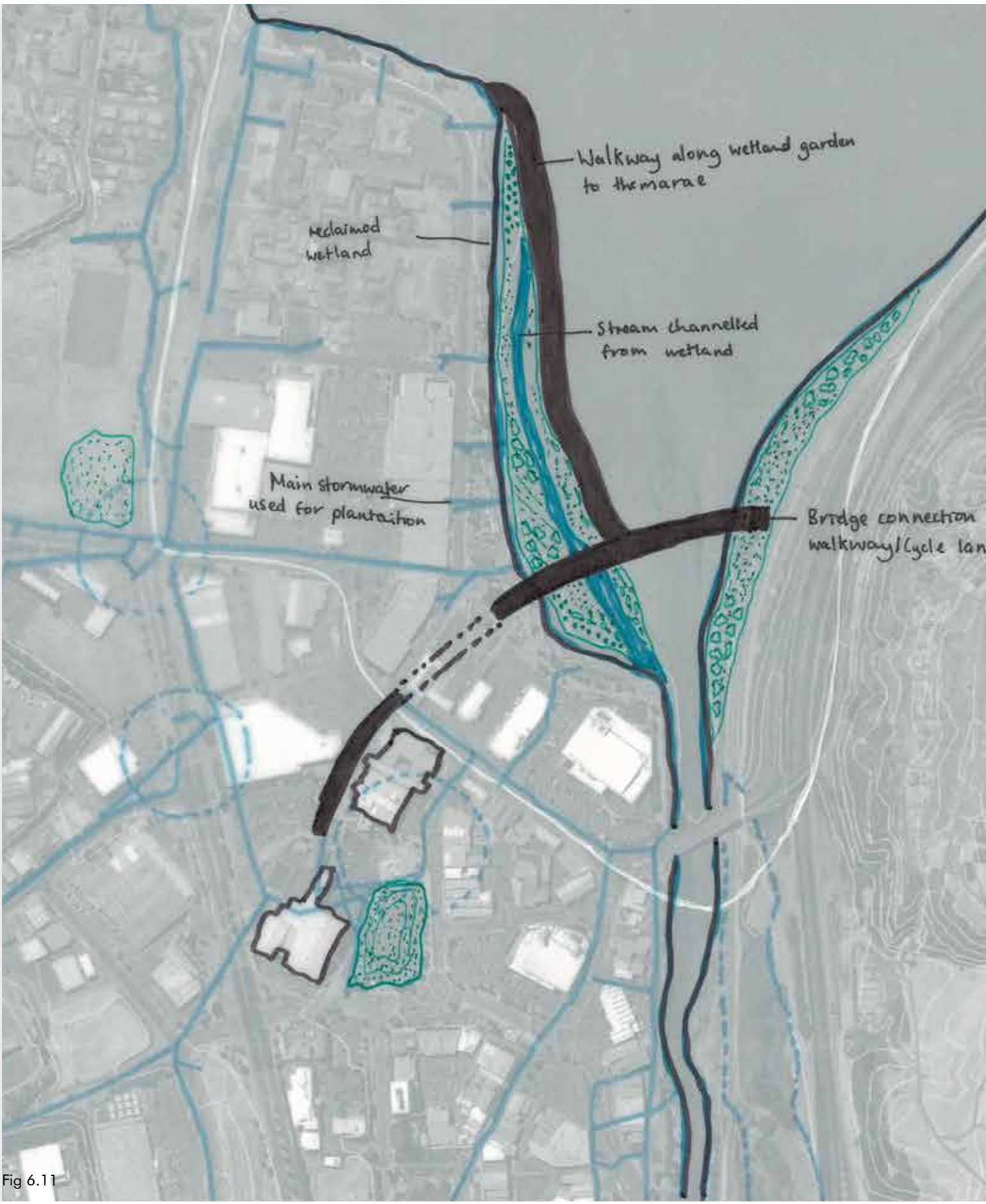

Walkway along wetland garden to the marae
reclaimed wetland
Stream channelled from wetland
Main stormwater used for plantation
Bridge connection walkway/cycle lan

Fig 6.11

The Floods

Porirua experiences regular flooding every year, it is said that a one in one hundred year flood event has occurred at least once a year for the past few years. (Porirua City Council, may 2019) In 2015 and 2016, the CBD was badly affected by flooding, including other locations such as Porirua School and Elsdon Park (as highlighted in Figure 6.11) The city council has produced and published flood maps of parts of the city that are vulnerable to flooding in an attempt to reduce the impact in the future. The flood maps provide a better understanding of future flood events and improve infrastructure and emergency response planning, however, they do not solve the recurring flooding problem. Extreme weather conditions are often experienced on small island nations like New Zealand, and a more permanent way of addressing conditions such as flooding would be a long term investment in a flood control system similar to that of Kongjian Yu. The construction of a wetland could act as a flood control buffer as well as a concrete flood wall. Yu's ecological strategy of treating polluted water would also be beneficial to the Porirua harbour and improve the water quality. Figure 6.11 illustrates the various areas that are prone to flooding and the areas where sediment ponds and a wetland would be located (in green). This is a project that the Porirua council and hydrological engineers could establish for the future.

Reflection

There were problems to be addressed in reference to the bridge connecting people from the harbour to East Porirua(Matau bridge),

1. The bridge would not connect people from the city centre to the main residential areas in East Porirua.
2. The design of the bridge was very literal, and not directly addressing the Urban Interior.
3. A pedestrian walkway on ground level would be impossible to construct due to the train tracks and State Highway 1.

After a critical reflection, it was important to go back to the drawing board and look at the methodology in order to take on a different design approach. It is possible to construct a bridge in the future, however, it would be a large scale project that would require building above the train tracks and highway. Due to the scope limitations of this project, the bridge design is something that can be reviewed and perhaps considered in the future. The next stage of the thesis required a focus on strategies and techniques that would address the Urban Interior and how interiority can be applied in the urban environment.

FRANK DUFFY'S OFFICE DESIGN LOGIC

Introduction
This chapter analyses and reveals a shift in architectural language and connections between interior spaces and urban environments. Looking at office design models in the 1980's we start to see how interior spaces could be viewed at cities and towns with functional streets as well as the separation of private from public spaces. This architectural language begins to address the 'urban interior' and uncovers techniques that can be applied to the city of Porirua.

In the 1980's, the design of office buildings took a new, creative turn caused by technology advancements as well as global economic pressure. Businesses were forced to rethink their organizational structures after the introduction of mobile telephones, the modem and personal computers, it was no longer necessary for employees to occupy a particular space from nine to five, five days a week. This brought about ideas of flexibility in office buildings, it was vital for the buildings to facilitate and accommodate change. The design of office buildings advanced from being governed by order and rigidity to becoming more liberal in the sense of allowing all users to create their own preferred kinds of environment within a structure. This is observed in the **Centraalo Beheer offices, Apledoorn**, The Netherlands, 1970-71 designed by Architect Herman Hertzberger. The case study shows a building with a robust framework of voids which provide sunlight and create break away spaces from offices, these are referred to as 'main streets' and likened to a 'Mediterranean village than a conventional office' by Francis Duffy. These statements begin to reveal a shift in architectural language and connections between interior spaces and urban environments. Hertzberger made an attempt to humanize the office environment by accommodating individual choice - this allowed building occupants to add a personal touch by bringing in pieces of furniture, murals, pets in cages and indoor horticulture. Duffy exclaims that this was a successful workplace design which allowed people to create their own world within a world. In my opinion, this was an inventive way for Hertzberger to accommodate change in the design, it was also an inventive way to enhance circulation spaces, allowed high levels of interaction, autonomy and ownership.

CASE STUDY
SAS Headquarters, Stockholm, Sweden, 1988
This is another example of the use of architecture to create an interactive environment. Design by architect Niels Torp, the building portrays the north European tradition of 'street' office buildings. The internal street creates a powerful managerial device for bringing the whole organisation together. Circulation was often minimized for economic reasons in office buildings, however, at SAS, it is expanded and celebrated. 'The street is the essence of the plan- the place where everyone meets… a common area for group activities.' It is seen to mimic urban streets, with indoor plants and trees, timber benches and casual meeting spaces. (Duffy, 1997, 38) The top lit atrium provides sunlight and a connection to the external environment. Off the 'street' are training rooms, restaurants, sport facilities and shops. Clustered around the 'internal street' are individual, glass-fronted office rooms for each employee. All the rooms are precisely the same size with identical furniture that can be arranged as the occupant wishes. The office clusters provide high levels of autonomy and the internal street, high levels of interaction for the workers. These successful building designs reveal various design processes that can be applied when designing for engagement and interaction. These processes will be further analysed and applied in the design of this thesis.

Fig 6.12, Fig 6.13 - Centraalo Beheer offices, Apeldoorn, The Netherlands.

Fig 6.15- Plan view of the building and the indoor street (Mediterranean village) that allows people to commune and engage outside the offices.

Fig 6.13

Fig 6.14

Fig 6.12

Fig 6.15, Fig 6.16 - SAS Street interior and view outside.

Fig 6.17- Plan view of the building and the indoor street.

Fig 6.15

Fig 6.16

Fig 6.17

The design logic of the new office

Francis Duffy – Hives, Cells, Dens, Hives

In the development of new office design, Duffy identifies two organisational variables that influence types of office layouts. The first variable is Interaction, 'face-to-face contact that is necessary to carry out tasks. As interaction increases, there is more pressure to accommodate and support such encounters.' (Duffy, 1997, 60) Forms of interaction vary in relation to the urban field, from direct – face-to-face contact to indirect telephone or virtual interaction. This thesis aims to encourage face-to-face contact which develops engagement in the community and most importantly whanaungtanga (a sense of belonging). The second variable that Duffy notes is autonomy, 'the degree of control, responsibility and discretion each person has' in a particular space. (Duffy, 1997, 60) Interaction and autonomy are strongly correlated with community engagement and a sense of belonging.
Duffy classifies organisational work patterns into four major structures. These are characterized as hives, cells, dens and clubs, each having varying levels of interaction and autonomy. These have been classified in relation to the Porirua city centre.

Hives – traditionally exist in an open plan area and encourage individual, routine process activities with low levels of interaction and autonomy. This category relates to the vast amount of parking spaces in Porirua CBD. Parking lots are simply vacant land that encourage the influx of vehicles in the city.
Cells – these promote little interaction but are highly autonomous. Cells are designed for individual concentrated work which directly relate to shopping centres in the city. Places where people go in search of particular services and leave once the service is complete.
Dens – this is a highly interactive category which promotes group work and engagement. However, it has low levels of autonomy which relate to the educational institutes and sources in the city. Places where people can interact and learn but are still governed by the institute.
Clubs – this category promote high levels of interaction and autonomy. They are for networking and sharing of knowledge, often with people from various organisations. This category represents the potential of the harbour, a place that could potentially engagement and a sense of belonging through the sharing of historical and cultural knowledge.

The different categories were mapped on the map of the city and are classified in different colours. The classification and application method began to reveal an unseen connection between the educational quarter and the harbour (Dens and Clubs) which unearths a potential passageway that connects the city to the harbour. Pataka Museum is seen as quite a successful building, not only in function but also as a landmark for historical and cultural reference. The vibrant, dynamic museum is a hub for creativity for the community that provides activity based learning opportunities and an authentic experiences. There is potential for Pataka museum to be used as a connection to other areas of the city, in this case, this would be the harbour.

Reflection

Francis Duffy's organisational framework was designed specifically for interior spaces, mainly office design. Evidently it does not directly relate to the design of the urban environment, however, the analysis of the process Duffy used was a helpful tool in classifying spaces. Classifying work activities as well as levels of interaction and autonomy was a useful method that could be applied to groups of buildings and their uses in the city. Through this process, the existing buildings in Porirua are grouped into four categories, the Education Quarter, the Shopping Quarter, Vacant Space and Potential spaces for urban interior interventions. This analysis reveals the processes and techniques that can be applied by interior architects in the urban field. Evidently, the techniques used by Duffy in the 20th century could be irrelevant and updated in modern times, however the underlying principles are still the same.

FRANK DUFFY'S OFFICE DESIGN LOGIC

Cells
Shopping centres

Hives
Secondary Circulation

Dens
Education centres

Clubs
Potential engagement spaces

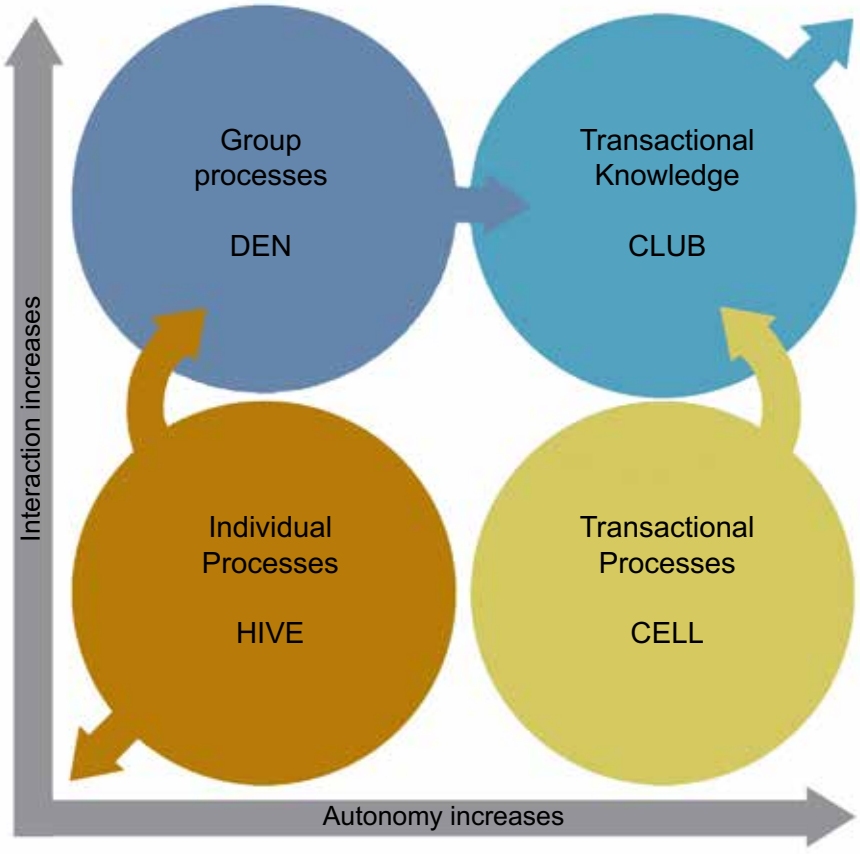
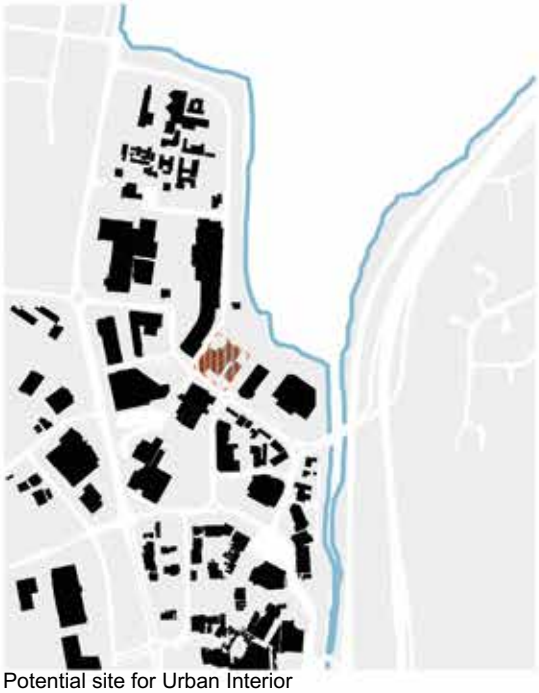
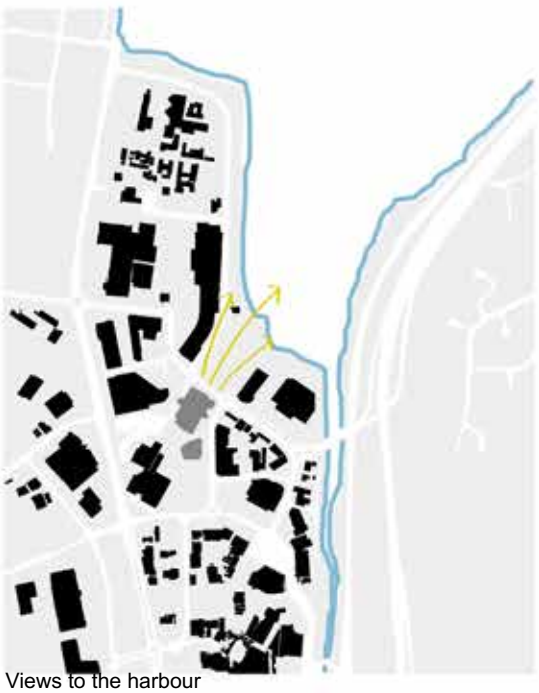


Fig 6.18

Fig 6.19



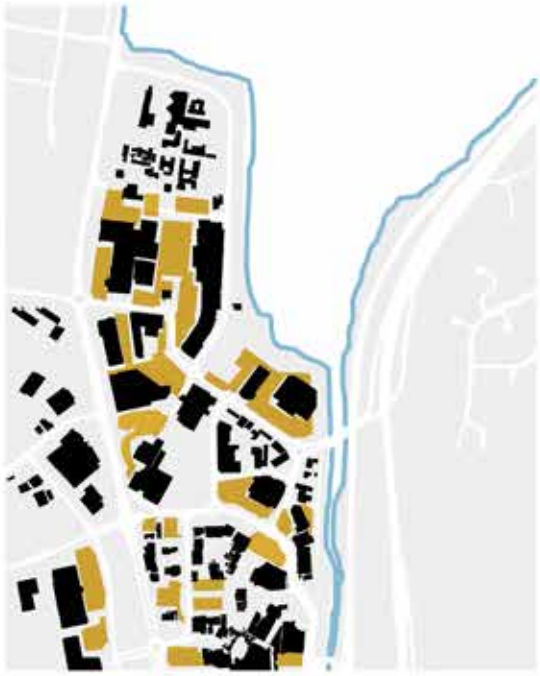
Potential site for Urban Interior



Views to the harbour

Vehicular Circulation

Cultural / Historical sites



Parking spaces

Pedestrian circulation

Fig 6.20


Pedestrian circulation
Corridor
'Knowledge Trail'
Takapuwahia
Te Uru Kahika pa

Fig 6.21

Iterations

An iterative process was used to further analyse parts of the potential for pedestrian access to the harbour from the city. These iterations revealed that the main traffic roads run parallel to the edge and do not encourage access to the harbour. It is evident that there is a need to make lateral links through the city- connecting the current activity in the CBD to the harbour. An access 'corridor' was soon identified as a lateral link which would be facilitated by the demolition of the buildings across the road from Pataka Museum. This would provide a connection to the harbour as well as pedestrian and cyclist freedom. The proposed buildings for demolition are shopping facilities quarter (Cracklerjack, Big Save Furniture and Liqourland) that generate a lot of cars in the city, Tibbalds explains that "such developments tend to be very popular with shoppers, but display a devastatingly ugly environment." (Tibbalds, 1992, 51) These facilities can be moved to out of town locations, close to good primary roads.

Corridor – Potential Urban Interior

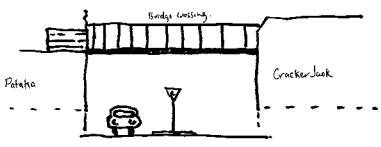
The 'corridor' stretches from Cobham Court in the Central Business District through Te Rauparaha Park to the Harbour's edge with connecting links to historical sites such as Te Uru Kahika pa and Takapuwahia Marae. This work process helped to identify commonly used pathways within the city and the potential site for a series of interventions. The series of interventions will encourage engagement and form the interior of the city.

After visiting the potential urban interior site, it was evident that there were structural elements that that could start to inform the future design. As an interior designer, it is important to identify the materials and elements that could be maintained. The streel structures of the buildings presented an opportunity for further design. The main building, which currently exists as Crackerjack, is spacious and provides opportunities for natural light and a direct view of the harbour. This is one of the techniques that is used by urban interiorists, to make use of pre-existing structures which enclose an internal space. The neighbouring buildings would also be refurbished as part of the masterplan, providing different cultural activities. The site was seemingly ideal for the design proposal, however, the busy road (Parumoana Street) would make it extremely difficult for pedestrians to cross over to and the city centre, making the site inaccessible. After much deliberation and sketching, two options came as solutions to the problem.

Fig 6.22.Sketches showing short and long term solutions

1.A temporary short term solution

The road would be closed on certain days of the week, ie Sundays would be the market day and this would allow people to cross over freely with no vehicle interruptions. It could also be developed to become a shared road, one which both vehicles and pedestrians can use. A successful example of this is the Woonerf concept in Amsterdam. 'Woonerven are shared surface areas in which essential traffic movement is allowed, but, through the design of the street, it is subservient to the needs of pedestrians.' (Tibbalds, 1992, 52)



2.A long term solution

A walking bridge would be constructed connecting people from Pataka Museum to the urban interior site. The bridge would then lead people from the 'corridor' to Pataka then to the Urban Interior Hub.

Fig 6.22

Fig 6.23

Fig 6.24

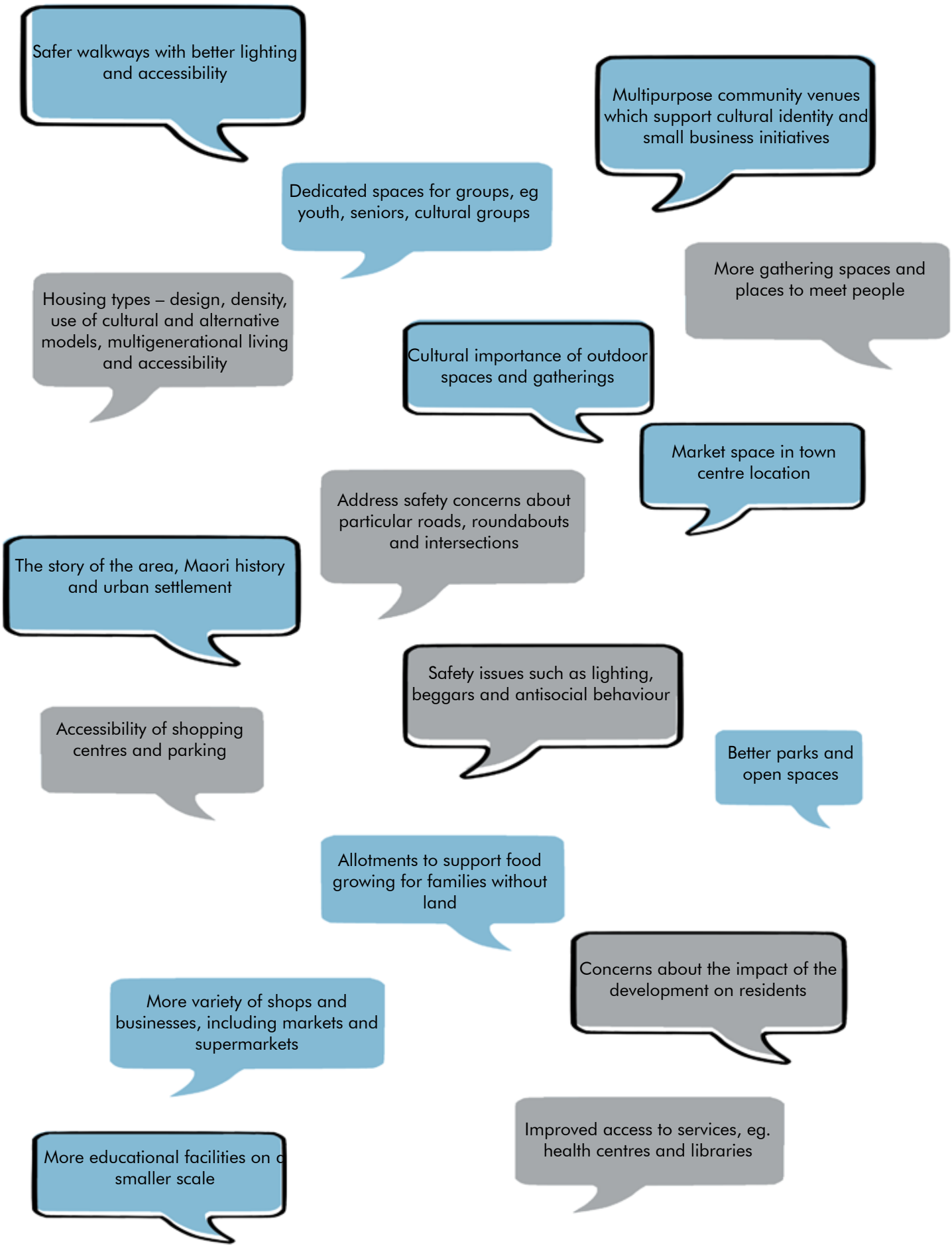
Fig 6.25. Initial sketch identifying the need for lateral links to the harbour.

Fig 6.23. Bridge option 1- Connecting people directly from Pataka Museum to the Hub.

Fig 6.24. Bridge option 2 - Directing people from Te Rauparaha Park to the Hub and a another bridge across the harbour.

Fig 6.26 Porirua City council meeting.

Fig 6.27 **Opposite** Feedback from Porirua community council meetings.


Safer walkways with better lighting and accessibility
Multipurpose community venues which support cultural identity and small business initiatives
Dedicated spaces for groups, eg youth, seniors, cultural groups
More gathering spaces and places to meet people
Housing types – design, density, use of cultural and alternative models, multigenerational living and accessibility
Cultural importance of outdoor spaces and gatherings
Market space in town centre location
Address safety concerns about particular roads, roundabouts and intersections
The story of the area, Maori history and urban settlement
Safety issues such as lighting, beggars and antisocial behaviour
Accessibility of shopping centres and parking
Better parks and open spaces
Allotments to support food growing for families without land
Concerns about the impact of the development on residents
More variety of shops and businesses, including markets and supermarkets
Improved access to services, eg. health centres and libraries
More educational facilities on a smaller scale

RECONNECTING THE PAST WITH THE PRESENT

The three stories

After collating the research and findings, it was important to redefine the narrative and focus on the problems highlighted by the City council. One of the issues brought up was the importance of the history of the area, Māori settlement and local heroes. History plays a significant role in the development of a city and it was necessary to identify stories of the past that could be carried to present times and further into the future.
Three stories surrounding the harbour were identified, they serve a purpose of education the community on the history and importance of the harbour.

Fig 6.28

1.**The Reclamation story**

This story shows the effects of reclamation on the Māori community, the loss of a healthy harbour and eradication of various marine species and vegetation. These were all effects of industrialisation. The thesis aims to discuss ecological methods of rejuvenating the harbour and improving the water quality. It is also important to educate the community on the reduction of pollution for a better future and for wai ora. A pathway leading to the harbour would be created to reperesnt this story. A wide range of plants and vegetation would be planted along this pathway and around the harbour, in an attempt to replace the abundant flora that was cleared away during the reclamation.

Fig 6.29

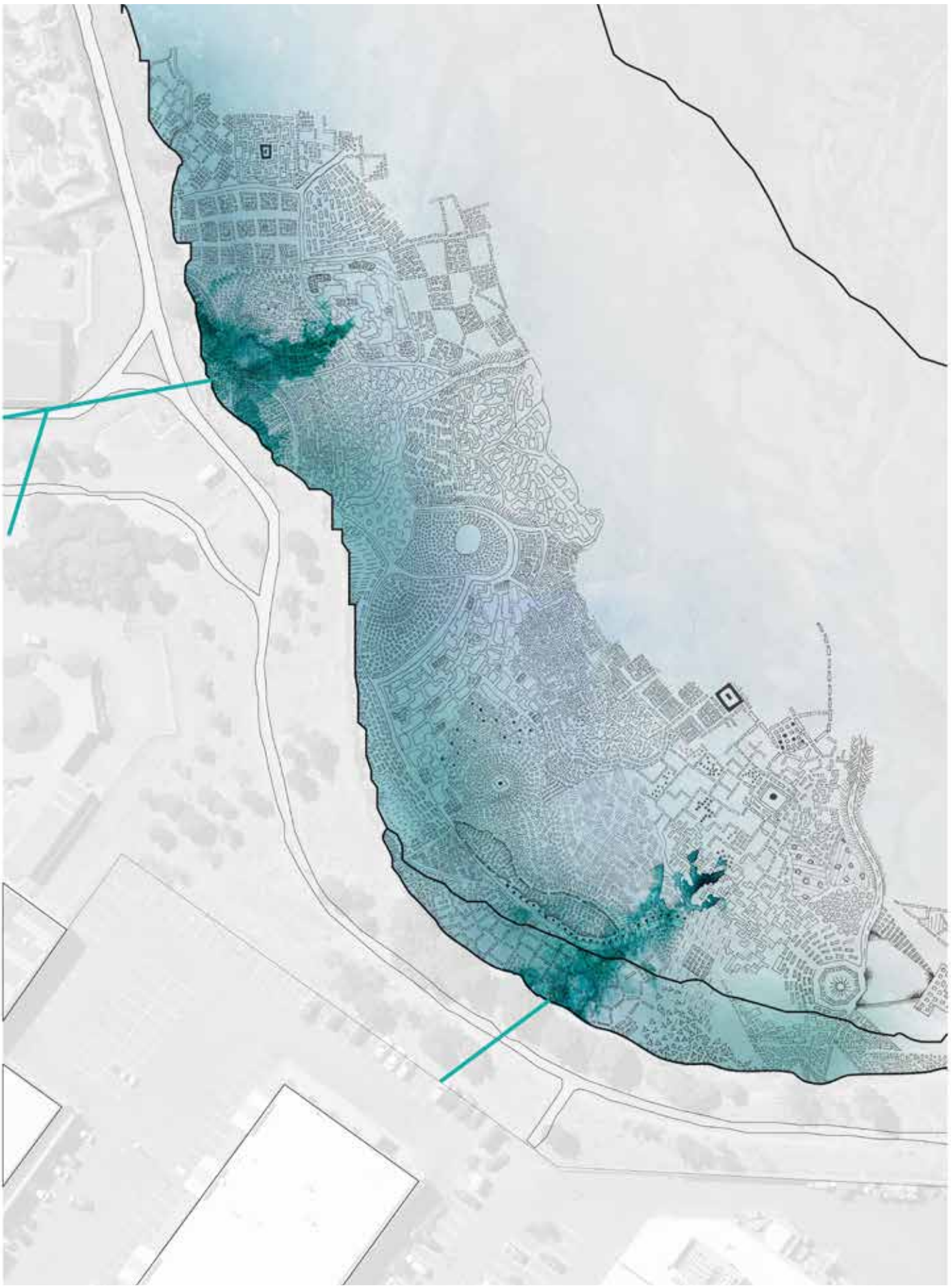
2. The story of the water edge

This story connects with the first one, it identifies where the initial shore line was. This was significant to the Ngati Toa because they had built Takapuwahia Marae in close proximity to the water for food and other uses. Historically the pa had the water ‘at its doorstep.’ (Michael. K, 1900) This signifies the importance of water, it was a resource and an essential part of the environment that provided sustenance for life. This story aims to educate the Porirua community of where the harbour edge was, this could be architecturally represented by wall and floor patterns, street art, lighting and signage. An exhibition space would further explain and educate people on this story and other results of land reclamation.

Fig 6.30

3. **The story of the bountiful harbour**

This story is reiterated throughout this thesis because it is of great importance to the community. The harbour was once free of harmful chemicals and pollution and it is an aim to restore it to its' original health. It is evident that restoration will take several years however, the story aims to show how the harbour could be restored and the impact it will have on the lives of future generations. This story suggests a treatment of the water to make it pure again. The construction of a wetland and plantation of various species of plants that absorb pollutants could be a method of revitalising the harbour. This would also draw people back to the previously neglected harbour. A lot of potential lies on the land and its restoration could positively transform the city.



RECAP : CULTURAL AIMS

THE STRATEGY

DESIGN CRITERIA

A CULTURAL PLATFORM

A place for Maori in Porirua where culture can be celebrated and an educational tool for younger generations.

STORYTELLING JOURNEYS

A series of journeys that retell important narratives of the Past, Present and Future.

A SENSE OF BELONGING

Create a place for people of all ages and backgrounds. A place that promotes engagement in the community.

The three stories :

The Reclamation Story

The story of the harbour's edge

The story of a bountiful harbour

The three principles :

Mahinga Kai

Te Whakaari

Whakato

Fig 6.31

Fig 6.32

Fig 6.33

MASTERPLAN

1. ENTRANCE FOYER

2.THE HUB – Programme/Function

There was a need for a cultural base which supports cultural identity and small community business initiatives. Many residents would also like to see better parks, market spaces and overall spaces for gathering and engagement for all ages. The next stage of the design process was to define the function of the Urban Interior. Mahinga kai being an important part of the harbour, it would be fitting for the programme to be surrounding food, a celebration of culture through the sharing of kai – An Urban Market. This is the main programme and building site for this thesis.

After having identified the function of the main building, a masterplan was generated to show various programmes surrounding the urban interior which addressed the issues raised by the community. The main, central building is the 'Hub' which takes the role of a living room in a home setting, a place where people can meet, eat, socialise and engage in various communal activities. The Hub is surrounded by a Dance studio, a Weaving centre and an outdoor dining room. The programmes for these other spaces are discussed and defined, however, the design and development will not be explored in the thesis.

3. DANCE STUDIO

Dancing is a common activity for the youth in Porirua, particularly in the Pacific cultures. It is a form of expression that allows children to learn more about their cultural history. This promotes an exchange in knowledge from older to younger generations. Māori used chants, song and dance to record their history, tell stories, to express ideas, to celebrate important events, to persuade and protest. Maori dance plays a critical role within whānau (family) and iwi (tribal) customs and lifestyle, including ceremonial events such as pōwhiri (welcoming of visitors), weddings and tangihanga (funerals). (Ministry of Education, Arts Online, n.d) The studio provides a space for small to medium groups that might not have a permanent gathering or practicing space in and around Porirua.

4.OUTDOOR DINING ROOM
The outdoor dining room will be a space to dine as well as enjoy the view of the harbour. This area will be surrounded by plants, flowers, shrubs and vines, in an attempt to restore the flora that was removed during land reclamation.

5. CORRIDOR
This is a break away space that connects the Hub and the Weaving Centre. It is a transitional space that leads to the harbour.

6.WEAVING CENTRE
Weaving is deep rooted in the Polynesian culture as a spiritual, artistic expression. There is a belief that an artist is a vehicle for the gods and whatever he or she creates is sacred and spiritual. Māori weaving has many symbols and meanings hidden within their art and many of these symbols and techniques have been passed through the ages, however, only raranga (plaiting technique) has survived colonisation. Māori believe that the past is also the future and the present and is an eternal circle. Raranga has been passed down from the ancestors to people living today, it is a living technique that has survived for many generations. The art of weaving symbolises togetherness and unity, ensuring that the tribes remain strong and memories are kept alive. Weaving is also known to aid the physical and mental abilities of the craftsmen and the preparation of the artwork is a test of both patience and determination. (The Initial Journey, Maori Weaving, 2016) This profound and spiritual meaning of weaving made it important to incorporate weaving as a part of the design. It promotes community engagement, the history of weaving and provides a space for weavers in the Porirua area.

Fig 6.34 **Opposite**
Masterplan

7. THE DECK
A space where various events can be held, live performances as well as exhibitions. This is an extension of the Hub and its location allows people to enjoy views of the harbour.

8. THEATRE IN THE PARK
This area is proposed as a space for outdoor theatres and concerts.

9. EXHIBITION AREA
This will be converted into an exhibition space, mainly to show the history of the harbour and explain the Three Stories.

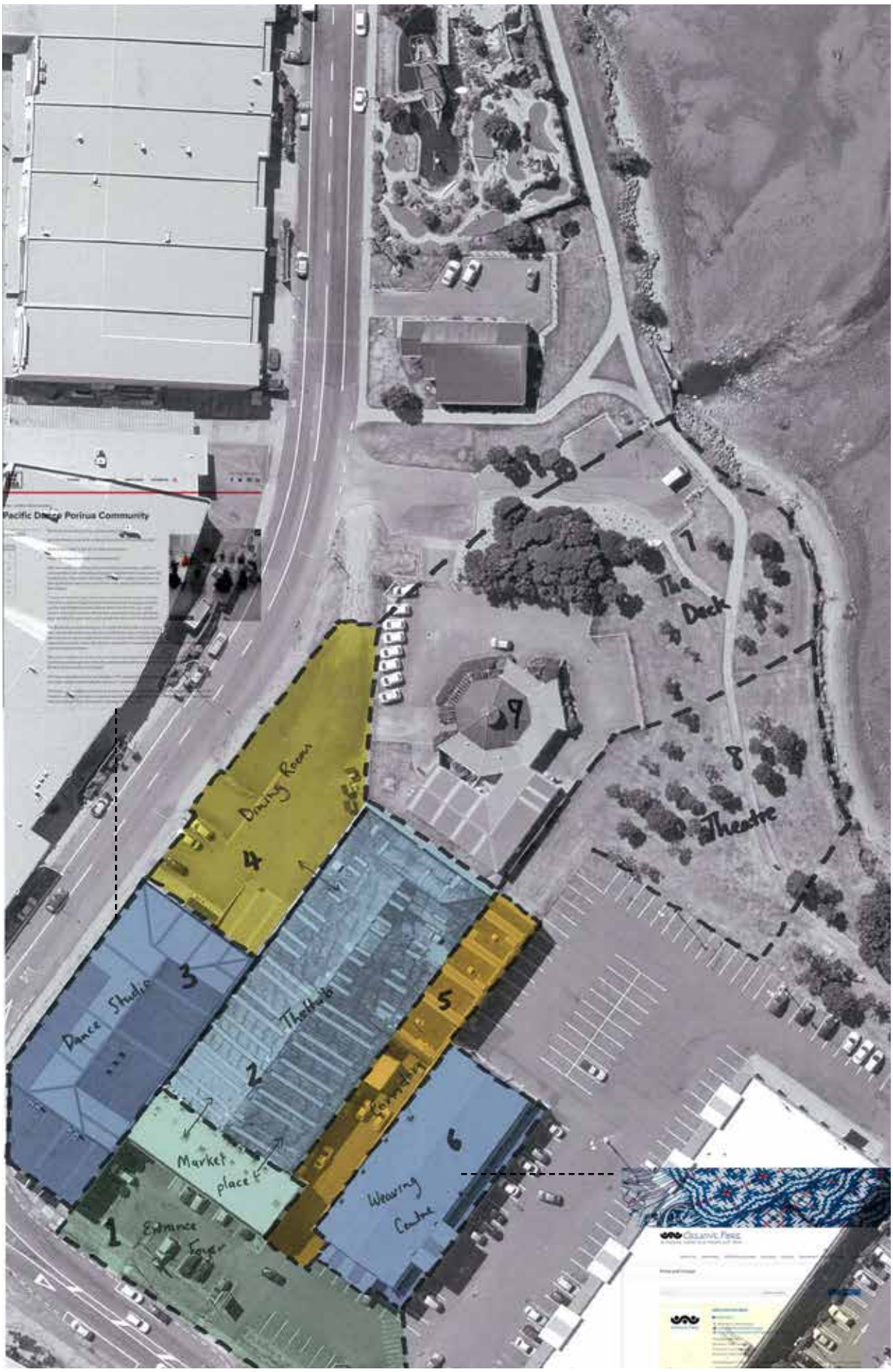

Pacific Dance Porirua Community
The Deck
Theatre
Dining Room
Dance Studio
Market place
Entrance foyer
Weaving Centre
Foundation
1
2
3
4
5
6
7
8
9

Fig 6.33

Tool Kit

Along with the masterplan, a tool kit was introduced, these are various design elements that would be implemented in the overall design proposal. The tool kit aims emphasise the stories of the past, present and future.
The street art, Floor patterns and Urban installations tell a story of the Old water line. The aim is to collaborate with local artists to reveal the history of Porirua and the harbour. Community gardens will allow Porirua residents to plough the land and explore the history of whakato (gardening) in the Maori culture. Signage and Lighting will improve directional clarity in the area and encourage more people to walk in the city.

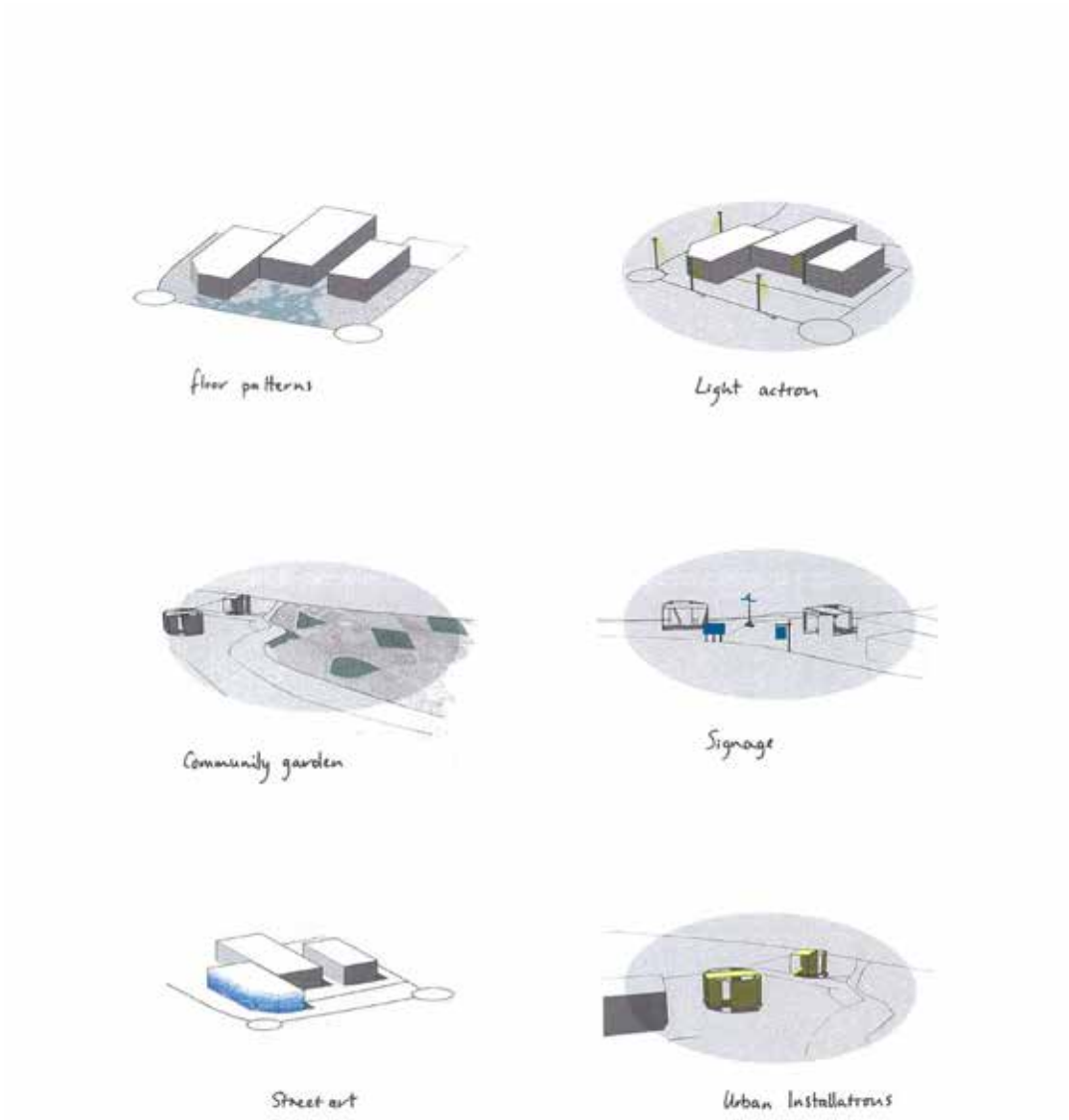


Fig 6.35 Toolkit Icons

CASE STUDY

Value the ordinary – Zhongshan shipyard Park (Zhongshan, Guangdong Province, China, 2001)

In this design project, Kongjian Yu redesigns an abandoned, polluted and dilapidated shipyard which had been erected in the 1950's but disintegrated because of bankruptcy by 1999. The project shows how a derelict site can be transformed into meaningful and functional place. The park connects visitors to the Qijiang River and a network of bridges were constructed at various heights to cater for the fluctuating water levels. A wetland was also constructed to preserve native habitats, mainly 'weeds', plants and allow visitors to 'feel a hint of the ocean.' (Walker, 2012, 20) The large, rusty docks and machinery were regarded useless by local residents, however, Yu restored and reused them, in an attempt to preserve the local history of the area. Yu applied three approaches to the site, preservation, modification and creation of new forms. The new forms included a network of paths and green boxes (made of fig trees as living walls) and a large red box that highlighted the cultural history. The park is environmentally friendly, educational and embedded in historical meanings. This project reveals the importance of narrative in urban spaces, calling people and designers to pay attention to previously neglected culture and history. The concept of making use of old docks and structures was adopted in the 'Inside Out' project, instead of demolition, the existing structures were reused and adapted to the masterplan.

Fig 6.36

Fig 6.37

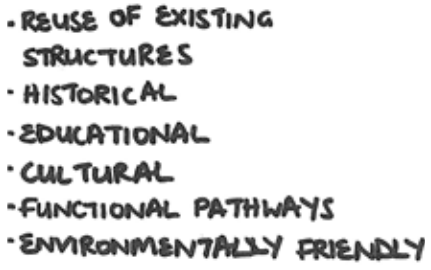


Fig 6.38

Fig 6.36, Fig 6.37.,Fig 6.38. Zhongshan Shipyard park

DESIGN ITERATIONS - GENERATING THE FLOOR PLAN

Having established the programme of the building, the next step was to create conceptual sketches and generate the floor plan.
The main program for 'The Hub' was a market place and a place where food, culture and community would be celebrated. Traditionally food was not eaten on tables in Maori culture, however the use of tables became common after the arrival of the British settlers. Tables have now become an essential part of meal partaking and presentation. The design concept is influenced by the act of sharing a meal on a table that spans across the building. The design of the long table aims to give a sense of family and community.
'Around the table, all previous meals come together in every meal, in an endless succession of memories and associations. The table is the place where the family gathers, the symbol of solidarity, or indeed the backdrop to family rows and childhood tragedies. At the table the eater is tamed. At the table we relive our youth through the recipes of the past. At the table we talk about what we've eaten before and what we're going to eat and everything in between.' (Fresco. L, 2015) The table would be the heart of the market place with everything else happening around it. The stalls would mainly be for food and drink made by people from various cultures in the community, this would facilitate an exchange in information between people.

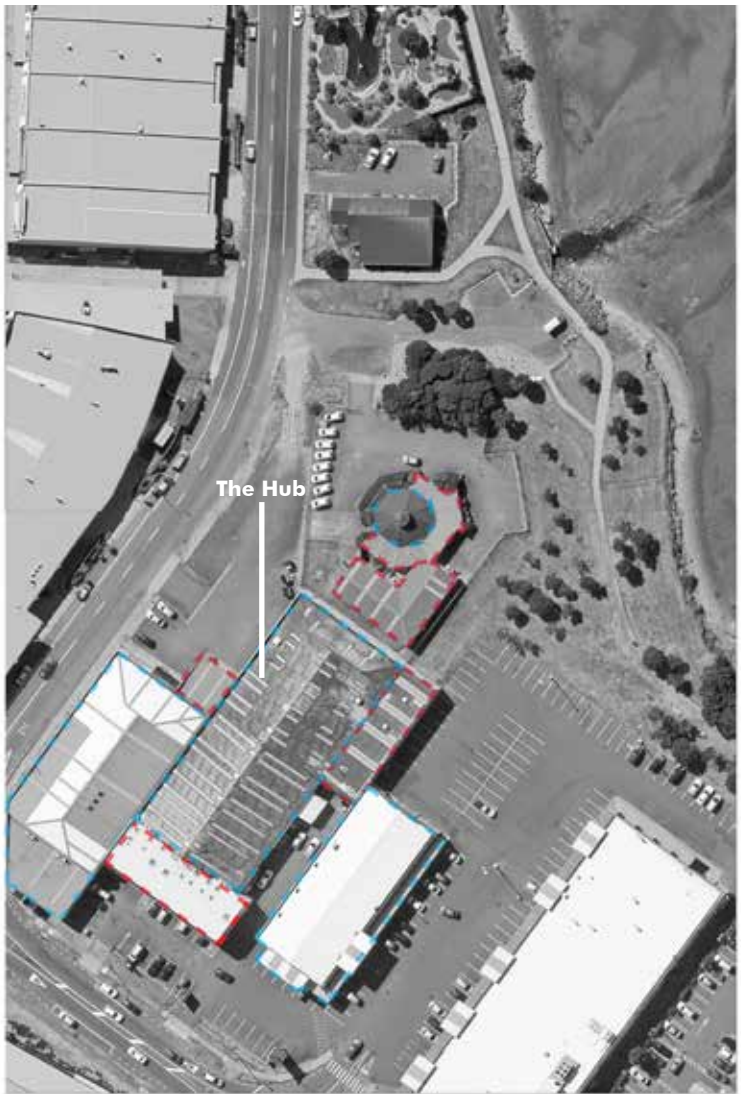


Fig 6.39. Site plan showing buildings to be demolished.

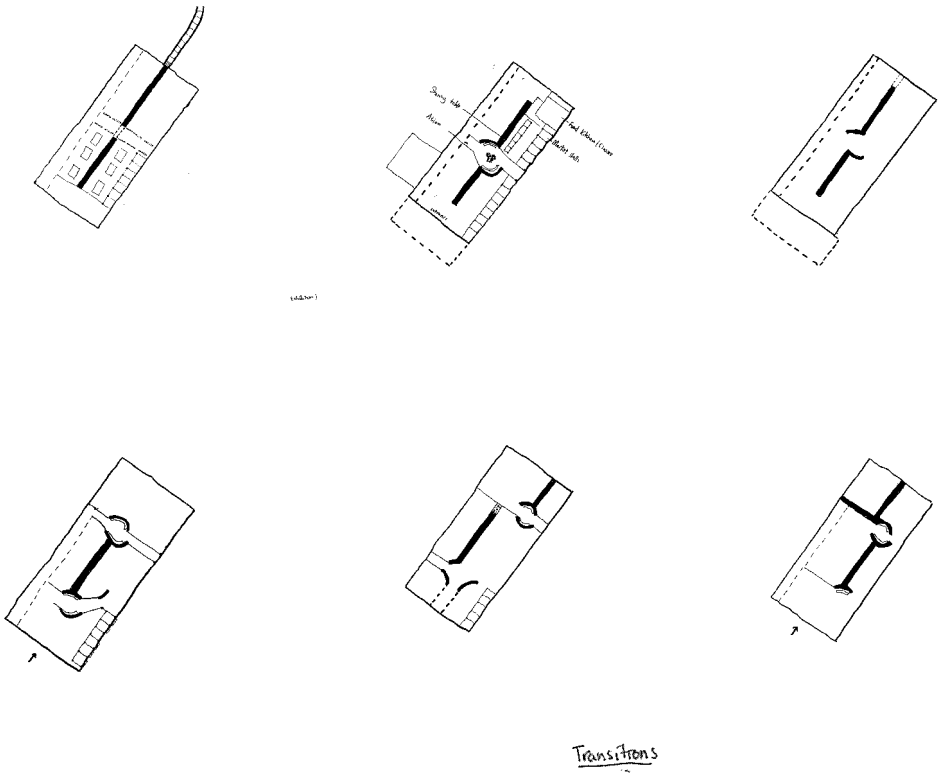


Fig 6.40

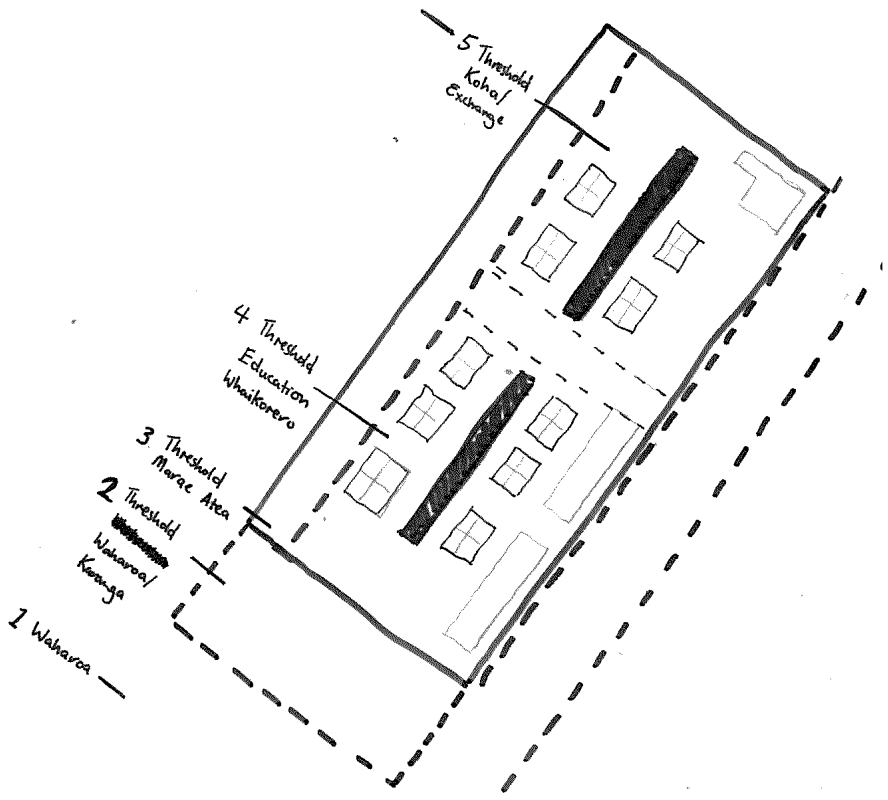


Fig 6.41

Fig 6.40. Sketch iterations of the floor plan. The drawings explored the positioning of the table in relation to the buing and site.

Fig 6.41. Concept sketch showing the transitional journey when entering the Hub

The existing structure

External Walls

The four walls around the Hub were proposed to be demolished for the creation of an open area and more of a market place environment. This also opened the space to views and access to the harbour and the connecting spaces in the masterplan. The roof was reinstalled with corrugated metal and clear polycarbonate sheets to allow natural light in the building. This would provide shelter from the rain and also a social place for people to 'hang out' during the day and night.

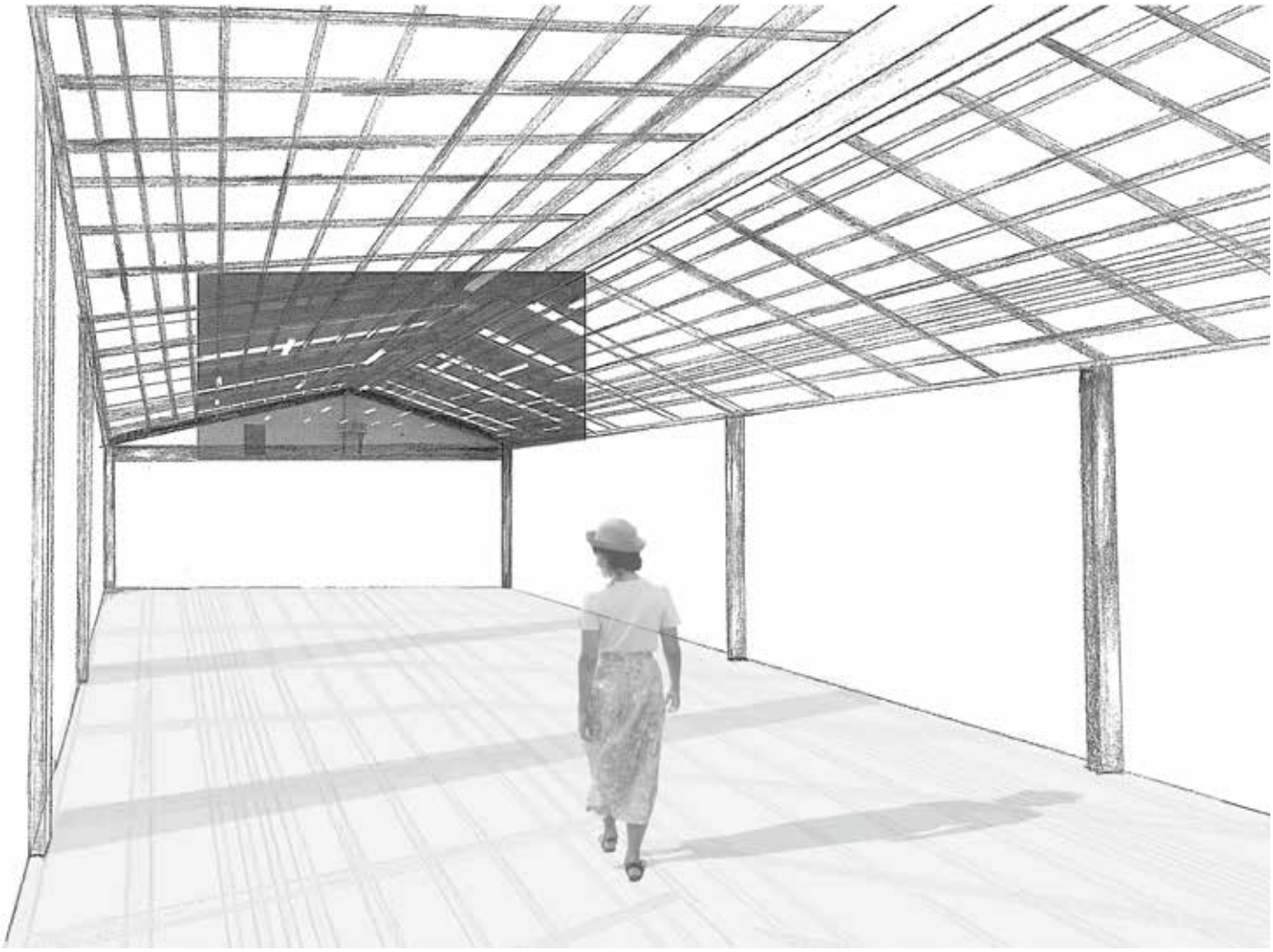


Fig 6.42

Fig 6.43

Final demolition plan

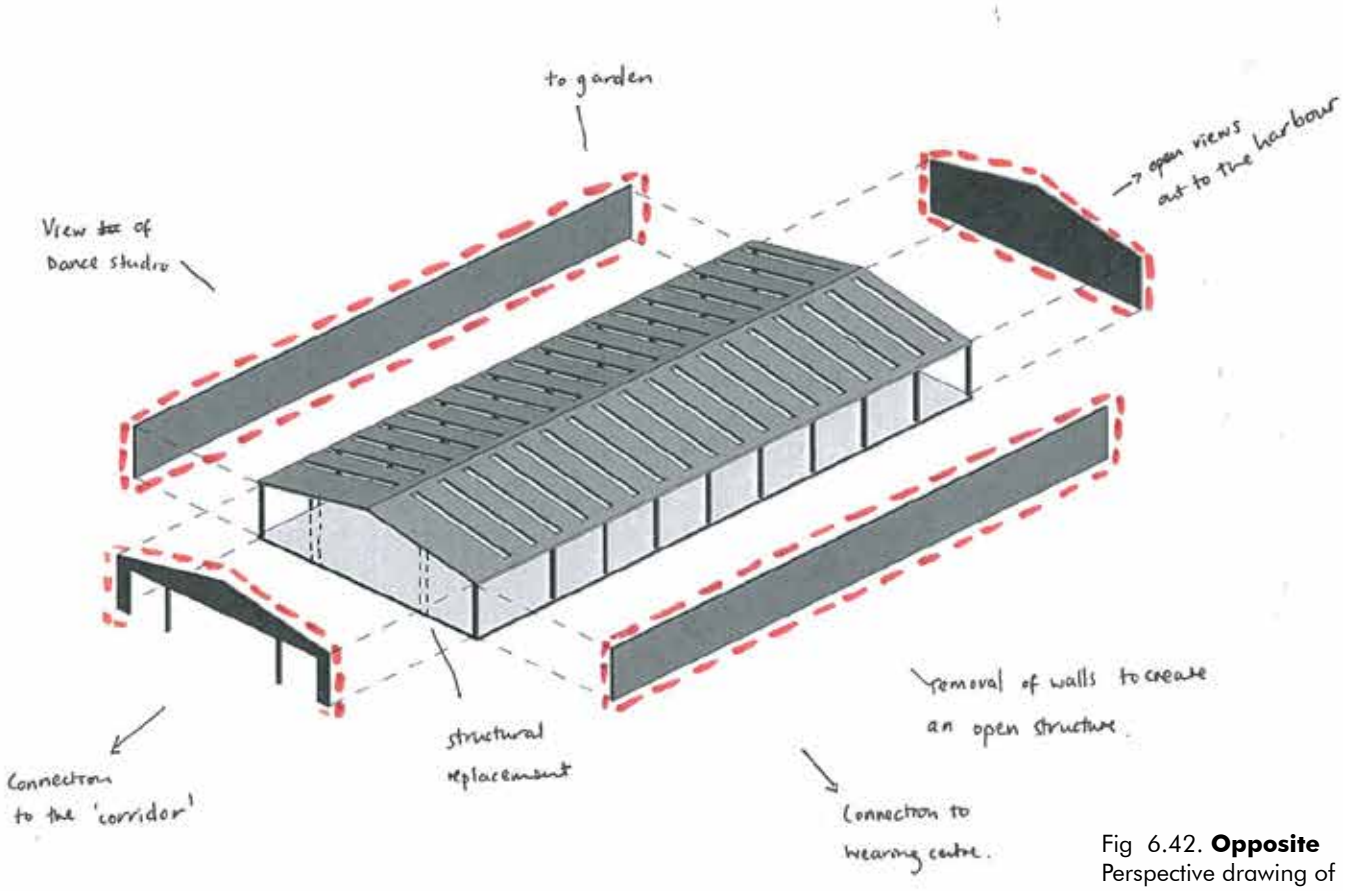


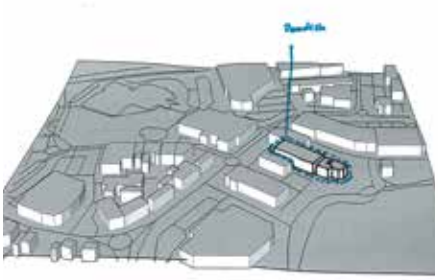
Fig 6.42. **Opposite** Perspective drawing of the building structure (Crackerjack now The Hub) with demolished walls.

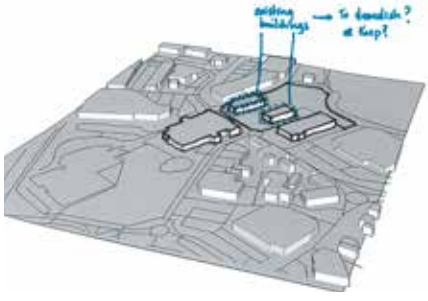
Fig 6.43. Existing Crackerjack building

Fig 6.44. Walls to be demolished

Fig 6.45. Sketches determining the demolition plan and location of the Urban Interior.

Fig 6.44





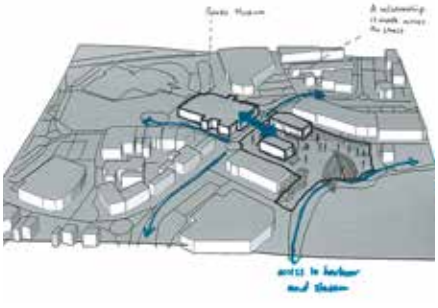


Fig 6.45

CASE STUDY

A wharewaka for Wellington: Keeping a Maori footprint in the city

The wharewaka project really started with the 1990 commemorations of the signing of the Treaty of Waitangi although initial design started around 2000. (Love, 2010, 91) the site chosen was Frank Kitts lagoon on the Wellington waterfront which was historically close to the old Te Aro pa site where upwards of a hundred waka came in and out of. (Love, 2010, 92) Once the site was identified, the next step was to figure out how the wharewaka could integrate in the 21st century city and what buildings or structures would surround it to essentially 'keep the waka warm' (Love, 2010, 93) or look after them. One option was to rebuild a pā and have papakāinga housing, however this was going to be a challenge given that the location was in the centre of Wellington and on the waterfront. As a solution, certain functions were set:

- There would be hui space, including having food available, and it would have all sorts of service functions
- The waka would be housed
- The waka would be on display all day and night
- The waka could access the lagoon

Another challenge of building on the waterfront was the pressure to make an architectural statement as it is a place visited by many people in the community as well as international tourists. The final version of the design featured an 'articulated roof' (Love, 2010, 97) with roof levels that go up and down, which creates a unique and eye-catching structure. It mimics the cloak of an ancestor and is made of steel and high quality glass. The roof also works in a way to cover external connections such as kitchen extractors and air conditioning plants. The wharewaka was deliberately designed without any parking spaces. This allows more pedestrian access to the waterfront, as a way to connect people to the water. Its proximity to Te Papa is also important, it provides a continuation of culture and history in Wellington. Although built for the iwi, the building is a mixture of traditional purposes, recognising that it is sited on the Wellington waterfront, a space that 'mainstream people of Wellington visit and still feel strongly that it is 'their' space.' (Love, 2010, 98) It aims to bring a sense of ownership to the community whilst being economically sustainable and making a cultural footprint. This sense of belonging is in line with the aims of the thesis as well as creating a space that connects people to the waterfront.

- CULTURAL PLATFORM
- HISTORICAL
- SENSE OF OWNERSHIP
- SUSTAINABLE
- A SPACE FOR ENGAGEMENT

Fig 6.46

Fig 6.47

Fig 6.46, Fig 6.47. Wharewaka for Wellington.

Fig 6.48. The wharewaka has turned into something more than just somewhere to house the waka. It is seen as a cultural base with various social activities around it.

Fig 6.48

Fig 7.0 Tokelauan women in the Wellington area formed weaving groups to make kie tau (fine mats).

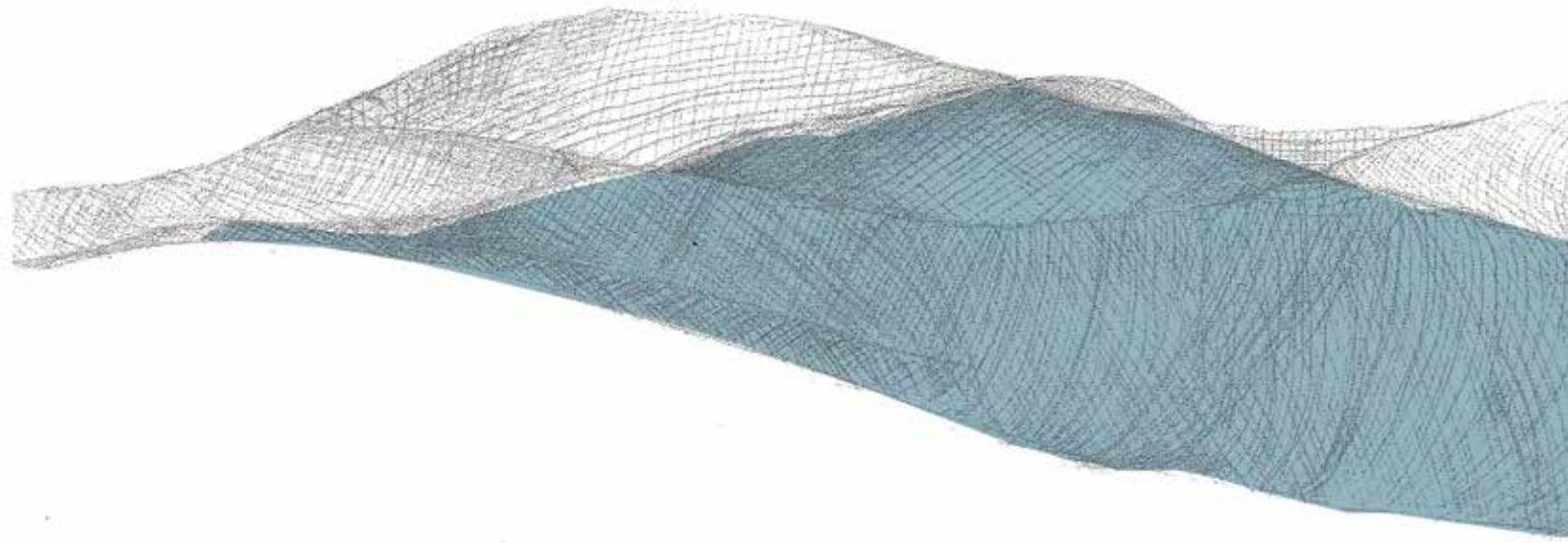
07

CHAPTER SEVEN

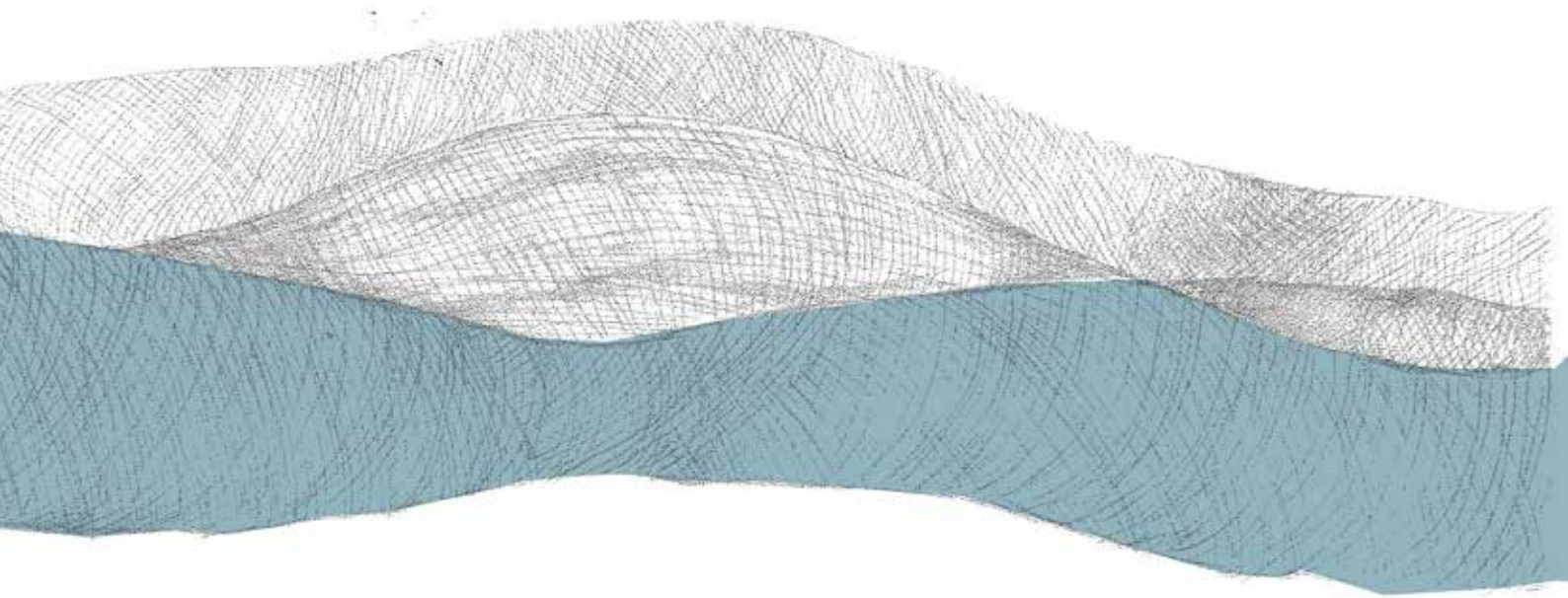
DESIGN DEVELOPMENT
A WEAVED STRUCTURE
THE DINING TABLE
MARKET MODULES
TILES FOR KENEPURU

Weaving explorations

The art of weaving became a big driving force for the design. The meaning and symbolism of weaving was of great importance to the narrative of this thesis as it would unify the past, present and future, binding together 'The 3 Stories'. Various weaved models were created in order to understand the art of raranga and how it could be applied to architecture. Through a series of iterations, weaved models were designed and developed to create a structure that originates in the Hub and leads to the harbour. Traditionally, the art of weaving was taught in a special building called te whare pora (the house of weaving). This is where novice weavers would receive knowledge and be initiated through a series of ceremonies and prayers. 'The karakia (prayers) endowed the student with a receptive mind and retentive memory, weavers became dedicated to the pursuit of a knowledge of weaving and the spiritual concepts.' (Te Kanawa, 2014) The principal goddess of te whare pora is Hineteiwaiwa, who represents the arts pursued by women. As a result weaving was mainly practised by women. (Te Kanawa, 2014) This being a spiritual process of cultural importance, it was crucial to identify weavers with advanced knowledge to collaborate in the making of the weaved structure in the Hub.



The aim was to create a lattice that mimics the water, something that is creates a sort of 'ripple effect'. Experimental models were made to identify materiality and structure. The first step was to have an understanding of the art of weaving and how to weave. Initially, thin card was used to make the models, although not as flexible as flax, the card models helped to explore the numerous possibilities and techniques of weaving. For more fluidity and flexibility, the next set of experiment models were made from plastic mesh which would be held up by tensile cables.



Whiria te tanagata
Weave the people together

Fig 7.1

Mata Aho Collective – (A collaboration)

The identified weavers for this collaboration was Mata Aho Collective. This is a group of four Māori women who produce large scale fiber based works that address the complexity of Māori lives. Their work is centred on the art of weaving and one of their first works, Te Whare Pora was inspired by the sharing of knowledge imparted by Hineteiwaiwa. (NZ history, 2012) They treated their residence like a modern whare pora, where they would eat, sleep and create work all within the gallery. The Collective's work and creation process has been exhibited and celebrated all over the world. The use of everyday materials is also an interesting technique for their work, easily accessible and simple materials such as tarpaulin which can be found in any hardware store have been used for the artwork. The transformation of a simple, common material into an intricately detailed large scale creation makes their work special and memorable. The use of materials that are common in homes and in the community make their work relatable to visitors. Kiko Moana is the name given to one of the collective's creations, it is inspired by Taniwha (a water monster of Maori legend) (NZ history, 2012). The installation measures 11 x 5 metres and is made of sixty, blue tarpaulins that are folded and stitched together to make a textured surface that mimicked the rippling effect of water. Another important component of Kiko Moana was the collection of tanhiwha narratives from the community, this would transfer knowledge, ideas and experiences around taniwha. This method of research and documentation encourages community participation and is an approach that this thesis aims to promote.

Fig 7.2. Kiko Moana,
Mata aho Collective

Weaving precedents
These projects provide methods that were explored and devopled n the design phase.

Fig 7.3, Fig 7.4, Fig 7.5 Aka, Mata aho Collective. The piece of work enlarges domestic hand weaving to a monumental scale.

Fig 7.4

Fig 7.3

Fig 7.5

The Weaving project - Anya Hindmarch

Fig 7.6, Fig 7.7 The bright blue structure is made of 10,000 feet of rope and creates a sense of excitement and playfulness.

Fig 7.6

Fig 7.7

Woven Sky - A bamboo tunnel installation
woven like a basket by Wang Wen-Chih

Fig 7.8, Fig 7.9 The use of lighting in this installation illuminates the space and creates spatiality.

Fig 7.8

Fig 7.9

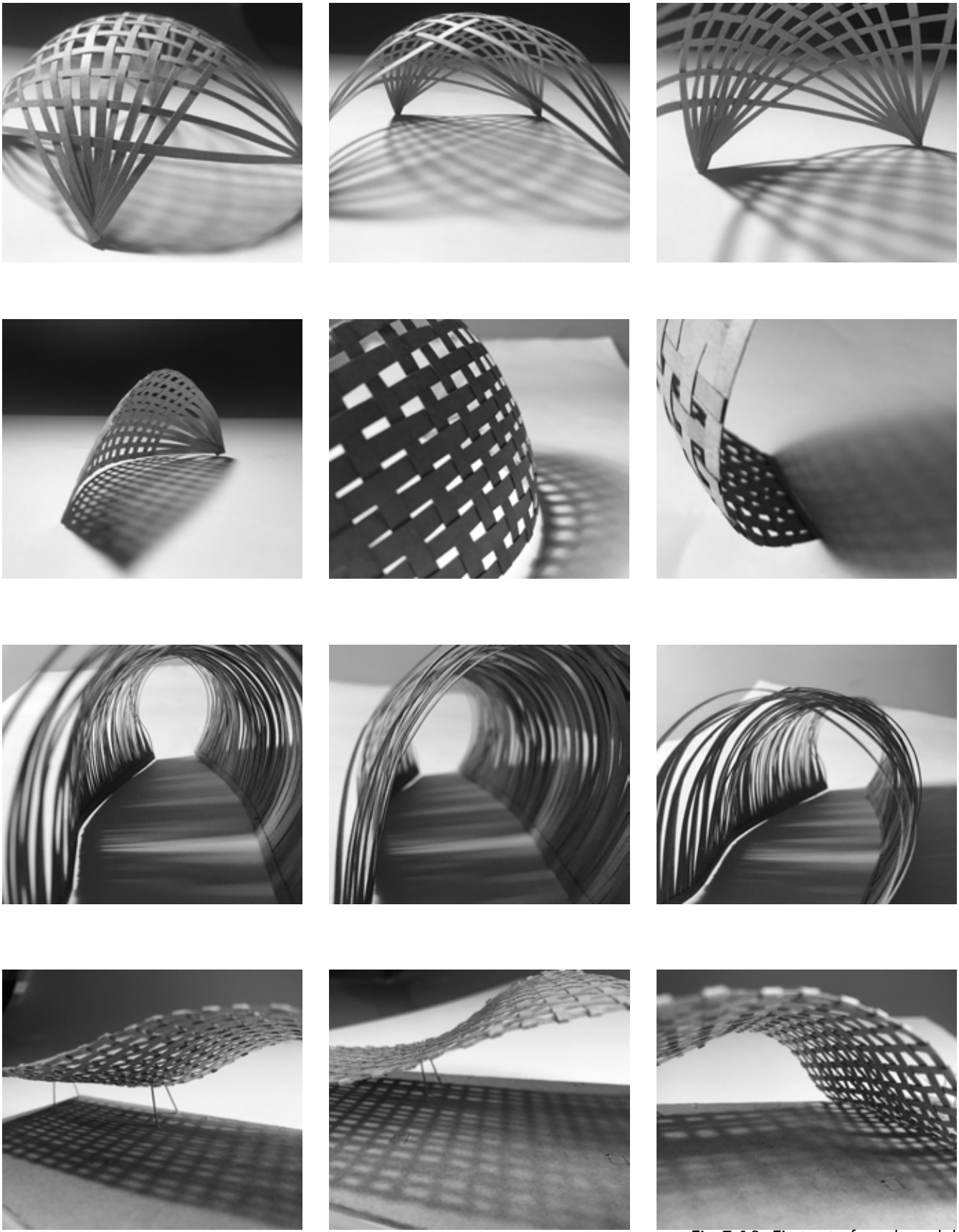


Fig 7.10 First set of card model experiments

Structural elements and Materials

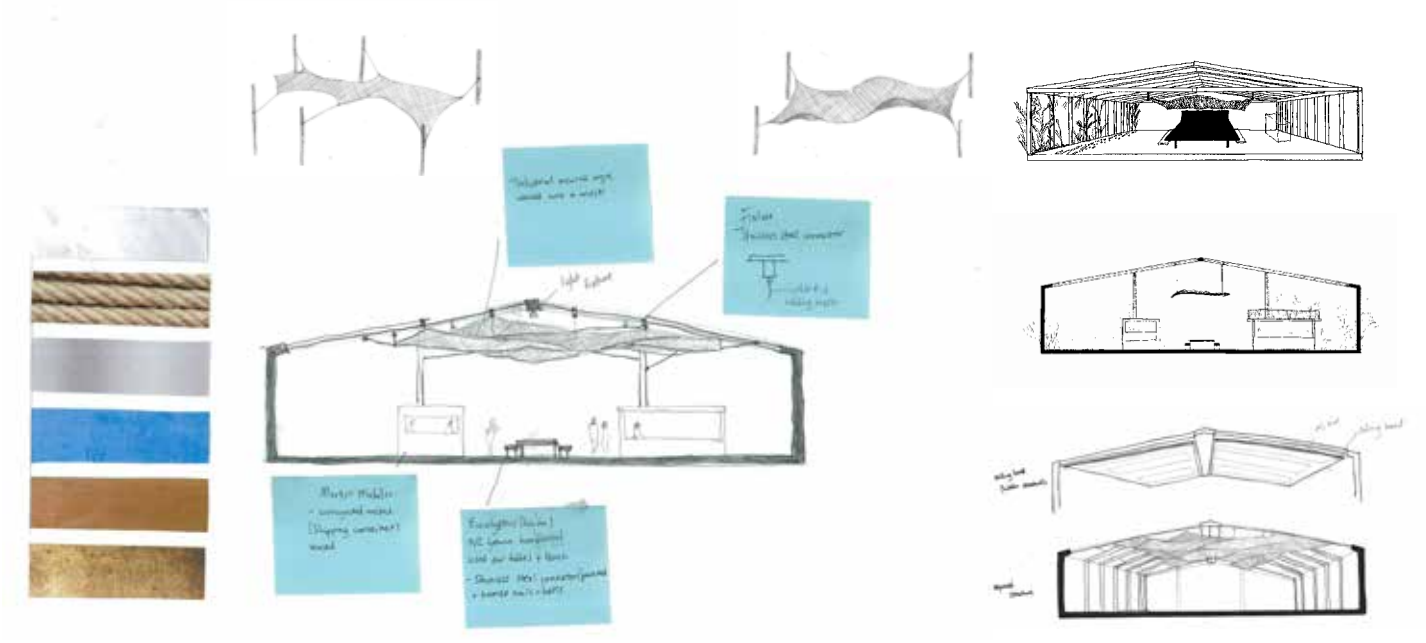


Fig 7.11

Fig 7.11. Development sketches showing structural elements and materials to be used.

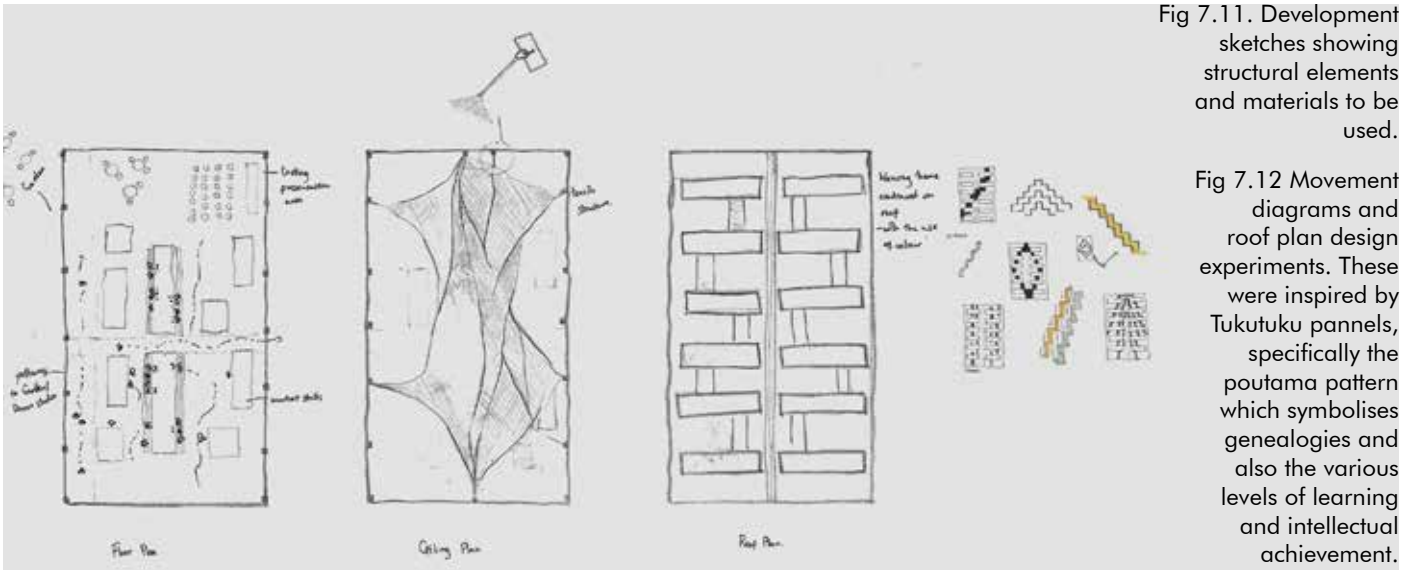


Fig 7.12

Fig 7.12 Movement diagrams and roof plan design experiments. These were inspired by Tukutuku pannels, specifically the poutama pattern which symbolises genealogies and also the various levels of learning and intellectual achievement.

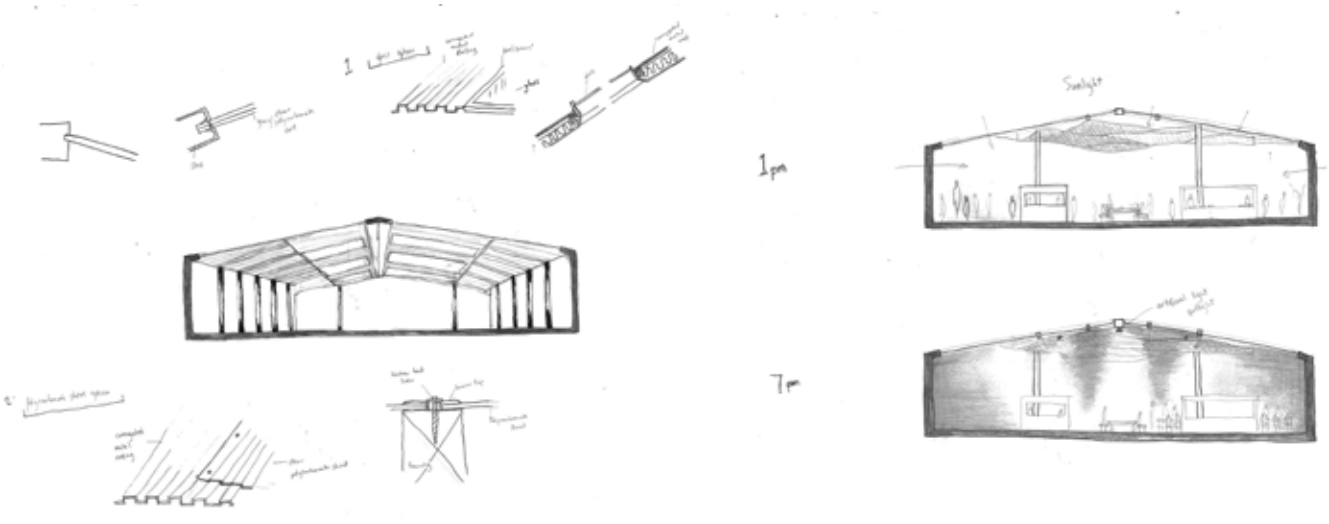
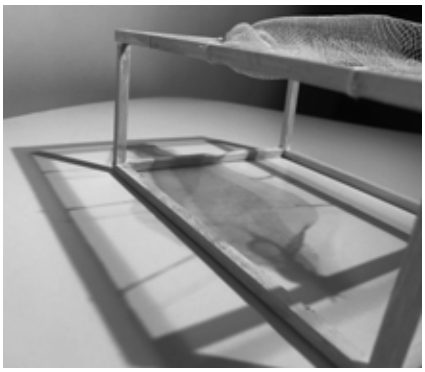
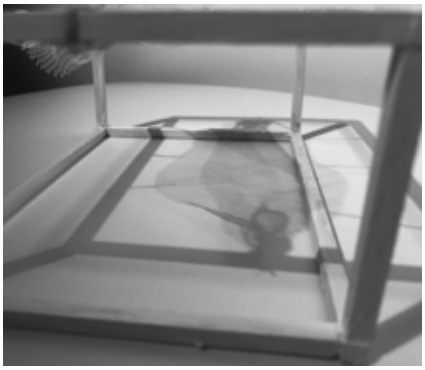


Fig 7.13





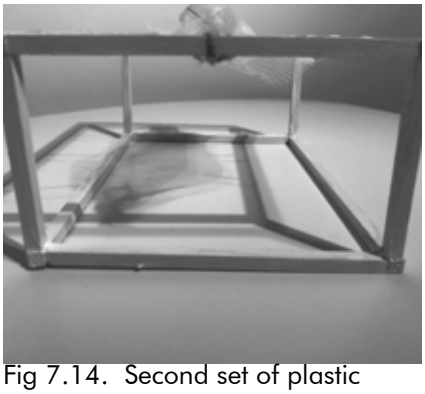


Fig 7.14. Second set of plastic mesh model experiments

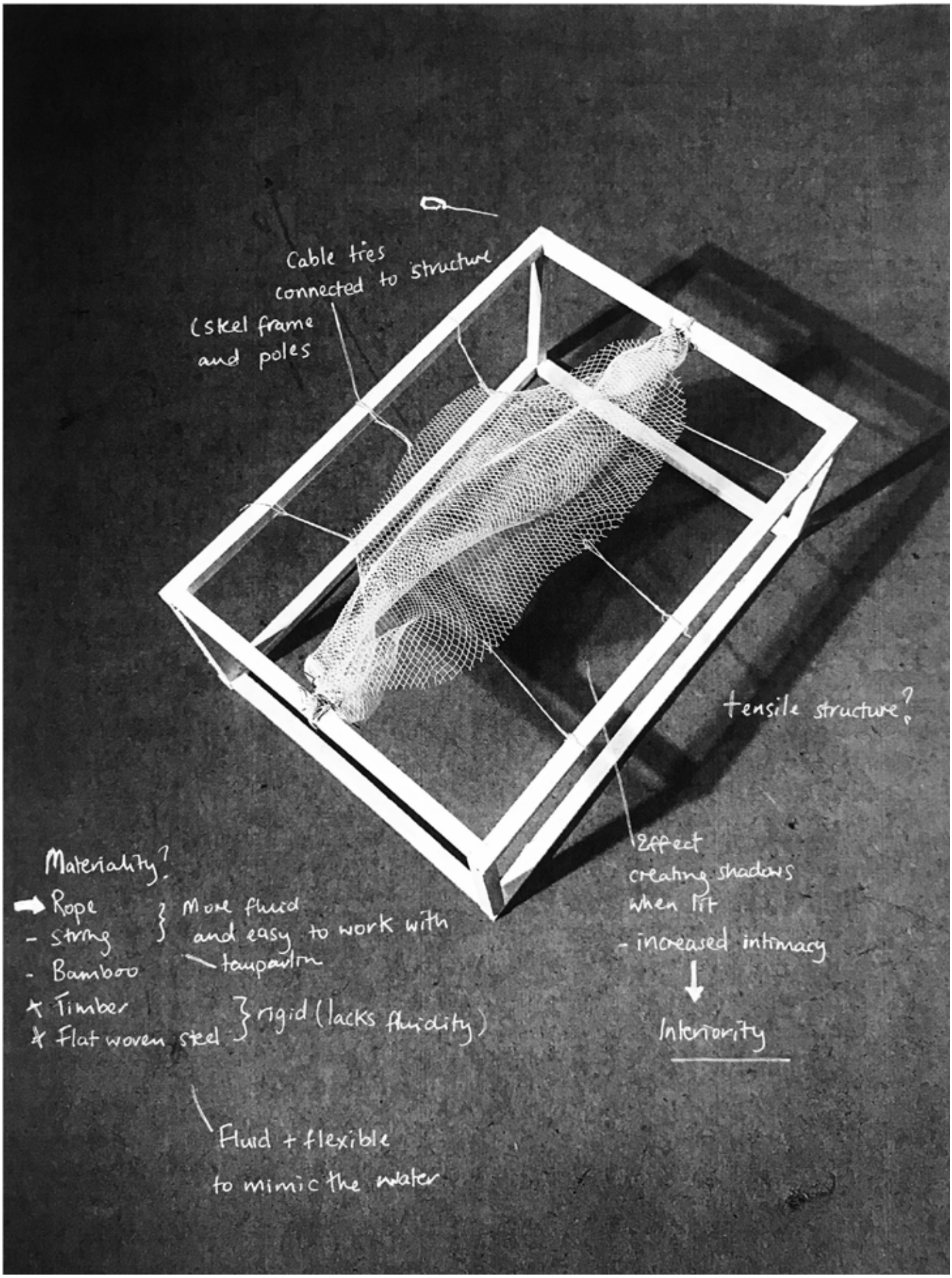

Cable ties
connected to structure
(Steel frame
and poles
tensile structure?
Materiality?
Rope
- string
- Bamboo
More fluid
and easy to work with
toupaulin
* Timber
* Flat woven steel
rigid (lacks fluidity)
Effect
creating shadows
when lit
- increased intimacy
Interiority
Fluid + flexible
to mimic the water

Fig 7.15

Case Study 1

Tread Lightly – Red Ribbon Park (Qinhuangdao, Hebei Province, China, 2007)

Landscape architect, Kongjian Yu redefines the concept of designed ecologies and establishes models to show how minimal interventions can make urban landscapes functional and pleasant social places. (Saunders. Ed. 2012, 84) Yu's interest is based on establishing a healthy relationship between nature and civilization, an example of this is a project in Qinhuangdao Park. Yu designed a fibreglass structure that extends 500 metres through the landscape, along the edge of the river.

The Red Ribbon was designed to curve with the terrain in an attempt to reinforce the water's edge. It integrates a boardwalk, seating, lighting as well as planters connected to the ground; allowing a continuation of the natural vegetation. There is minimal disturbance to the natural environment as the Red Ribbon winds along the river, even seedlings on the site were preserved and the Ribbon was built around them. The vibrant colour of the Red Ribbon contributes to the brightness of the flowers and vegetation in the area, it also reinforces identity and becomes a further recognition element for the park and province, offering new visual and spatial quality to its residents. This is evidently a landscaping project, however, it presents some techniques that relate to the Urban Interior. The project promotes engagement in a previously unkempt and deserted land, it has provided walkers and cyclists a place to sit, rest, eat and meet. The use of colour is also an interiority technique, the Red Ribbon runs through stands of trees, helping to create a sense of place.

The fibreglass structure represents continuity and eventually leads people to the water, this concept was useful for the Hub. The length of the table in perspective, aims to fix the eye on the focal point, which is the harbour. A designed path then leads people from the Hub to the Harbour.

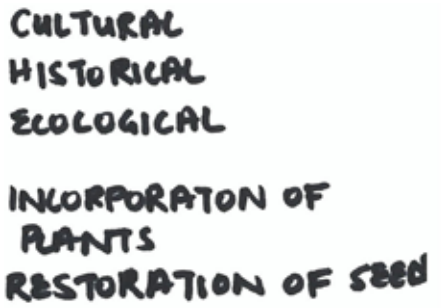


Fig 7.16

Fig 7.17

Fig 7.16 The vibrant red colour is a cultural reference and provides a contrast to the green of the vegetation. The Red Ribbon stands out and leads people along a pathway to the water's edge.

Fig 7.18

The Dining Table

The table not only symbolises community, but also the coming together of different cultures through materiality. Traditionally, Maori structures and many objects are made of wood, carved and decorated artistically (whakairo). Good examples of these structures and objects are the posts of wharenui (meeting houses), taiaha (weapons) as well as waka (canoes). This explains why the body of the table is made of timber which represents a strong rooted Maori foundation with elements of steel and bronze to assemble and hold the table. With the unique structures, strengths and weaknesses, timber, steel and bronze are linked together and stronger as one. This represents the diversity of the community and the harmony that can be created.

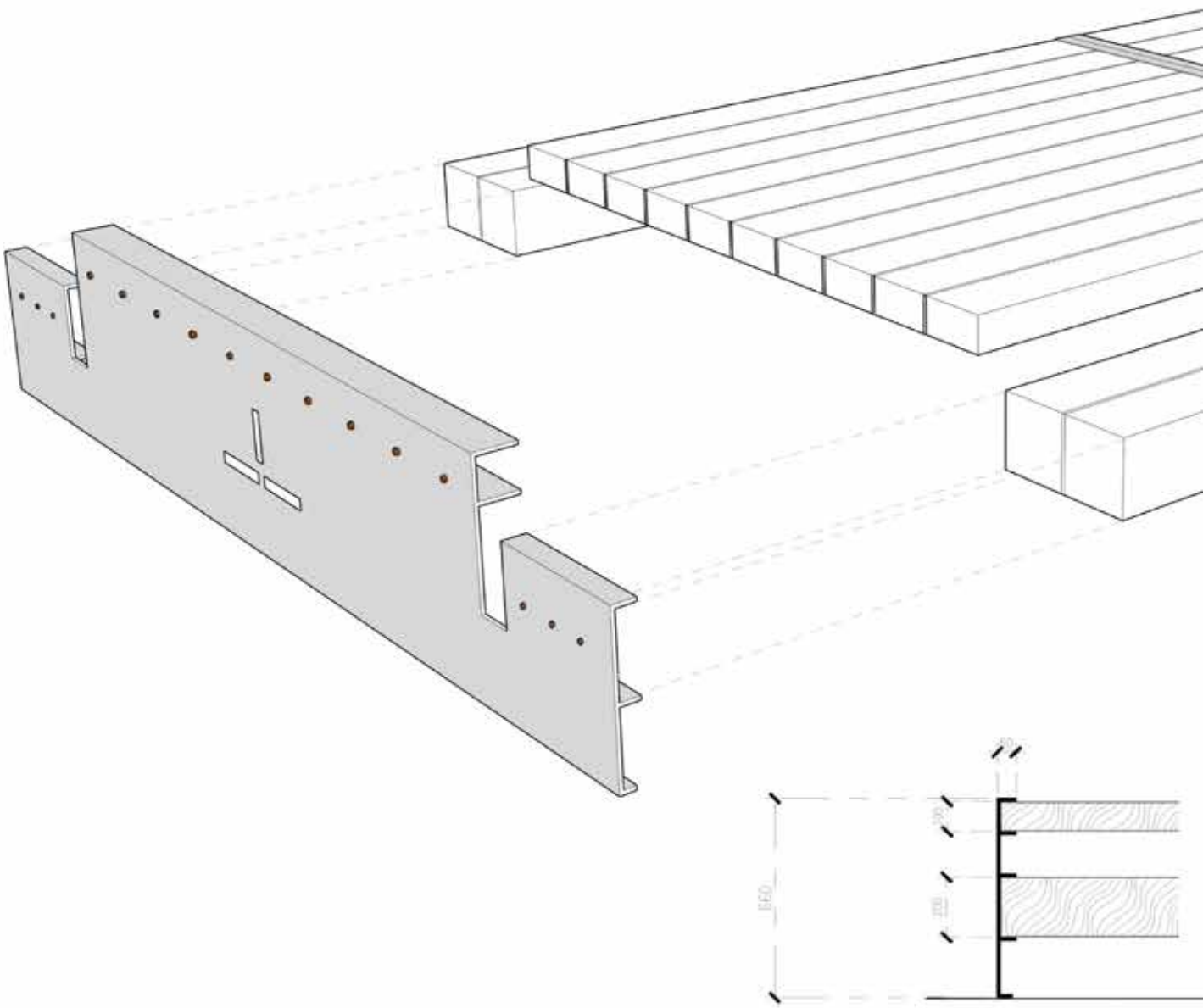
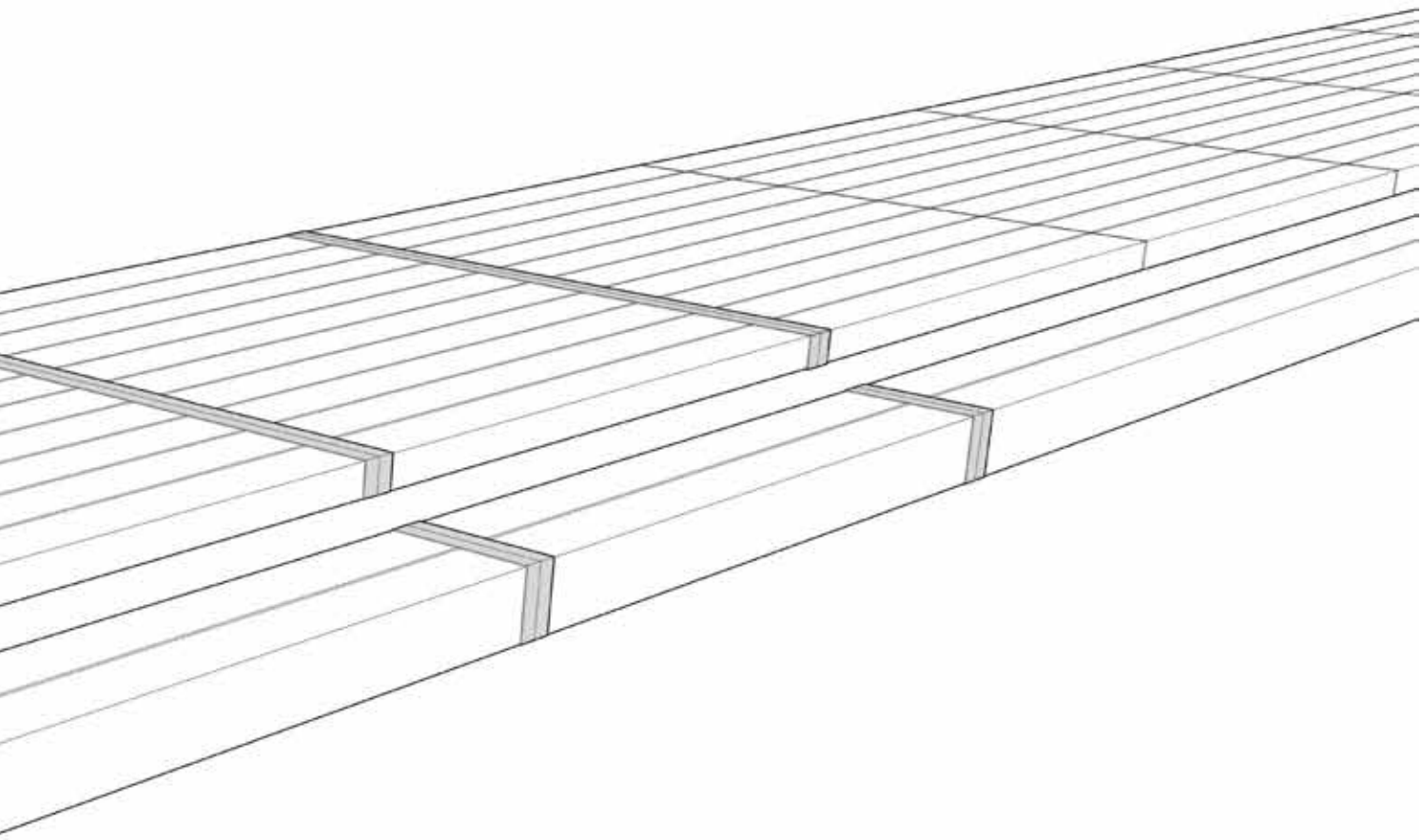
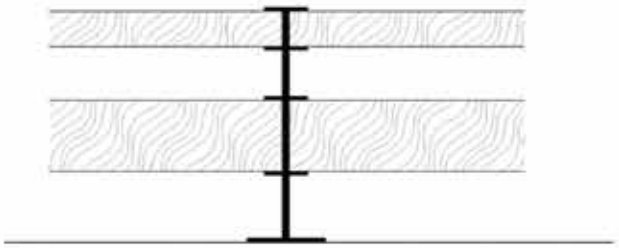


Fig 7.19





Market modules

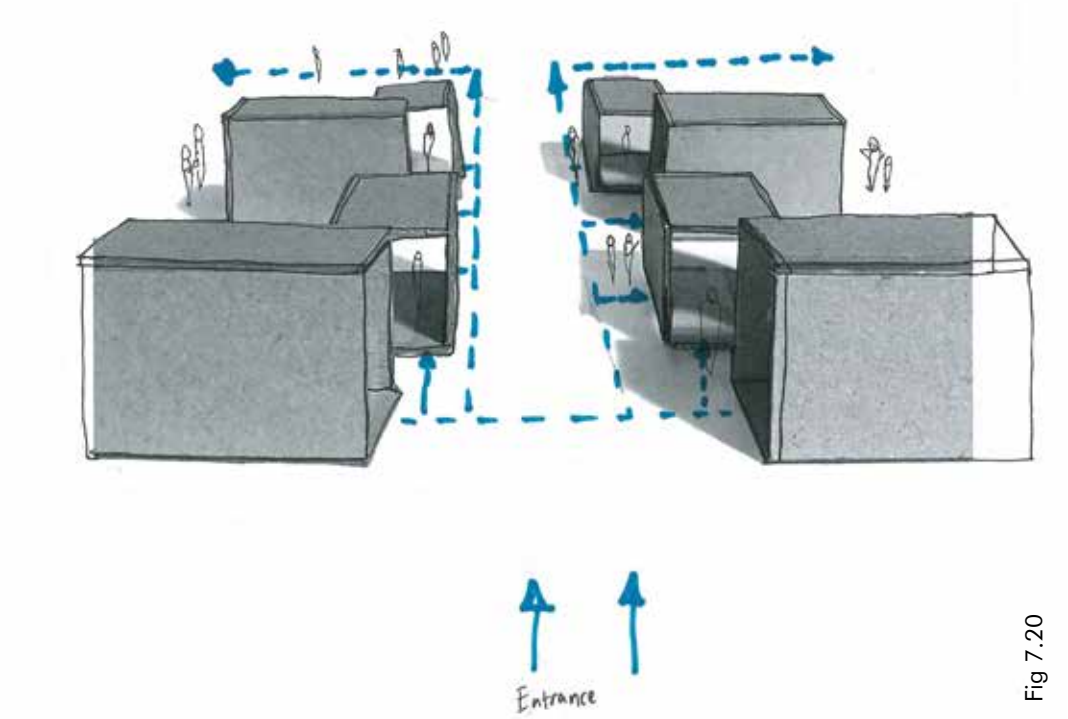


Fig 7.20

Fig 7.20 Development model sketches of the market module configurations and layout.

The process of physical modelling combined with hand drawing the movement gave a detailed understanding of how the space would be occupied.

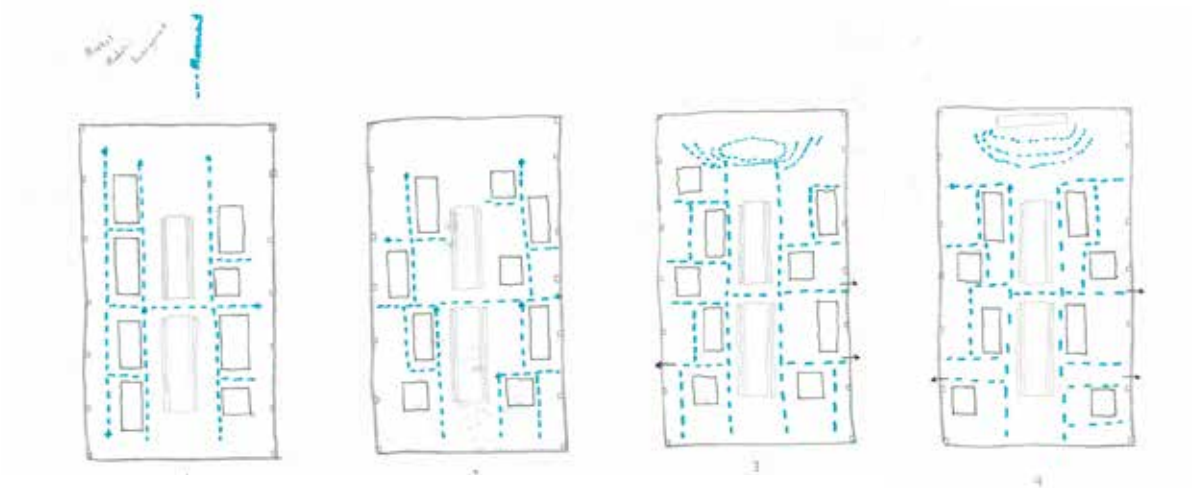
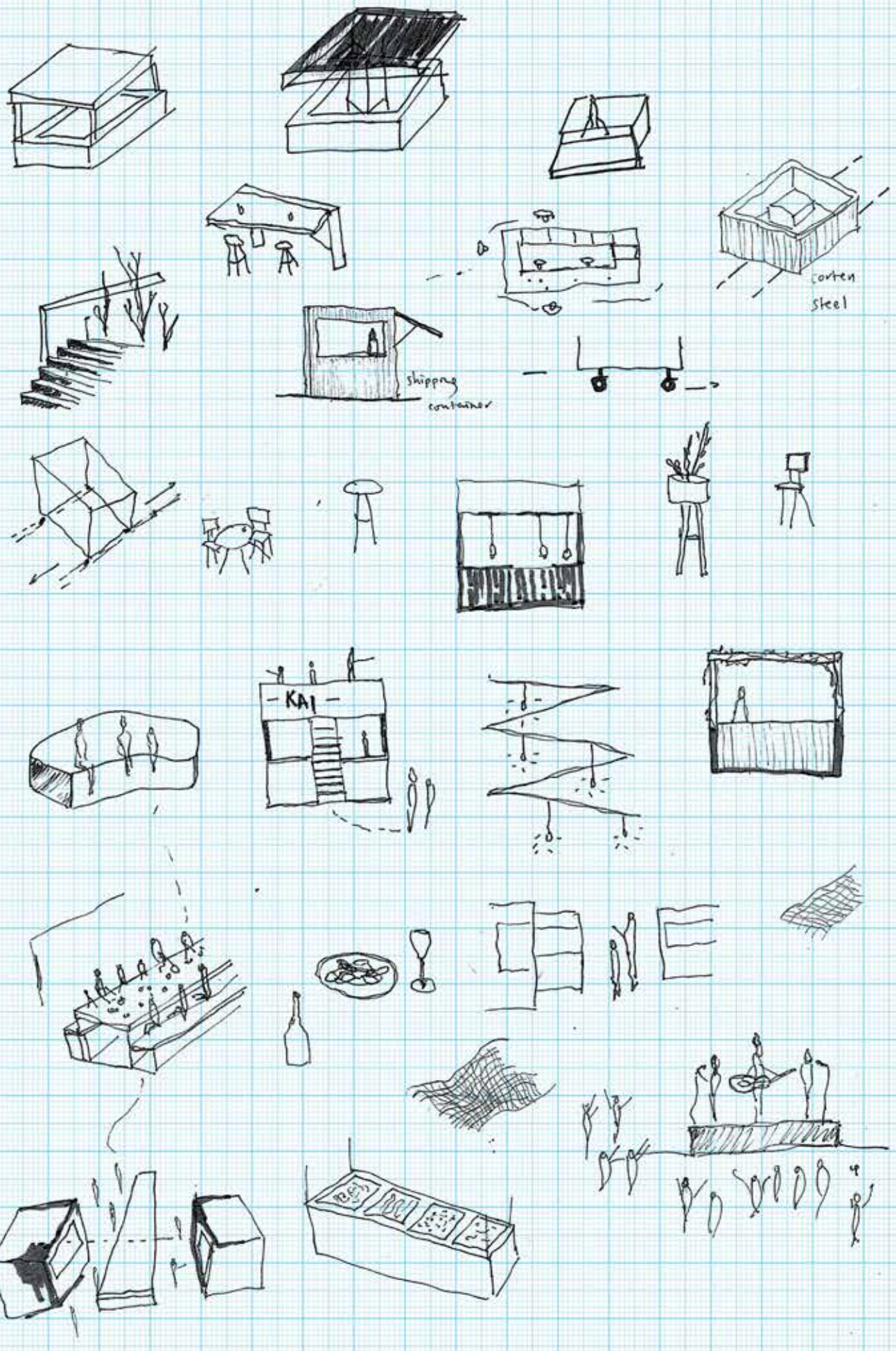


Fig 7.21


corten
steel
shipping
container
KAI

Tiles for Kenepuru – (A collaboration)

A group of architecture students from Victoria University of Wellington worked on a project sited on Kenepuru Landing in Porirua. The design challenge was to unpack and propose an architecture and spatial program for Kenepuru that probed ideas of how designers could decolonise cities and define how this could be carried out in consideration of mātauranga Māori, 21st century New Zealand culture, identity, history, place making, sustainability and architectural innovation. The group produced an experimental set of ceramic tiles looking at how additive manufacturing (3D printing) and a materials-first approach to architecture. This was an approach that does not begin with form finding or symbolic concepts, but with materials and how they could be understood and utilised, this could then provide a means for reflecting local cultural identity, particularly for the local iwi, Ngāti Toa. In order to decolonise architecture, it was important to first de colonise the processes that produce architecture. The finals design experiments were proposed as prototypes which could be used on a building façade or interior. The group also researched on the use of silt from the Porirua harbour in the production of the tiles, this would be a sustainable and innovative way to make use of the unwanted sediment. The production of the tiles would be a long but beneficial process for the future of the harbour. The incorporation of the tiles to this thesis would add to the celebration of cultural identity and further the narrative of weaving together the past and the present to create a positive future. The tiles would be used as a directional tool along the entrance and on pathways leading to the harbour, this would reinforce the water's edge and the vibrant colours would contribute to place-making.

Fig 7.22 3D Printed ceramic tiles before glazing.

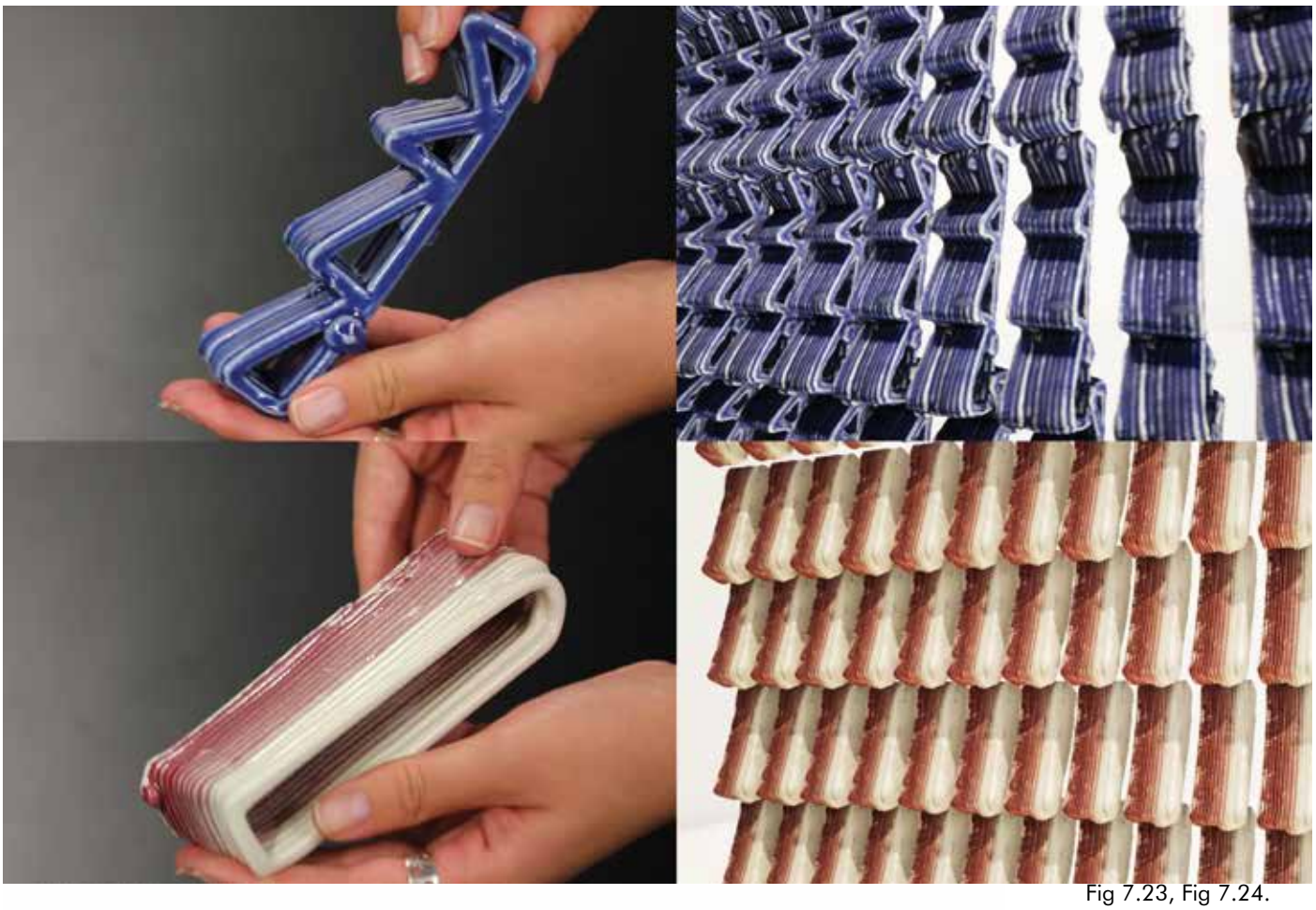
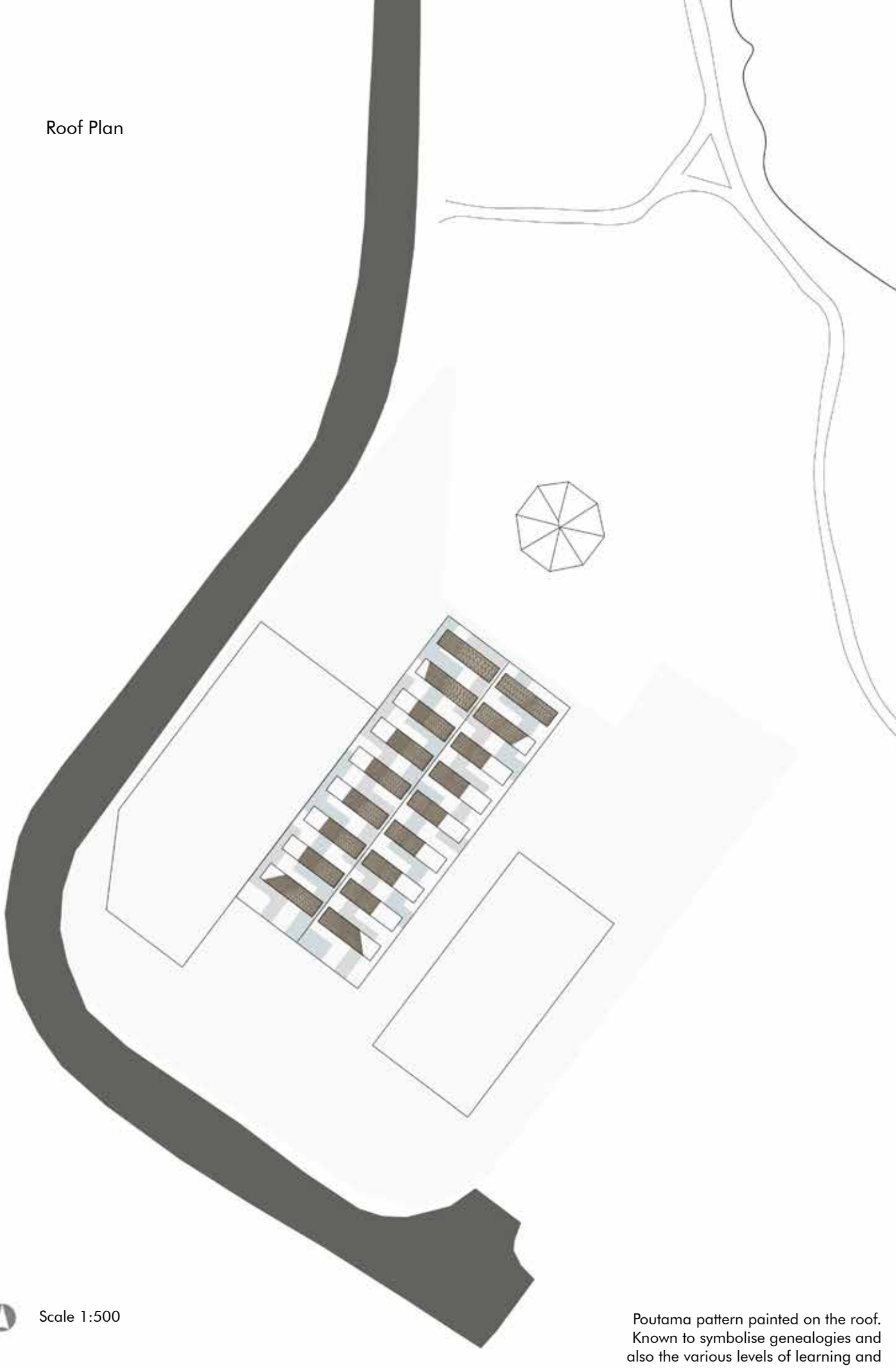


Fig 7.23, Fig 7.24.
The different designs
and shapes of the tiles.

08

CHAPTER EIGHT
DESIGN PROPOSAL
INTENTIONALITY AND REDUCTION

Roof Plan

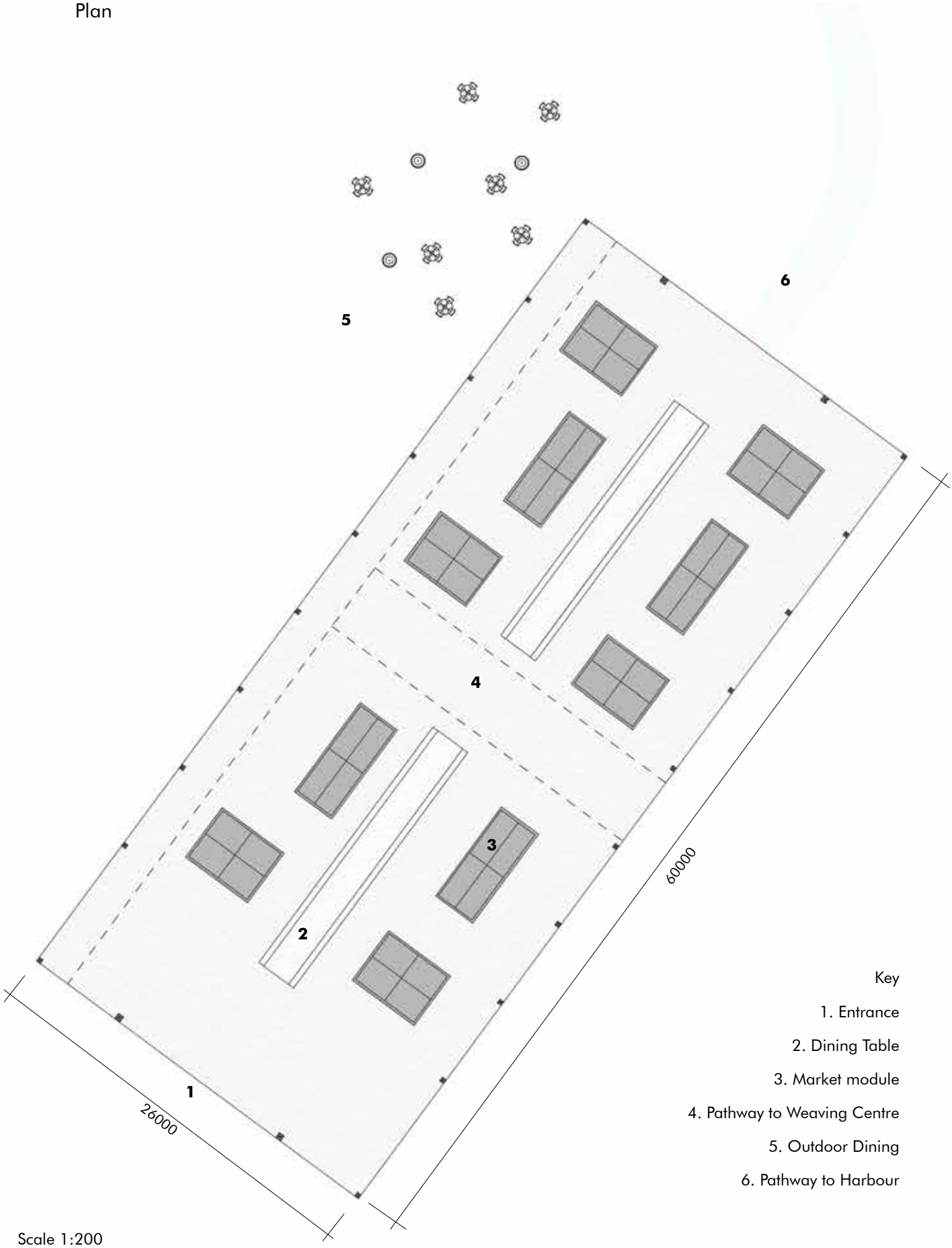


Scale 1:500

Poutama pattern painted on the roof. Known to symbolise genealogies and also the various levels of learning and intellectual achievement.

Fig 8.0

Plan



Key

1. Entrance
2. Dining Table
3. Market module
4. Pathway to Weaving Centre
5. Outdoor Dining
6. Pathway to Harbour

Scale 1:200

Fig 8.1

East Elevation

Scale 1:200

Fig 8.2

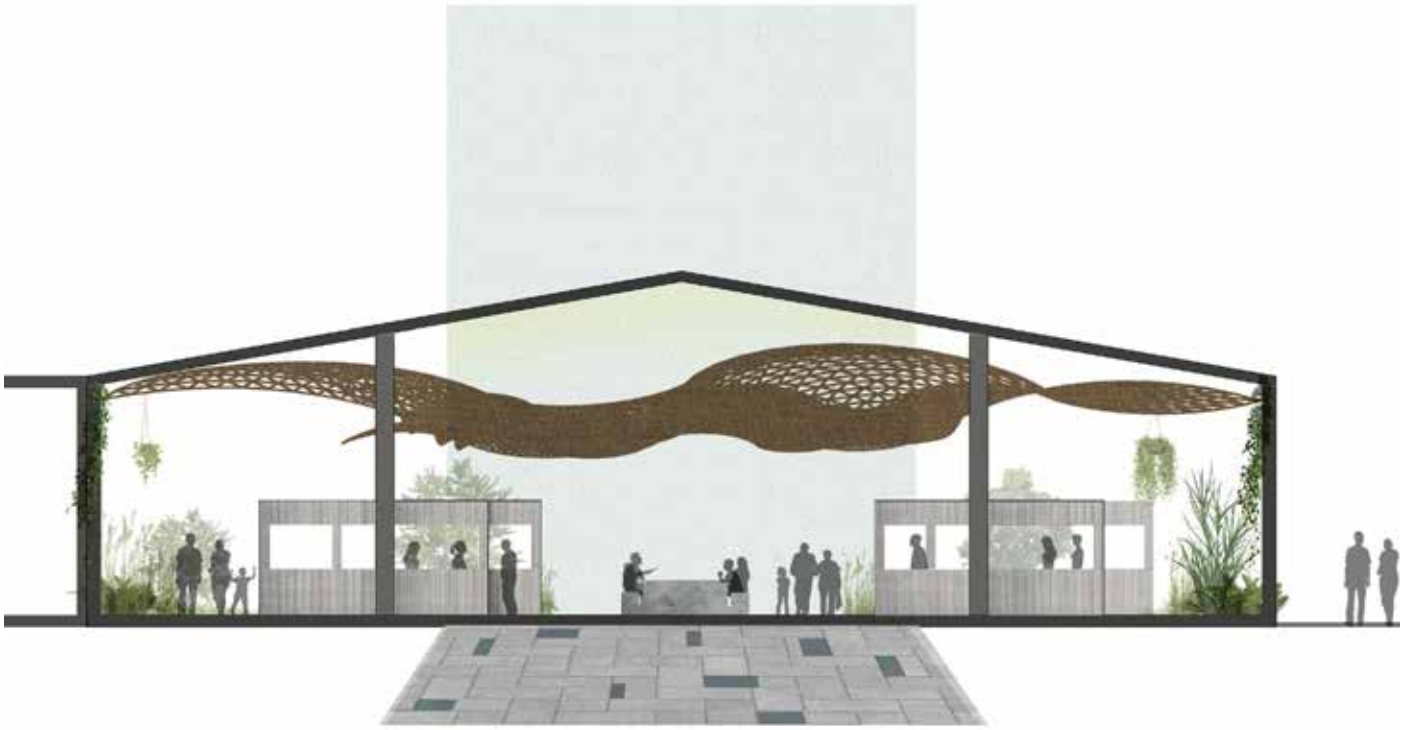


Fig 8.3

Cross section

Scale 1: 100

Fig 8.4

The intentionality of a tiled entrance
{...emerging through the threshold, the contrast between the cold colour tone of the tiles and the warm tones, tactile textures and smooth surfaces bring a light and welcoming feeling to the interior. The pace slows down on the textured floor and the interior provides shelter from the outside world...}

Fig 8.5

The intentionality of a weaved lattice
{...as the sun sets in the sky, the intertwined rope weaves across the ceiling and creates reflections on the floor. A warm and inviting atmosphere is created, in praise of shadows. The meal is eaten slowly, taking time to taste the many flavours of each course...}

Fig 8.6

The intentionality of a table
{...a line of sight towards a dining room leads to a large timber panel attached to steel and tightened by bronze. As time passes the steel transforms, revealing tactile qualities and its' truest form ...}

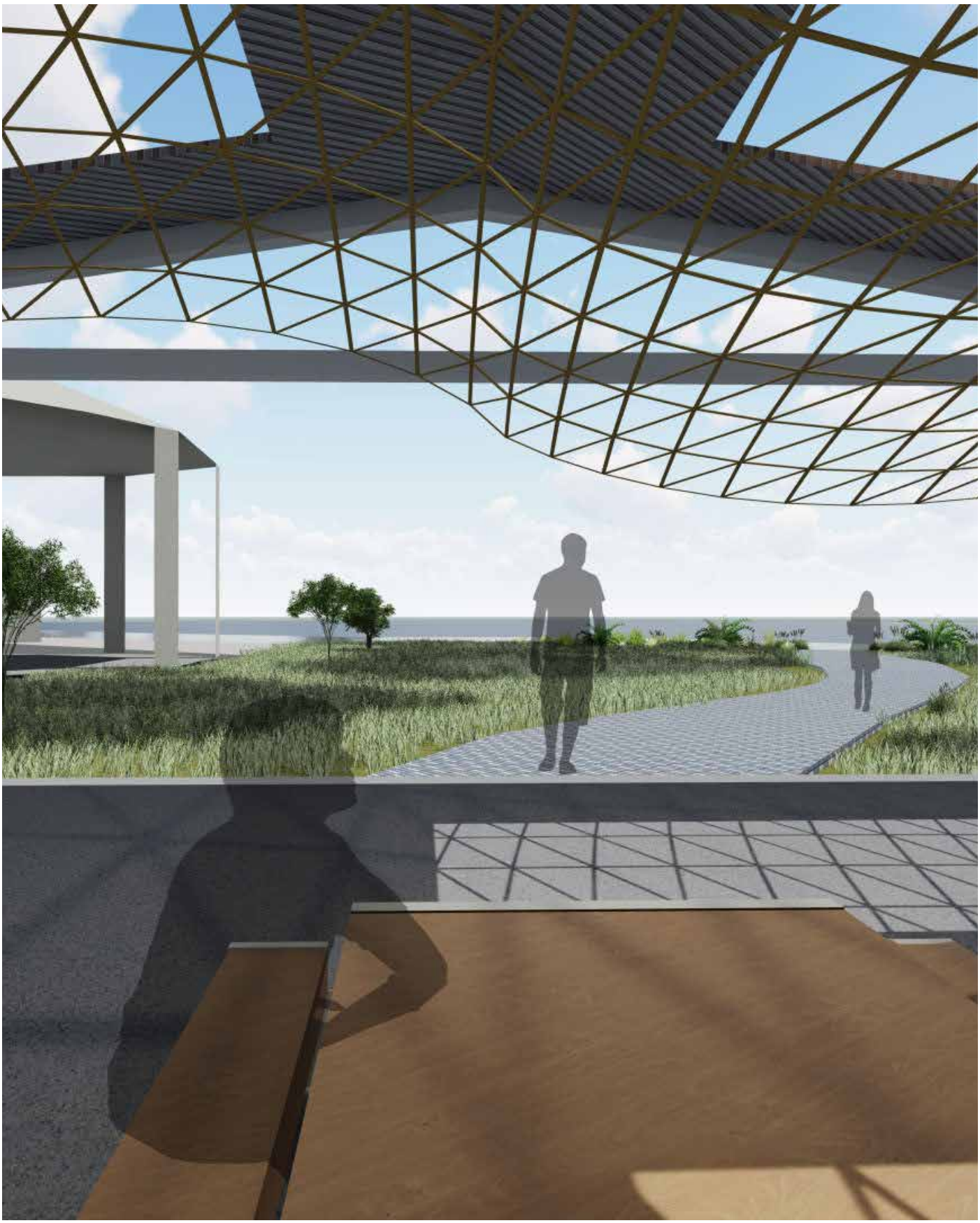


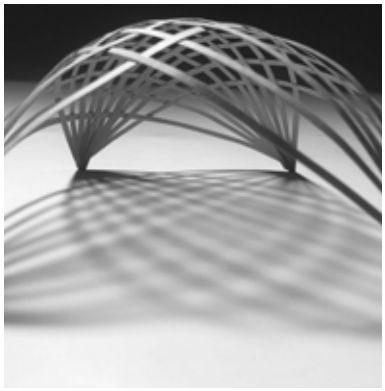
Fig 8.7

The intentionality of a pathway
{... the sun spills across the bay and the water glistens. It can be seen through a screen of flax. A pathway leads as a visitor follows, all to see what lies ahead...}

Fig 8.8
The intentionality of an outdoor dinning room
{... although empty, a cheerful display of seats echoes the chatter of people laughing and enjoying the melody on a bright summer day. The tone is convivial...}

Fig 8.9

Fig 8.10



09

CHAPTER NINE
CONCLUSION
THE FUTURE

It is evident that the proposal of an Urban Interior will not solve the several urban design challenges faced in Porirua, however, it presents a gateway to how small to medium scale interventions can start reshaping the city. The thesis approaches the design of Porirua city centre from the inside out, where buildings and roads as the interior, manipulate the surrounding exterior. Techniques explored can be applied to different parts of Porirua. The proposal initiates the exploration of boundaries that determine an interior space. It has been proven through this project that interior designers can implement change in the urban landscape and their role should not be overlooked.

Conclusions drawn from this thesis suggest that community is a major factor that cannot be ignored when designing a city for the future. It is always important to engage with community and allow people to share ideas and opinions concerning their future. The final design proposal was a permanent structure, however it can be adapted to various uses overtime. The Hub – Market place created a space for social engagement and is also a fresh produce and cultural food market that acts as a business incubator for small business initiatives. The final masterplan provides social, cultural and economic opportunities for the people of Porirua and this has been achieved through an intentional selection of programmes and activities that take place within the site.

The masterplan celebrates culture through the inclusion of a dance studio, a weaving centre, an outdoor performance area and a gallery space. These various spaces bring a cultural richness to the site, providing the city centre with a sense of identity and individuality, attracting people during both day and night. This offers many opportunities for social and interactive activities for the residents of Porirua.
Although not directly interior related, harbour water treatments were explored as this was an important part of the thesis. To celebrate the local character and encourage more people to visit the harbour. The construction of a wetland, sediment ponds and a water filtration system will improve the quality of water and eventually attract more visitors. This is an attempt to remove the stigma around the polluted harbour.

Due to the nature of a 12 month design led research thesis, there was a limitation to the scope of the design, more exploration of Urban Interior techniques is needed to achieve larger scale design proposals. In addition to this, a more rigorous approach to developing pedestrian walkways between the city's centre and the harbour are essential. Although briefly analysed in this thesis, the addition and refinement of these objectives would strengthen the final result if the project is revisited in the future.

An important part of this thesis was the narrative that was based on historical events. Architecture is a tool that can be used to tell a story that inspires and empowers communities. The story has to be relatable, sensitive to its context, and intentional. The 'Three Stories' in this thesis, informed the design process and outlined the cultural and historical aims. The narrative became an important part of the methodology as a foundation and pathway to successful place making.

The theme of intentionality has been highlighted through-out the thesis (from case studies shared to the materials used in the final design proposal), the stories of the **past** have led to **present** outcomes and through analysis and discussion, the **future** can be designed.

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