

an exploration of architects and rangatahi
collaborating in the design of spaces in order to
activate youth agency

(a)
**Rangatahi
Project**

an exploration of architects and rangatahi
collaborating in the design of spaces in order to
activate youth agency

by

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Note: all unreferenced images are produced by the author.

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Contents

Acknowledgments	5
Abstract	8
Preface	
Haere mai, dobro došli, welcome	
A multimedia thesis	10
Chapter 1	
Who, what, when and why	
Introduction	12
So what is the issue and how do we solve it?	13
Research question	15
Positionality	17
A note on collaboration	18
Thesis structure	20
Glossary	22
Chapter 2	
Theoretical framework	
Establishing the branches of inquiry	24
Part One: Rangatahi agency in architecture and research	26
Part Two: The evolving role of the architect	30
Part Three: Using collaborative methodologies to bridge the gap	38
Part Four: A shift in how we communicate space	42
Part Five: Precedents in academia, industry and community	50
Chapter 3	
A methodology of emergence	
Hunches and approaches	52
Methodology	52
Scope	56
Outreach, ethics and research in the midst of a global pandemic	
Initially	58
Then COVID-19 hit	58
Out of a setback, we saw an opportunity	59
We used social media platforms to kōrero	60
Chapter 4	
The incubators	
Incubator project	64
Purpose of incubator	64

The Youth Hub

How it began	66
Incubator question	69
Methods of engagement	69
Lessons	84

Youth Learning Centre

How it began	88
Incubator question	89
Methods of engagement	90
Lessons	98

Ngāti Toa Education Space(s)

Starting from scratch	104
Incubator question	104
Methods of engagement	105
Lessons	154

Chapter 5

(a) Mana ki te Mana Process

Collective contribution	156
A Process	156
A Table	158
Reflection	164

Chapter 6

Critical reflection and findings

Discussion	168
An architect's guide to...	177

Chapter 7

Closing chapter

Conclusion	180
Where to next	181

Chapter 8

References

Works cited	184
Figures	187
Appendix 1: Ethics Committee Documentation	190
Appendix 2: Education Space(s) Spatial Brief	212

Abstract

Today's rangatahi (youth) have exhibited a great capacity to address social and environmental issues and propose solutions toward the future of people and the environments we live in. Although society claims to value the wellbeing of rangatahi, there seems to be very marginal space for the voices of youth to be heard. The aim of this project is to explore design processes that redistribute power and agency between architects and rangatahi in a manner that is not extractive, but mutually beneficial. It asks how we can do this in a democratic way; moreover, it explores how to do it in the midst of unprecedented global challenges.

With my co-researcher Ellie Tuckey, we concurrently explore our research agendas through our individual conceptual frameworks. My focus is on the **agency of rangatahi in the design process** and the evolving role that architects have to play in the awahi (care) of this agency. With an emphasis on decolonisation and agency, this thesis takes a methodology inspired by generative design research and cooperative inquiry. This is applied to collaboration with rangatahi at the front end of design processes, fostering collaborative processes that lead to collaborative outcomes. We have undertaken three **real-life community 'incubator' projects**, which explore how spatial understanding can occur earlier in the design process with the aid of immersive tools.

Our approach began by first acknowledging rangatahi as experts in their own right, just as architects are experts in spatial design. This thesis explores how communication can be enriched, with a particular focus on collaboration and co-opting emerging design tools such as computer game simulations, virtual reality and video media. This multimedia body of work culminates in an individual thesis, **with a collaborative contribution of A Mana ki te Mana Process** - one way of engaging with rangatahi through a decolonised lens.



Fig.1 Ellie through the lens of rangatahi at Takapūwāhia Puna.

Preface

Haere mai, dobro došli, welcome

A multimedia thesis

This thesis was written with the intention that academics and students would read it. A **glossary** is available to describe some of the key concepts and terms throughout this body of work, as well as diagrams of concepts and ideas, some messy, some refined. This body of work sits alongside a multimedia experience; the documentation of my work aims to be more accessible by disseminating the research in the form of **printed media, short videos, computer games, and virtual reality experiences**, along with an installation which was presented at the Te Kāhui Whaihanga Resene 2020 Student Design Awards.

Although it portrays some of the journey of the collaborations, I would like to acknowledge the complexities of the collective effort and the parts of process that could not make it to the final version of this book.

If you are **'skim reader'** and are eager to learn about the important reflections in this research, the **introductions and lessons** sections in each chapter outline the major findings.

Fig.2 Multimedia methods and toolkits.



Who, what, when and why

Introduction

Rangatahi (youth) have exhibited a great capacity to address social and environmental issues and propose solutions toward the future of people and the environments we live in. Although society claims to value the wellbeing of youth, there seems to be very marginal space for their voices to be heard. Aotearoa New Zealand operates within a colonial framework which to this day systemically excludes many people from decision making, including rangatahi. The architectural profession is no exception to this, **as a common attitude of the profession is to maintain an esoteric 'expert' role in the architect-stakeholder dynamic**; collaboration with end-users is seldom facilitated to the fullest extent. Architecture is inherently political and the need for inclusivity and accessibility in the design process is evident.

As Cloke and Jones assert, youth have the ability to be “co-constituents of [...] their own spaces [...] in ways which escape or even defy the ordered spatialities of adults” (2005, p. 311). This thesis explores the agency of youth in the design process and how we can collectively benefit from youth in the design of spaces and natural environments. The aim of this project is to explore **design processes** that **redistribute power** and agency between architects and rangatahi in a manner that is **not extractive, but mutually beneficial**. It asks how we can do this in a democratic way; moreover, it explores how to do it in the midst of unprecedented restrictions and global changes.

With my **co-researcher Ellie Tuckey**, we concurrently explore our research agendas through our individual conceptual frameworks. My focus is on the agency of rangatahi in the design process and the evolving role that architects have to play in the **awhi (care)** of this agency.

So what is the issue and how do we solve it?

Despite the fact that Aotearoa is a “superdiverse” place (Spoonley, 2015), minority voices are often not included in important discussions and efforts to do so are often superficial. Prevailing Euro-centric processes trickle into the architectural profession, which the profession fosters through neoliberal notions of what is **timely**, what is **valuable** and what counts as **communication**. Among the voices which are often excluded is the youth population, who are often infantilised and dismissed in decision making processes. Most of the burden of inclusion is placed back on minority communities, but are not provided with the scaffolding to express values creatively.

In this way, the social responsibilities of architects are dismissed as arbitrary, while design outcomes risk being riddled with **naivety, tokenism and misunderstood values**. Much of this mentality is solidified through academic processes in tertiary education, where inward, individual development is encouraged, but outward, community based thinking seems to lack the attention it deserves. Part of the role of the architect is practicing “anti-oppressive praxis” (Fabish, 2014, p. iii), challenging the god’s-eye-view of the profession.

One of the major obstacles for mutual understanding to occur is **communication**; the division between ‘expert’ and ‘non-expert’ is rooted in the exclusivity of the profession, in architectural literacy and the

ownership of 'creativity.' Much of the time, it is not just the frequency of conversation, but the methods of meaningfully communicating design ideas which require evaluation. Architecture which reflects a group's values must involve that group in the process that leads to architecture.

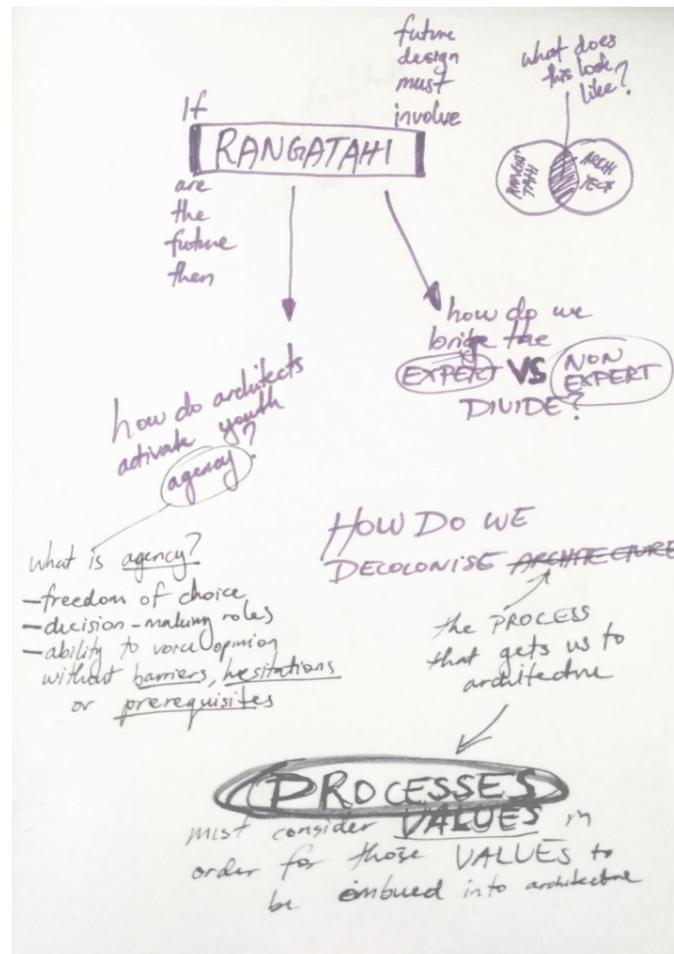
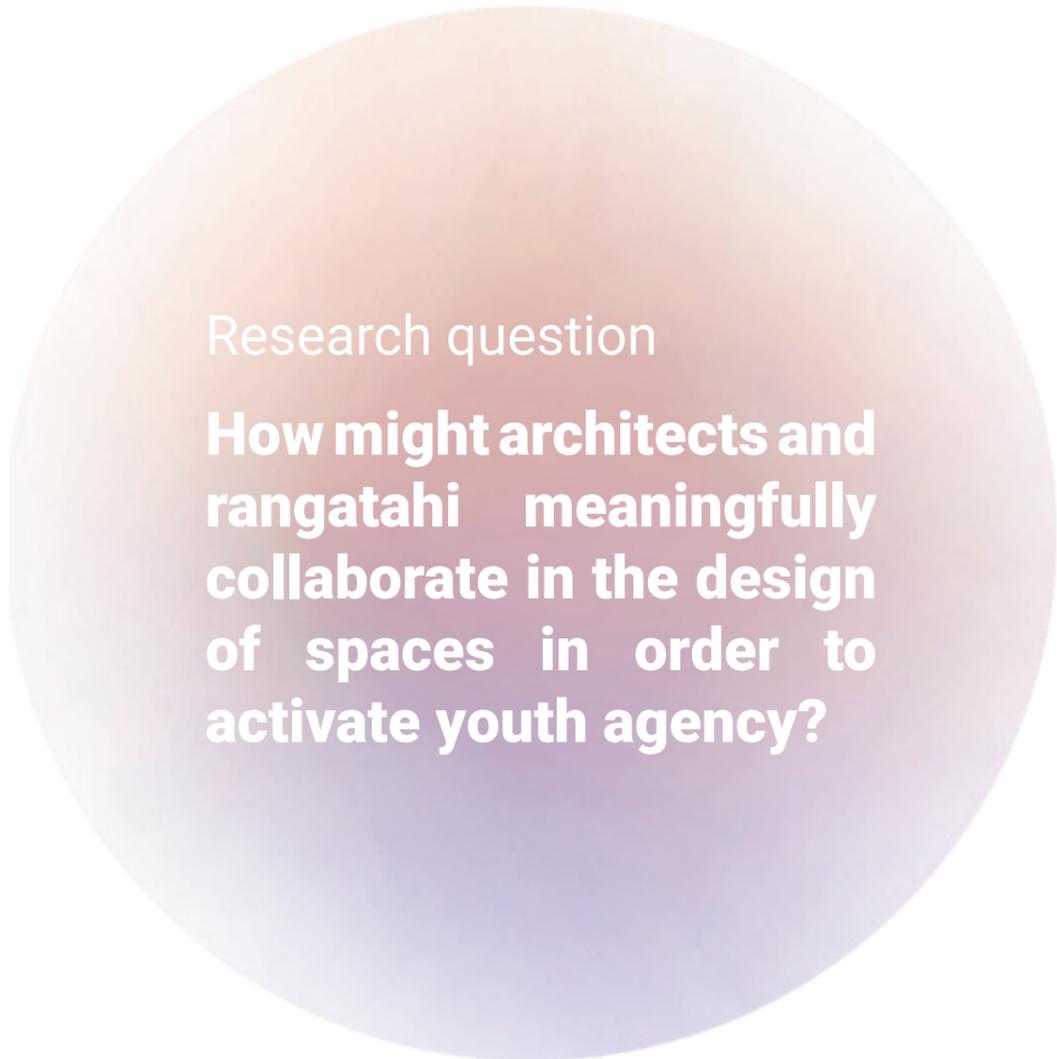


Fig.3 Initial mapping of the issue and key ideas.



Research question

How might architects and rangatahi meaningfully collaborate in the design of spaces in order to activate youth agency?

Nō Herepia me Monoterikoro	My ancestors are from Serbia, Montenegro
me Hanakeria ōku tīpuna	and Hungary
He tauwi au	I am a person coming from afar
I whānau mai au i Herepia	I was born in Serbia
I tipu ake au Herepia me Te Awakairangi	I grew up in Serbia and Lower Hutt
Ko Stara Planina te maunga e mahea	Stara Planina is the mountain that
nei aku māharahara	alleviates my worries
Ko Toplica te awa e mahea	Toplica is the river that
nei aku māharahara	alleviates my worries
Ko Vojvodina te mānia	Vojvodina is the plain
e rū nei taku ngākau	that speaks to my heart
Ko Mitra Homolja tōku ingoa	My name is Mitra Homolja
Ko tēnei taku mihi ki ngā tāngata	I acknowledge the Indigenous
whenua o te rohe nei	people of this area
He Tangata Tiriti ahau	I am a person of the Treaty

Positionality

From experiences seeing things happen to youth rather than with youth, I have a particular interest in youth agency. I immigrated to Aotearoa as a young person and as a youth I felt quite misunderstood - I always boiled it down to language or cultural barriers, but as an adult I have realised that there is a **broader disconnect between youth and adult worldviews**. Youth's ability to subvert the worlds of adults is usually labeled as naivety rather than being looked at as an opportunity for alternative ways of thinking. Agency, at its core, is about empowerment and this is part of wider conversations about decolonisation and the re-evaluation of power structures.

I am a first generation immigrant in Aotearoa; I have carried myself through life feeling like an other and it is in my nature to awahi (care) towards others whose experiences I can relate to. I have recognised that my diasporic identity and experience has impacted the tone of this research. Particularly, my siblings' and my experiences as third-culture youth has shaped my motivation for this field of research. As a tauwi, white, able bodied woman, I understand that I benefit from the privileges inscribed within that and although I criticise Western hegemony, I have a part to play in its structured inequity nevertheless.

I identify as **Tangata Tiriti**; I recognise that I do not have the mana to define, categorise, or claim certain things about Te Ao Māori or other minority worldviews, without the tohutohu (guidance) of the community itself. I also acknowledge that I am an adult and that power exists in the generational gaps between me and rangatahi that I collaborate with. I felt it was important for this work to be built on the foundations of self-reflection and to approach this work from an honest perspective. I aim to create a conceptual framework through which my assumptions about rangatahi, privileges and biases can be acknowledged along the way. I want to be part

of the conversation about active decolonisation and the role of architects in the movement towards the democratisation of architectural processes.

A note on collaboration

While this thesis is an independent body of work, it sits beside and is complimented by another; with my collaborator Ellie Tuckey, we explore our individual interests, conceptual frameworks and methods, but work **together** on a series of engagements with rangatahi. Rather than focus on the architectural 'outcome,' our collective interest lies in exploring **value-based processes** which inherently involve end-users in creative decision making at the messy front end of design. Our intent with the collaboration was to approach single case studies from individual angles which are unique, but simultaneously work in a synergistic way in order to robustly engage with design problems. Our individual perspectives result in multiple reflections, critiques and most importantly, accountability for the ethical awahi of rangatahi we engage with.

Our research is organised in two parts: the collaborative and the individual. *Te Herenga Waka Victoria University of Wellington Masters regulations* section 6c states that:

"up to 15% of the assessment within a research portfolio may be based on group work where students work collaboratively to explore and develop ideas and solutions to problems, but submit individual work."

The 15% shared between Ellie and I is attributed to the time and efforts spent on our engagements with FIELD Studio of Architecture and Urbanism during Incubators one and two and the Ngāti Toa rangatahi engagements in incubator three. For this reason, we were very clear on what specific roles we would take

in each engagement. As part of Te Herenga Waka's vision statement in the 2020-2024 *Strategic Plan*, we believe our research is challenging "the status quo" and "service of our communities" and that our pursuit for collaborative processes within our Masters thesis delivers "transformative outcomes" (Te Herenga Waka Victoria University of Wellington). This process enabled us to create a far more well-rounded research project which explores (in depth)

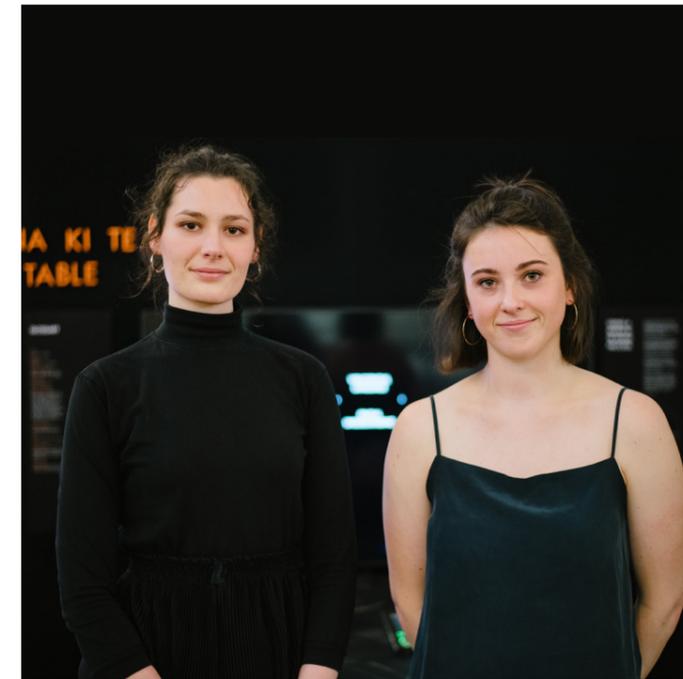


Fig.4 Ellie and I represented Te Herenga Waka as a collaborative duo at the Te Kāhui Whaihanga Resene 2020 Student Design Awards.

multiple methods and theoretical standpoints; I can wholeheartedly say I would not have been able to achieve this level of rigor without Ellie.

We did not receive an abundance of support to do this, having setbacks and obstacles at every stage of our theses which we had to navigate, at times, unguided. It is important to emphasise that although we have similar passions, **Ellie and I do not have a homogeneous point of view**, nor do we view our work as purely individual. We agreed to co-authorship of 15% of the content and acknowledge that knowledge



Fig.5 Ellie and I preparing immersive tools for an engagement with rangatahi at Takapūwāhia Puna.

can be co-constructed but that we can also have our own individual conceptual frameworks, input and reflections. As Ellie is a Pākehā who grew up here in Aotearoa and I am Tauīwi with a different background, it is important to emphasise that we have individual perspectives and that both are valid in their interpretation of the world. I would encourage anyone who reads this thesis to also refer to Ellie’s research, “A Third Space” (Tuckey, 2021).

Thesis structure

This research focuses exclusively on the messy front end of design processes; the conceptions, beginning and complex relationship building which makes up the scaffolding for the process to work. It is a process which is often raw and unrefined. In its complexity, it blurs the line between method, methodology, tool and outcome, and I admit this does become, at times, messy. It is influenced by the ebbs and flows

of engagements with rangatahi. This enabled me to explore emergent lessons that came from hands-on engagements, without the pressure of confining myself to ‘structure.’ If I was to loosely describe the structure, in the most simplified terms, it is:

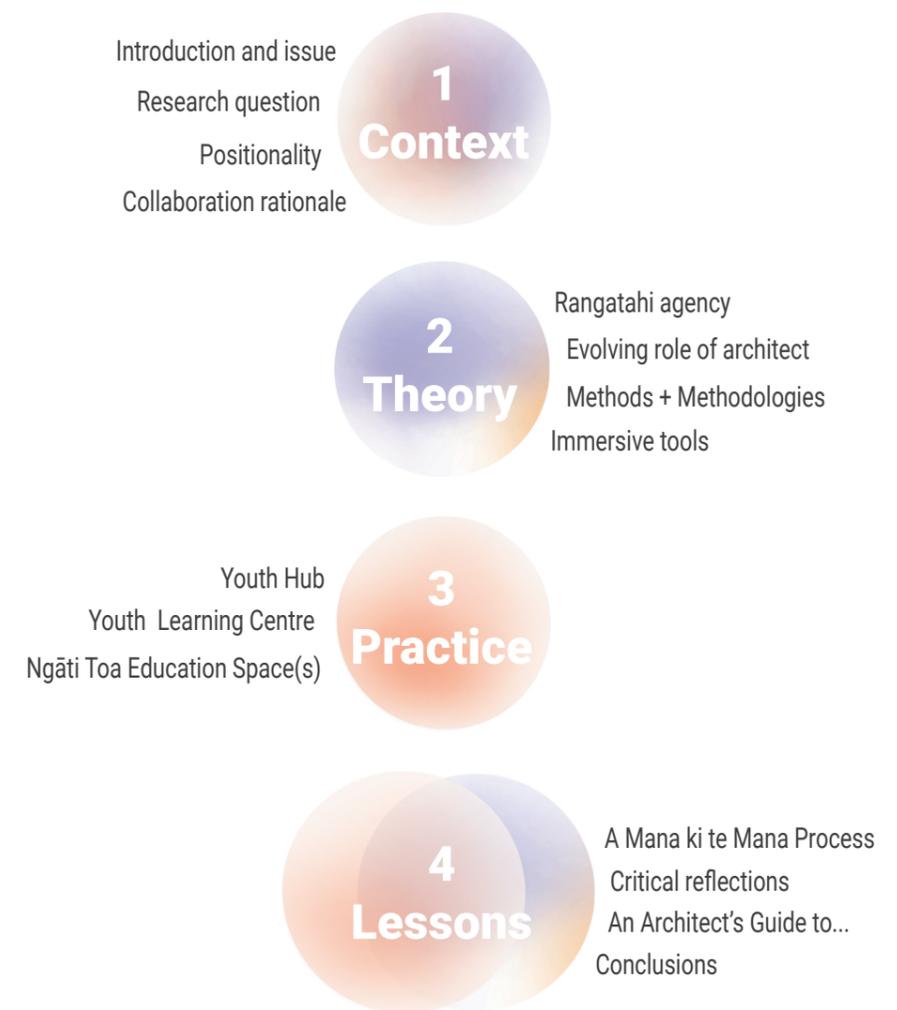


Fig.6 A simple version of the thesis structure.

Glossary

RANGATAHI:

youth, young person

MINORITY RANGATAHI:

youth of minority backgrounds, including gender identity, disabled youth, ethnic minorities, socioeconomic status

YOUTH AGENCY:

youth having the power to make important decisions

AWHI:

to care, to nurture

KŌRERO:

discussion, conversation

WHAKAARI:

to show, to play out, to present

KANOHI KI TE KANOHI:

face to face

KAI:

food

DECOLONISATION:

there is no one definition of decolonisation. In this project we are approaching it as an avenue through which to question hegemonic structures (introduced and upheld by colonisation) that dictate what has value. It is through this lens that we are re-evaluating architectural processes

A MANA KI TE MANA PROCESS:

A reciprocal relationship between rangatahi and architects which is created through equal authority, agency and respect.

BRIEF:

a set of instructions and criteria

PROCESS BRIEF:

outlines how communication or process between people could happen in order to achieve the spatial brief

SPATIAL BRIEF:

outlines the requirements for spaces and spatial relationships

INCUBATOR PROJECT:

smaller, live explorations that each contribute to the overarching project

DESIGN POTENTIAL:

a designed space that is not a final design but instead, intended to propel conversation by providing a visuospatial language

VISUOSPATIAL LANGUAGE:

a visual representation of space that can be used to communicate design concepts

SPATIALISING TOOLS:

tools that can communicate space and atmosphere without the prerequisite of being able to mentally translate 2D lines into 3D space

MATHIKO:

digital

AUGMENTED REALITY:

an overlay of digital information on a real space

VIRTUAL REALITY:

a fully immersive digital environment

SPATIAL TRANSLATION:

the process of turning ideas / values into 3D spaces

SPATIAL UNDERSTANDING:

the ability to comprehend how a 3D space will feel

VERISIMILITUDE:

life-likeness or believability

Theoretical framework

Establishing the branches of inquiry

As a means of identifying a methodology, approach and methods, it was important to engage in an inter-sectional framework which would inform the processes and methods in this thesis; the exploration of these main issues act as a foundation to ground the research. I began with a review of case studies, literature and kōrero to identify the main branches of inquiry. Each part consists of knowledge and commentary about current attitudes towards rangatahi; each part builds onto the next, expanding and establishing a theoretical framework and methodology.

As well as academic sources, the review is inclusive of grey literature such as websites, films, documentaries, podcasts and other 'non-academic' sources in order to give a broader picture of the issue. Alongside online databases, acquiring references through kōrero was just as valuable. Cross-disciplinary texts were considered in order to acknowledge that architecture transcends its own bubble and has implications outside of its own profession. Care was taken with identifying authors' backgrounds and ensuring there was an inclusive selection of voices varying in gender identity, ethnicity, opinion and 'academic' experience (or lack thereof).



Part One: Rangatahi agency in architecture and research

As a Tauwiwi rangatahi growing up in Aotearoa, I always felt misunderstood by adults and I was not entirely sure why. Whether it was class divide, cultural differences or language barriers, I could never truly pinpoint. Having grown up, I have come to realise that there is a bigger problem creating a divide between rangatahi and adults; one of age, maturity, experience, and therefore, **authority**.

Youth in Aotearoa have exhibited the capacity and the willingness to address issues that face them and their wider communities. I attended a number of events, vigils and marches in the last few years alongside rangatahi; whether it was causes such as the Black Lives Matter movement (figure 8), climate change, issues surrounding Te Tiriti, land reclamation movements such as Ihumātao (figure 7), rangatahi have mobilised in large numbers and were not only present, but **vocal**. Yet, I would argue that even though they are often praised, rangatahi are rarely looked at with genuine seriousness. While rangatahi are used as tokens of innocence for adults to look to in socially tumultuous times, they are often denied the roles of decision-makers.

This part looks at attitudes towards rangatahi in architectural processes. Some key ideas that I explored include superdiversity, youth's ability to subvert adult spatialities and how perceptions of maturity influence power structures.

Rangatahi lived experience

Aotearoa is a multicultural, superdiverse (Spoonley 2015) place and minority youth are often wandering through the intersections of many cultures, backgrounds and opinions. Homolja (2019) states that “as a result of living in superdiverse communities, young people find themselves in environments where they are consistently encountering difference, cultural, linguistic, religious or otherwise” (p. 14). Paired with access to information and connectedness through the Internet, social media and immersion into popular culture, these diverging paths offer platforms and spaces where knowledge, solidarity and communication is shared.

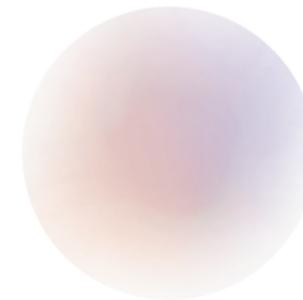


Fig.7 Rangatahi have been present at Ihumātao protests, at Ihumātao and other cities in Aotearoa.

Whether it is through kōrero, videos, memes, games or other media, rangatahi are constantly educating themselves and each other about the world around them. Platforms such as TikTok that dedicate channels to body positivity, political education and education about Indigenous youth's lived experience are abundant, easily accessible and I would argue, **mainstream**. In an era of rapid information sharing, knowingly or not, rangatahi are immersed in a culture of knowledge co-construction.



Fig.8 Rangatahi at the 2020 Wellington Black Lives Matter March.

Rangatahi outlooks on the spaces they inhabit are valuable lessons for architects and their inputs into community projects:

“[Young people] are much more sophisticated than their older generation. They’ve grown up in a multicultural atmosphere and see a shared future with each other [...] what happens when a community begins to say everyone is a citizen and a participant, not just people over 18 or 21 - everyone is a participant and it begins to take them seriously?” (Spence, 1994 in Breitbart, 1995, p. 47).

Adults, authority and decision-making

While no one outwardly claims it, there is an implicit bias and dismissive attitude towards rangatahi due to the prevailing adult-youth dichotomy; **the already existing expert versus non-expert barrier is amplified by adultism**. Power is an intersectional issue; age, just like gender, ethnicity, disability and socioeconomic status, all play into the hierarchies of power and thus, alter the level of agency rangatahi are given in architectural processes. By associating rangatahi with **greenness**, or an overly **romanticised, unrealistic view of the world**, architects imbue their own identity with notions of **maturity**, while rangatahi are labeled as naive. Adults tend to look at youth from a place of superiority; whether they are cognisant of it or not, it hinders the value they put into youth opinion.

“Adultism refers to all [...] These attitudes are embedded in institutions, customs, child rearing practices, and relationships between young people and adults” (Bell in Frey, 2018, p. 54).

INTERSECTIONALITY:
My understanding of intersectionality is that it is framework through which multifaceted issues concerning identity form layers of discrimination (or privilege).

When there are such power balances to be traversed, youth participation runs the risk of tokenistic engagement. Breitbart (1995) states that treating rangatahi with dignity in the process is crucial, citing that “inviting and sustaining the genuine participation of children in projects is also critical” and that “tokenism is recognized and responded to as such by children” (p. 45). Adult-centrism in academia trickles into the way research is conducted and the way researchers conduct themselves with rangatahi; it shows in how responsive (or unresponsive) rangatahi are to participation in research. In an *Australian Youth Research Centre* report on *Young People in Decision-Making*, Wierenga et al. (2003) comment on the pitfalls of “adult-centrism,” with some of the young researchers stating that “[...] so often, it is still about what adults do for young people – missing the point of working with and alongside young people” (p. 5).

Who ‘owns’ creativity?

The freedom rangatahi feel to push creativity beyond the bounds of ‘what is realistic’ is in some ways intimidating for adults. I have often heard rangatahi referred to as ‘dreamers’ with whom reality will catch up to eventually; youthful curiosity is often dismissed as something that should be left within the realm of adolescence and cannot transcend into ‘real’, ‘adult’ decision-making. Cloke and Jones talk about youth as “co-constituents of their own worlds – their own spaces – in ways which escape or even defy the ordered spatialities of adults” (2005, p. 311). They occupy “places and spaces which are seen to be outside of adult control and ordering, where the fabric of the adult world has become scrambled or torn, and the flows of adult order are disrupted or even abated” (Cloke and Jones, 2005, p. 312).

Lessons

Rangatahi are engaged, they are concerned, and have creative solutions to problems which even adults may not even begin to consider. **If we are discussing the future, then we must consider the voices of those who will make up the future.** As a researcher, I am aware that keeping adultism in check is incredibly important for many reasons, including its influence over the ability to actively listen, build trust and provide safe spaces for youth creativity to flourish.

As a researcher working with rangatahi in community projects my responsibilities must include being proactive about caring for those communities. Kake asserts that, “for Pākehā and Tauīwi practitioners, this may mean listening, ceding space, supporting others to lead, and sharing power” (2020).

In Aotearoa, youth agency is part of the bigger conversation surrounding power hierarchies, decolonisation and the impact Western ideology has on architects and thus, the way they produce creative outcomes. Which begs the question: without hindering the architect’s expertise, is it possible to nurture and foster respect for rangatahi in decision making? It is important to briefly delve into architecture in Aotearoa, in order to understand more about the role of the architect in academia and the industry, specifically focusing on issues and solutions which are rooted in Aotearoa.

Part Two: The evolving role of the architect

Part of the motivation for this research, especially its collaborative nature, was my own struggle with identifying how and where I fit into the architectural profession. My passion for architecture was truly ignited with an opportunity to work collaboratively

and by asking questions about architectural processes alongside students and people outside of academia. This research was also fueled by another pressing question; **if rangatahi have a role in the future of the spaces we inhabit, then how does the role of the architect enable this?** While my focus is on rangatahi agency within the design process, this thesis stems from a position of decolonisation. I am hoping to engage in a deeper conversation about my role as an architect and the often overlooked political responsibility that comes with such a title.

Decentering the West

To understand agency and power hierarchies in Aotearoa, it is crucial to discuss **decolonisation**. Blundell (2020) summarises that in “the colonising of Aotearoa, New Zealand has meant, for the most part, that decisions determining the past and future of our cultural landscapes are made by distant ‘experts’ within mainstream practices” (p. 3); these decisions **channel imperialism, positivism and alongside that, consumerism** (all tightly interwoven and exploitative). I use the term ‘decentering the West’ with intention; to focus on the positive ways that thinking outside of that hegemony has contributed to providing alternative ways of conducting research and creating architecture.

Despite the challenges that come with bringing about change, due to critical thinkers in the field, decolonisation now has a presence in architecture. One of the particular features of Mātauranga Māori in the field is the emphasis on power structures and the importance of inclusion of rangatahi voices. My use of the term ‘rangatahi’ in this project was used to acknowledge this ideology. As Berryman et al. (2017) state:

“the word rangatahi has its roots in the verb raranga—the Māori word for weaving. We

posit this term as a metaphoric indicator that our young people stand as both the result of the influences, including the impact of significant people in their lives, and their own position and actions of agency and self-determination” (p. 478).

Referencing the *Imagining Decolonised Cities* project (figure 9), Kiddle praises young people as a group who has “much to offer in terms of drawing new and complex maps as the hope is that they are more likely to be unencumbered by colonial processes” (Kiddle et al., 2018, p. 5).

Many acknowledge colonisation’s presence but are passive to it, or are too scared to face it. In Aotearoa, “[...] some built environment professionals may just be at a loss as to how to go about engaging with or translating this mātauranga to a contemporary urban context” (Kiddle in Kiddle et al., 2018, p. 55). Tolich (2002) writes about this whakamā (embarrassment) particularly in regards to “Pākehā Paralysis” and inaction due to fear of tokenism and cultural insensitivity. Potter asserts that “although consultation processes do take place, these are largely formulaic and often rely on discursive techniques that commonly align with dominant Western neoliberal notions of communication and rarely overcome the power relation embedded in the authority of “architectural expertise” (Potter, 2012 in Kiddle et al., 2018, p. 55). In simple terms, it is not a level playing field for minorities.

Kiddle explains her meaning of decolonisation as being about “creating spaces that are levellers” and that architects in Aotearoa have a role in spatial justice (Kiddle in New Zealand Institute of Landscape Architects, 2018). Challenging the ego and the god’s-eye-view of the architect begins by relinquishing ownership of knowledge.

Hence, how do we create these ‘levellers’ and actively practice decolonisation in projects with rangatahi?

I argue that by asking ourselves the question ‘**whose space is it really?**’ we can begin to understand whose values and input is crucial to the eventual success of those spaces.

Architect’s role as collaborator and co-creator

Hamdi spoke about “owning the problem as well as the solution” (Hamdi in Architecture UIC, 2016). The role of the architect is to help unearth and identify the problem before solutions are even mentioned. This thesis focuses on rangatahi agency and began as an echo of Smith’s call for asking the question:

“what happens to research when the researched become the researchers?” (2012, p. 297).

This question essentially calls for collaborative research and places rangatahi in the role of co-researcher. Often seen as difficult, collaborating with end-users are processes which “take time and commitment and will involve all kinds of people, not all of whom are on your side, nor share your ideals” (Hamdi, 2004, p. 42). This culture of decision-making has to be propelled for mutually beneficial collaboration to occur. Kiddle states “if professionals are not explicit about their value sets” it becomes incredibly difficult for stakeholder communities “to confront these underlying assumptions and suggest alternatives” (Kiddle et al., 2018, p. 55). Hamdi (2004) adds that “intelligent practice builds on the collective wisdom of people and organisations on the ground [...] in this respect, good development practice facilitates emergence; it builds on what we’ve got and with it goes to scale” (p. xviii). Creating spaces for rangatahi to express ideas, concerns and potentials was part



Fig.9 Imagining Decolonised Cities Project included an under 18 rangatahi category and encouraged rangatahi to share their ideas in the form of artwork, writing, poetry and other media.

of the *awhi* that needs to be rooted in collaborative processes.

Another argument for collaboration within academia and the profession is the importance of **accountability**. Having looked at a number of previous theses which consider ethical issues and kaupapa, it has become apparent that “potential unintentional biases” and “implicit bias” can be minimised by a co-researcher who keeps in check “all conscious impressions, preconceived ideas and biases” within the engagement and post-rationalisation (Baldwin-Denton, 2019, p. 17). Till puts it clearly when stating that:

“architects have to face their political and social responsibility, and that participation should be involved in the construction of that social responsibility. If architecture is going to become a truly collaborative, a truly social discipline, then participation, in the true sense of the word, has to be part of that whole new discipline. Other things we have to do as well, but the whole process of negotiation, the whole process of conversation, the whole process of communication is an important aspect in discovering a kind of social intent for architecture” (Till in Upmeyer, 2015).

The architect’s role as activist

I have been reflecting on my own education thus far, namely the realisation that there is an attitude that architects are creators of spaces and do not have a responsibility outside of that creation. In fact, the most misleading thing I was told as a student is that the spaces we create are inherently innocent. Till

claims:

“in order to avoid participation in architecture and urban design becoming merely a politically required token of democratic involvement – a kind of fake participation that does not actually engage the participants in any meaningful way – architects, planners, and designers need to commit themselves and relinquish control” (Till in Upmeyer, 2015).

In order for architects to acknowledge their collective social responsibility in the making of spaces, they need to **unlearn** some of the individualistic filters through which we are taught to sieve information. Hamdi’s commentary on exclusivity in academia particularly comes to mind and encapsulates these shortcomings:

“I will argue that mistrust, defensiveness, jargon, abstraction and intellectual competitiveness still dominate academia [...] Rationality and factual evidence are more rewarded than creativity because they are easier to measure. All of these things are a barrier to learning. They are anti-developmental” (2004, p. xxv).

Architects who want to actively engage with rangatahi issues and concerns should establish a “shared sense of purpose and justice” in the cause (Hamdi, 2004, p. xvii).

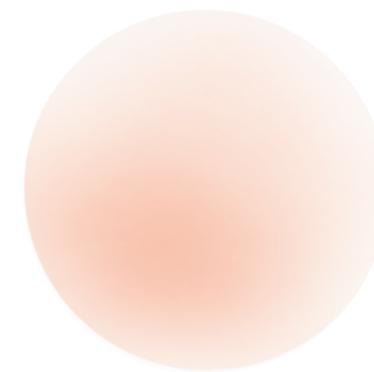
In Aotearoa, wāhine Māori within architectural professions have been consistently vocal on the need for a kaupapa for architects which reflects this social responsibility. Weaving these sentiments into what decolonisation in architecture means, Kiddle views it as “spatial and social justice”, advocating that architects should “all see themselves as politicians” (Kiddle in New Zealand Institute of Architects, 2018).

WĀHINE MĀORI:
Māori women.

Kake echoes this, stating that we have “reached maturity as a country” where conversations can turn into actions which are actively decolonial, actively anti-racist and actively political (2019, p. 132).

Lessons

Whether we are aware of it or not, our training in spatial understanding sets up a power dynamic between architects and rangatahi, and forms a **barrier for understanding and communication**. In the midst of consumerism and imperialism there is great need for **counter movements** which subvert dogmatic recipes of short term outcomes and actively provide frameworks for long term values. Architects have a social responsibility towards rangatahi, towards tangata whenua, to honoring Te Tiriti and fostering **a culture of awhi**.



Part Three: Using collaborative methodologies to bridge the gap

Parts one and two delved into where the disconnect and potential gaps lie between rangatahi and architects. Part three focuses on how we can begin to bridge that gap; predominantly, by questioning how to translate these ideas of agency, decolonisation, co-creation and co-expertise through the way my **research is conducted alongside rangatahi**. This included uncovering methodologies which centre rangatahi and are used for the purpose of mutual understanding. The following is a summary of explorations into methodologies and pedagogies which underpin them, along with examples of methods which enable **co-creation and reciprocity** in the process. My exploration into methodologies and pedagogies began with some initial criteria.

Methodology criteria

The methodology for this research must:

- be **collaborative**,
- be conducted **alongside rangatahi**,
- engage in **live, real scenarios**,
- be **intersectional**,
- be cognisant of **Indigenous and minority values**,
- have **self reflection ingrained** in the methodology,
- hold researchers **accountable**,
- consider **ethical care**
- be one of **emergence and malleability**.

Pedagogy + methodology

As much as we are experts in architecture, rangatahi are experts in their own lives. The architect-rangatahi divide is usually intertwined with the adult-rangatahi divide, thus, an understanding of the impact of me, as an adult in the room, is fundamental to understanding how to encourage rangatahi to participate. I briefly reflect on pedagogy in the conceptual framework.

I first began by looking at relational and narrative pedagogies to understand specific lived experiences of rangatahi as a necessary step in true mutual understanding. In a critical reflection on pedagogy and policy, *Listening and Learning from Rangatahi Māori: the Voices of Māori Youth* explored culturally responsive methodologies, citing that relational pedagogies alongside kaupapa Māori methodologies “try to impose a transmission model of learning” where “rangatahi wanted to bring their own funds of knowledge to their learning” (Berryman et al, 2017, p. 482). Similarly, this research was mobilised by Freire’s *Pedagogy of the Oppressed*, where his argument centres around “a humanistic value base, upon which a pedagogy should be constructed” (Goodman, 2014, p. 1055).

Freire argues for “the notion of students as co-creators of knowledge engaging in ‘dialogics’ - a form of communication between students and teacher which encourages critical thought through encouraging ‘epistemological curiosity’” (Freire in Goodman, 2014, p. 1055). I delved into methodologies which were specifically reflective of these ideas.

Although my research does not belong in the realm of Kaupapa Māori, discovering values and transforming them into the pillars for a project was an approach I wanted to take. Kaupapa Maori methodology ideas surrounding the whakapapa of the client, the designer and the space overlapping are closely tied with the notion of belonging and agency. Pivotal Indigenous

WHAKAPAPA:
Descent, lineage, or
background

methodologies, such as the *Borderland-Mestizaje Feminist methodology* (Anzaldúa, 1987), delve into the “necessary engagements in the struggle against patriarchal, cultural and imperialist domination” (Saavedra & Nymark, in Denzin et al., p. 256). Feminist movements challenging sexism, racism and ableism, such as the Barrier-free design methodology, were also considered. Figure 10 is a brief matrix of the methodological frameworks which would influence my own theoretical framework.

Lessons

It is clear that I need to engage in methodologies which shift the power dynamic and ones that can encompass a variety of ideas and opinions. It is crucial that it includes the role of rangatahi as “critical co-investigators” (Freire, 1993, p. 62), alongside architects. The best way to address all of these intersectional issues is to build self reflection into the methodology, along with methods which would ensure my co-researcher Ellie and I keep each other accountable. Cooperative inquiry, design-based research and generative design methodologies all enable this within my theoretical framework and allow for methods to be defined on a case by case basis, not predetermined. It is essential to this thesis that the outcomes, no matter how messy, **are the products of live, collaborative explorations and not abstracted theory in a vacuum.**

	METHODOLOGY	METHODS	RANGATAHI IMPLICATIONS	RESEARCHER IMPLICATIONS
Co-operative Inquiry	A methodology in which “co-subjects are fully involved as co-researchers in all research decisions—about purpose, method and final outcomes—taken in the reflection phases (Coghlan, and Brydon-Miller, 2014, p. 187). Baldwin-Denton cites Schwandt (2007) as asserting the methodology is “a process where at least two researchers are present” (2019, p. 15).	Flexible and generative: rangatahi and other stakeholders can be part of the problem defining process as well as the solution seeking process.	Provides an opportunity for rangatahi to build trust with us and establish mutual respect. It is “research with people rather than on people”, allowing rangatahi to “better understand both the problem and solution through active participation and ownership of any outcomes” (Schwandt, 2007 in Baldwin-Denton, 2019, p. 15).	Two researchers who do not have a homogeneous worldviews can practice accountability. Using semi-structured focus groups could be an opportunity to achieve an understanding of the project’s purpose; it is a process of making and negotiating values with rangatahi.
Design-Based Research	An inquiry by design methodology using iterative cycles of development, testing, and refinement of an intervention that is developed in collaboration with stakeholders and then deployed and evaluated in the rich, real-world contexts. (Crippen and Brown, 2018, p. 489).	Flexible and generative: the creation of ‘interventions’ based on criteria, which are put to use to see how they will work.	Rangatahi and other stakeholders can be part of the problem defining process as well as the solution seeking process.	The mix of theory and practical, generative outcomes means there is room to wander, reflect and converge. For Ellie and me, it is very important to have this flexibility and to be able to look at “failure” as a design outcome.
Generative Design	A design-led process which is “fueled by a participatory mindset” (Sanders and Stappers, 2012, p. 20). The methodology empowers everyday people to contribute alternatives under the umbrella idea that “ all people are creative ” (p. 20).	Flexible, generative and diverse: it implements a participatory approach to using ‘generative tools,’ the co creation of a shared design language.	It is at the front end of the design process and works directly with end-users. Ideal for real scenarios and tackling the ideas of communication and mutual understanding through co-creation of design languages. It is a process of emergence and enables wandering.	Considers all people as creative, therefore leveling the power with architects. Care would need to be taken in the communication of these ideas so that mutual understandings can be achieved. Additionally, ethical considerations will need to be considered when working with rangatahi.

Fig.10 Matrix of influential methodological frameworks

Part Four: A shift in how we communicate space

An important part of unpacking this expert-non expert, adult-rangatahi divide is understanding how crucial good communication is (or conversely, the harm of miscommunication). This part explores architectural language(s) and the alternative ways to engage in meaningful conversation with rangatahi, particularly focusing on facilitating spaces where mutual understanding, and commonality can be fostered. How do we take kōrero and turn it into whakaari (a form of acting out, playing, and envisioning together)? This exploration echoes Wolfgramm's (2015) prompt for using technology to propel imagination (figure 11).

Architectural language(s)

Architects are trained extensively in understanding not only the theories surrounding space but also visual languages. Whether it is for the conceptual stage, or communicating detailed design, our training in visual communication gives us the ability to explore and refine design thinking. In Freire's (1993) *Pedagogy of the Oppressed*, "dialogics," or the use of collaborative dialogue to foster reflection and meaning making, is referred to as "an act of creation" in itself (p. 70). Freire declares:

"and since dialogue is the encounter in which the united reflection and action of the dialogueurs are addressed to the world which is to be transformed [...] this dialogue cannot be reduced to the act of one person's "depositing" ideas in another, nor can it become a simple exchange of ideas to be 'consumed' by the discussants" (1993, p. 70).

In the context of dialogics between architects and rangatahi, simply **'talking architecture at them'** cannot produce meaningful reflection. This is why post-it note exercises are prevalent but often do not move past this superficial level of engagement; it **leaves room for misinterpretation, tokenism, and does not create a robust strategy or create commonality**. Our preference for plans, sections and elevations further exacerbates the communication gap between architects and rangatahi; because rangatahi are not trained in architectural languages, it means there is an **obstacle and a prerequisite for rangatahi to participate in sharing of spatial ideas**.

Languages, whether verbal or visual, can be **accelerators** for idea generation and representation. Throughout our collaboration, Ellie and I have often spoken about the transition from kōrero to whakaari - from merely talking about spatial ideas to playing, performing or acting these ideas out. As movement, atmosphere, scale, light and colour are some of the essential factors in spatial meaning-making, **how could we use emerging tools to prompt more meaningful kōrero than a plan or a section could?**

Play and meaning making

Play has a role in the process of meaning-making; imagination, movement and training in motor-sensory skills are activators for understanding. Some would argue a lot of the architect's role is playing pretend; these "imaginary scenarios" in adult creativity are also "part of a child's capacity to imagine the non-existent within pretend play" (Carruthers 2003, in Birch et al., 2016, p. 250). With rangatahi, the gap of spatial understanding could be mended by play; play becomes the medium for "creative processes" and afford "flexibility, divergent thinking and insight to combinatory imagination" (Russ and Fiorelli, 2010 in Birch et al., 2016, p. 249). In *Creativity, play and transgression: children transforming spatial*

“AS WE CREATE A NEW FUTURE, WE NEED TO CREATE NEW TOOLS THAT CAN HELP TO PROJECT US INTO THAT FUTURE. FOR HOW DO WE KNOW, AT ANY POINT IN TIME, WHETHER WHAT WE ARE IMAGINING IS WHAT WE ARE REALIZING, AND WHAT WE ARE REALIZING IS WHAT WE ARE IMAGINING?”

(WOLFGRAMM, 2015, P. 215).

Fig.11 Inquiry poster, prompting Wolfgramm's (2015) question.

A Shift
I N
H O W
W E
C O M M U N I -
C A T E
Space

Fig.12 Response poster, "A shift in how we communicate space."

design (2016), Birch et al. interviewed numerous spatial practitioners about their experience working with children, and they found that adults who would tap into the powers of playfulness could unlock the “adult-child relationship and, importantly, opening up the design process to the children” (p. 250).

Gamification

Put simply, gamification is a process, where the “use of game thinking and game mechanics” are used “to meet non-game ends” (Folmar, 2015, p. 2). Gamification needs guidance, both from architects and rangatahi because it requires purpose if collaboration and relationship building are to occur; gamification can lead to “behaviour change” where we as architects can help facilitate and encourage “the player to internalize a value system the designer is promoting” (Folmar, 2015, p. 4). Games, or simulations, have been used in the past for designing spaces; the most notorious probably being SimCity, which was designed to educate and influence policy and its more scaled down, intimate offshoot, The Sims, more for the purpose of entertainment. Gamifying as a process, or a tool, is about “applying game thinking to how we impart that lesson and continuing to develop it based on the feedback of players” (Folmar, 2015, p. 5). For rangatahi and architects, bridging the communication gap could lie in bringing these ideas into the table.

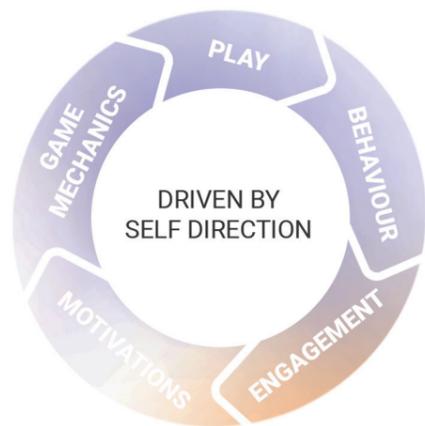


Fig.13 Interpretation of the gamification cycle in design.

Immersive tools, alternate realities

Saggio (in Borries et al., 2007, p. 398) states “the importance of virtuality [...] lies not in how they can help create newer, better virtual worlds, but in how they can be returned to materiality and inspire a new type of architecture.” Immersive tools can “engage children in a dialog about the problem” as they are “guided” to “discover the answers by learning to derive them from real-world situations” (Druin and Solomon, 1996, p. 7). Using alternate realities and what Druin and Solomon call “computer cultures” (1996, p.

5), architects can represent environments that may not be realistic but are real enough to spark realistic conversation; **not replacing traditional methods, but sitting alongside them in the wider architectural toolkit.** In this thesis, the potentials of immersive tools as vectors, or vehicles for communication are explored, namely **PC game simulations, virtual and augmented reality tools and film and video media.**



Fig.14 Artwork using virtual reality platform Tilt Brush allows the artist to draw in three-dimensional space.



Fig.15 Immersive tools allow rangatahi to move their bodies and heads, aiding with meaning-making.

Lessons

By acknowledging the constructivist notion that rangatahi are already knowledgeable in experiences in their own lives, architects become facilitators and guide rangatahi to keep building on what they already know (Druin and Solomon, 1996).

Once again, it becomes crucial to acknowledge rangatahi as experts in their own right, and as people who have valid contributions to the architectural process. In using immersive, generative tools, architects could provide rangatahi agency to explore space, light, colour, and atmosphere. In doing so, I believe architects can take a step closer to equipping rangatahi and themselves with a common visuospatial language.

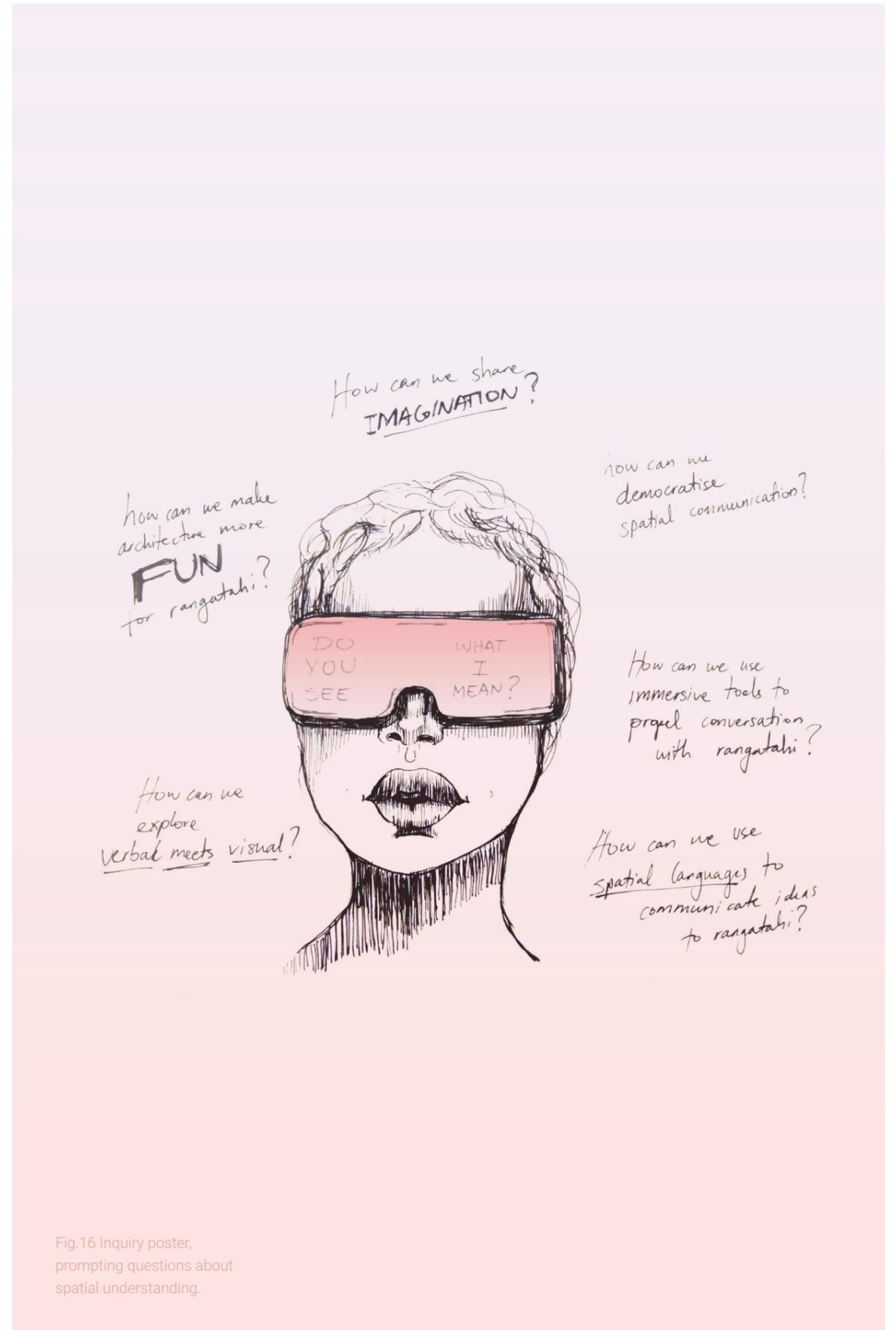


Fig.16 Inquiry poster, prompting questions about spatial understanding.

Part Five: Precedents in academia, industry and community

The following are some of the many texts, podcasts, competitions, architectural practices and philosophies which were influential to this work:



Fig.17 Influential texts, podcasts and organisations collage..



Fig.18 ĀKAU's Whare Ora project involved rangatahi engagement.

ĀKAU Studio: a collaborative design based practice rooted in “empowering taitamariki through design” (ĀKAU Design and Architecture Services). Based in Kaikohe and Tāmaki Makaurau (Auckland), the

studio engages in rangatahi projects with rangatahi directly involved in the discovery process at the front end of design. Context, communities and people are at the centre of these conversations. They develop context based engagements and methods with rangatahi which are responsive to their needs.

MAU Studio: based in the Tāmaki Makaurau region, MAU Studio engage and educate communities, particularly focusing on human and environmental injustices. They believe “architects have a responsibility to be more engaged and active in this space as they possess skills in problem solving, creativity and collaboration” (MAU Studio services statement). They strive to better people’s well-being through “regenerative environments” (MAU Studio services statement).

FIELD Studio of Architecture and Urbanism: Ōtautahi (Christchurch) based architectural studio FIELD are an award winning studio and have garnered a respected reputation for their collaborative approach to community architecture. Committed

to bettering both the social and built environment, FIELD engage frequently with end-users, particularly in projects which are about and for rangatahi. Notable among these rangatahi projects is the Youth Hub Ōtautahi and the Youth Learning Centre, based in Kiribati.

TAITAMARIKI:
Youth, young people.



Fig.19 MAU Studio facilitate community engagement and education as part of their collective mission.

Fig.20 FIELD Studio facilitate in person design engagements with rangatahi.



A methodology of emergence

Hunches and approaches

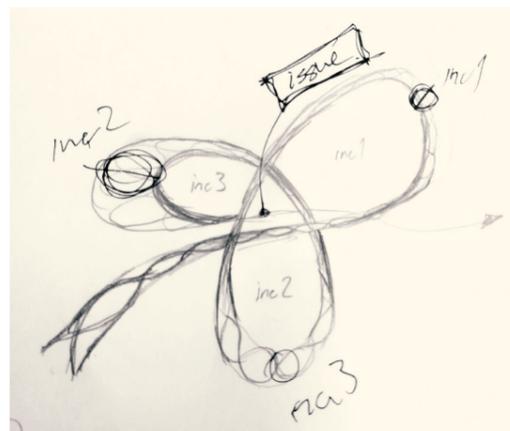
Figure 22 establishes the four branches of inquiry, alongside the hunches I have based on the learnings from the literature review. It also proposes an approach for each hunch.

Methodology

Taking a design-based approach and drawing on a generative research and cooperative inquiry methodologies, my methodology (figures 23 and 24) is one which embraces emergence. It will inherently involve self-reflection, and collaborative reflection with my co-researcher along the way. It will aid in creating multivocal engagements using immersive tools and processes, nurturing the idea that “all

people are creative” (Sanders and Stappers, 2012). This is done by creating value based foundations and scaffolding alongside youth and ensuring visual and verbal accessibility through **methods such as drawing, modeling, Photovoice, computer games, film and mixed reality tools.**

Fig.21 Sketch of initial methodology diagram.



	HUNCH	APPROACH
Role of rangatahi agency in research and architecture	Engaging in live projects would enable real contexts and unpredictable things to happen. In order to truly explore youth agency, in both community and industry, my approach is to work alongside rangatahi in real scenarios.	INCUBATORS: Collaborating with rangatahi in live engagements ensures that rangatahi voices can be active in the creation of processes. Incubators are smaller, live projects and can become a powerful testing ground which is bound by real people, encapsulating the agency of the end-user.
Evolving role of the architect	By engaging in co-research and co-authorship, this allows us to evaluate processes through decolonisation and youth agency simultaneously, while acknowledging the collective effort of all involved. Along with Ellie's, these theses would be the first of their kind within the School of Architecture, and would be setting a precedent for future collaborative theses.	THESIS COLLABORATION: I will be working closely with my collaborator, Ellie, in order to re-conceptualise what a Masters thesis can be. With an emphasis on awahi, accountability, decolonisation and activism, Ellie and I will simultaneously pursue our collective and individual research.
Using collaborative methodologies to bridge the gap	In order to reevaluate how we co-create architecture with rangatahi in Aotearoa, we need to take a step back and look at the process that gets us there. This thesis takes a value-based approach to architecture.	EVALUATING THE PROCESS THROUGH COLLABORATIVE METHODOLOGY: I will be exploring value based “fuzzy” processes (Sanders and Stappers, 2012) at the front end of design. This will involve exploring toolkits, methods and processes to collaborate with rangatahi, enforcing the idea that knowledge is co-constructed.
A shift in how we communicate space	Particularly with the challenges that come with collaboration in a COVID-19 era, the potentials of using customised immersive media such as PC games, VR, AR and video are worth exploring, particularly in communicating space to rangatahi.	KŌRERO TO WHAKAARI: By conceptualising architectural space as a verbal and visual language, I will explore immersive spatialising tools such as PC games, VR and film media as a means to propel existing analogue and conversation methods.

Fig.22 Hunches and approaches of branches of inquiry.

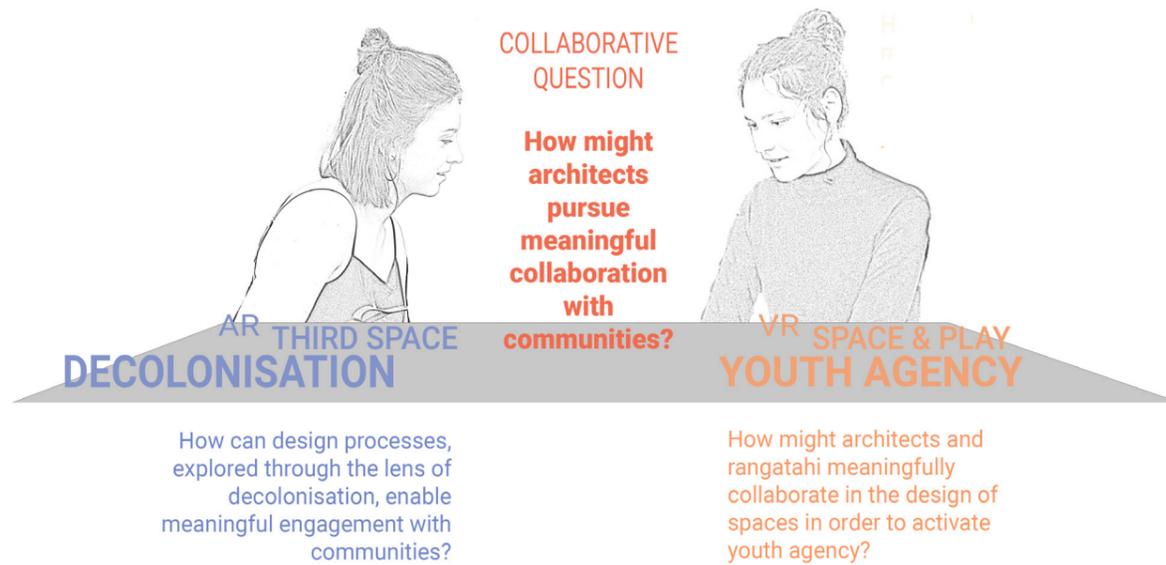


Figure 23 elucidates how Ellie and I approached our individual and collaborative contributions. We each brought our interest and expertise to the table and evaluated a common goal which would drive our collaborative engagements, which embodies 15% of our contributions. How we conducted, interpreted and reflected on the engagements was individual.

The methodology (figure 24) shows three ‘threads’; mine, Ellie’s and the collaborative ‘thread.’ The methodology shows our collaborative processes, with each resulting in our individual theses and a collaborative contribution.

My methodological thread has a general order, however, it is not followed rigidly and embraces the emergent qualities of collaboration. It loosely follows the structure of **establishing values and translating them into design criteria in order to test design potentials**. The methods are also undefined; they are established in each incubator based on its context. However, an overarching method in this research is using **ethnographic accounts of engagements and auto-ethnographic reflections**.

Fig.23 The interests and expertise Ellie and I bring to the collaboration.

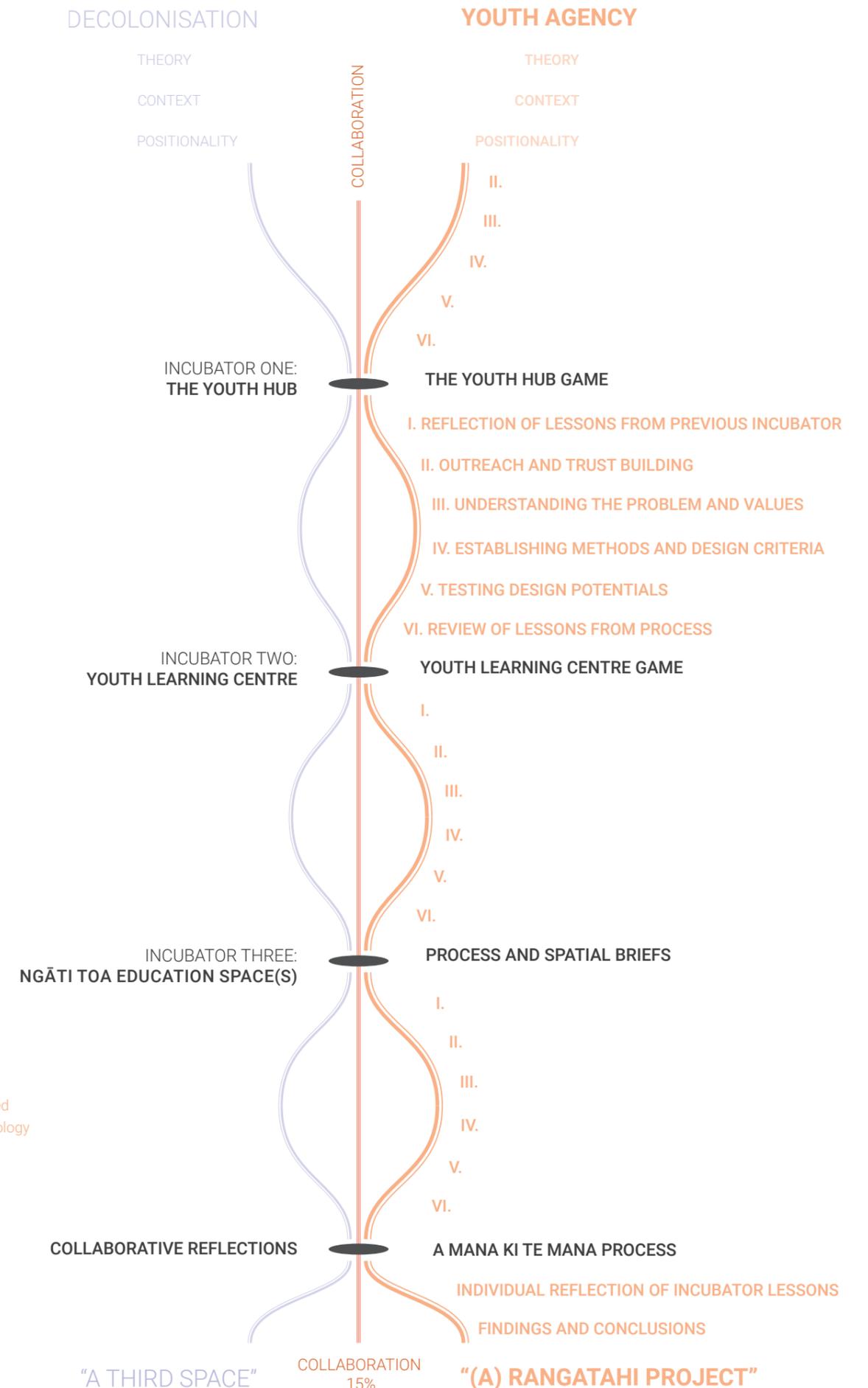


Fig.24 Unwrapped threads methodology diagram.

Scope

The scope of this thesis is set up in ‘does’ and ‘does not’ categories in order to delineate where the research sits. It is complex and has non-traditional collaborations, approaches and outcomes; thus, the scope is defined by the following:

THIS THESIS DOES:

Explore community projects concerning and involving rangatahi

Draw inspiration from participatory design processes, generative design research, collaborative

Provide processes which practice decolonisation that could lead to architecture

Looks at the messy front end of the design process and speculates on conceptual representations of potential spatial qualities.

Establishes value based briefs

Focus on youth and how they interpret the world.

Use PC games, VR and film as a process tool.

Exist as part of a two-thesis collaborative contribution to academia.

THIS THESIS DOES NOT:

Discuss all rangatahi community projects or generalise about them.

Align with a specific participatory methodology

Claim to decolonise architecture itself.

Conclude with a traditional “final design” documentation set.

Make predetermined assumptions based on biases.

Exclude adults from the conversation.

Use PC games, VR and film as a mere visual representation tool.

Conclude in a homogeneous contribution from Ellie and myself.

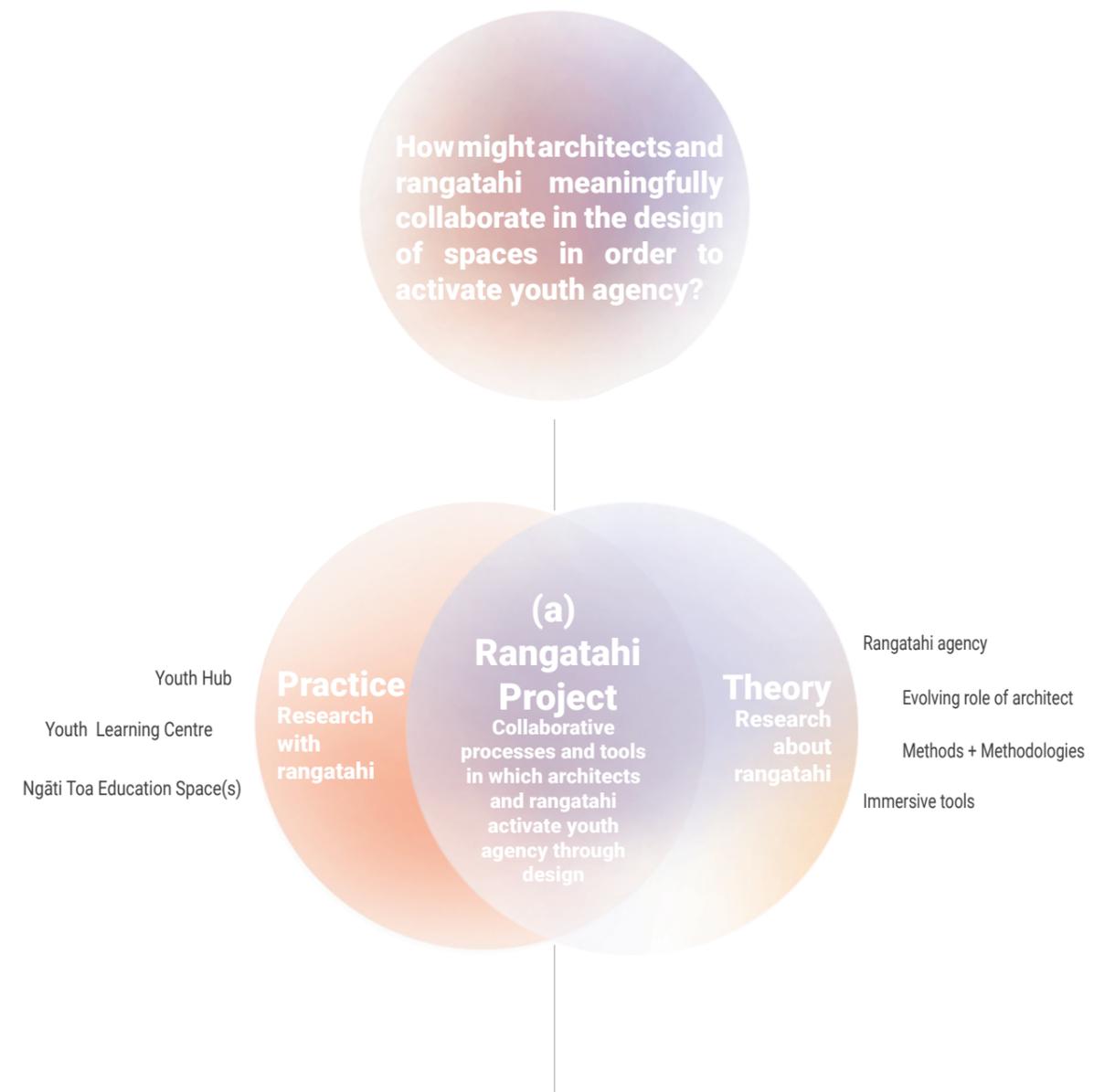


Fig.25 Conceptual framework and design ethos.

This thesis is about blurring boundaries and bridging gaps. It is about blending theory and practice and engaging architecture as such. It is about the amalgamation of architect and rangatahi expertise, and the acknowledgment that both are experts in their own right. ‘(a) Rangatahi Project’ suggests that this is one of many ways to engage with rangatahi in a meaningful way.

Outreach, ethics and research in the midst of a global pandemic

Initially

We already knew live engagements were difficult; I was often told to avoid it at all costs and ‘speculate’ instead. Ellie and I were adamant that we would engage a number of times because we wanted to build mutual respect and trust with rangatahi. We had contacted a community in Ōtaki, looking to discuss the city library in relation to rangatahi values. We also discussed some opportunities to work with youth through ĀKAU, who were generous enough to give us their time to discuss. We were hopeful that we would establish a working relationship with at least one community.

Then COVID-19 hit

The COVID-19 pandemic shook the world and understandably, when a global pandemic is everyone’s reality, students of architecture looking to engage with rangatahi for their thesis take a back seat on the list of priorities. We had intentions to facilitate workshops, use mixed reality headsets, to spend time with rangatahi, which was now compromised. Bound to our temporary bedroom studios during the national lockdown, I was overwhelmed with a wave of

KANOHI KI TE KANOHI:
Face to face

unproductivity (which I am sure every student and academic surely also felt), trying to push through without a real strategy and wandering through life on hold while being told to carry on as usual. Set against the many additional challenges, I had to critically reconsider how we can have kanohi ki te kanohi engagements with rangatahi when they are literally impossible to achieve. The pandemic brought about new ethical considerations, more rigorous hygiene practices and physical restrictions to consider.



Fig.26 My bedroom studio, where I wandered through establishing my research position and how to go about collaboration.

Out of a setback, we saw an opportunity

Our supervisor prompted us to consider that the obstacles in our way could provide opportunities for alternatives and innovation. It prompted me to ask the question; how can we awahi rangatahi as researchers from afar? I had to reconsider the status quo of workshops, interviews and collaboration in an era of Zoom calls. I decided to embrace emergence; with new ethical considerations to engaging with people. In the rapidly changing times we live today, rigidity does us no favours. Flexibility quickly became part of the ethos and we adopted it into our methods for engagement.

Hamdi recognises the importance of emergence and suggests that the architectural profession is transforming and shifting “in favor of informed improvisations, practical wisdom, integrated thinking and good judgement based on a shared sense of justice and equity” (2004, p. xxii). Hamdi (2004) encourages the community architect to make “plans without too much planning” (p. 117), instead focusing on “... partnership and mutualization” (p.109) which leads to robust collaboration. We sought opportunity from



the one place interaction was abundant and in a physically isolated world, growing now more than ever.

Fig.27 My bedroom studio wall, filled with the messy string of questions and potentials.

We used social media platforms to kōrero

Social media connected us in a time where kanohi ki te kanohi was not possible. We quickly understood that there was opportunity for collaboration with people who we could establish co-benefits and a mutual exchange with. Research can often be extractive rather than mutually beneficial. In order to ensure we would actually be useful to communities, our outreach approach began to take the shape of **bartering; a calling for collaboration, with an exchange for the skills Ellie and I could offer to communities**. Our supervisor put us in touch with Amiria Kiddle and Andrew Just from FIELD Studio Architecture and Urbanism via social media. They were intrigued by our skills in AR and VR and our initial negotiations resulted in establishing incubator one, which later lead to incubator two. Via word of mouth, we touched base with Bianca Elkington on behalf of Ngāti Toa rangatahi, which transformed into numerous engagements in incubator three.

For me, this process was transformative; viewing ambiguity and wandering as an advantage became our approach. In *Failed It!*, Kessels (2016) talks about opportunity wearing “many disguises” and as designers, to “be on the lookout” for them (p. 62). The most rewarding lesson was that despite all the challenges in a global pandemic, there are still ways of talking to, engaging, and collaborating with people in a productive way.

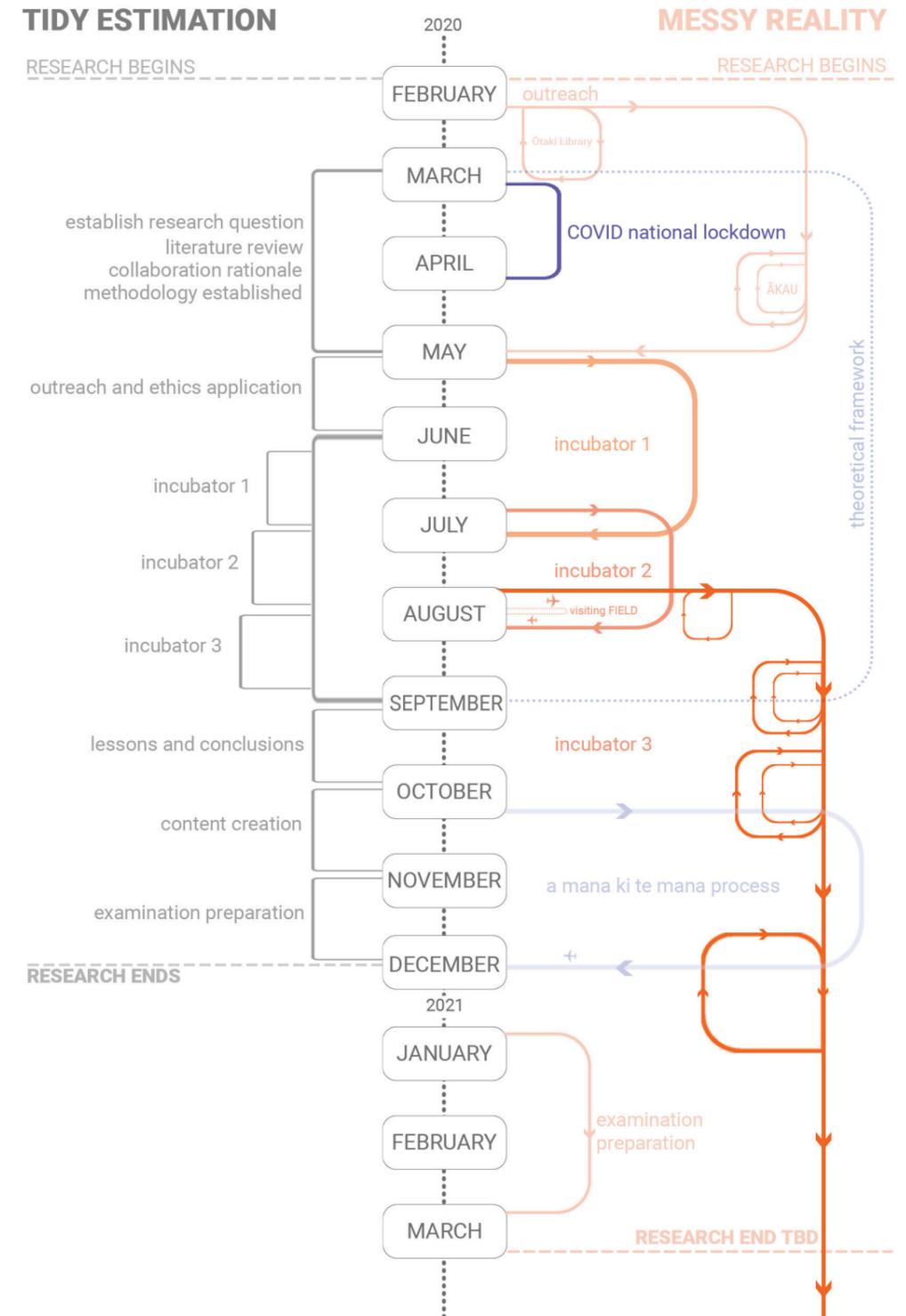


Fig.28 Timeline of estimation versus reality of this research.



Fig.29 Provocation poster: working with communities.



Fig.30 Provocation poster: opportunity in design.

The incubators

Incubator project

A small, live exploration that explores a specific design problem with rangatahi and other stakeholders. Each incubator contributes to the overarching project. Each incubator is unique; reflections and learnings from one incubator influence the next.

Purpose of incubator

To, place rangatahi in the role of co-creator/ decision maker and, alongside rangatahi, **elicit values into design criteria to show design potentials.**



The Youth Hub

Location: Ōtautahi (Christchurch)

Rangatahi: All Christchurch youth

Architects: FIELD Studio of Architecture and Urbanism

Partnering Organisations: Te Ora Hou Ōtautahi, The Youth Hub Trust, Schools across Christchurch

How it began

FIELD Studio of Architecture and Urbanism are the architects for a Youth Hub project in Christchurch aimed at youth who need assistance and care for a variety of reasons. The building complex is intended to work as a one-stop-shop for youth, with housing, recreation, health and financial support all included. After a variety of their own workshops with rangatahi, Amiria Kiddle (figure 33) and Andrew Just (figure 34) were at a point in the project where they wanted to go back to rangatahi and gain insight into their preliminary design ideas and to ensure that

the values established with rangatahi in the initial stages of the engagements were translating into their design rationale.



Fig.31 Mural at FIELD Studio offices, Ōtautahi.



Fig.32 FIELD Studio offices, Ōtautahi.



Fig.33 Amiria Kiddle reflecting on our collaboration, rangatahi and architectural practice.

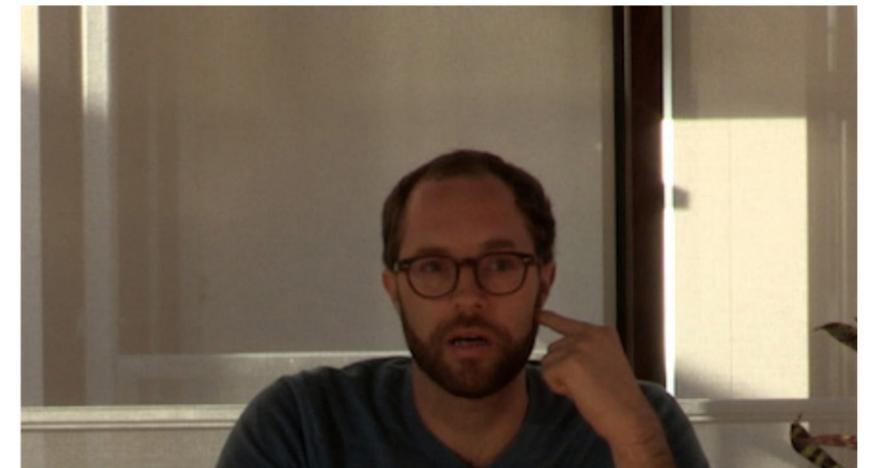


Fig.34 Andrew Just reflecting on our collaboration, rangatahi and architectural practice.

We established contact with Amiria and Andrew remotely, and after a number of meetings, we established the potentials and the scope for the incubator. At this point, we were all in COVID lockdown, limited to communication via Internet platforms. We began by deriving values and understanding where in their process thus far, and what they would want to achieve for rangatahi with this collaboration.



Fig.35 FIELD's concept design for the Youth Hub Project.

Because physical workshops were not an option, we talked about the idea of creating a digital tool, which could be distributed virtually. The criteria of the tool was that it needed to have good reach and be accessible to use for a wide variety of rangatahi. It also needed to be based on FIELD's existing design iterations and portray design options which are actually viable for the final design.

Through a series of 'design jams' and 'brief/reverse brief' exchanges, we created a brief together for the foundations of the tool. Initially we spoke about VR and AR, but were inevitably limited to creating tools which could be used on something more accessible, like a computer, or a phone.

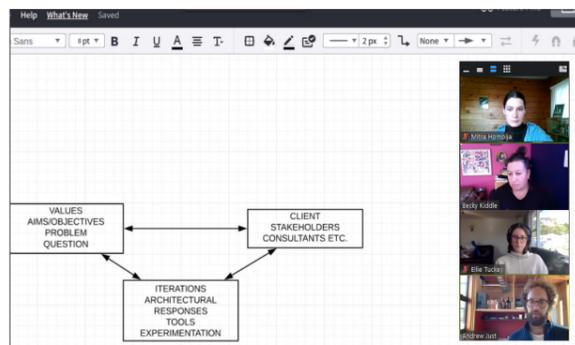


Fig.36 Online meeting with FIELD talking about their value-based design processes.

DESIGN JAM:

A short exercise where a design question is posed and the team has a short amount of time to create a design response. The idea is that it is sketchy, rapid, and provides a number of perspectives on one design problem whilst identifying potentials. We were introduced to this by FIELD, as they practice design jams often in their own studio.

REVERSE BRIEF:

a process whereby a brief is interpreted and re-negotiated based on viability and other potentials.

Incubator question

How can a digital tool (which is accessible via a computer) reach a variety of rangatahi and allow direct design input into FIELD's existing design?

Methods of engagement

'Design jams' and reverse briefing: regular weekly meetings with FIELD via Zoom to identify the brief, scope and limitations.

Storyboarding: game play "story" used to communicate the what, why and how of the game and the overall atmosphere.

Diagramming process: showing the iterations and line of inquiry for the creation of the tool.

Co-creation of game tool: creating the game logic and user interface for the game and ensuring its usability.

Film media: use of video to accurately portray the experience of the game tool.

Interviews and ethnographic notes: interviews with Andrew and Amiria reflecting on the process and anecdotal responses from an engagement with rangatahi at Te Ora Hou Ōtautahi.

Auto-ethnographic field notes: personal reflections on the process, tool and the collaboration.

Proposed contribution

A game tool/simulation in which rangatahi make design choices to create a **'place where you would want to escape for a while.'** It allows you to create a space from a series of design options including roof shape, openings, floor and wall colour. Once you've created this space, the game takes a screenshot and opens a feedback form, both of which you can choose to send digitally to the architects. These **feedback forms from rangatahi create a database of designs for FIELD**, from which they can begin to decipher design trends and make design decisions based on democratic feedback.

Roles

	FIELD	ELLIE	MITRA	RANGATAHI
Designated role	Giving us the relevant information, design variables, dimensions, ambient qualities and guidance.	Ellie's role covered the user interface. Her aim was to make this 'digital third space' as accessible and easily used as possible.	<i>My role was game logic, game-play and the translation of FIELD's existing designs into a game-space. I had to ensure spatial elements in the game made sense, visually communicate atmospheric elements. There was an emphasis on usability, movement and photo-realistic depictions of the space.</i>	To test our tool and feed back about its usability, how engaging it is, and ultimately, to contribute to the project with their own creations.

First iteration

The initial idea for the game-play of the tool was to create an abstract, rectilinear, plain room, in which variables would morph at the press of the space button, while the player looks around using the arrow keys and mouse. In Unreal Engine, the game logic for this would require a matinee to be choreographed based on a series of colours. The gradual change allows you to visually compare design choices in real time.

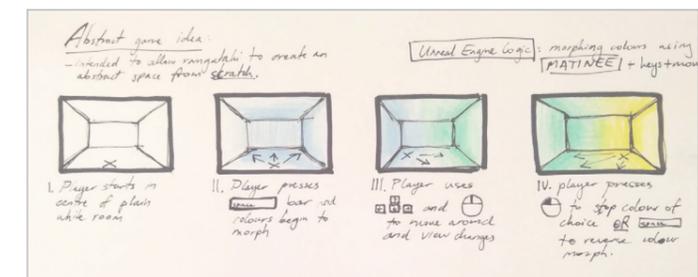
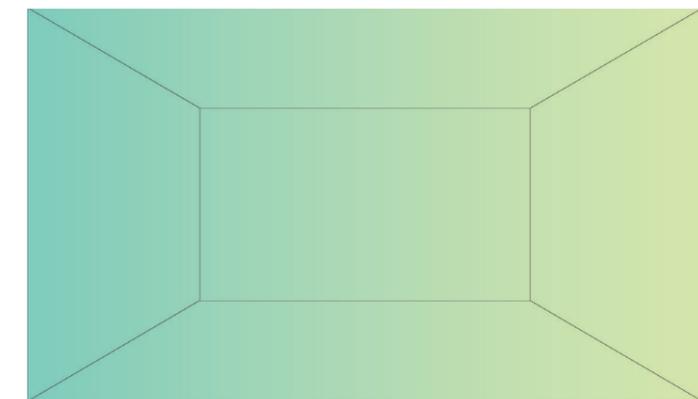
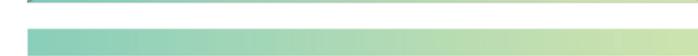


Fig.37 Initial storyboard sketch, showing game logic.

ABSTRACT ROOM



COLOUR MORPH

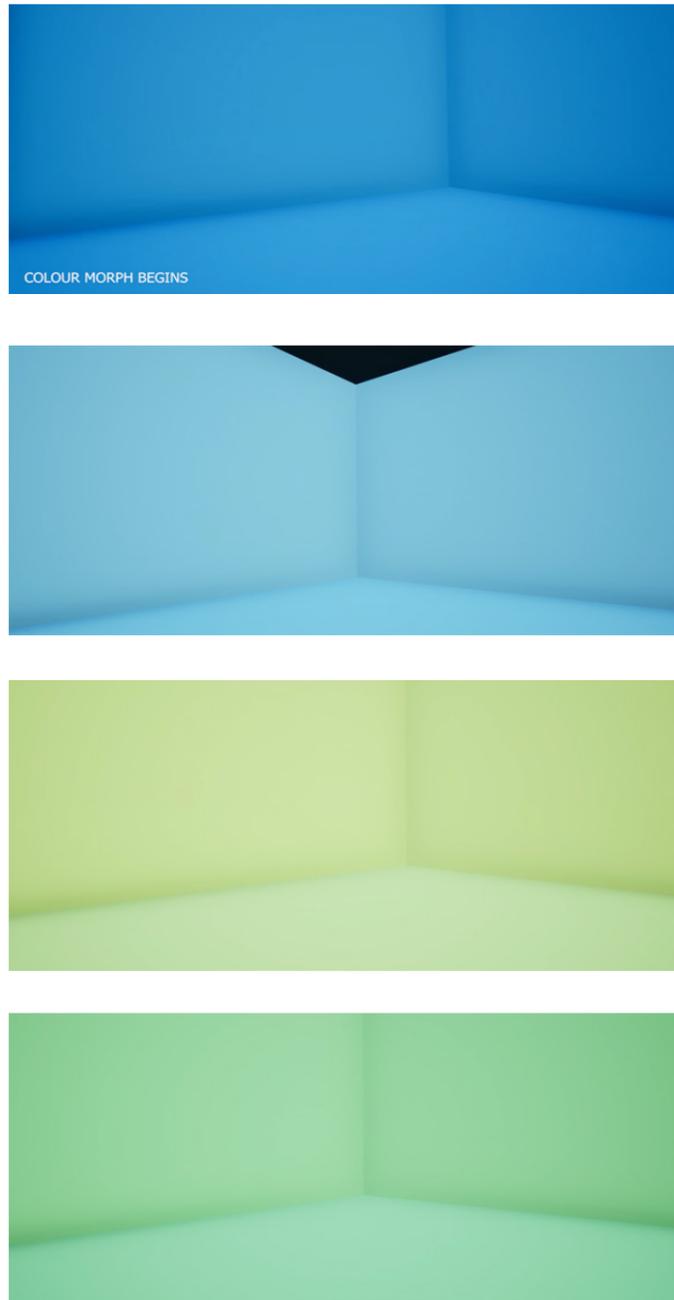


MOVE

MORPH

LOOK

Fig.38 Diagram of space and the game logic/procedure.



The result is an abstract space in which the player is asked to create a space of 'sanctuary' and is engulfed by morphing colours (figure 39), using the keyboard to start and stop the morph when they are particularly drawn to a colour. The idea was that we could rig other variables, such as roof shape and wall openings to morph in size the same way. We got as far as storyboarding the gameplay and UI (figure 40), however, we realised that although an abstract space can generate ideas, it may not be the most useful tool for FIELD. Amiria and Andrew were eager to explore how rangatahi respond to their **current existing** Youth Hub design and wanted the tool to utilise **viable design variables** which they could implement in real life.

Fig.39 Four colour morphing stages.

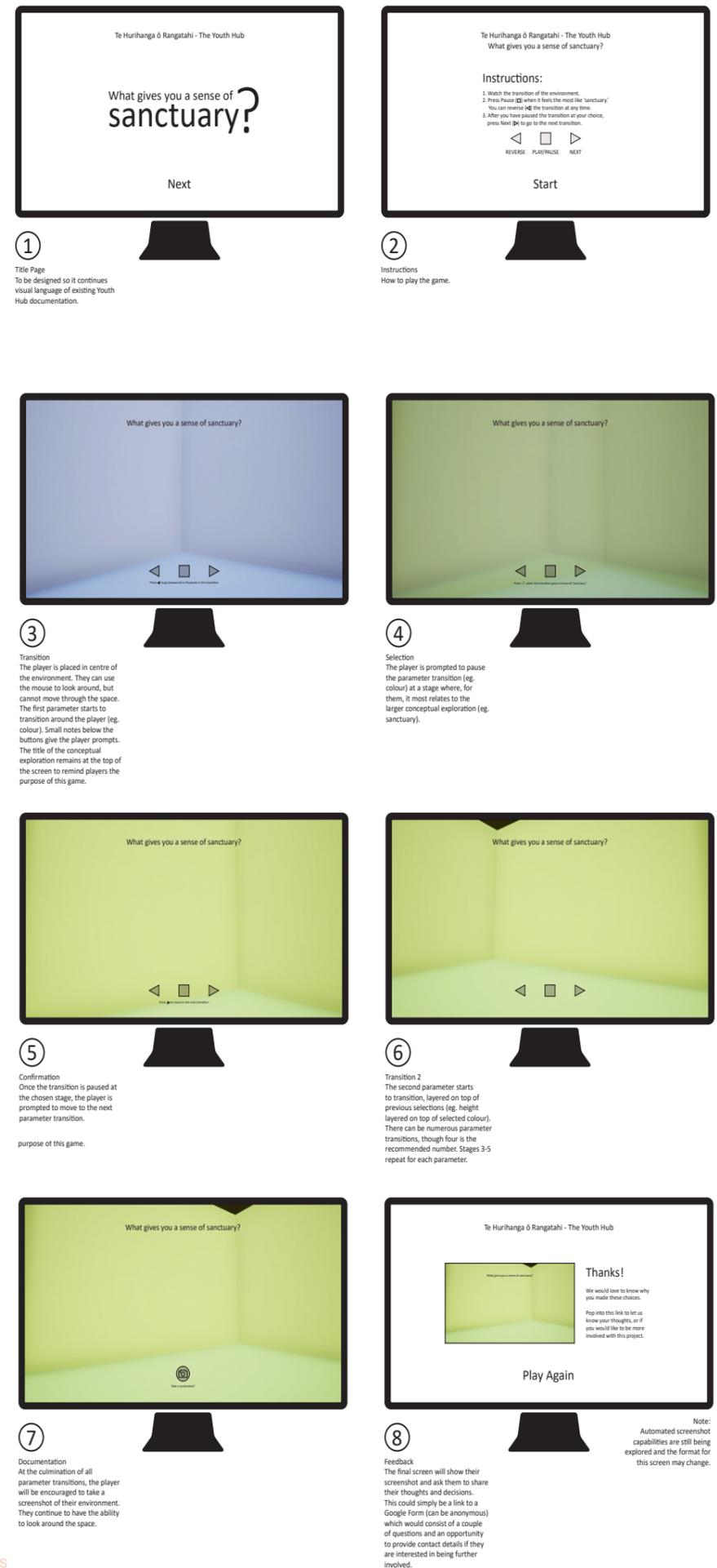


Fig.40 First iteration user interface storyboard.

Second iteration

We went back to the drawing board to figure out what would be most useful for FIELD. Another reverse brief re-established the values of the project, thereby the values and intention of the game. After segmenting the Youth Hub areas of design, we collectively decided to focus on the bedrooms, as FIELD wanted rangatahi input on how they are designed.

Collaborating with Andrew and Amiria was a frequent occurrence (figure 42); we would use Zoom screen sharing to walk them through the game in order to receive input and guidance. In this way, we got to fine tune the design variables, game-play and user interface. This was a constantly changing discussion.

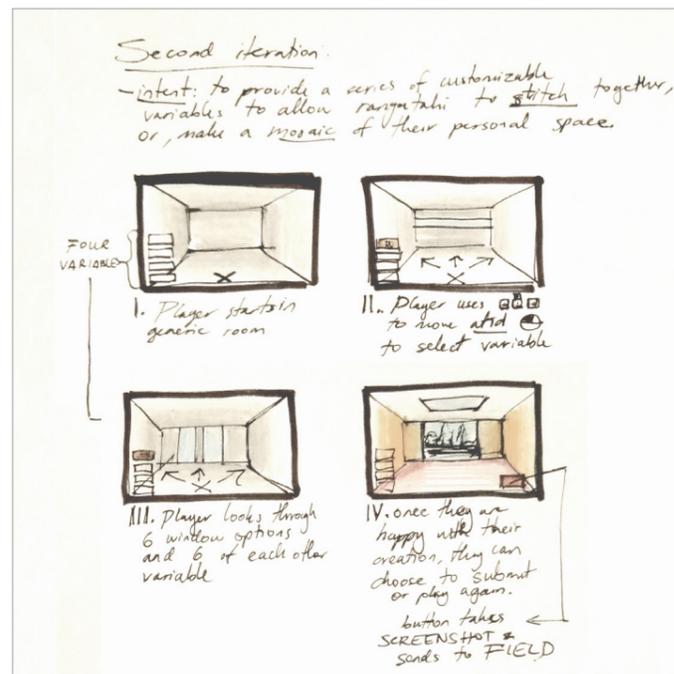


Fig.41 Storyboard of second iteration of the Youth Hub game tool.



Fig.42 Remote collaboration: online meetings with Amiria and Andrew discussing second iteration.

The second iteration consisted once again of a blank room, the difference this time being that there are four variables to shuffle through: ceiling, wall, window and floor (figure 41).

Part of my role was to take FIELD's existing viable design options and translate them into believable spaces; it included modeling all windows and ceilings in Rhino 6 and creating customised material assets.

A lot of the conversations revolved around realistic depictions of the space, and viable options for FIELD to use in the actual design. We had to think about composition, *verisimilitude*, viability and realistic connections to the outside (figures 44 and 45).

With advice from our colleague at the Computational Media Innovation Centre (CMIC), I developed a blueprint (figure 43) which successfully toggles through the translated design variables, allowing rangatahi to create a space with the added feature of **FIELD being able to access these design collages**.

Fig.43 Unreal Engine game blueprint script.

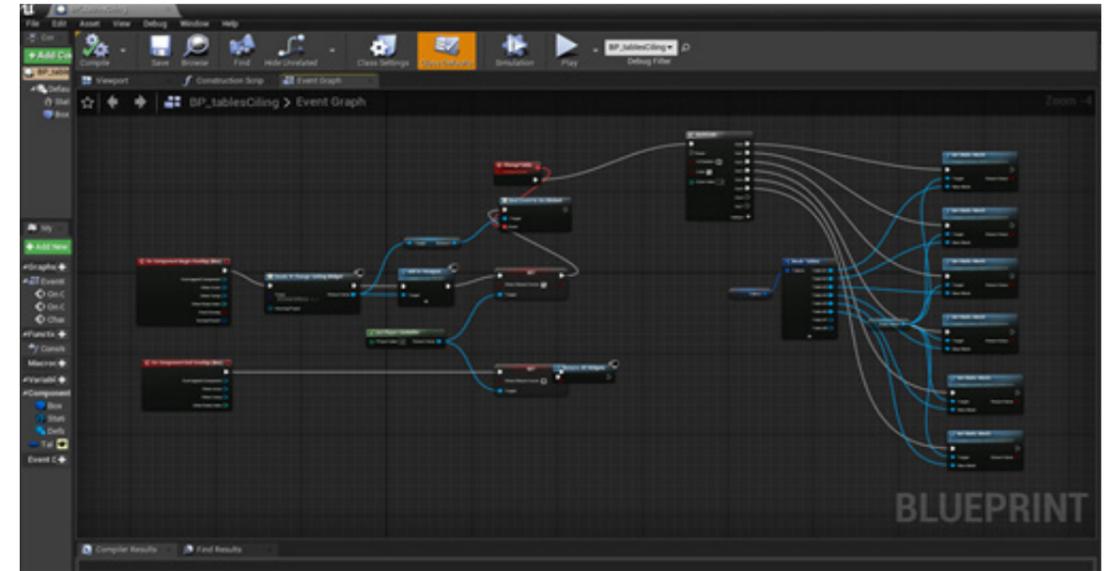


Fig.44 Transferring assets from Rhino 6 to Unreal Engine.

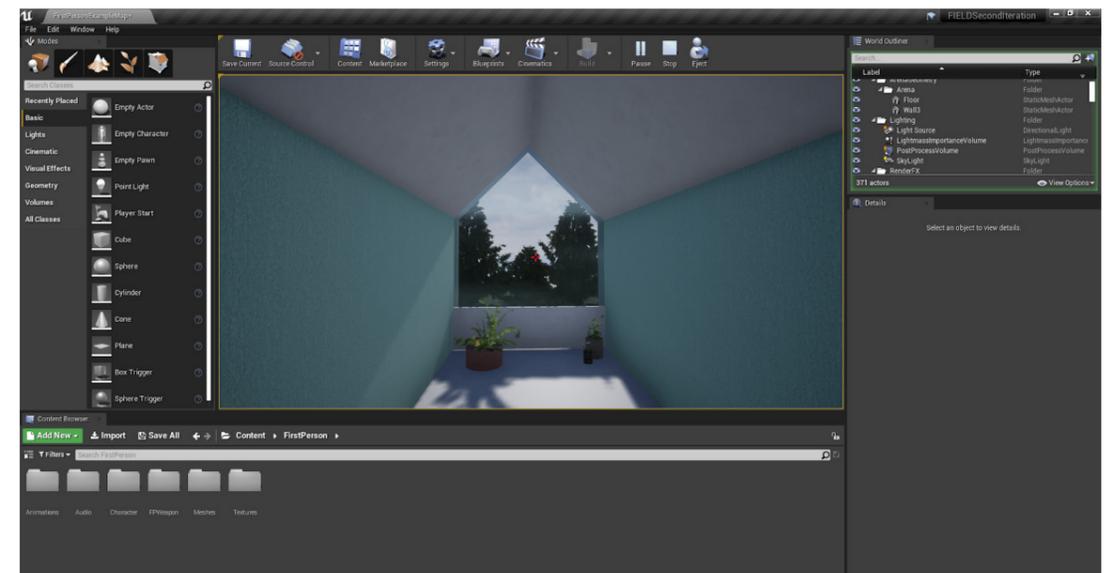
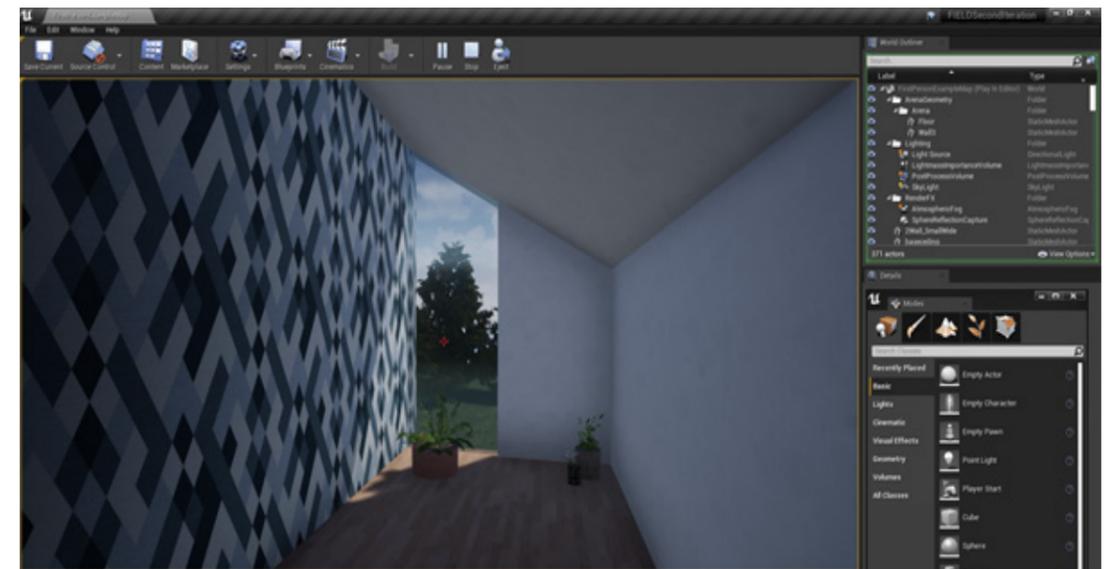


Fig.45 Unreal Engine game-play of second iteration game tool.



Final iteration

The game tool has 27 variables (figure 46) to choose from in one of four categories: ceiling (c), window (wi), wall (wa) and floor (f). Modeled in Rhino 6 and transferred into Unreal Engine, the variables shuffle at the press of a button. Figures 47, 48 and 49 show creations made with combination of these variables. These variables are based on specifications from FIELD, meaning they are actual viable options which could be used in the final design. The size of the room is also compatible with FIELD's proposed design.

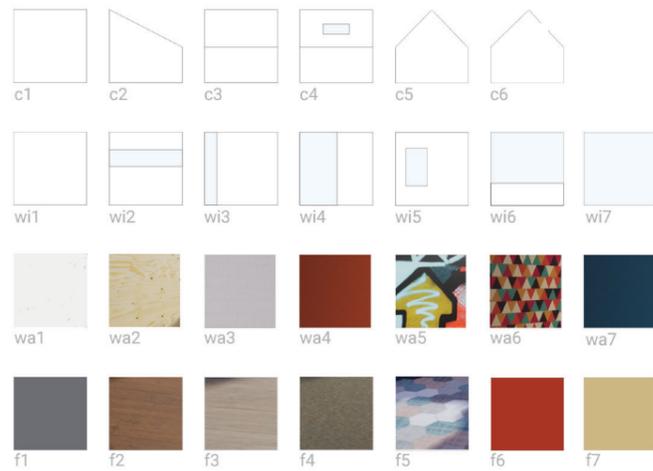


Fig.46 All possible game design variables.

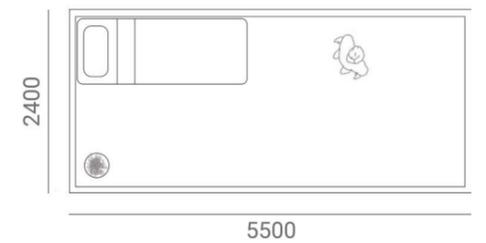
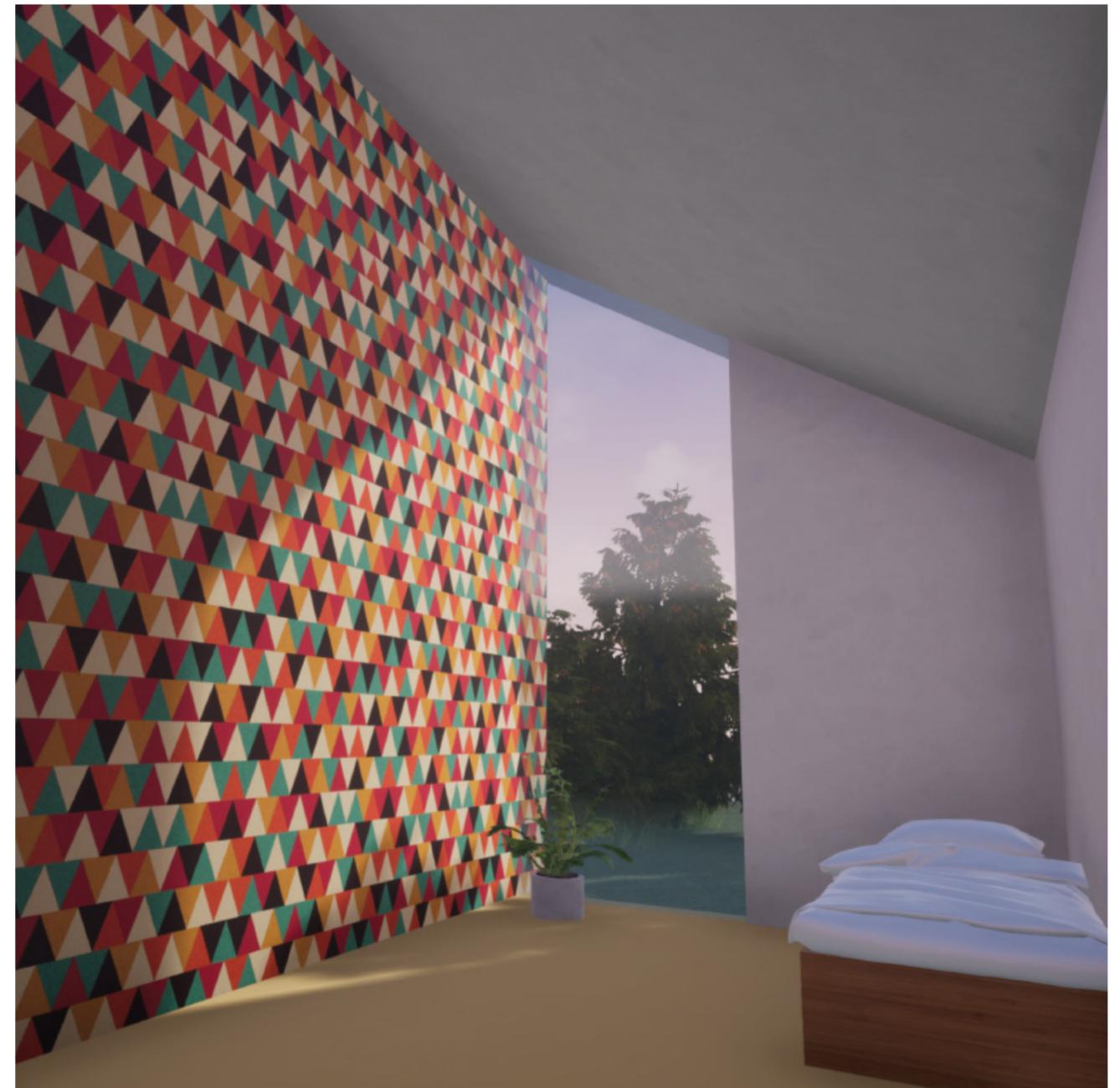


Fig.47 Random Hideout design potential 1.



Fig.48 Random Hideout design potential 2.

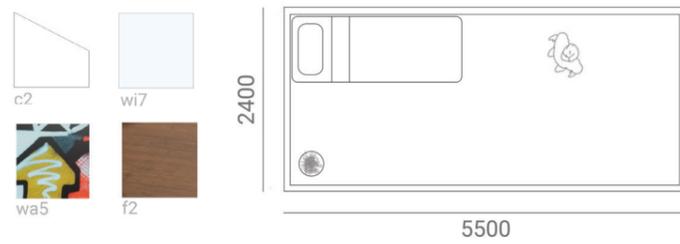
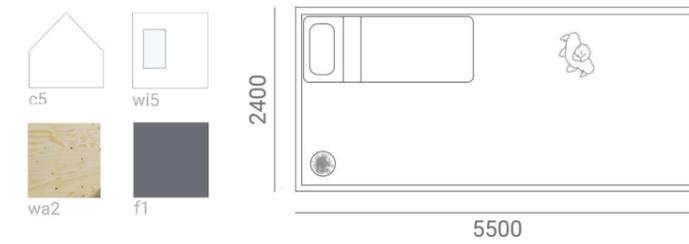


Fig.49 Random Hideout design potential 3.



Gameplay

Our combined efforts (game-play and user interface) produced a game which successfully allows rangatahi to create their space, and then to **choose to send their creation to FIELD via an online survey**, where they can also find more information about being part of the project (figure 50).

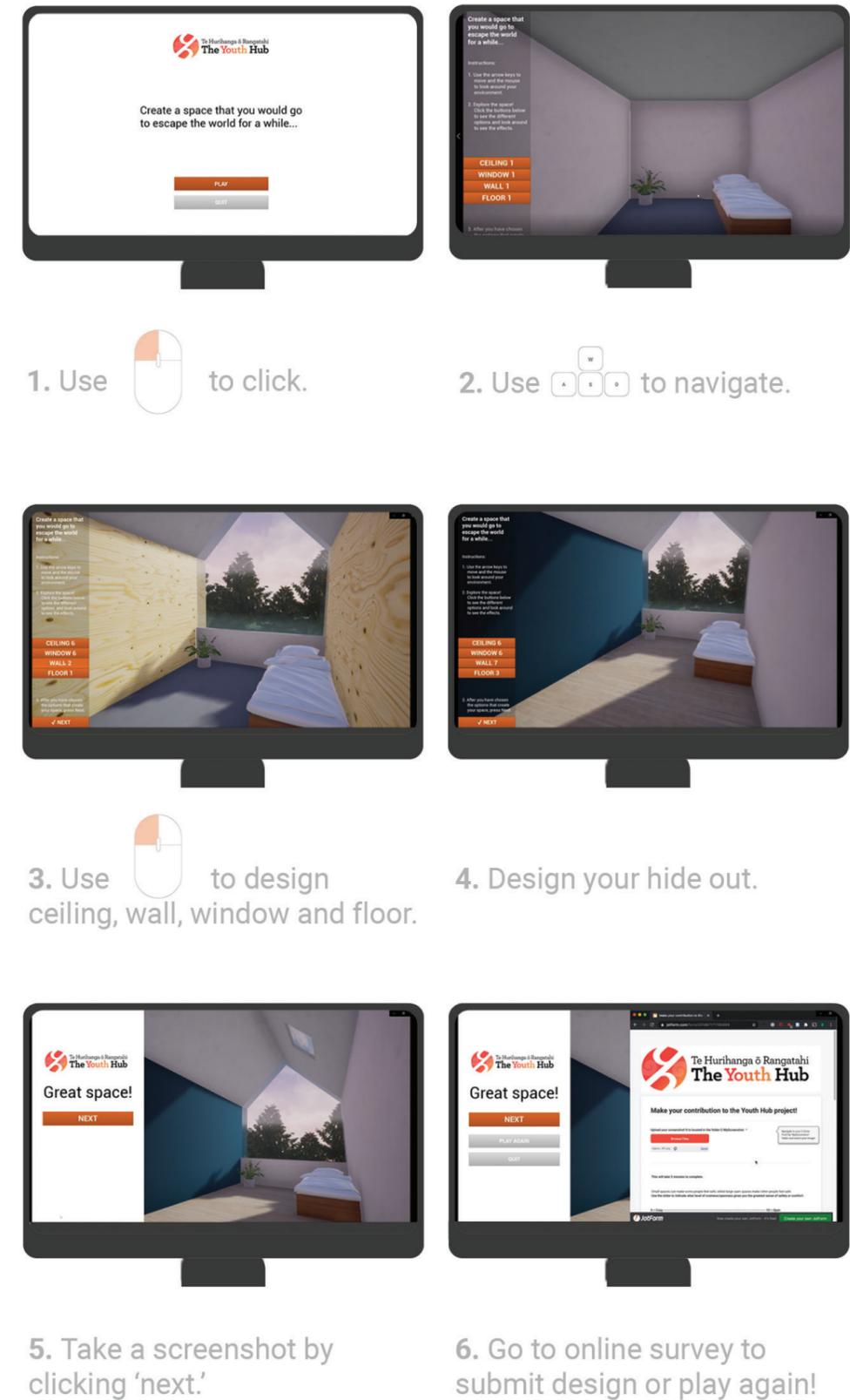


Fig.50 Storyboard of the Youth Hub Game.

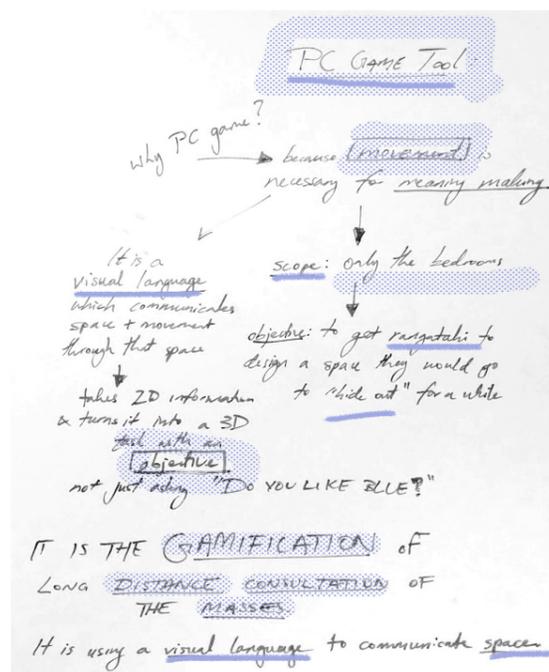
Lessons

Gamification and space

From a youth perspective, gamification creates excitement for otherwise mundane activities and becomes a language accelerator, creating a dynamic environment where space can be comprehended. It is human-centred. Lange (in Borries et al, 2007, p. 18) states that the use of games in architectural processes creates a realm where “every player finds him or herself simultaneously in a world of play and in the real world,” bridging a connection which is often lost or miscommunicated in other forms such as plans, sections and renders. Essentially, the mere act of play can be an accelerator for meaning-making in the built environment. By providing an alternate

reality, an abstraction in which spatial customization can be explored, the game offers an opportunity for accessible self expression and direct input into the live project. Although I speculate that this tool is accessible to use, I am aware that it is likely there are rangatahi who will find it challenging to get to a computer which is able to open the file.

Fig.51 Gamification rationale notes.



Response from rangatahi

FIELD organised a visit to Te Ora Hou Ōtautahi with a few rangatahi in order to test the simulation. There were a variety of responses from youth who used the tool - one particular person, who was very obviously a gamer, was very unimpressed with the game and expected it to be more sophisticated; when prompted to give feedback about the game, he very calmly stated that “it’s sh*t” (anonymous rangatahi in Tuckey, 2020).

Although it is quite blunt feedback, it is an example of the agency I am exploring in this research; having the opportunity to voice opinions, even if they are negative, is part of the process of refinement. The more rangatahi are involved in this stage, the more we foster this agency. It also allows us to see trends and contrasts; one rangatahi engaged with the game quite happily and explained her design decisions to Ellie, explaining that she likes “muted tones” and minimalistic themes (Tuckey, 2020), which contrasted quite strongly with the vibrant, colourful options FIELD were anticipating would be the natural choice for rangatahi. This was a very direct bit of feedback which **mitigated architect’s biases by providing rangatahi with this visual language to express design ideas.**

COVID-era collaboration

We live in a world of file sharing and a game like this has the ability to have far greater reach and accessibility to a variety of youth groups than FIELD would not have the capacity to achieve in person. It accounts for people who cannot physically be there to give input (increasingly important given COVID) and accounts for introverted youth who may not want to verbally share their thoughts. Amiria stated that:

"the game has a much wider reach than those that can physically be at workshops. So getting a more diverse feedback, then hopefully the design being influenced by and catering for a wider range of people" (Kiddle in Just and Kiddle, 2020).

The tool has a wide reach and is democratising. As the architect, you are able to directly engage with any number of youth, it could be tens, it could be thousands. The responses become a database of images and words that can feed back into your design decisions. Field were a proxy through which we would engage with a wide variety of rangatahi. Although it had reach and created a dataset, it is not a direct conversation, which has its own setbacks. FIELD have expressed their excitement for the opportunities the games have afforded, which confirms that our approach to collaboration has been successful and meaningful for their project. Due to its accessibility, the game is currently being packaged and implemented into the 2021 curriculum at several Christchurch schools.

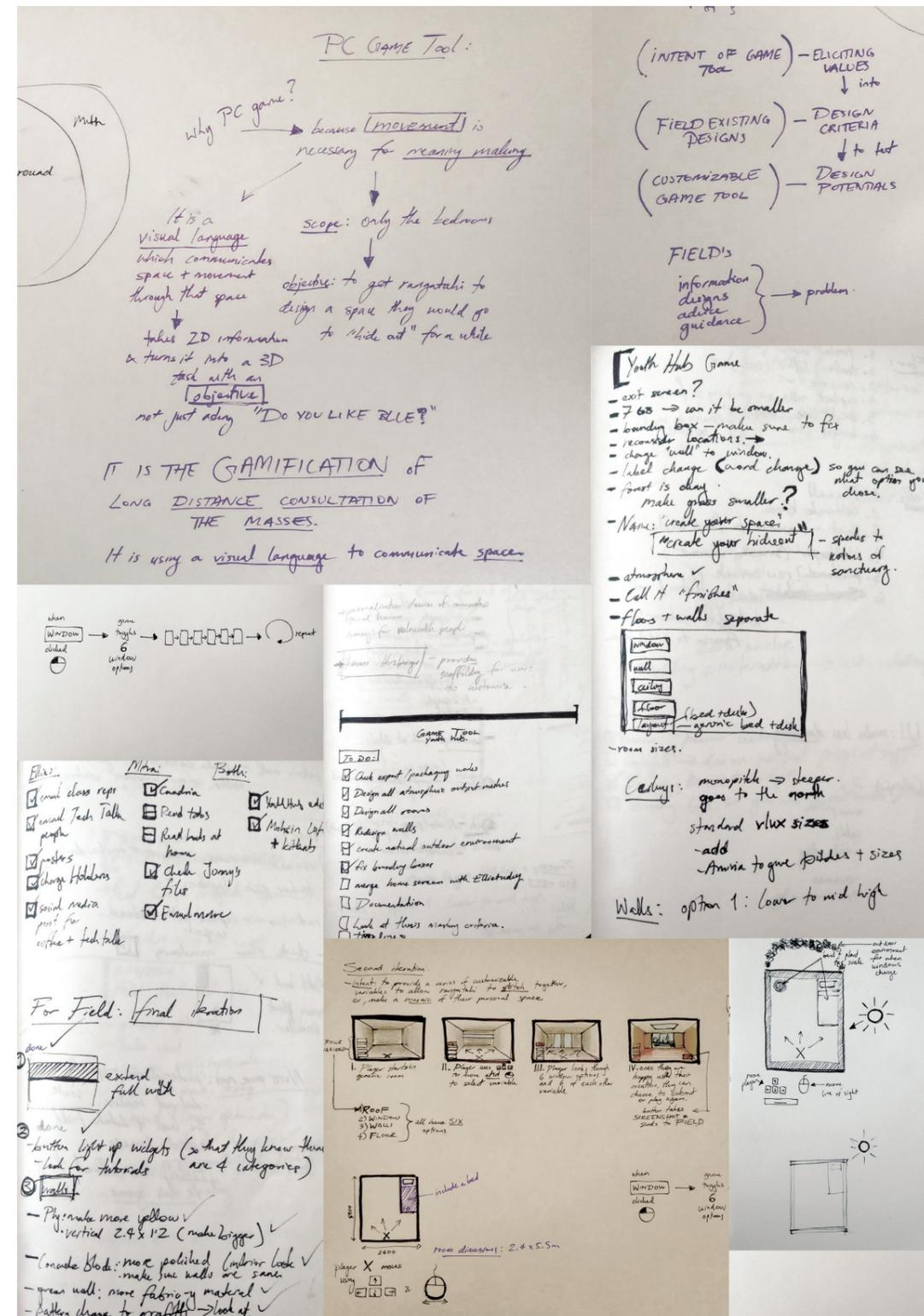


Fig.52 Notes, checklists, sketches, hits and misses of our collaboration with the Youth Hub game tool.

Youth Learning Centre

Location: Kiribati

Rangatahi: Kiribati youth

Architects: FIELD Studio of Architecture and Urbanism

Partnering Organisations: Ministry of Foreign Affairs and Trade, ChildFund NZ

How it began

As a continuation of our collaboration with FIELD, they came to us with another project they were heading, asking us to create another tool that can be used to reinvigorate their collaboration with rangatahi. The Youth Learning Centre is based in Kiribati, so despite COVID restrictions being lifted, physical workshops were not an option. Rangatahi were heavily involved in the initial stages of the project, and **FIELD still wanted direct feedback from rangatahi, particularly in regards to the cultural adequacy of the building.**



Fig.53 Zoom session with FIELD and Kiribati ChildFund team.

TE TAETAETAE NI KIRIBATI:
the Kiribati spoken language.

With the success of the tool created for incubator one, we quickly decided that the PC game format was the most reliable form for the tool to take:

- 1) it could be co-created quicker than other platforms,
- 2) it could accurately depict FIELD's existing designs,
- 3) it could provide a visuospatial language for rangatahi to express ideas,
- 4) we could translate English instructions into Te taetae ni Kiribati within the game
- 5) it could be sent digitally to Kiribati.

Since the previous simulation was aimed at a broad reach of rangatahi, we needed to reconsider how the game functioned, how it prompted rangatahi to express ideas and the function of the engagement that the tool would be used in.

Incubator question

How can a digital tool, accessible via computer, allow Kiribati rangatahi to engage cross-culturally with FIELD in design processes?

Methods of engagement

'Design jams' and reverse briefing

Storyboarding

Diagramming process: showing the iterations and line of inquiry for the creation of the tool.

Co-creation of game tool: creating the game logic and user interface in Unreal Engine for the game and ensuring its usability. Additionally creating the process for facilitators who will prompt questions from rangatahi.

Film media: use of video to accurately portray the experience of the game tool.

Interviews and ethnographic notes: with Andrew and Amiria reflecting on the process and engagements with rangatahi and anecdotal responses from MFAT and Kiribati ChildFund team.

Auto-ethnographic field notes: personal reflections on the process, tool and the collaboration.

Proposed contribution

Our response was another PC game however, the difference here being the fostering of spatial understanding by the game allowing rangatahi to roam around the digital space in first person. Again, it provides a **visuospatial language** which you can draw upon when discussing complex design concepts. It also turns a mundane activity into something exciting.

Roles

FIELD	ELLIE	MITRA	RANGATAHI
<p>Giving us the relevant information, design variables, dimensions, ambient qualities and guidance.</p> <p>Consulting with Kiribati team about translations of questions.</p>	<p>Ellie's role covered the user interface. Once again, her aim was on 'digital third space' as accessibility.</p> <p>She focused on objects which triggered questions to pop up, providing a goal for rangatahi to reach and explore. Ellie needed to consider accurate translations of the questions.</p>	<p><i>My role was game logic and ensuring all of the spatial and design elements in the game make sense, visually communicate atmospheric elements and engage the player in moving through 3-dimensional exploration.</i></p> <p><i>The focus was on a realistic depiction on Kiribati climate in regards to the materials and accurate use of vegetation. Once again, there was an emphasis on usability, movement and photo-realistic depictions of the space.</i></p>	<p>To test our tool and feed back about its usability, how engaging it is, and ultimately, to contribute to the projects with their feedback about cultural aspects, their experience of the space and to what extent they felt their identity was being reflected in it.</p>

Verbal meets visual

As the architect, let us say you want to check back with your end-users that your designs achieve what you think they achieve; Andrew and Amiria were conscious about how they were communicating design concepts to the team in Kiribati particularly because of the **language barrier and cultural nuances**. Our creation of a visuospatial language, in the form of a game simulation, helped bridge this communication gap. We spent time with FIELD and the ChildFund team in Kiribati making sure the game was accessible and translated accurately.

By asking **open-ended questions regarding colour, spatial qualities, functionality for activities and cultural adequacy**, it allows for a wider variety of responses and provides youth the agency to raise concepts the designers may not have thought of (figure 54). It pulls out the unconscious biases and assumptions designers can bring with them. Since there was a language barrier, we focused on translations and providing this visuospatial language, which was particularly important to mitigate architects' cultural biases.

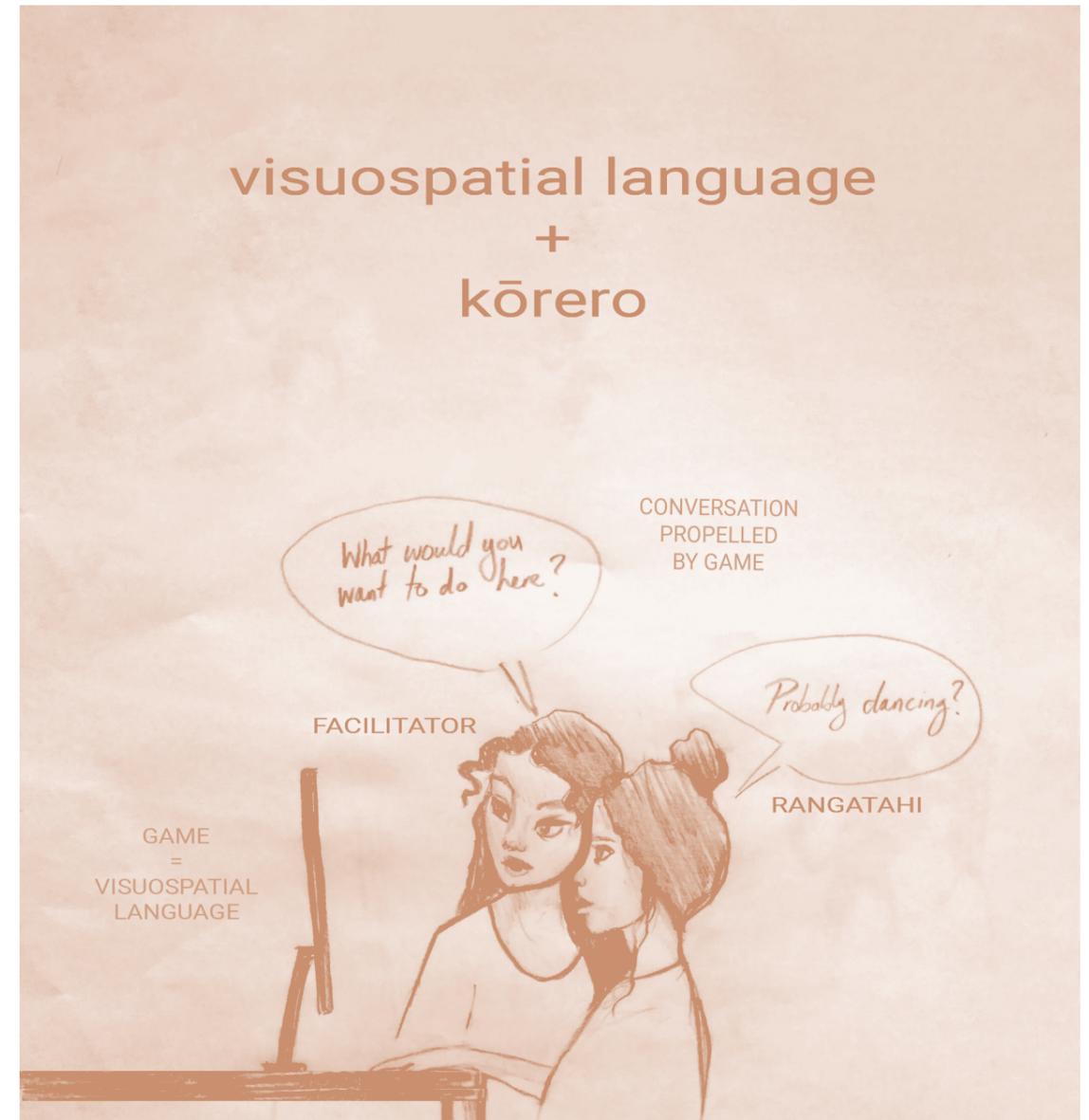


Fig.54 Speculative drawing of how facilitation and game propel conversation.

Asset processing and material allocation

My role included processing CAD information from FIELD into Unreal Engine in order to allocate materials and vegetation. As a team, we decided that the game did not need to be realistic, but it had to be **believable**.

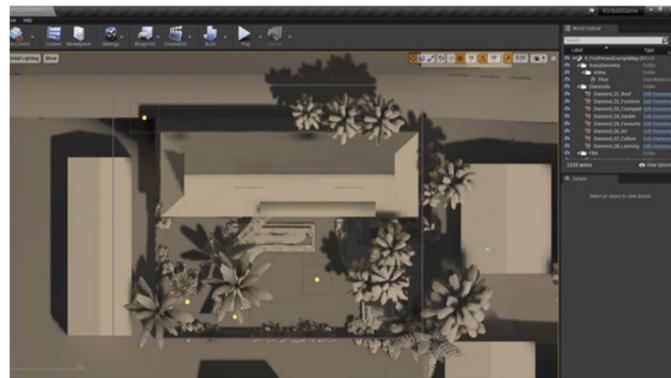


Fig.55 Plan view of building model in Unreal engine, no materials.

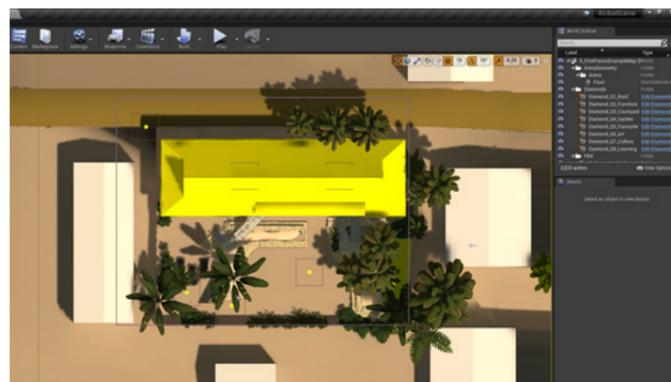


Fig.56 Plan view of building model in Unreal engine, materials applied.



Fig.57 Building model in Unreal engine, no materials.



Fig.58 Building model in Unreal engine, materials applied.



Fig.59 Building model in Unreal engine, materials applied, vegetation applied.



Fig.60 Youth Learning Centre game outdoor area.



Fig.62 Youth Learning Centre game yellow diamond question prompt in outdoor area.



Fig.61 Youth Learning Centre game street front entrance.

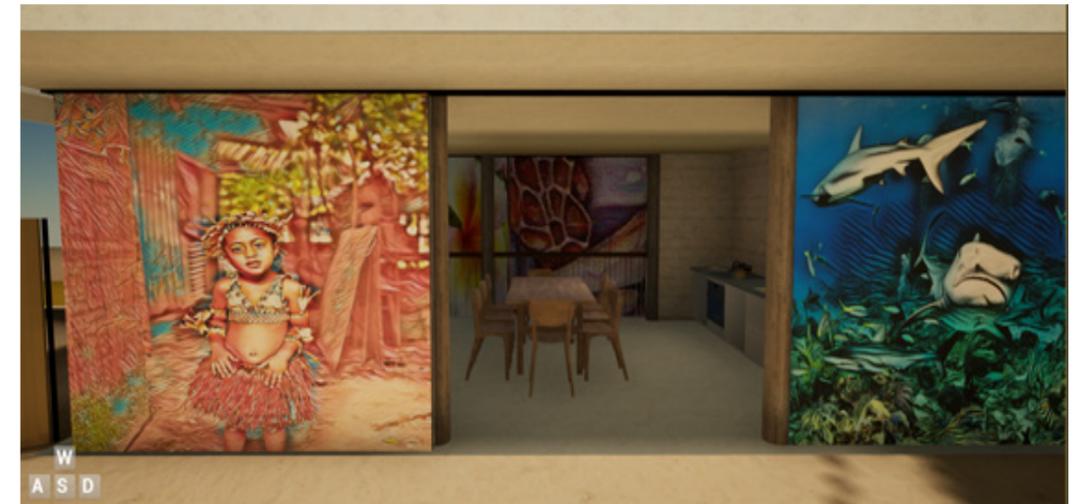


Fig.63 Youth Learning Centre game art panels on outdoor walls.

Lessons

Gamification

Richard Bartle, famous in the world of game design in the 1970s wrote about different types of players in his book *Designing Virtual Worlds* (2004). One of the players Bartle describes is the “explorer”; players who “love the sense of discovery” and seek “knowledge inside the game” (Folmar, 2015, p. 14). Once again, a gamified experience was used to propel design discussion in regards to the Youth Learning Centre; this time instead of being confined to a space and asked to ‘design’, rangatahi were prompted to ‘explore’ and ‘report’ to a person how they felt about the space based on design based prompts.

Visuospatial language

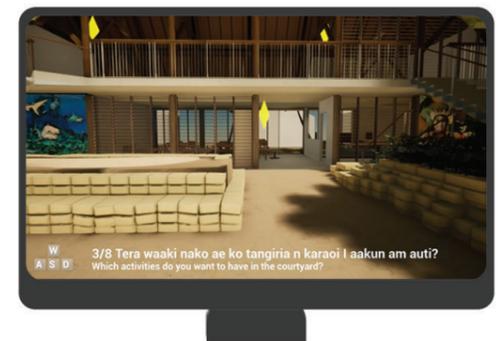
In games, in order “to make a game meaningful, you will also need the challenges to impart a lesson and make it meaningful” (Folmar, 2015, p. 7). The use of a roaming world with prompts provides the agency to move around freely with a sense of discovery, but also specific prompts give the experience direction and meaning, much like a workshop or an interview would. We speculate that the synergy between the digital space, the in-game prompts and a facilitator who would sit beside rangatahi as they play the game would create a visuospatial language which can be used to communicate design ideas in an empowering way.

Fig.64 Youth Learning Centre Game on screen.



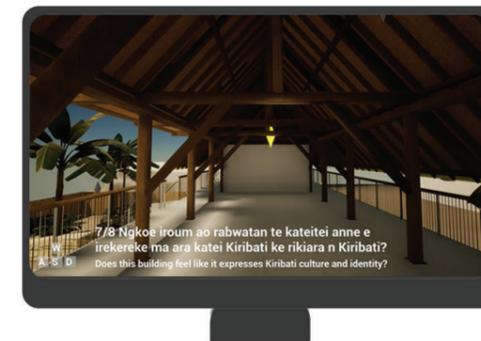
1. Use  to click.

2. Use  to navigate.



3. Approach the  diamond.

4. Answer the questions that appear.



5. Find all 8  and answer all the questions.

6. Talk about your ideas as the questions appear.

Fig.65 Storyboard of the Youth Learning Centre game.

Fig.66 Classroom in initial model.



This game provided a base for the architects to critique their designs as well; after seeing and playing the game, a number of design decisions were made about classroom desk orientation and challenging Euro-centric notions of learning (figures 66 and 67)



I think this is particularly successful as it uses a three-dimensional space to tell the story, which can often be missed in plans and sections. The Kiribati team mentioned that they even understood the space more in the game than they did in a

Fig.67 Classroom changes after FIELD team first time playing.

video previously shared with them. This ability to look up, around, behind on a whim feeds this need for exploring and enables this curiosity. Rangatahi are not trained in architecture and this should not be a prerequisite for them to participate in design discussions. In this way, **I believe it is democratising an otherwise adult-centred process.**

Collaboration across barriers

This game was sent out via executable file and the Kiribati team had no issues opening it on their computer. It was tangible proof that international engagements during the pandemic are possible if the **methods of engagement are reconsidered to suit the circumstances and limitations.** This game/simulation being plugged into FIELD's existing robust engagement strategy proves that engagement is still possible under these limitations and maybe that it is even more crucial architects engage with rangatahi in the midst of these limitations.

Rangatahi identity and agency

Amiria and Andrew told us that the rangatahi had a strong value base for their culture and wanted it to be embedded in the spaces of the Youth Learning Centre. Voicing this at the first engagements had a direct impact on the design that and FIELD embedded these values into the spaces of the building (figure 68). At this point, checking these translations was crucial for them in order to ensure their design decisions are reflective of Kiribati rangatahi identity. This was particularly important for the architects as they come from culturally different backgrounds. The game provided a medium through which this spatial understanding can be achieved and input from rangatahi can be recorded. This is also crucial to MFAT and ChildFund NZ who are the drivers of the project and have a **public accountability to the integrity of the project and the care of Kiribati rangatahi.**

So far, we have not had direct responses from rangatahi on how successful or engaging they found the game, but confirmation from the Kiribati ChildFund team. They aided in the translation of English questions, and were enthusiastic about the level of engagement this would offer Kiribati rangatahi, especially as cultural identity was one of the main values discussed in the initial engagements. I speculate the tool will be very usable and will provide a visuospatial language for rangatahi to discuss spatial qualities as well as the identity of the space.

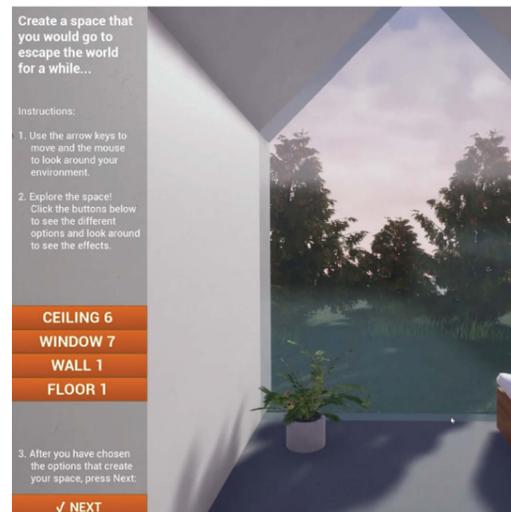
Fig.68 Roof shape, inspired by Kiribati architecture and culture, was part of the conversation prompts in the game.



Play the games!

Try the games, follow the link, download the .zip file:

[CLICK HERE](#)



YOUTH HUB SHOWREEL
[CLICK HERE](#)



YOUTH LEARNING CENTRE SHOWREEL
[CLICK HERE](#)



Fig.69 Amiria Kiddle on empowerment



Fig.70 Andrew Just reflecting on games.

Ngāti Toa Education Space(s)

Location: Takapūwāhia and Mana Island

Rangatahi: Ngāti Toa youth

Architects: TBD

Partnering Organisations: Te Rūnanga o Toa Rangatira, Ministry of Education

Starting from scratch

Until this point, FIELD had been the proxy through which we had interacted with rangatahi from afar and this was our opportunity to engage with rangatahi in person. COVID alert levels went down and we had the privilege of interacting face to face, which brought a new opportunities for engagement. Unlike in previous incubators, it was time for us to hear from rangatahi directly. We needed to start at the very beginning of the design process, asking what the question is in the first place.

Incubator question

Although the initial question focused on what a Ngāti Toa based education space would embody, we did not define the question prematurely. I felt it was important to identify what the problem was, what does not work for rangatahi in current education spaces and then to, alongside them, develop the

question, scope, values, methods and design criteria in order to create design potentials.

Methods of engagement

The method was not predefined; we identified methods for each engagement based on the learnings from the engagement that came before it.

Roles

ADULTS	ELLIE	MITRA	RANGATAHI
To facilitate and be part the engagements.	Ellie's role was to conduct her research based on her conceptual framework, focusing on decolonising the architectural process and how 'third spaces' can aid in this process. Her explorations involved using AR as a process tool with rangatahi.	<i>To explore youth agency through my conceptual framework by using methods which foster mutual respect. Based on the lessons from incubator one and two, I wanted to embrace informed improvisations and implement a culture of awahi. Amongst other methods, I explored the use of matihiko tools such as VR to facilitate spatial understanding.</i>	To be co-researchers alongside us and define the problem as well as seek out the solution. To inform us, use their knowledge and expertise to tell us about the type of education they want and how they want to be collaborated with.



Fig.71 Kaleb, Camryn, Jershon and Tayla, eating kai and discussing.



Fig.73 Kaleb viewing virtual reality design potential.



Fig.72 Rangatahi at Te Aro Campus atrium lounge.



Fig.74 Ellie using augmented reality with rangatahi.

NGĀTI TOA ENGAGEMENTS SHOWREEL

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Meeting one another

Location: Takapūwāhia Puna, Porirua

Before proposing anything, we wanted to gauge whether the rangatahi were even interested in engaging with us in this way. As two strangers, we used this opportunity to introduce ourselves as people who want to collaborate, **not researchers who want to extract.**

The rangatahi were very excited about the mixed reality tools and were eager to meet once every few weeks at Puna to work through the engagements. They were very interested in technology and had plenty of ideas about education, particularly from a decolonising perspective. Although we did not go into too much detail, we established the mutual desires for the project: **they were very eager to work towards some sort of conceptual design for an 'education hub.'**

I was personally nervous about the engagement, as it felt like the 'make or break' moment for our live engagements with rangatahi, and it was very important for me to engage with rangatahi in this way.

Talking to the rangatahi briefly about architecture, decolonisation and what it means to them was intriguing; this was something we would explore further in later engagements.

The next steps were to establish what the core purpose of the incubator is and what are the questions we should be asking, to then be able to establish the methods.

Fig.75 Oculus Rift kit.



Fig.76 HoloLens headset.

TAKAPŪWĀHIA PUNA: Puna, or Te Puna Mātauranga, (loosely translating to "spring of knowledge" or "wisdom") is a Ngāti Toa led education space which was established to support Ngāti Toa rangatahi of all ages with their education in Porirua. We spent most of our engagements with rangatahi here.



Fig.77 Camryn in VR, using Tilt Brush to explore space.



Fig.78 Ellie through the lens of rangatahi.

FLIPPING THE SCRIPT: I particularly like this HoloLens photo of Ellie from the eyes of the rangatahi, drawing over and around her. Rather than merely observing, the researcher becomes part of the space and conversation through someone else's lens.

Engagement One: Understanding the problem

Location: Takapūwāhia Puna, Porirua

We began the official engagements by attempting to collaboratively identify ‘the problem.’ The main method of this engagement was a group activity where we asked rangatahi to spatialise their day. Ellie suggested a “Boxes” exercise (figure 79), which consisted of using cardboard boxes to map out your day spatially, turning over a side every time our day turned a new chapter. We did this with the rangatahi; talking about our own day to day lives made us less intimidating and created a sense of commonality as we expressed our own views on our education spaces. We spent time speaking about these spaces and discussing what and why these spaces provide opportunities for learning (or conversely, get in the way).

Technology as a means for education was a frequent comment; one rangatahi mentioned that they learn most things from their phone, like current events and ‘what goes on in the world.’ One rangatahi spoke about the obsolescence of books, stating that they do not use them even if they take them to school. There was agreement on the fact that, despite education spaces lacking character, it was friends and teachers who showed enthusiasm that made school fun.



Fig.79 Boxes exercise outcomes.

The rangatahi also used Google Tilt Brush in VR and Sketch in AR to start getting acquainted with the tools. At one point, it became very apparent what the **impact of having an adult in the room is**. While in VR drawing her experiences with education spaces, one of the rangatahi was showing me what she was drawing; as soon as an adult walked into the room, her enthusiasm shifted and she began to say “**don’t look**” and “**it’s dumb.**” No matter how much fun VR was, that one instance affected her willingness to freely discuss further.

Sharing kai at the end was a great opportunity to sit down and talk in an even more relaxed setting. It was a leveller for us all to sit down and discuss less formal things.

The next steps were to continue exploring what a decolonised education space embodied, and we left the rangatahi with a Photovoice activity for them to document these ideas through their own perspective.

PHOTOVOICE: an activity where participants are given cameras and asked to take photos or videos of their experiences in a given context. In this instance, we asked the rangatahi to take photos of their education spaces in their everyday lives.



Fig.80 Finding commonality with boxes exercise.

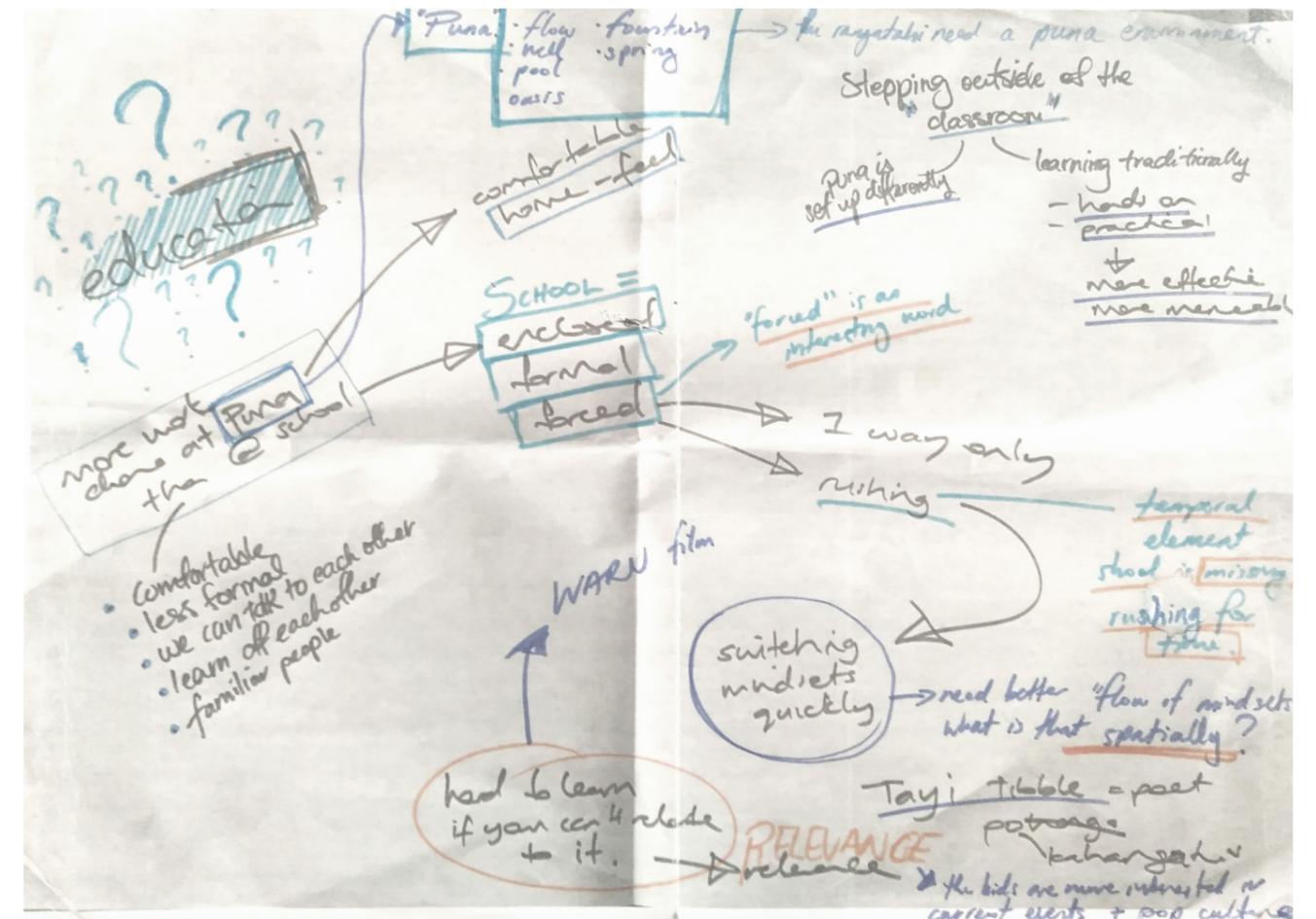


Fig.81 Analysis of field notes about decolonisation and education.

Engagement Two: The beginnings of a brief

Location: Takapūwāhia Puna, Porirua

This engagement was about **establishing a mutual vision by identifying mutual values**. We continued building trust and emphasized the rangatahi role as **co-researchers**, and the value of the knowledge they bring to these discussions.

We had a robust plan to use VR and AR, but we did not touch digital tools at all. Only one rangatahi completed the Photovoice activity but it provided a great starting point for discussion. We sat on the floor and on couches in a circle (figure 82). This helped get us on level ground, where everyone was comfortable and willing to talk. We brought kai, so the atmosphere was as though we were in any lounge, chatting.

Everyone took a piece of paper and wrote down their answers which were then shared around the group. This led to some insightful kōrero about architectural qualities. The question ‘why?’ prompted the rangatahi to discuss the reasons why they had identified each space and prompted conversation about what they valued in their education.

Having Bianca there was beneficial as she was able to tell us that Ngāti Toa would like to have its own **kura, with a curriculum that is “rooted in Ngāti Toa-ness”**, based on the shared history of Ngāti Toa and eventually inclusive of Pākehā and other cultures.

KURA:
school.

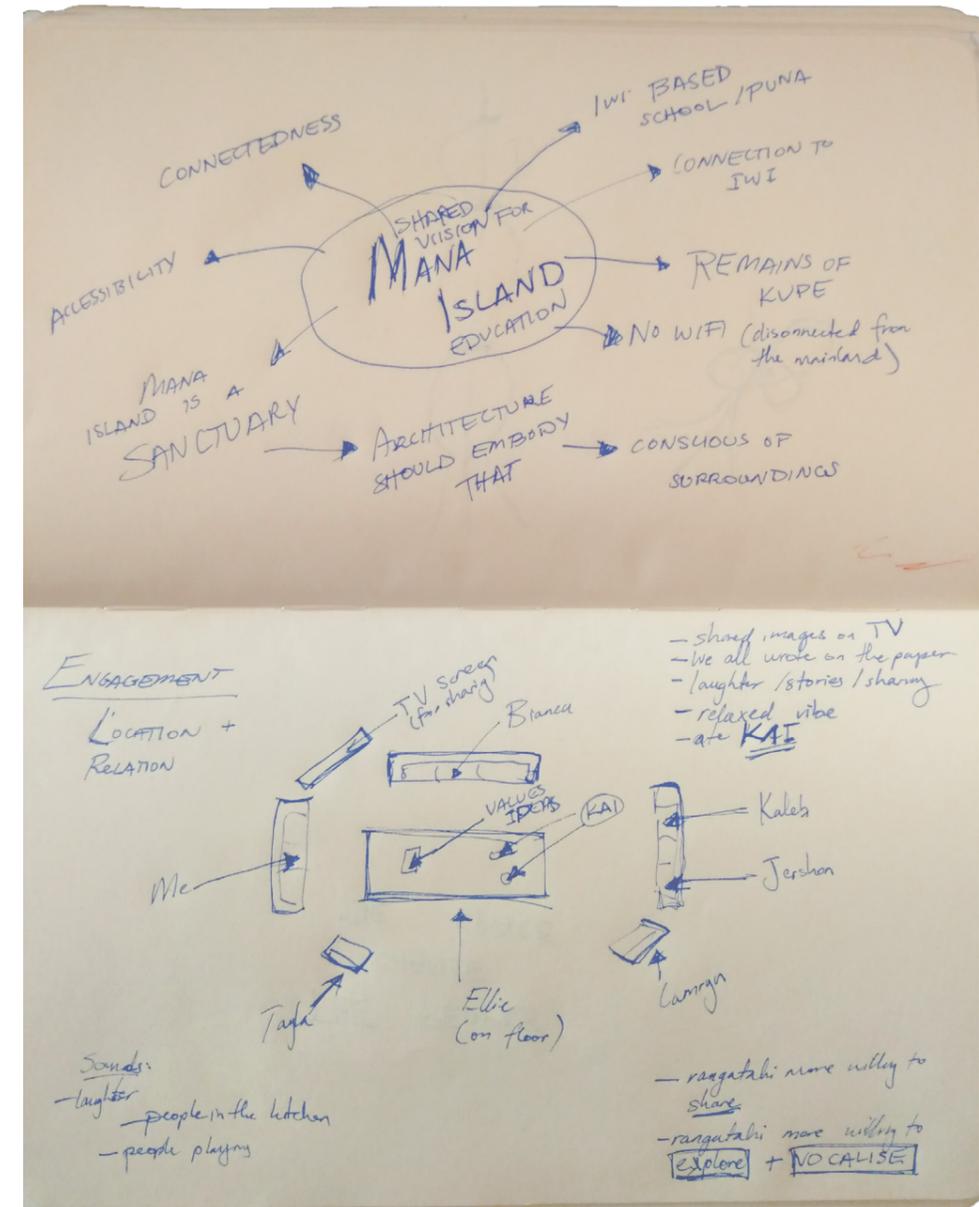


Fig.82 Field notes on Mana Island education space and spatial positioning diagram.

Even when we thought we were communicating in an accessible way, it was important to keep each other **accountable**. Ellie was very good at asking me what I meant when I used certain terms which the rangatahi may not understand and vice versa. **It would elucidate to the rangatahi what we meant and also made it feel like more of a conversation than a delivery of information.** This was an example where cooperative inquiry really shows its benefits and the accountability that comes with having a co-researcher. The outcome was a values document that identified collective concerns and values for a Ngāti Toa education hub (figure 83).

Over kai, Kaleb chatted with us for a while about his experience in education and what decolonisation meant to him. We talked about our shared experiences and frustrations of schooling and what we would change if we had a decolonised education.

As we discussed the possible location for a series of education spaces, Mana Island (off the coast of Porirua) was mentioned as a viable option. When discussing the remoteness of Mana Island, the rangatahi agreed that they would prefer it to be unconnected, in the sense that there would be no internet connection and possibly no mobile reception. For them it would be a welcome break from their usual world of total connectivity.



Fig.83 The beginnings of a brief.

Bianca commented that this was in opposition to what she and other adults thought, expressing how total connectivity had been something they wanted to pursue. It is an interesting contrast of generational values where the younger generation is so used to being completely **connected that they value opportunities for non-connectedness**. This contrast prompted Kaleb to say:

“If I wanted wifi I would stay on the mainland. I want to decolonise.”

Once again, it ended with kōrero and kai.



Fig.84 Drawing in real life and in augmented reality.

Engagement Three: Critiquing existing education spaces

Location: Te Aro Campus, School of Architecture and Design Innovation, Wellington

As rangatahi welcomed us to their Puna, we invited rangatahi into our space to them a glimpse into our world of tertiary education.

The intention was to show rangatahi the opportunities provided at our campus as well as provide a space as a **visuospatial setting for conversation**. The aim was to establish a collaborative mood board to be able to define a design brief; bridging verbal communication of values alongside visual communication of spaces.

We gave the rangatahi a tour of campus and asked them to conduct an analysis of the space, where they would begin to unpack education spatially. After another failed Photovoice activity, we went back to what we felt most comfortable with: **kōrero and kai**.

The atrium lounge was appreciated as the comfortable **buffer zone of the campus, due to the homely atmosphere**. Our methods were mostly kōrero, with the addition of using our phones to look up images for reference. We also critiqued the spaces in the building and used that as a visuospatial context to speak to. The rangatahi were much more comfortable speaking about the space in real-time and using their phones to show examples of what they would replace, add or improve about Te Aro Campus spaces.



Fig.85 Rangatahi at Te Aro Campus Lounge.



Fig.86 Discussing briefs as we eat pizza at Te Aro Campus Lounge.

When asked about the campus, some notable responses included that it is dark and does not look like “it’s alive”; that there is power in having spaces that are ‘lived in’ - that there’s not too much pressure on keeping things “perfect.” Too many corners in the space made it feel “forced.”

Based on these comments, I prompted the rangatahi to consider what their non-negotiable values for the space would be. They included:

Rangatahi must be included in collaboration and discussions.

Minimal waste and consciousness around environmental impact; materials to be a certain percentage locally sourced and sustainable to reflect local whakapapa.

Openness and connection to the outdoors (specifically, glass to be used to connect to nature).

Carvings and Iwi storytelling to be imbued in the space.

A history wall of the whakapapa of the building itself, told by rangatahi on screens, in matihiko “moving portraits.”

Traditional ways of learning and weaving technology into them.

This engagement gave us a rich set of information to interpret and translate into spatial values for a live brief. The next step was deciding on what form this brief looks like and how loose or rigid it would be.



Fig.87 Rangatahi try VR experiences at Te Aro campus.

Engagement Four: Briefs and design potentials

Location: Takapūwāhia Puna, Porirua

After coding previous notes from the rangatahi “non-negotiable” values, I created a “spatial brief” (figure 88). It was my intention to show the rangatahi what a translation of values into space could look like if we were to take a value-based approach to design. As well as a VR experience with a design potential, using my translations of the rangatahi values, I created a small booklet which took the spatial brief and offered opportunities for rangatahi to create their own translations.

For this engagement, it was important for us to **reiterate their role as translators and experts in their own right; to ensure they were aware that their translations of values into spatial ideas are just as valid as ours.** In order to help them read and understand the spatial brief, I had prepared a design potential in VR based on my own translations of one value in the spatial brief. I wanted to use the brief as a means of showing the rangatahi that we are all capable of translating values into space; for this reason, I created an example of my interpretation of “awhi towards the land” (figures 95, 96, 97 and 98).

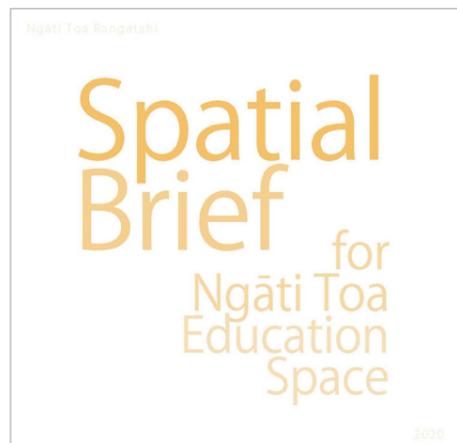


Fig.88 Spatial brief booklet front cover was, by chance, printed on glossy paper.



Fig.89 The spatial brief prompted rangatahi to state who they are, in their own words.

THE BIG QUESTION

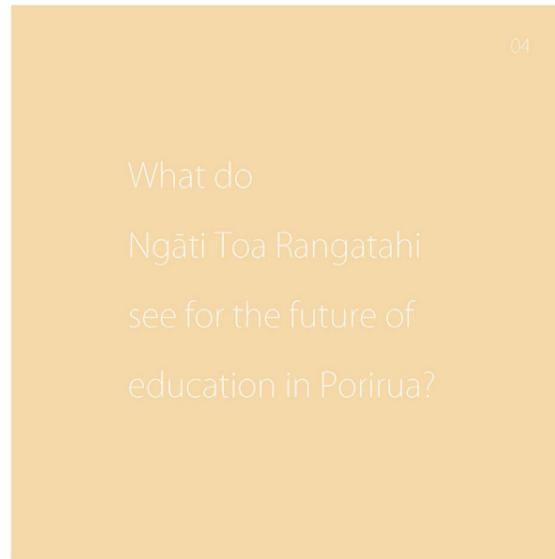


Fig.90 The big question in the spatial brief.

THE BIG IDEA

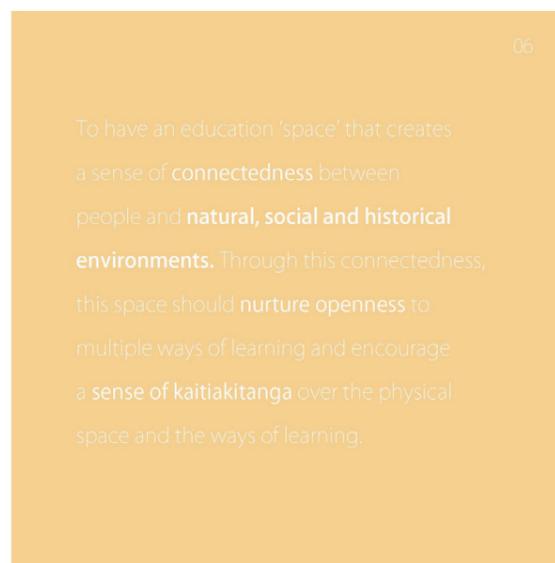


Fig.91 An approach to addressing the question in the spatial brief.



Fig.92 A page for rangatahi translations was provided.

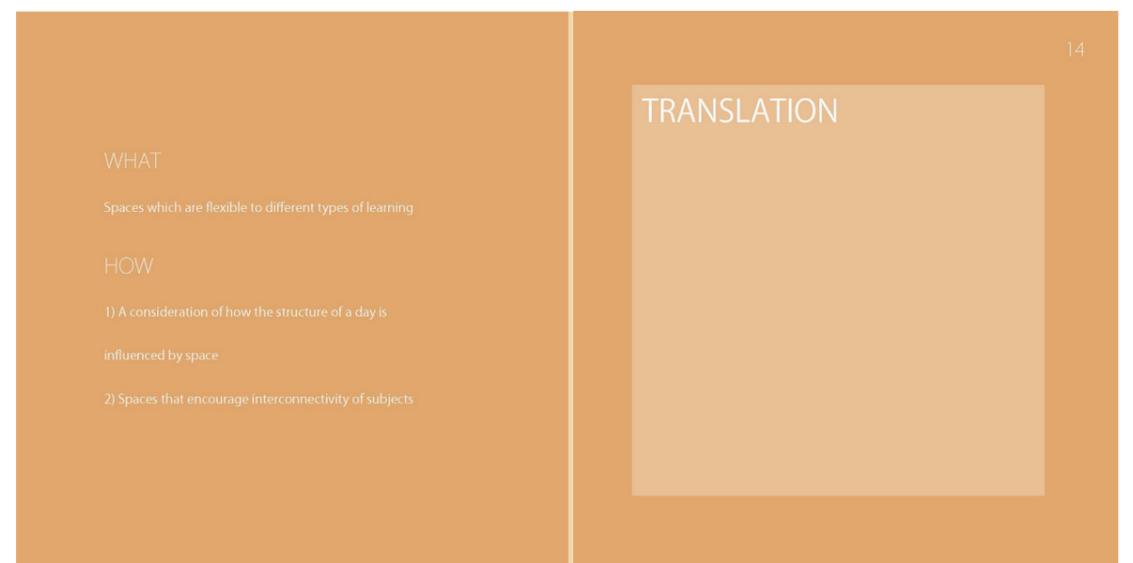


Fig.93 The brief was designed to be written and drawn in.

WHAT

Awhi towards the land

HOW

- 1) Thought is put into where materials come from and if they can be sourced locally and sustainably.
- 2) Every space needs to be working with nature instead of against it.

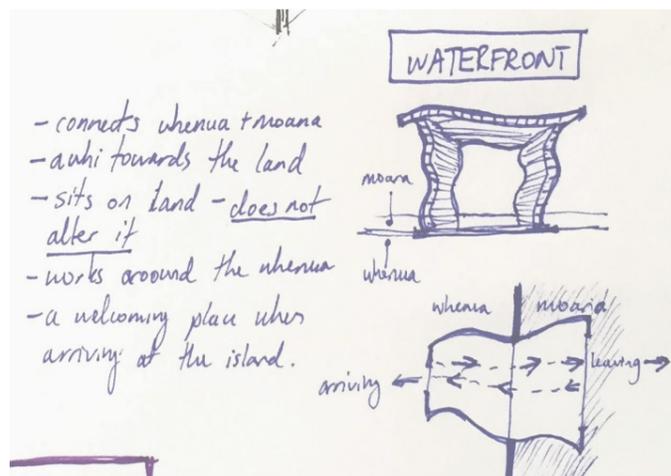


Fig.94 One of the design criteria in the spatial brief.

Fig.95 A sketch of my translations of "awhi towards the land" into a design potential.



Fig.96 The Waterfront: a virtual reality experience of Mana Island design potential exploring "awhi towards the land."



Fig.97 Looking towards the sea.

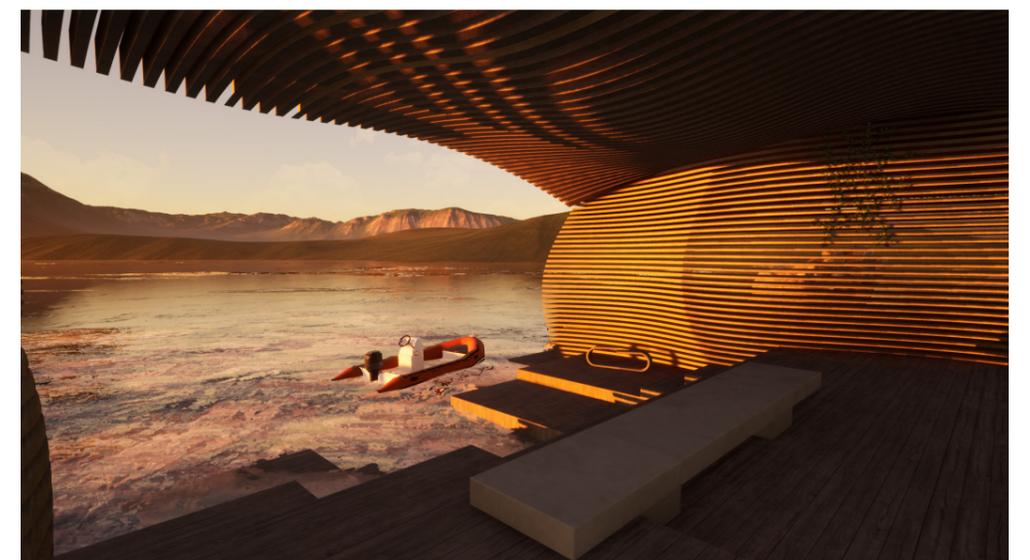


Fig.98 A potential outdoor teaching space.

Something we did not anticipate was the quality of the booklets impacting how the engagement went; by chance, the booklets were printed on **glossy paper**, giving them an overall **polished look**. This glossiness affected how the rangatahi interacted with it; it deterred them from wanting to draw on it. They all looked too official, too finished and rangatahi wanted to keep booklets as souvenirs more than engage with them.

I also found that words on a page, no matter how bold or big, are just not that engaging for youth - they did not show the booklets nearly as much enthusiasm as they did to the VR headset.

My solution to this was to use one of the design potentials I had prepared, paired with a Socratic way of questioning rangatahi about the space. The VR experience along with the questions of the booklet became an opportunity for experience and critique, much like what I anticipated would happen with the facilitation of the Youth Learning Centre game. Using an abstract design potential as a sounding board (or a visual reference for the values to be discussed) was

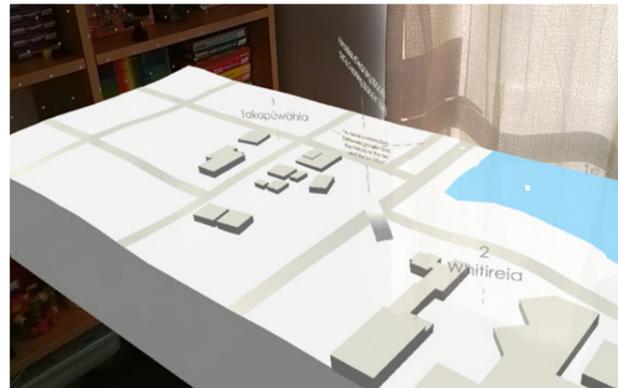


Fig.99 AR experience of Porirua map

Fig.100 Rangatahi experiencing AR Porirua map and discussing potentials.



incredibly successful. I contextualised the ideas by providing a space where atmospheric qualities, such as wind, light, water, plants could tell the story of the spatial brief and offer a visuospatial language through which **rangatahi can critique, suggest and create**. There was visible excitement on Jershon's face, citing that you can "hear the birds" in the space she was in (figure 102). Rangatahi commented on colour, scale, proportion, tactility, time of day, they gave activities a context and became very vocal about what type of opportunities they saw.

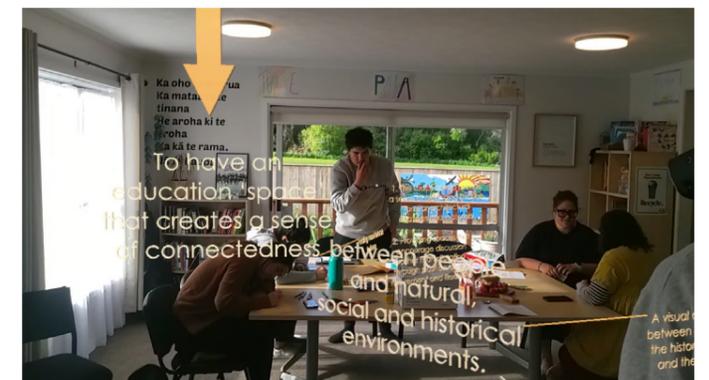
Ideas came about such as Harry Potter-like matihiko portraits telling the story of the Iwi; beanbags and classrooms with floor space to sit on and learn. Glass on the ceilings so you could look up at the stars at night started to spark conversations about education being an overnight experience.

Kai became, once again, a great space for these discussions, giving us opportunity to talk about the engagement and to discuss where to take it further.

Based on some of the rangatahi translations (figures 103 to 107), I interpreted another two spaces in preparation for our fifth engagement (figures 109 and 110).

AR EXPERIENCE SHOWREEL
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Fig.101 AR experience of spatial brief. Intended to prompt spatial awareness while conversing about values.





VISUOSPATIAL LANGUAGE:
a visual representation of space that can be used to communicate design concepts

Fig.102 Jershon in VR (above) looking at Mana Island VR design potential (below).

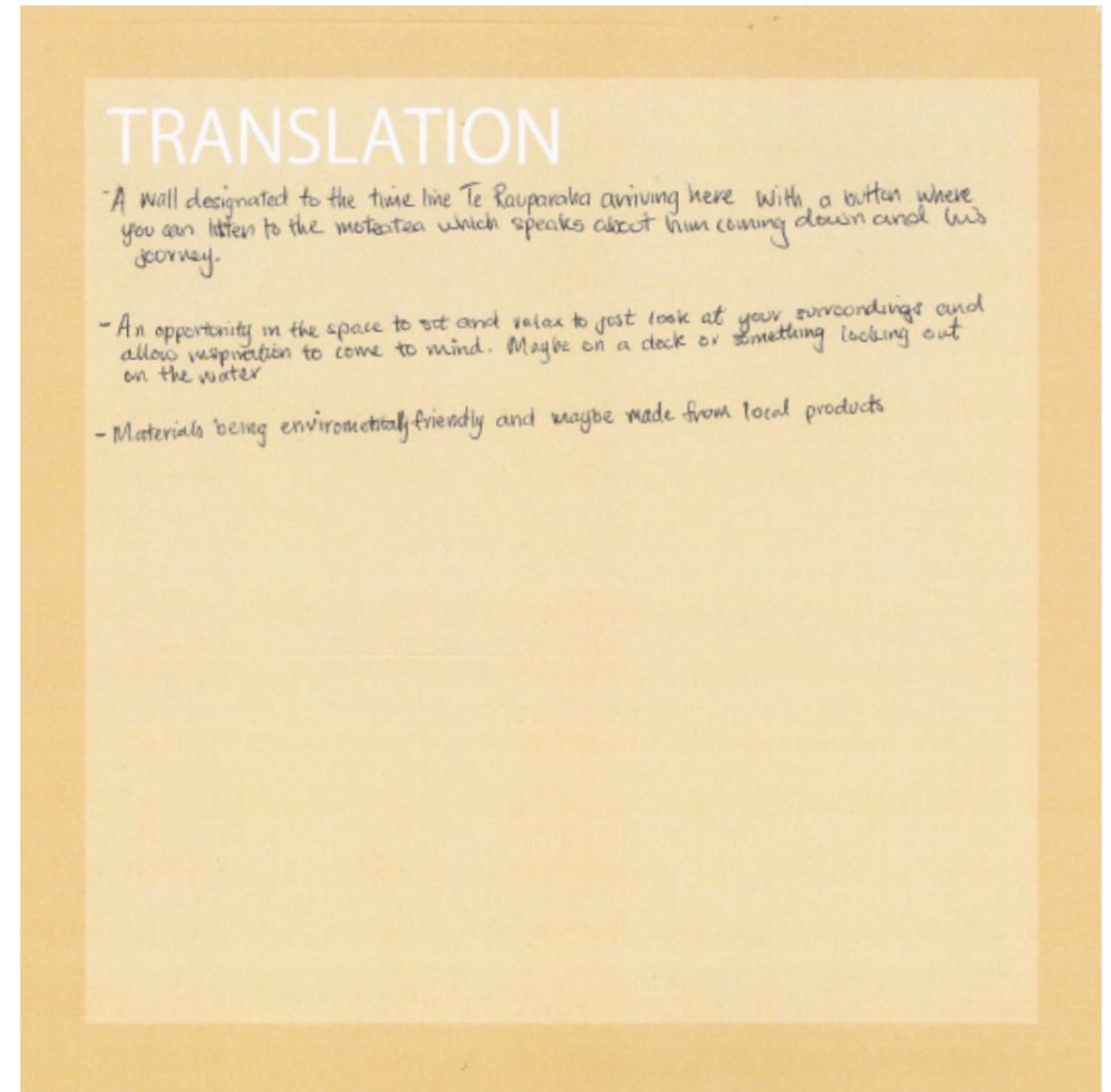


Fig.103 Jershon's translation of "awhi towards the land" after seeing Mana Island design potential.

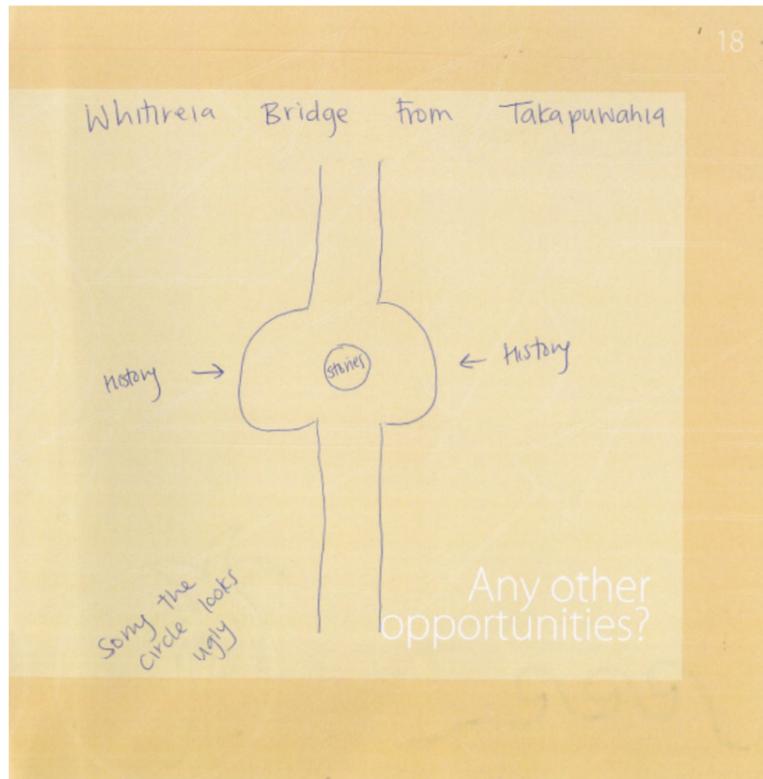


Fig.104 Tayla's translation of design potential.

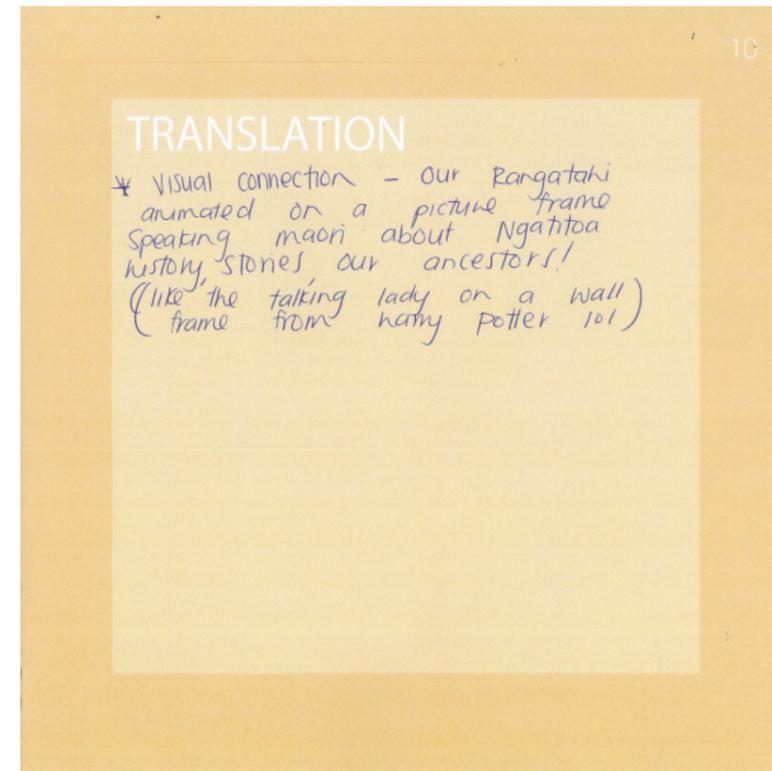


Fig.106 Tayla's translation of design potential.

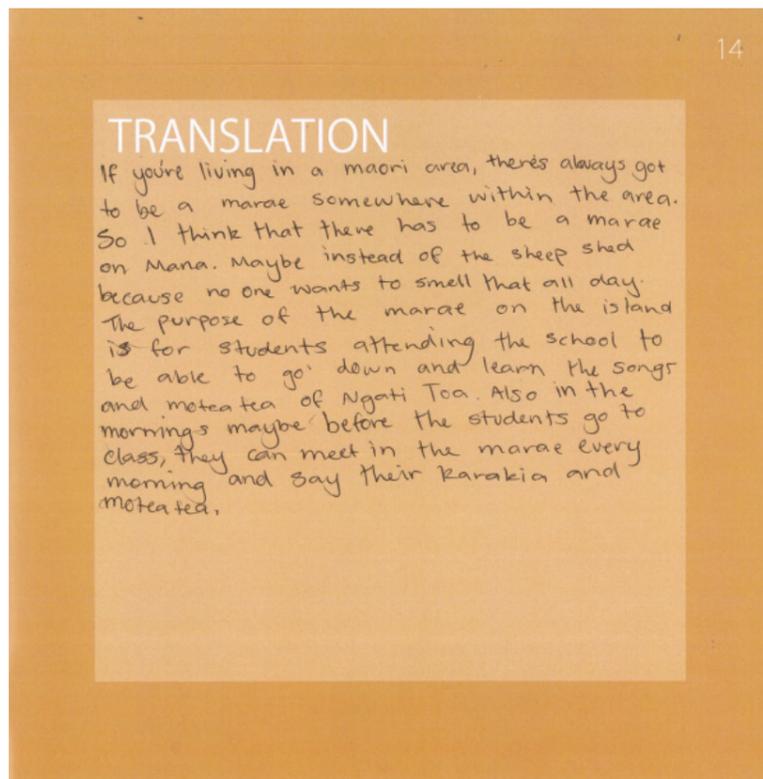


Fig.105 Camryn's translation of design potential.

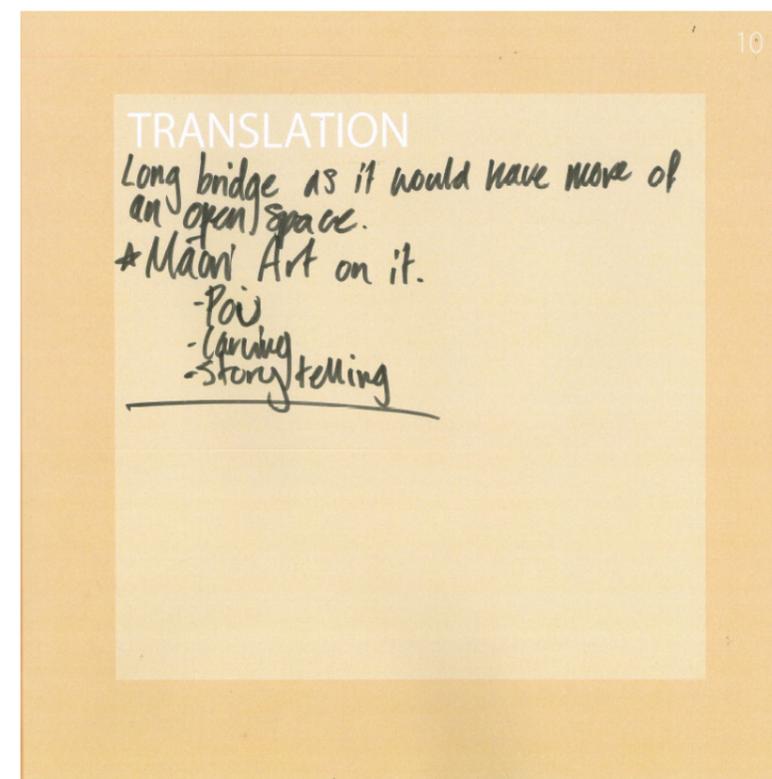


Fig.107 Kaleb's translation of design potential.

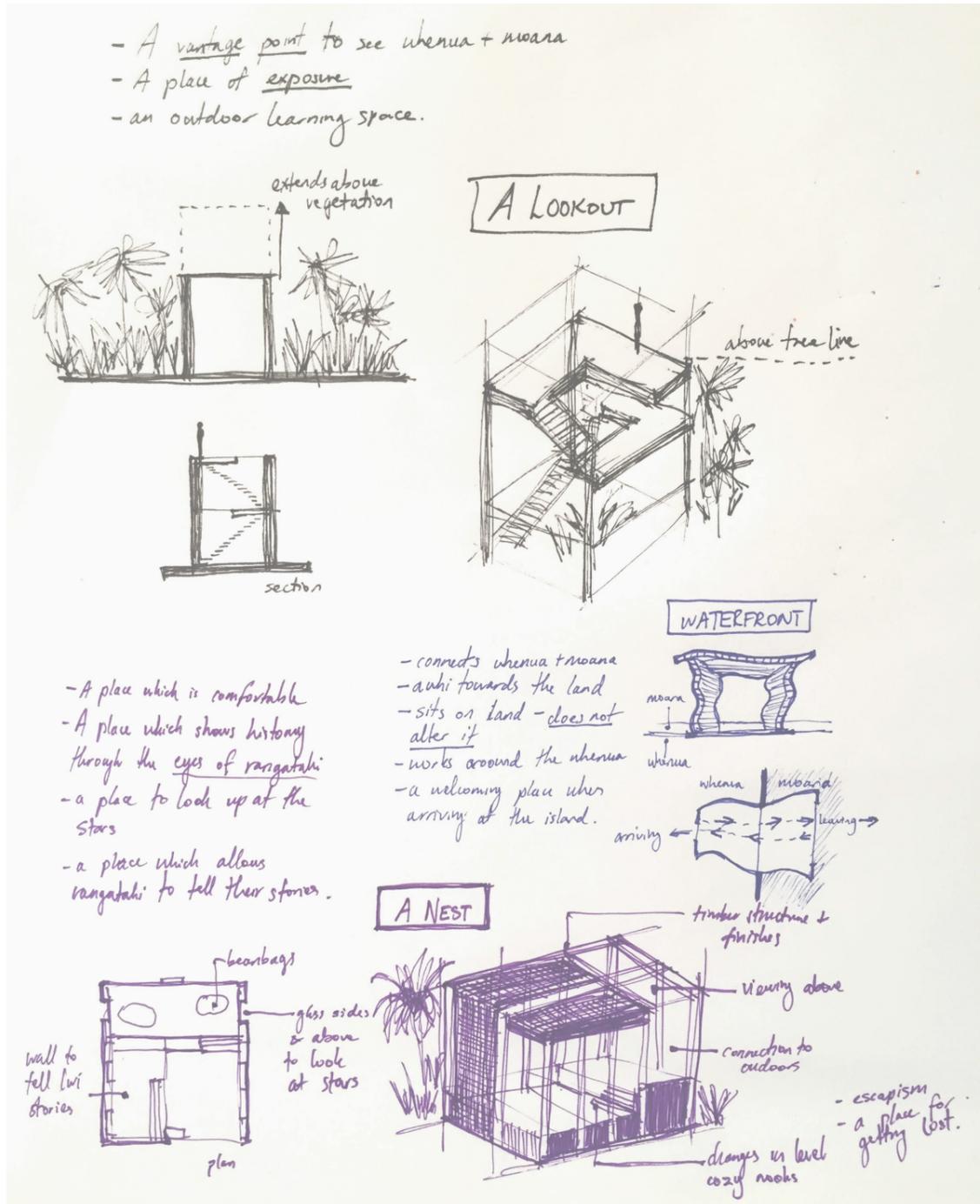


Fig.108 My interpretation of rangatahi spatial brief translations.



Fig.109 The Nest: a design potential in response to comfortable learning and the history of the space, with 'moving portraits' of rangatahi on the walls, telling the story of the space.

Fig.110 The Lookout: a design potential in response to outdoor learning, awahi towards the land and designing for vantage points of whenua and moana.

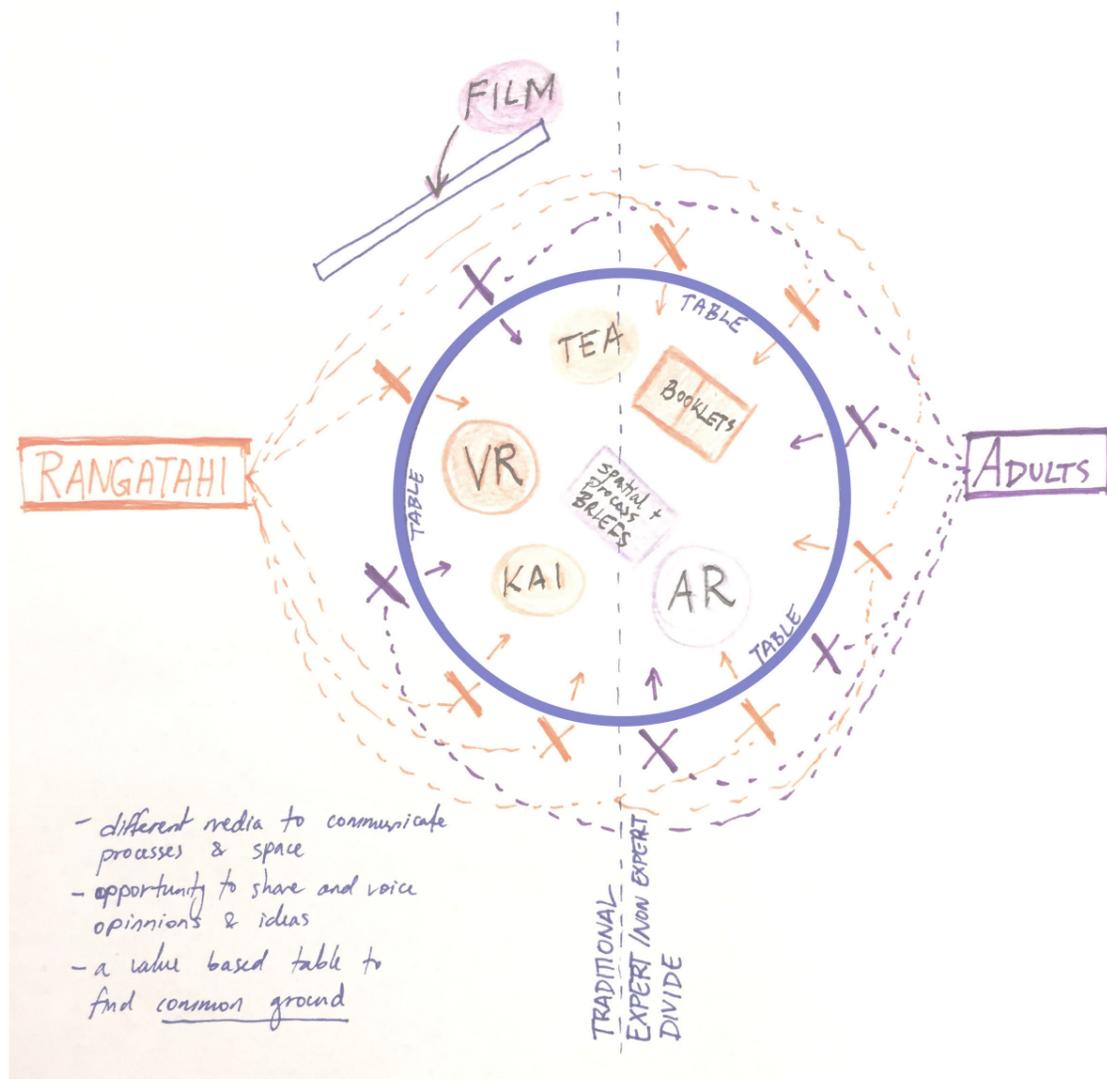


Fig.111 Wānanga table diagram.

Engagement Five: Wānanga

Location: TBD

The final engagement was intended to be a wānanga where stakeholders, Iwi members and rangatahi could discuss the future potentials of the project, with the hopes that it will be received as a political and social statement which addresses the needs of rangatahi. We intended to portray our collaboration so far in the form of a multimedia package. The aim was to centre the rangatahi in a setting where they can express their own ideas.

WĀNANGA: my interpretation of a wānanga for the rangatahi is a space to meet, discuss and consider the future of Ngāti Toa education spaces with architects, Iwi members, parents, partnering organisations and rangatahi all in the same room.

The posters (figures 112 and 113) depict the methods and processes for collaboration, along with two briefs; **the process and the spatial**. Alongside the existing spatial brief, a process brief was developed as an anchor for collaboration; it informs how collaboration activates the spatial brief.

The VR experience (figures 117 to 120) is an amalgamation of the design potentials I have interpreted from rangatahi translations of the spatial brief along with questions which prompt dialogue about the potentials of the space. It acts as a tool for **propelling communication and provides the wānanga's kōrero with a means to whakaari**.

The film documents our engagements thus far and acts as a testament to our collaborations. It sits alongside as the visual guide to the process brief.

Due to unforeseen circumstances and ethical considerations, we were unable to facilitate this within the timeline of our theses. This does not hinder us from hosting the engagement later on, as we are invested in seeing this through with rangatahi outside of our research and will facilitate this wānanga in the near future.



Fig.112 Visual of visuospatial language toolkit.

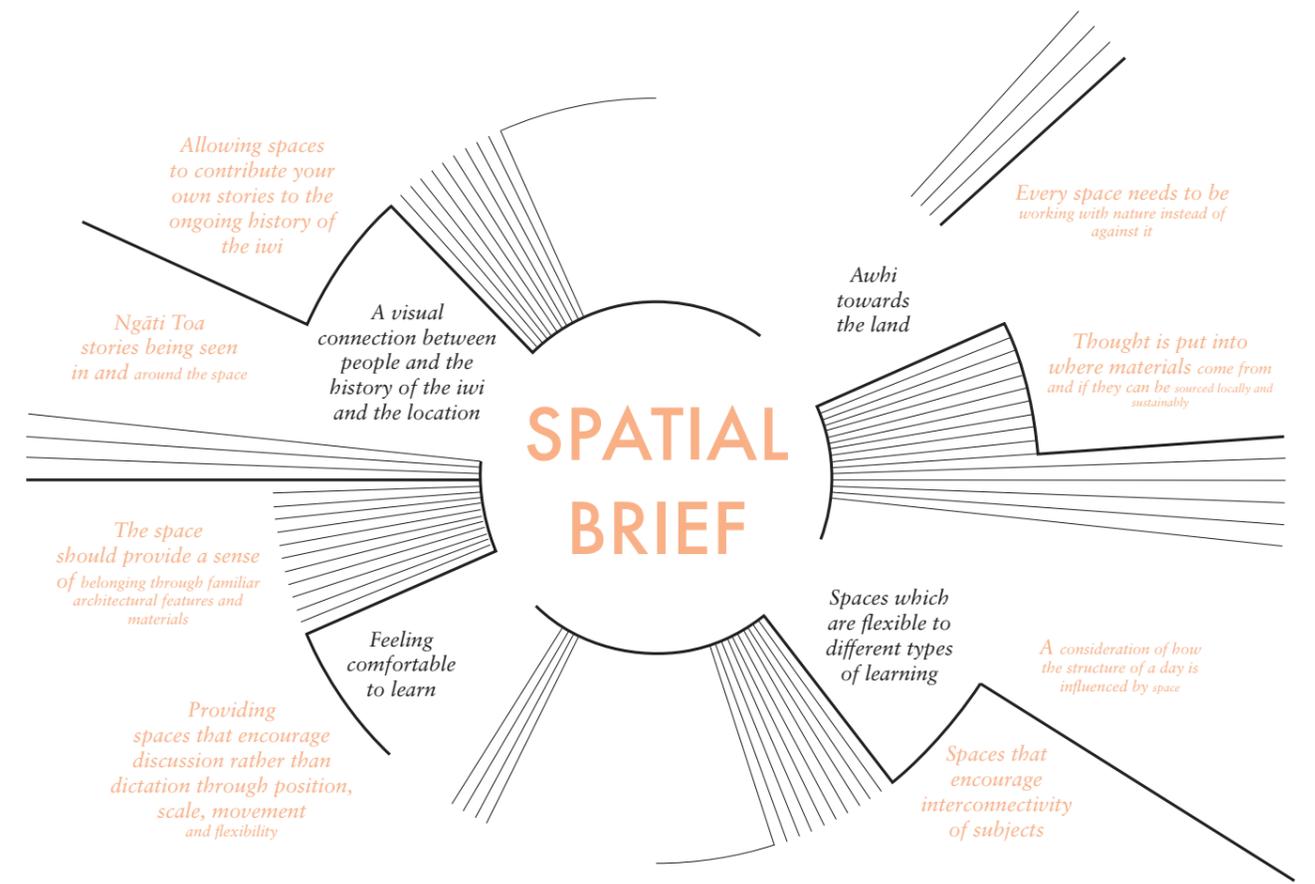
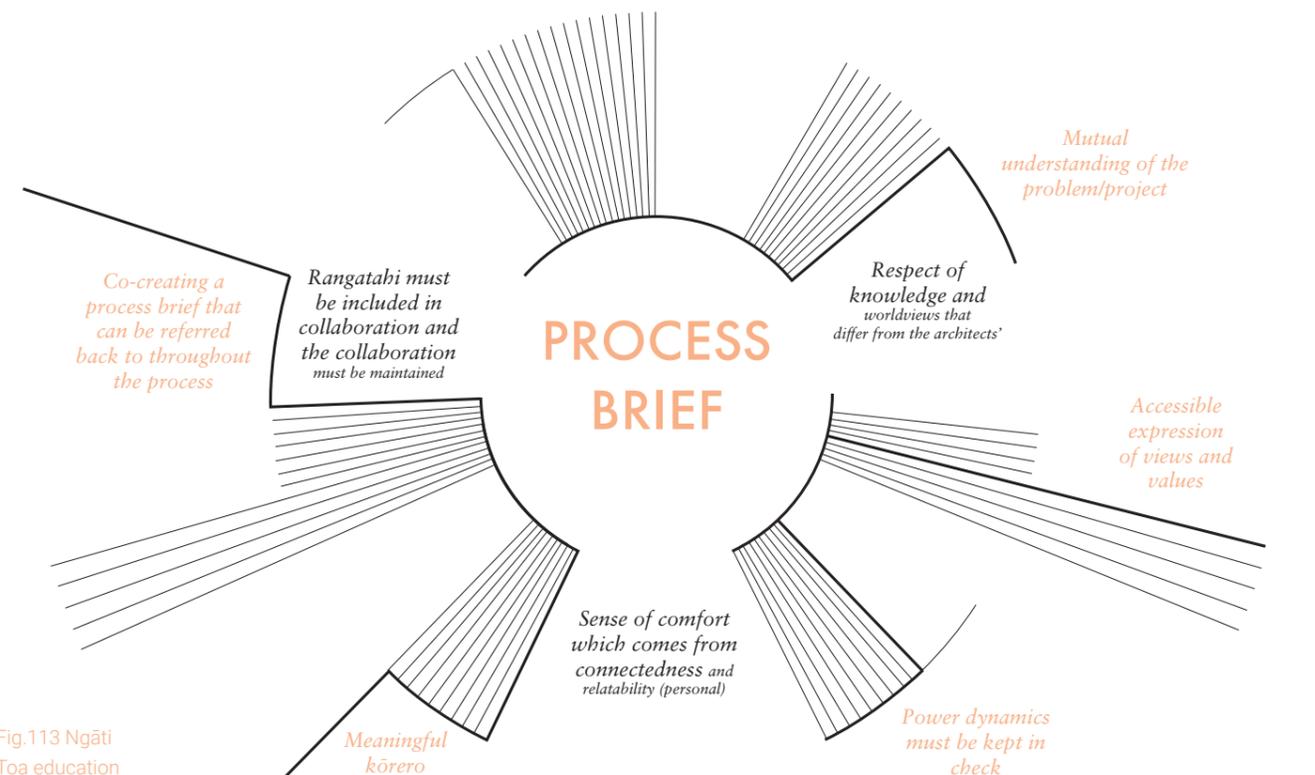


Fig.113 Ngāti Toa education space(s) brief package.



WHAT A visual connection between people and the history of the iwi and the location.

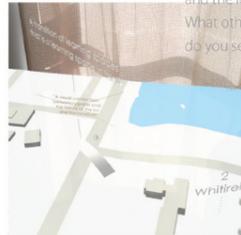
HOW

- 1) Ngati Toa stories being seen in and around the space.
- 2) Allowing spaces to contribute your own stories to the ongoing history of the iwi.

TRANSLATIONS



Do you think these two elements show "a visual connection between people and the history of the iwi and the location"?



What other opportunities do you see?

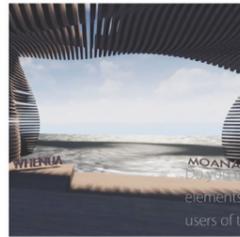
Spatial Brief for Ngati Toa Education Space

WHAT Awahi towards the land.

HOW

- 1) Thought is put into where materials come from and if they can be sourced locally and sustainably.
- 2) Every space needs to be working with nature instead of against it.

TRANSLATIONS



Do you think these two elements show, or allow users of the space to show, "awahi towards the land"? What other opportunities do you see?



Spatial Brief for Ngati Toa Education Space

WHAT Spaces which are flexible to different types of learning.

HOW

- 1) A consideration of how the structure of the day is influenced by space.
- 2) Spaces that encourage interactivity of subjects.

TRANSLATIONS



Do you think these two elements provide "flexibility for different types of learning"? What other opportunities do you see?



What other opportunities do you see?

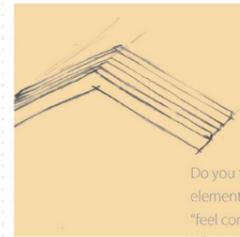
Spatial Brief for Ngati Toa Education Space

WHAT Feeling comfortable to learn.

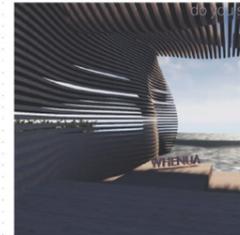
HOW

- 1) The space should provide a sense of belonging through familiar architectural features and materials.
- 2) Providing spaces that encourage discussion rather than dictation through position, scale, movement and flexibility.

TRANSLATIONS



Do you think these two elements could help people to "feel comfortable to learn"? What other opportunities do you see?



Spatial Brief for Ngati Toa Education Space

Fig.114 (Left and right) We re-formatted the Spatial Brief as drawing sheets to be a more approachable medium for rangatahi to draw and sketch on.

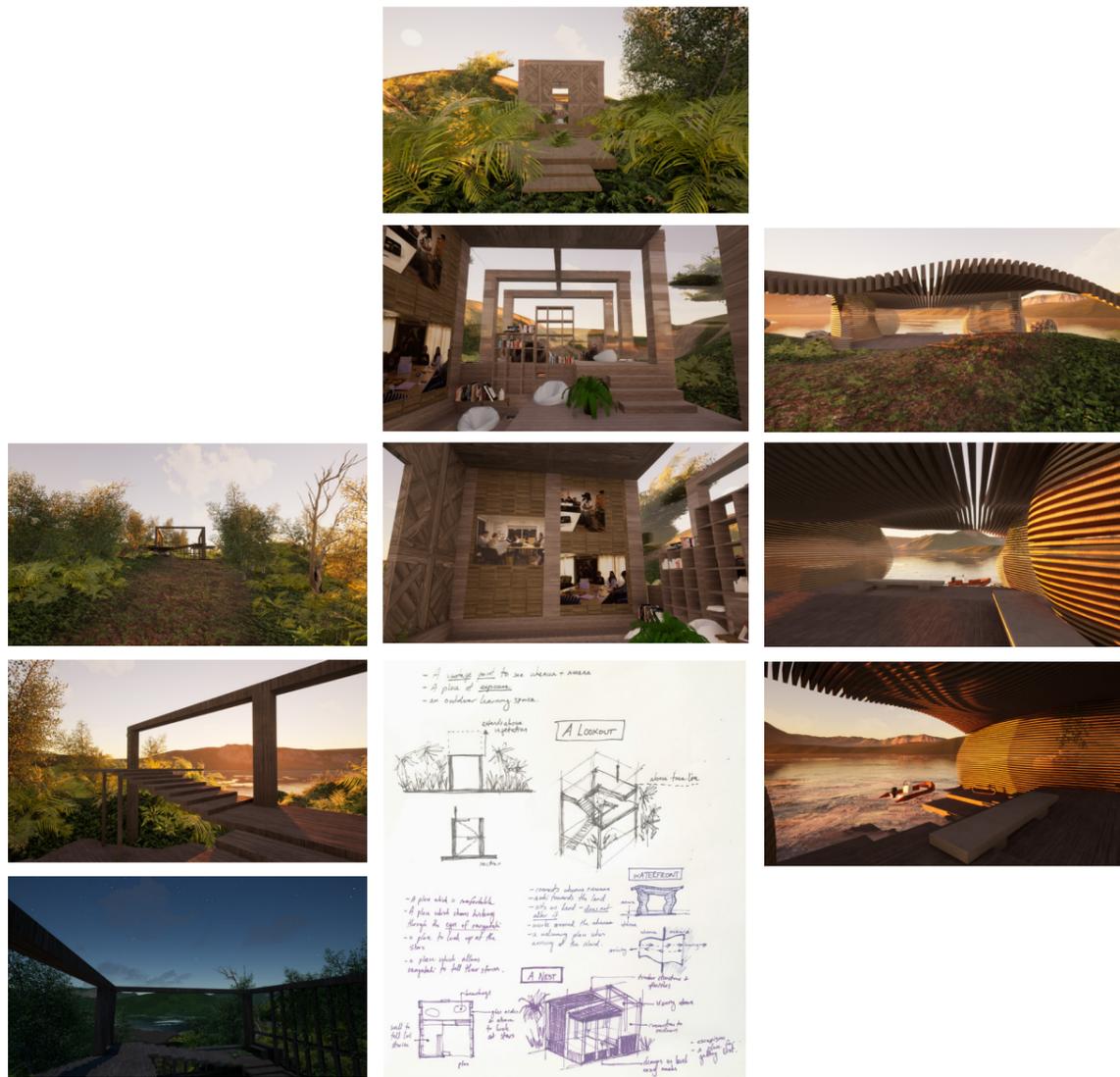


Fig.115 Grouping segmented design potentials into one virtual reality experience.

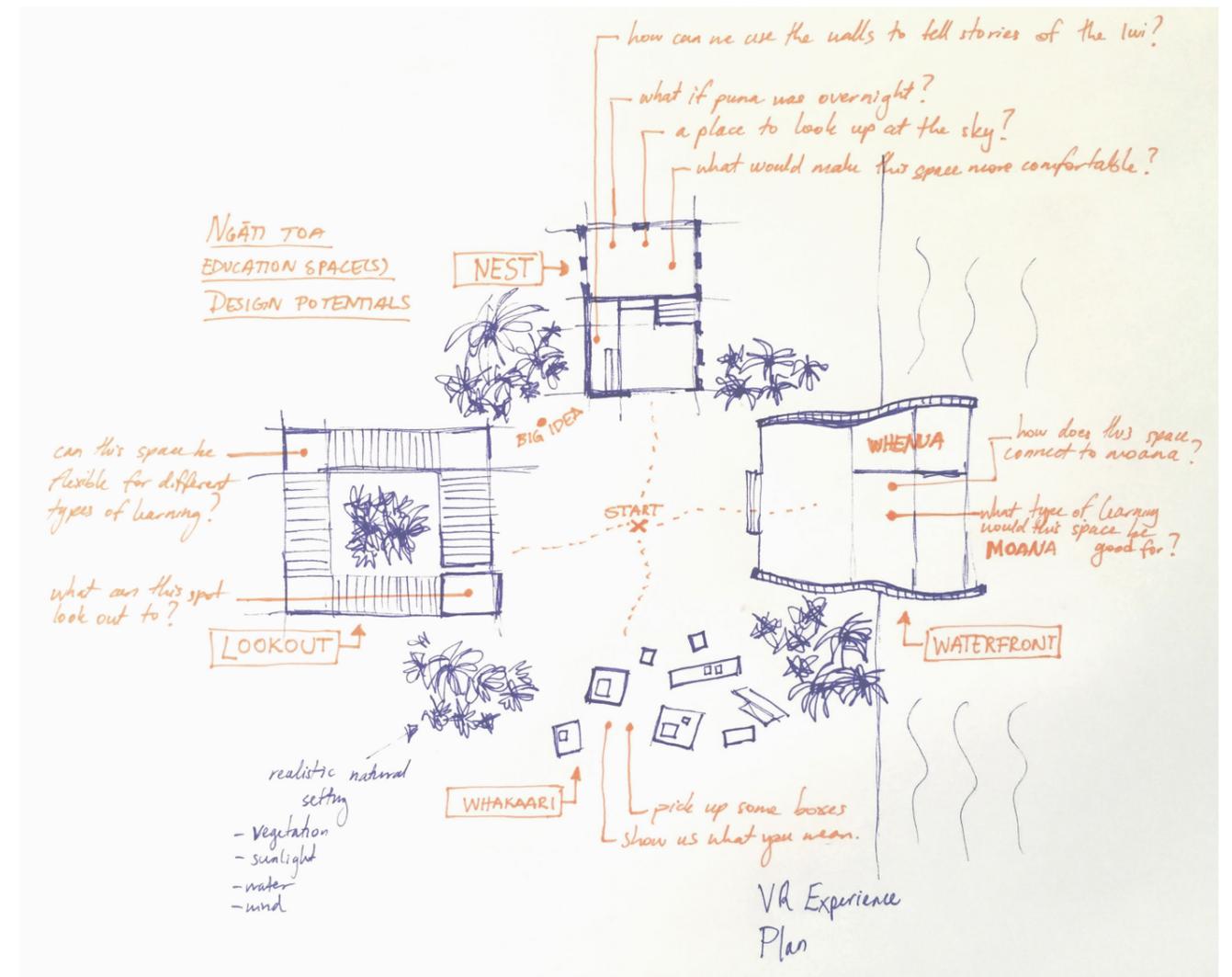
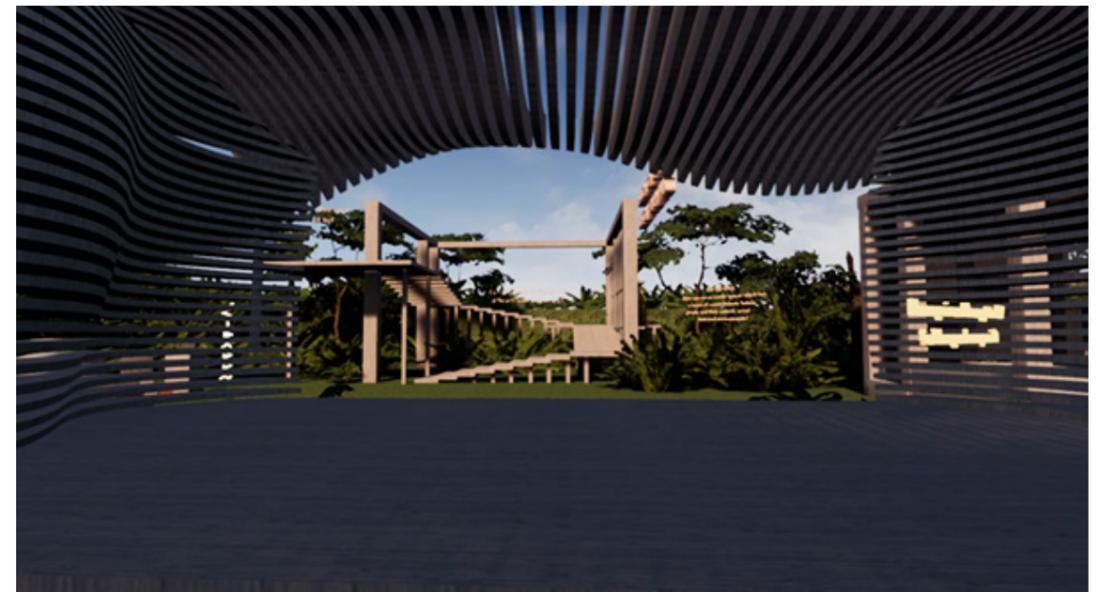
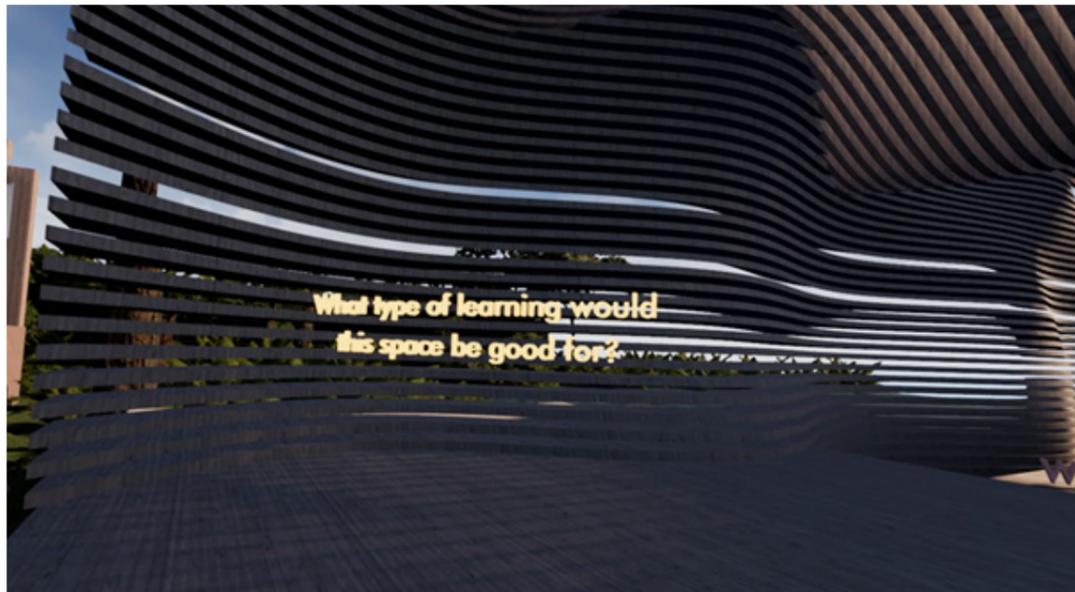
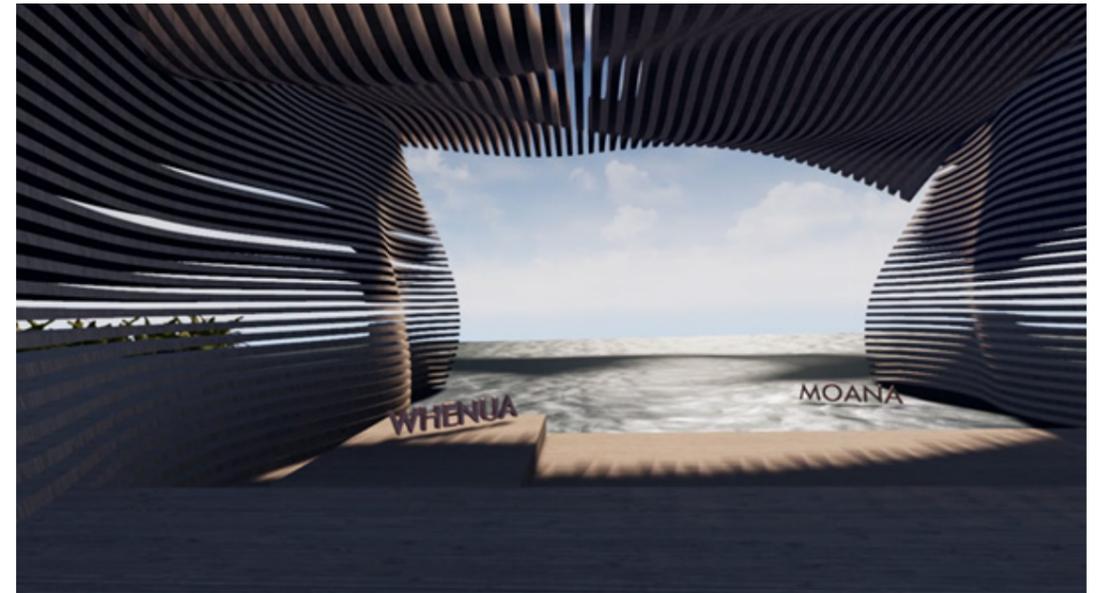
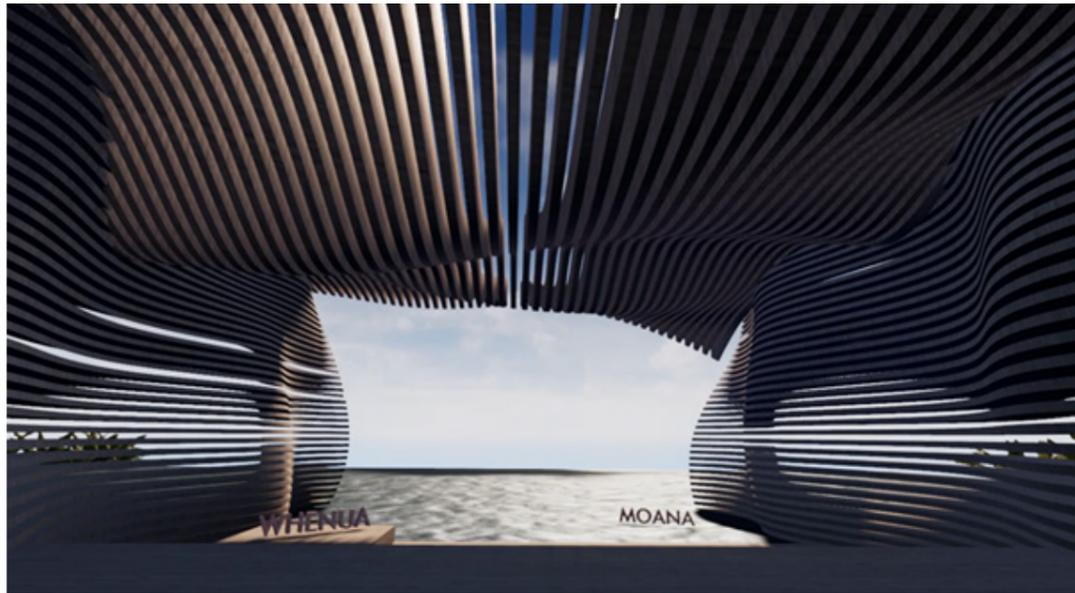


Fig.116 Diagram of virtual reality experience formations and questions that go along with them.



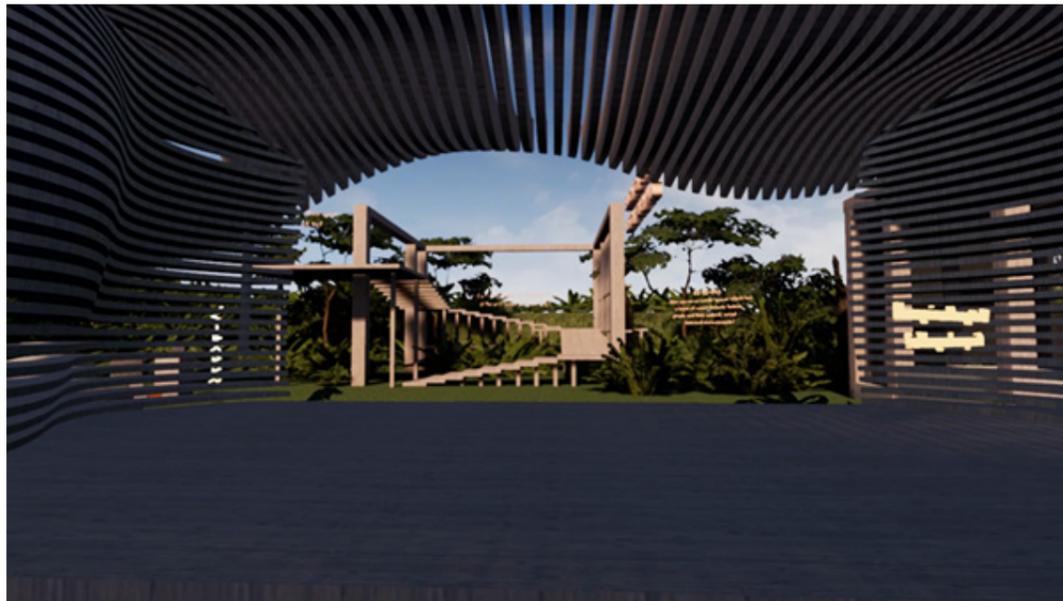
VR EXPERIENCE SHOWREEL
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Fig.117 (Left and right) The Nest education space design potential in virtual reality experience.



VR EXPERIENCE SHOWREEL
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Fig.118 (Left and right) The Waterfront education space design potential in virtual reality experience.



VR EXPERIENCE SHOWREEL
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Fig.119 (Left and right) The Lookout education space design potential in virtual reality experience.



VR EXPERIENCE SHOWREEL
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Fig.120 (Left and right) Whakaari station in virtual reality experience prompting rangatahi to use building blocks to communicate spatial ideas.

Lessons

Design potentials as catalysts for kōrero

Bringing the rangatahi to Te Aro Campus was a pragmatic way of immersing them in an education space which they can tangibly criticize. It was a great opportunity for rangatahi to have a physical example of an education space from which they can begin to form ideas, critique, add and subtract.

In virtual reality, this worked successfully; much like the Youth Learning Centre game, the VR experiences in this engagement propelled spatial understanding by utilising a visuospatial language. Saggio (in Borries et al., 2007, p. 398) states “**the importance of virtuality [...] lies not in how they can help create newer, better virtual worlds, but in how they can be returned to materiality and inspire a new type of architecture.**” It worked successfully because it provided an idea without any commitment to that idea being ‘the final design.’ It provided rangatahi an opportunity to give feedback and voice their own creative inputs, additions or subtractions.

Whakamā

Seeing the impact self-criticism has on rangatahi was eye-opening for me. Whether it was because of the presence of adults in the room, or just not being able to see themselves as creative people, being anxious or ashamed to express ideas is the moment collaborations stops flourishing between rangatahi and architects.

WHAKAMĀ
to be ashamed,
embarrassed.

There was one particular instance where Kaleb had experienced a design potential in VR and we were having a very robust conversation about how he would alter it spatially to suit his learning. After admitting that he is enjoying collaboration, he claimed that his setback was that he “**can’t draw.**” Rangatahi have their own conceptions and prerequisites for themselves to participate and try. Whether it is **internalised adultism** or if rangatahi are **whakamā** or uncomfortable about sharing, architects need to accommodate and replenish this confidence in order to foster a comfortable environment for collaboration.

Kai

On the topic of comfort, sharing can only happen when rangatahi are comfortable enough to do so. At every stage of our engagements, sharing a meal at any point proved to be a leveller; **the most relaxed, honest conversation occurred around the dinner table eating a hearty meal**, eating snacks on the go or on the floor eating ice cream.

Messiness

If we are talking about the ‘messy’ front end of design, then we need to **embrace the mess**; having something too refined early on is only bringing solidity to ideas which have not been fully formed yet. The glossiness of the paper in engagement four was a clear example of how something too refined early in the process can **derail the willingness of rangatahi to participate.** Messy methods like writing on scraps of paper and doing the ‘boxes’ activity proved to be far more engaging than a refined booklet.

NGĀTI TOA ENGAGEMENTS SHOWREEL

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(a) Mana ki te Mana Process

Collective contribution

As a means to formalise our collective lessons, Ellie and I translated our findings into a process; based on collective reflections we realised there was a need for the briefs to be simple, yet robust. We developed what we hope to contribute to the architectural profession; A Mana ki te Mana Process.

A Process

It is a formalised process which provides another way for architects to pursue decolonising architecture, primarily focusing on the collaboration between architects and rangatahi. It encompasses what needs to occur in order for knowledgeable kōrero to occur and proposes a back and forth process of using spatialising tools to co-design 'process' and 'spatial' briefs (figure 121). These are live documents, which are allowed to evolve as the process does.

The process does not intend to deliver a predefined method nor does it have a procedure that everyone must follow. It aims to provoke more consideration about the way architects pursue collaborating and provides innovative ways of using spatialising tools to propel this.

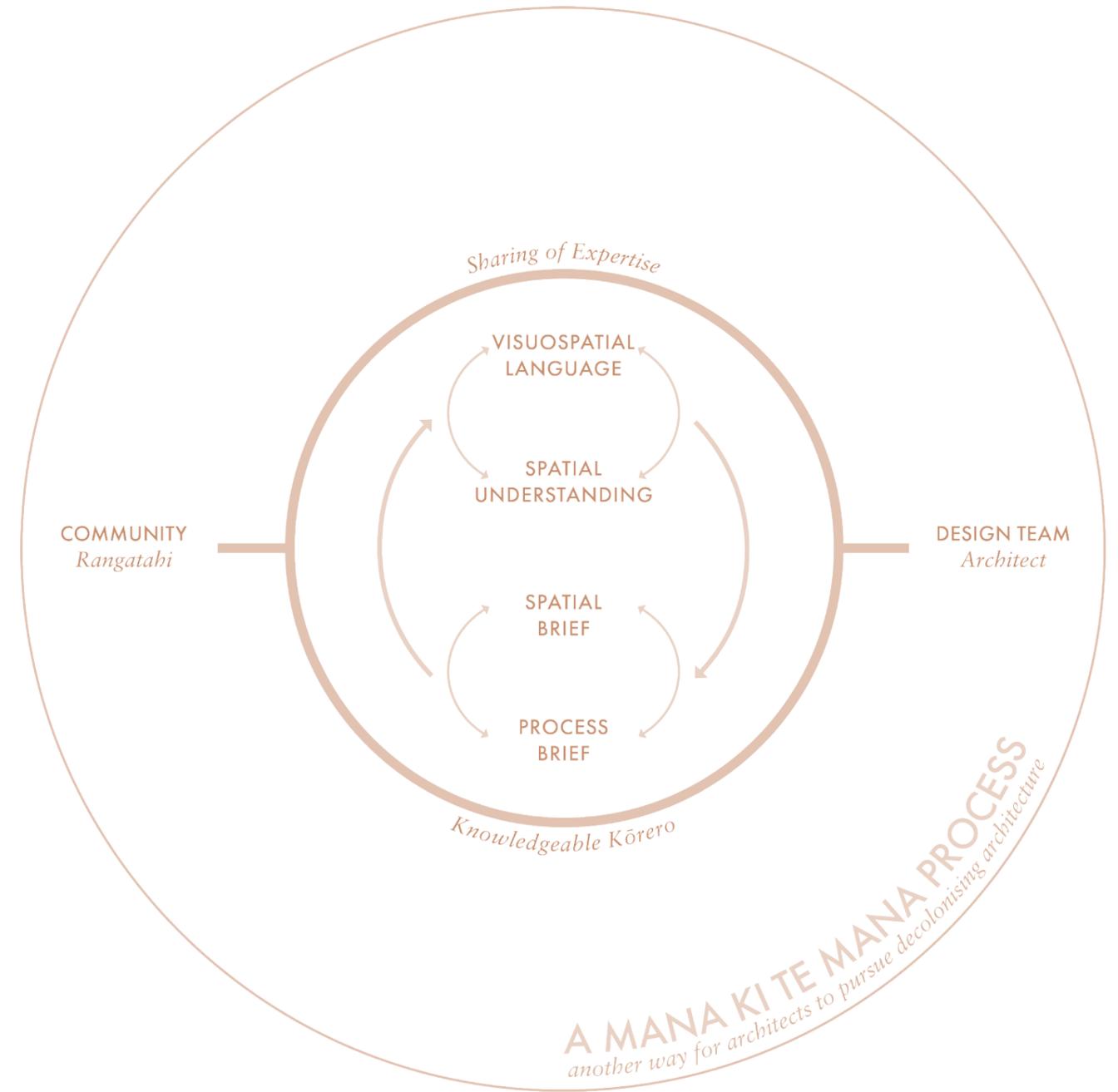


Fig.121 A Mana ki te Mana Process diagram.

A Table

As a physical embodiment of the journey that got us to the process, the table (figure 123) depicts the three incubator projects, along with the process, the tools, methods and kai that it took to make them happen. The table was laser cut and assembled to show a curated process and the tools which assist it.

Incubators one and two lead into the findings of incubator three, where over the course of five engagements with Ngāti Toa rangatahi, we have designed tools for engagement, alongside briefs that ensure continuity of engagement once we have left the project. Bridging the communication gap between rangatahi and architects earlier is essential to brief building and this table shows just some of the ways kōrero, kai and immersive tools can help bridge that gap (figure 122).

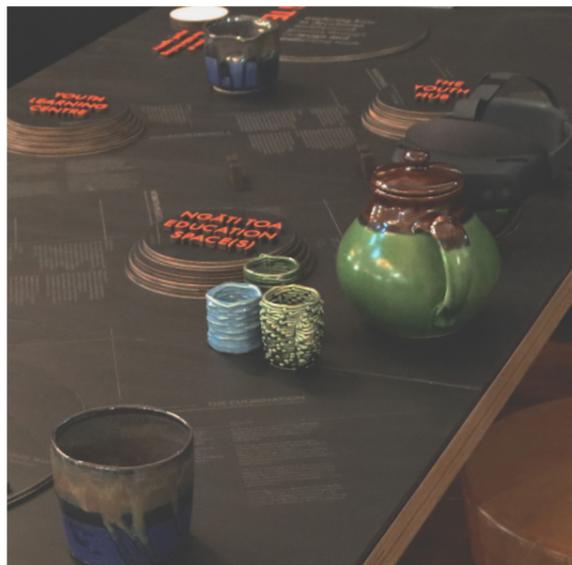


Fig.122 A Mana ki te Mana Table with equipment, tea and kai. Cups generously donated by Luke Ransfield and Hamish Morgan and bowls by Rebecca Kiddle.

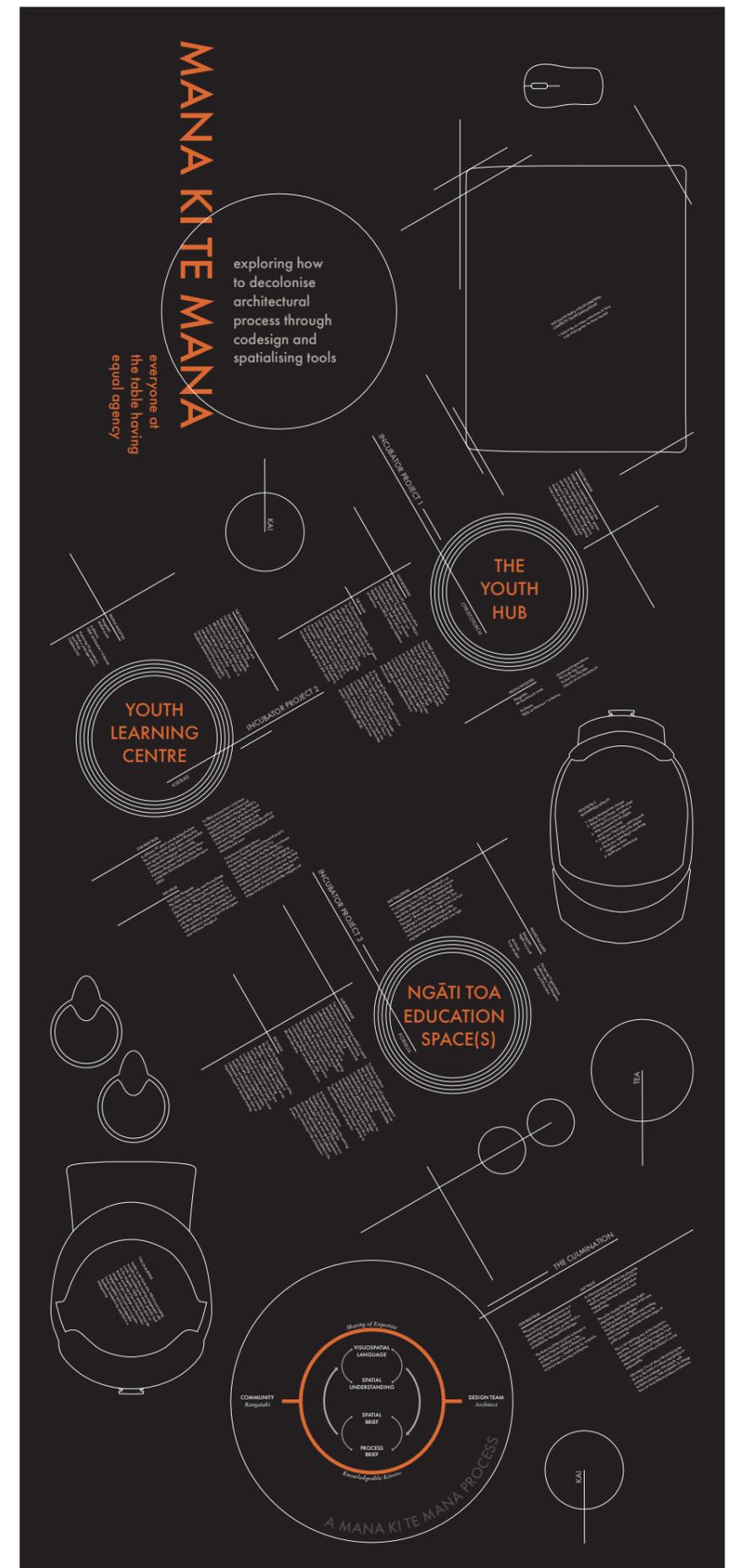


Fig.123 A Mana ki te Mana Table.



Fig.124 Creating the table in the Te Aro Campus workshop: it involved painting, laser cutting, sanding and assembling the table



Fig.125 Ellie preparing equipment in workshop.

Fig.126 Table topper with equipment.



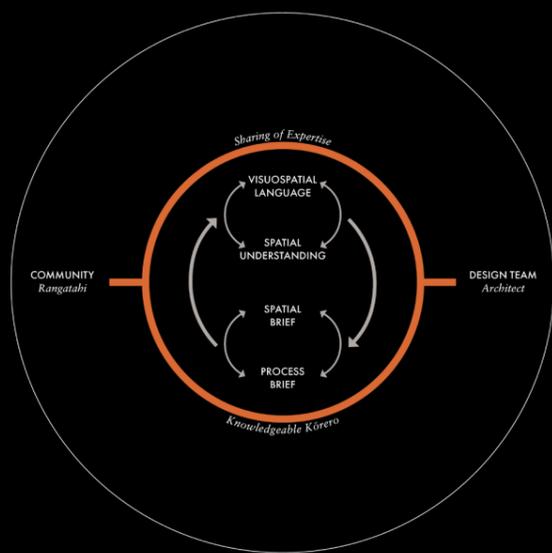
USING A MANA KI TE MANA PROCESS

Through designing experiences in spatialising tools, we can create visuospatial languages that catalyse spatial understanding earlier in the architectural process.

The continuous interchange of visuospatial languages and spatial understanding has enabled Ngāti Toa rangatahi to share their expertise in an empowered way.

A spatial and process brief have begun to be co-created in which values have been spatially translated and explored further via design potentials.

While the ongoing to and fro of spatial understanding and brief building will continue to define the project details, our next steps will be to bring other parties to the table to join rangatahi in conversation.



WHAT DO NGĀTI TOA RANGATAHI SEE FOR THE FUTURE OF EDUCATION IN PORIRUA?

To have an education 'space' that creates a sense of connectedness between people and natural, social and historical environments. Through this connectedness, this space should nurture openness to multiple ways of learning and encourage a sense of kaitiakitanga over the physical space and the ways of learning.

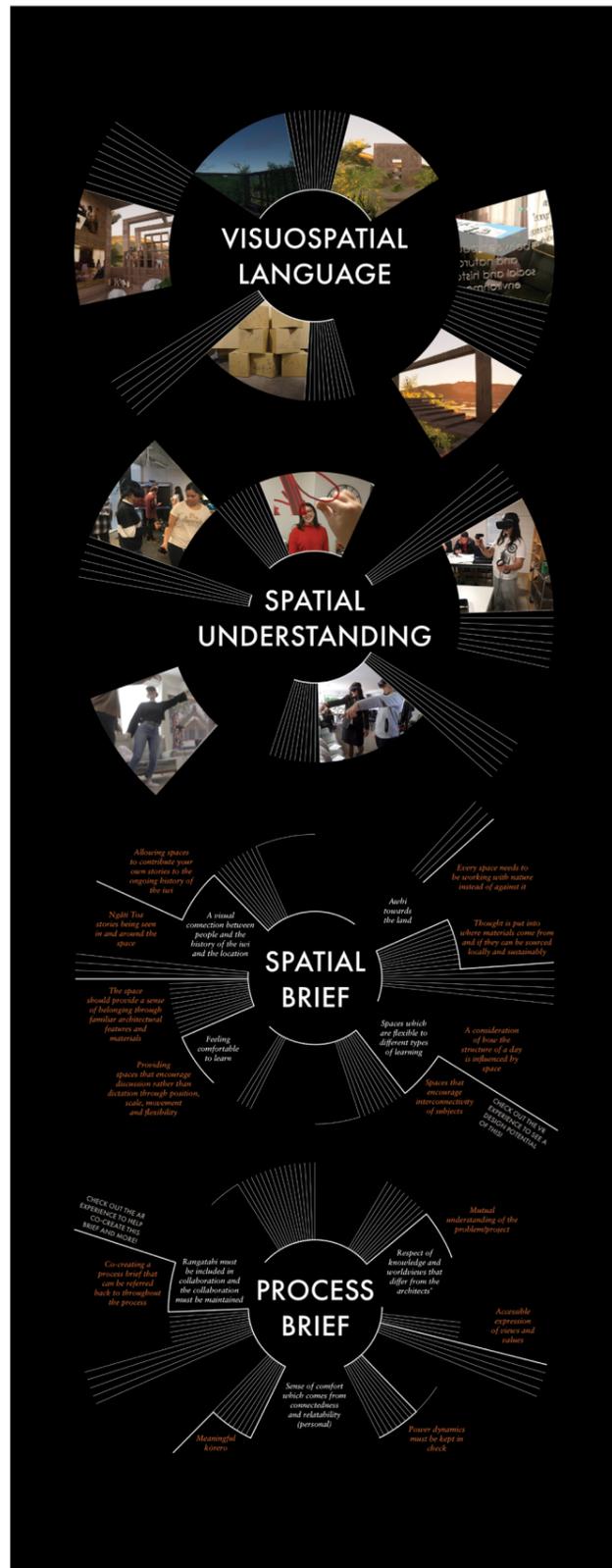


Fig.127 (Left and right) Posters of A Mana ki te Mana Process and Briefs package.



BUILDING THE BRIEF

Takapūwāhia Puna

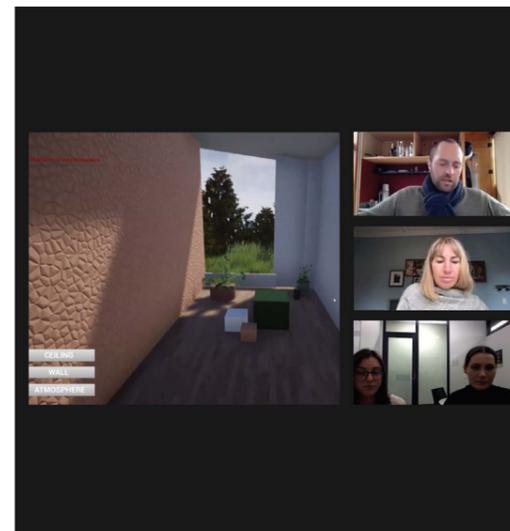
Using augmented reality tools to spatialise while co-creating briefs.



EXPLORING SPACE IN VR

Takapūwāhia Puna

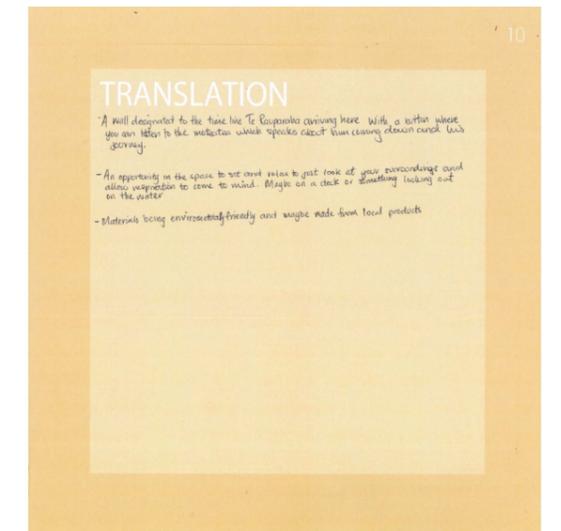
One of our first engagements with Ngāti Toa rangatahi. We explored virtual and augmented reality tools to start conversations about space.



COLLABORATING REMOTELY

Zoom meeting with FIELD

Creating the Youth Hub PC game required regular to and fro online meetings during and after COVID lockdown.



RANGATAHI TRANSLATE

Takapūwāhia Puna

Rangatahi translation response to what "a visual connection between people, the history of the iwi and the location" could mean in an education space.

Fig.128 (Left and right) Small process 'Polaroid' posters.

Reflection

Given that in all of our engagements, kai and kōrero at a table facilitated the most honest conversations, it felt *natural that A Mana ki te Mana Process would be embodied by a table*. When we were representing Te Herenga Waka at the **Te Kāhui Whaihanga Resene Student Design Awards**, asking the judges to sit down with us shifted the feeling from examination to conversation; it provided a spatialised common ground where discussion can occur. It was also our intention to bring Ngāti Toa rangatahi with us, to sit at the table alongside the judges; this unfortunately, was not able to happen.

The response from industry professionals was positive overall; they shared enthusiasm about the possibilities of the projects and the *need for processes such as these in the profession*. Part of our presentation was asking them to put themselves in the shoes of rangatahi and to think about how these processes might be empowering for rangatahi at this table.



Fig.129 Rangatahi using VR tools in our installation space.

Although this is an adult-centred event, by chance, a *visiting group of rangatahi on a field trip came through to see the installations* (figures 129 and 130). I was excited when I saw that they surrounded our table, wanting to try the games, VR and AR tools; it was a

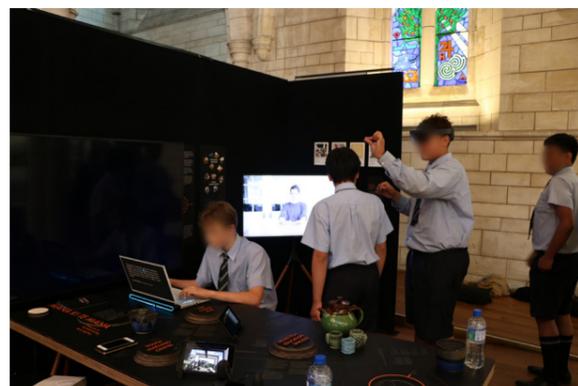


Fig.130 Rangatahi using AR tools and PC games in our installation space.

testament to the enthusiasm about immersive tools and play which we have been speculating over the course of the research. Prerequisites should not hinder rangatahi from participating in architectural processes. Agency is part of the larger conversation surrounding decolonisation and it is this agency that enables truly powerful collaboration with youth.

Although it subverts traditional notions of the role of the architect, this process does not undermine the architect's expertise; it adds to it. Ellie and I believe that designing how people have a relationship to space is just another valuable form of expertise and an important element of the profession's social responsibility.

"Because ultimately, it is not about decolonising the door or the lintel; it is about changing how architecture engages with people, with tangata whenua, with rangatahi, to change how we as architects produce architecture (Ransfield, Homolja and Tuckey, 2020).



Fig.131 A Mana ki te Mana Table installation space was a multimedia experience.

MANA KI TE MANA

exploring how to decolonise architectural process through codesign and spatialising tools

everyone at the table having equal agency

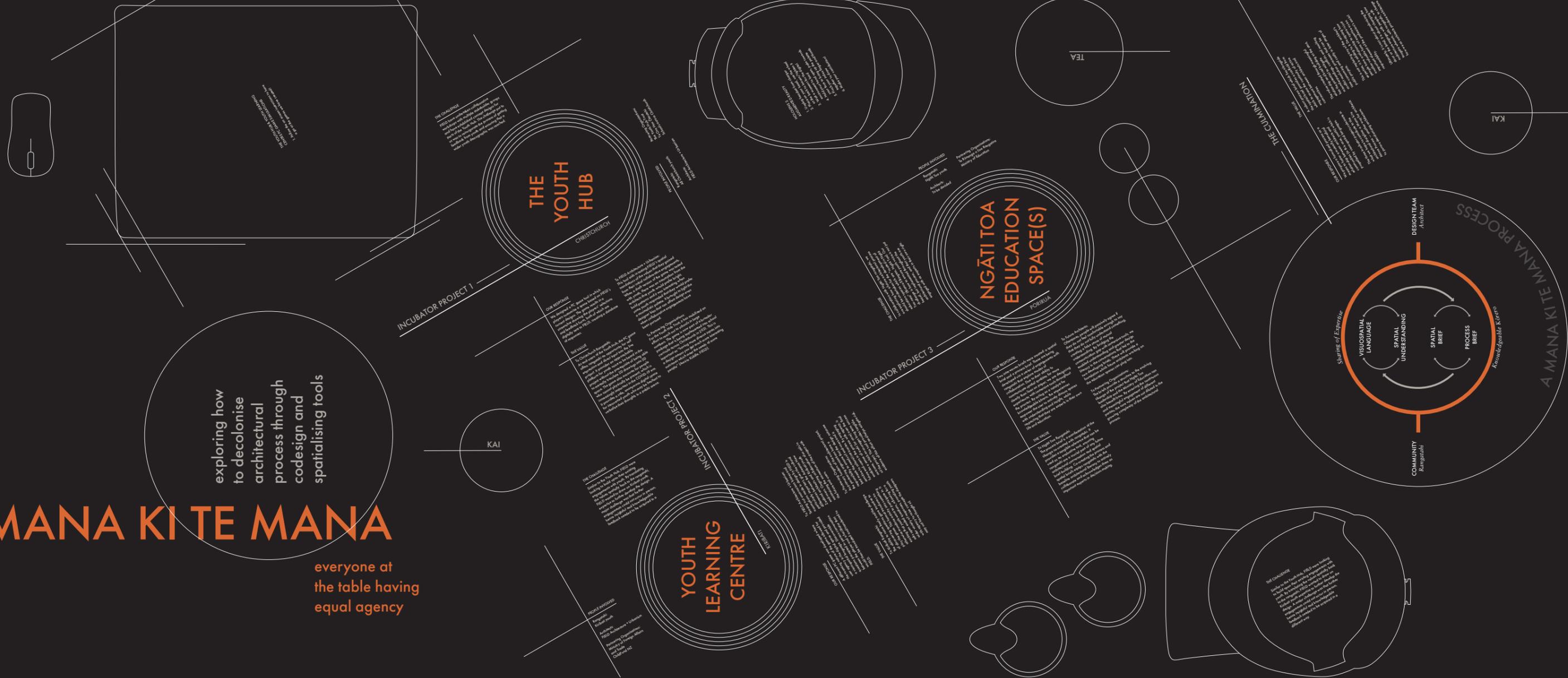


Fig.132 A Mana ki te Mana Table.

Critical reflection and findings

Discussion

This section revisits the research question and discusses it in relation to the learnings of previous chapters. It looks at the branches of inquiry established at the beginning of this research and addresses the **emergent learnings** acquired throughout the **three incubators and A Mana ki te Mana Process**.

Rangatahi agency

Rangatahi agency revolves around empowerment in the process and placing rangatahi in decision-making roles. The tools we have developed activate this agency in different ways and on different levels. While we have not seen the full impact of the two PC games yet, it is evident in incubator three; many of the Ngāti Toa rangatahi have said they cannot wait to be on the **walls of their education space, showing other rangatahi how they were part of the team that made it**.

Finding **commonality** with rangatahi is necessary for rangatahi to feel comfortable enough to share. Establishing common values and getting amongst each task is crucial; a lot of the time, we did the same activity as the rangatahi, answered the same questions and ate the same kai. Particularly the third incubator, the robustness of this empowerment was

driven by the level of engagement and the **amount of time spent with rangatahi**.

A number of encounters with rangatahi feeling ashamed to share made me consider rangatahi experiences with **internalised adultism**; it manifests as self-criticism which causes youth to “question their own legitimacy, doubt their ability to make a difference” and perpetuate a “culture of silence” among young people (Checkoway, 1996, p. 13). In reflecting on my own positionality as an adult, one account that particularly stood out to me was Amiria Kiddle’s comments on working with introverted youth. Not all rangatahi are willing to share, but that should not exclude them from being amongst these discussions. **It is part of the role of the architect to use tools and methods to accommodate rangatahi who might not want to outwardly contribute**. The success of the games we have developed lies in the fact that it does not “matter if you’re shy, it gives everyone a chance to feedback” (Kiddle in Just and Kiddle, 2020).

By imbuing reality with their own knowledge, rangatahi can begin to shape it. **Agency is abundant, but is dormant until it is activated in the right way, by the right scenario and with inclusive methods**. This curiosity can be valuable input into design processes; once adults begin to actively nurture the idea that “all people are creative” (Sanders and Stappers, 2012), they can begin to unpack the potential power imbalances which hinder connection between them and rangatahi.

Awhi as part of architectural expertise

It is part of the role of the architect to co-create processes in a transparent, inclusive way. The process of **othering** end-users creates a bubbled perspective where your expert brain tells you that a rangatahi nod is enough validation, leaving behind a plethora of

information about that rangatahi's lived experience.

Rangatahi participation does not rely on rangatahi alone, but involves the **architect practicing self-reflection**. Part of my exploration of youth agency has been acknowledging rangatahi knowledge and acknowledging where my knowledge is limited. From a pedagogical perspective, although my role was to teach rangatahi about spaces, the teachings were reciprocated by rangatahi. In incubator three, by teaching and also being “taught in dialogue” with rangatahi, we became “**jointly responsible for a process in which all grow**” (Freire, 1993, p. 61). The generative research and collaborative inquiry within the methodology enabled our collaborations to become incubators for co-creation of knowledge, rather than merely “depositing ideas” onto rangatahi (Freire, 1993, p. 70).

From a constructivist perspective, this approach allows rangatahi and architects to “actively construct or make their own knowledge” in a reality that is determined by our “experiences” (Elliott et al., 2000, p. 256). Constructivist ideas stem from the belief that rangatahi learn through experience and that it builds on their prior knowledge and perceptions of the world.

The space in which collaboration with rangatahi happens is crucial for good outcomes; being at eye level, being seated at the same height and sitting together on the floor are all small but effective ways architects can create levellers spatially. Architects need to be advocates for this level of engagement and to actively pursue it.

There are many roles that the architect can take when working with rangatahi; one factor which must remain central to the process is **responsibility, accountability and awahi**. Part of the community architect's toolkit now includes masks, sanitizer

wipes and hygiene products and adhering to any regulations for awahi towards health (figure 133). This awahi extends to ethical considerations and ensuring the research is of rangatahi's best interest. Awahi towards youth agency means being actively pro-youth agency; it involves actively engaging with conversations about power dynamics and ethical issues concerning the architectural process, namely, who gets to have a seat at the decision-making table.



Fig.133 The Architect's VR toolkit expanded to just the headset and controllers, now including hygiene covers,

Live projects with industry and rangatahi

Throughout this research, the incubators have allowed us to apply practical methods to our theoretical frameworks and work alongside rangatahi in a variety of ways. These lessons would have been hypothetical had we not engaged with FIELD and Ngāti Toa rangatahi in real scenarios; the live **engagements brought a tangibility to the processes**.

I acknowledge one of the limitations of this research is that these processes encompass design only at its conceptual phase. They are, however, grounded in real collaborations, which have made some level of positive impact on rangatahi and architects in industry. These tangible outcomes and tools reflect on the importance of **architectural process** and the impact redistribution of agency has on them. These collaborative explorations have “small beginnings which have ‘emergent’ potential” (Hamdi, 2004, p. xx).

The experience of working with both rangatahi and architects has been incredibly rewarding. To any students who want to undertake community research; if you are unsure your work will translate into the community or into industry, **consult with community members and industry professionals, if not seriously consider collaborating with them**.



Fig.134 Tuckey's (2020) observations about rangatahi and decolonisation; this was in response to her own struggle with grappling with decolonisation and her role as an architect.



Fig.135 Sentiments on prerequisites for rangatahi and the role of the architect.

Emergence, malleability and failure

Embracing obstacles as part of the process was central to this research. Viewing 'failure' as an opportunity for improvement became an **iteration** rather than an outcome.

The evolving architect's role is one of **malleability and willingness to bend to emergent obstacles without sacrificing the integrity of others**, particularly in the COVID-era of collaboration. Engagements do not need to be polished; everything is a work-in-progress and anything more can be intimidating and disengaging for rangatahi. Hamdi (2004) suggests that the architectural profession is transforming and shifting "**in favor of informed improvisations, practical wisdom, integrated thinking and good judgement based on a shared sense of justice and equity**" (p. xxii). and emphasises that placemakers have a role in "building livelihoods" as well as spaces (Hamdi, 2010, p. 185).

For those pursuing community work, be prepared for things to change constantly and for nothing to go to plan; embrace emergent lessons instead of rigid protocols. Expand your communication toolbox; if you are new to the tools, get to know a software developer or give yourself the time to learn them. **Practice in an interdisciplinary way; that is what the world will ask of you anyway.** Do not make the process glossy or polished; everything needs to be a work in progress, otherwise you are concluding something which has only just begun.

Value based processes

Standardised engagements bring inflexibility, finality and linearity to something that can **thrive from chaos and serendipity**. A Mana ki te Mana Process revolves

around embedding values into briefs which lead to those values manifesting in architecture. The lessons I have taken away from working with rangatahi is that processes such as these need to be established **early** in order to set the scaffolding for collaboration. It also involves using processes which are tailored to place rangatahi at equal mana to the architect. A Mana ki te Mana's process and spatial briefs address this - it is about creating the process which fosters rangatahi agency, decolonisation and inclusivity which **leads to empowerment in architecture**.

Kōrero and whakaari

One of my favourite words I learned this year is '**verisimilitude**', or the 'lifelikeness' of something that is not real. It is the representation of the 'trueness' of a thing or an idea. Verisimilitude in architectural communication relies on the type of visuospatial languages we use to ensure visuospatial understanding in rangatahi. Since language and translation are subjective, we cannot know how youth interpret them. This is where agency and perspective important. An plan or section is framed for you too look at from a particular perspective. A video incorporates movement, but it is still curated and you are still being told where to look. **Immersive tools offer agency in movement and are a catalyst for agency in communication.**

This project capitalises on the emergent spatialising qualities of immersive tools to enable rangatahi to express ideas and begin design conversations on a level playing field. Sanders and Stappers state that "new information and communication technologies are connecting people to each other and facilitating collective thinking and doing" (2012, p. 8). In the Youth Hub Game, the interactive component of the survey facilitates "speed and growth of direct feedback from communities of players" (Folmar, 2015, p. 5). In the Youth Learning Centre game, play and curiosity are used as motivation for kōrero, propelling

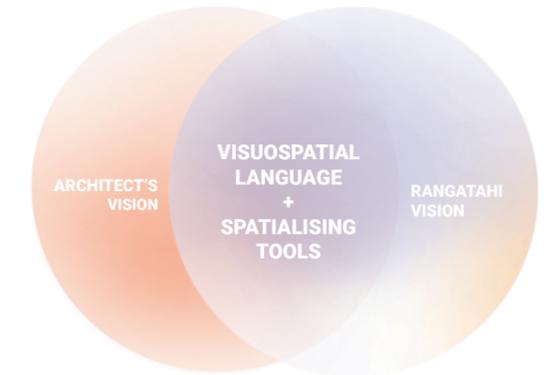


Fig.136 Commonality on the shared vision is fueled by visuospatial languages, propelled by spatialising tools.

conversation about space. Ngāti Toa education spaces were explored using matihiko tools such as VR and AR for ensuring architects' translations can be understood and critiqued; by doing so, **these processes allow rangatahi to engage in complex design ideas without the prerequisite of being able to translate 2D drawings into 3D space.**

I am strongly driven by the idea that these prerequisites can be mellowed out by using the right type of architectural language, at the right time, and with the right intention. In this research, the incorporation of 'play' into architectural discourse has been powerful. **By turning a mundane activity into an exciting one**, for rangatahi, play can become a "habitat for creative collaboration" (Bayram, 2010, in Birch et al., 2016, p. 250).

As an architect, being a dexterous language user (verbal or visual) is part of being an effective translator of spatial ideas. As Kake states:

"The role of the architect is reframed as skilled facilitator and interpreter rather than artist or author, drawing upon their technical, social, and cultural expertise to empower people to take a pivotal role in design of their own communities through participatory design processes and consensus decision making" (Kake in Kiddle et al., 2018, p. 167).

Tautoko in academic collaboration

Despite what some have told us, it is easy to collaborate when you have a common passion. My collaboration with Ellie was not just about having 'double the output' of a traditional thesis. It was

about **accountability, robustness, reflection and a mutual passion** for exploring architectural processes alongside the end-uses.

I will be honest, it takes a tremendous amount of effort and time to collaborate; just the sheer amount of checklists, notes, emails, confirmations and cancellations we had to work around was challenging. The outputs however, were richer than they could have been had we worked individually; we were driven by our synergy and accountability towards the project.

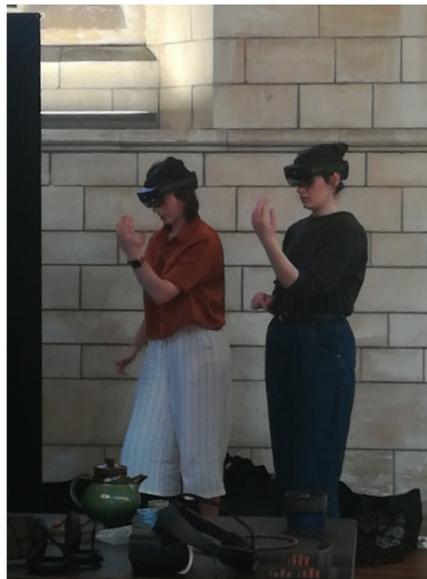
The accountability in our process was evident at each stage of our research and engagements. Our cooperative inquiry enabled us in “triangulating” (Yip in Martens et al., 2018, p. 5) rangatahi design ideas; through ethnographic field notes, creating design potentials and interpretation of emergent improvisation. We questioned and reviewed each other, ensuring we were coming back to the core of the project. **We would refine the work as it progressed, practicing the studio culture that will inevitably meet us once we enter the industry.** For rangatahi, this meant

that the research was done in the spirit of awhi, through careful consideration and negotiating what is best for them.

The purpose of our collaboration is a form of tautoko (support) and arotakenga (critique), in order to maintain a self-reflective ethos. Peoples lives matter more than my research, hence, considering wellbeing outside of what our ethics application stated, was important.

One of the things that we were often asked about our collaboration was “how can you guarantee you did not produce the same thesis twice?”, to which I say,

Fig.137 Troubleshooting HoloLens headsets.



it is quite simple; **two people can look in the same direction without having the same perspective.** Moreover, I am glad to say that I actually had an exciting thesis year and that having someone tautoko me, who is equally passionate about the project, was incredibly rewarding.

An architect's guide to...

Part of this reflection are my tips for architects, students or anyone else who wants to pursue activating rangatahi agency. It sits alongside Ellie's guide to 'Decolonising Architecture', as volumes in a series of student made guides which are based on the findings of their own research. The concept is open to all architecture students across Aotearoa to offer their research in a condensed, palatable format, sharing their knowledge as part of a wider community.



AN ARCHITECT'S GUIDE TO RANGATAHI AGENCY
[CLICK HERE](#)

Fig.138 An Architect's Guide to Rangatahi Agency cover.

WHO IS THIS FOR?

This is a condensed version of the major findings from a Master of Architecture thesis.

It offers key tips to architects, industry professionals, students, academics and anyone else interested in architecture.

It covers what to consider, what to apply, what to use, what to do, and how these things might impact practice and our society in Aotearoa.

This volume is one of many in this series which covers a broad range of topics relating to architecture, space and society.

BACKGROUND

Today's rangatahi (youth) have exhibited a great capacity to address social and environmental issues and propose solutions toward the future of people and the environments we live in.

Although society claims to value the wellbeing of rangatahi, there seems to be very marginal space for the voices of youth to be heard. This booklet offers guidance on design processes that redistribute power and agency between architects and rangatahi in a manner that is not extractive, but mutually beneficial.

A MANA KI TE MANA APPROACH

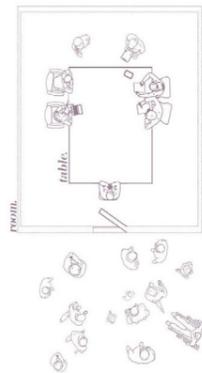
An approach which ensures ongoing engagement and enables a mutual sharing of expertise, which embeds a sense of belonging and awahi (care) over the architectural project and in the long run, any built outcomes.

For more detail about this approach and the tools which can support it, refer to '(a) Rangatahi Project' by Mitra Homolja (2021) and 'A Third Space', by Ellie Tuckey (2021).

RANGATAHI AGENCY

What is rangatahi agency?

Rangatahi agency means rangatahi feeling empowered in the architectural process; being a decision-maker. It means rangatahi expressing their creative ideas in the process, thereby having a sense of belonging in the process and the eventual spatial outcome. For collaborators, it means understanding that they are adults and being cognisant of power imbalances that could occur when collaborating with rangatahi.



Often experts outnumber community members, leaving many in the community sidelined from decision making.

Agency in architecture

In architectural processes, rangatahi agency can be instilled by first acknowledging rangatahi as experts in their own right, just as architects are experts in spatial design.

Agency in communication can be enriched by a process which allows rangatahi to engage in complex design ideas without the prerequisite of being able to translate 2D drawings into 3D space.

The following tips have been formulated to support architects in collaborating with rangatahi in architectural processes:

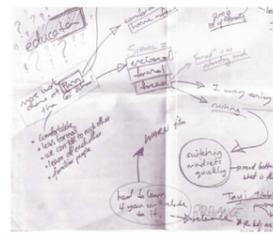
Make design inclusive

- + The only way to know what real people need is to engage with real people.

Embrace the process

- + Establish a shared vision: value-based processes create architecture which is embedded with those values. Establish common values, goals and ideas.
- + Keep it messy: standardised engagements bring inflexibility and finality to something that can thrive from chaos and serendipity. Engagements do not need to be polished!

Everything is a work-in-progress, and anything more can be intimidating and disengaging for rangatahi.



Embrace messy doodles, messy notes, jottings and ideas.

- + Be interdisciplinary: if you are interested in community architecture, contact a community architect, if not, collaborate with them.

A CULTURE OF AWHI

What is awahi?

Awahi means to care, to nurture. As a collaborator, awahi means ensuring you approach rangatahi with care and do what is in their best interest; it means being actively pro-youth agency.

Create levellers

- + Understand how you relate to rangatahi spatially: note where your eye level is, note where you stand in relation to them.
- + Bring kai (food): sharing can only happen when rangatahi are comfortable enough to do so. At every stage of engagements, sharing a meal can be a leveller; whether it is a packet of biscuits or an entire meal, kai helps create an atmosphere for sharing.
- + Get amongst it: do everything the rangatahi do, it is the best way to finding commonality.

Be accommodating

- + Introverts: extraverts are much more likely to speak up in workshops and discussions. Be creative about how to get introverted youth to contribute even when they find it hard to share.
- + Get creative online: rangatahi who may not want to attend physically, might be able to access online platforms.



Practice awahi

- + Ethical considerations: how is your collaboration considering the wellbeing of rangatahi, now and in the long term?
- + Evaluate your expertise: ask yourself if your input is worth this community's time, if your expertise is necessary in the context and if you are adding positively to the project.
- + Times change: global issues like health crises (COVID), climate change and social issues can all impact how you conduct research; adhere to any health restrictions that may be required of you.

EXPRESSING IDEAS

Having an architectural education should not be a prerequisite for rangatahi to participate in architectural processes. Here are some ways architects can bridge communication gaps.

Place yourself in their shoes

- + Language: language (verbal or visual) is fluid and subjective, concrete yet abstract; be aware that there are a variety of valid ways to understand language.
- + Vocabulary: avoid convoluted words which rangatahi may not understand, or alternatively, take the time to thoroughly explain them.



Co-opt the tools rangatahi use

- + Use tools that fit the context: whether analogue or digital, spatialising tools can help equip rangatahi with the right tools and terminology for meaningful interaction.
- + Context matters: sometimes digital tools are not accessible; ask yourself what the purpose of the tool is and develop a method from there.
- + Immersive tools: use tools that can help rangatahi understand 3D space. Tools which use movement and agency, like virtual reality and augmented reality can be catalysts for conversation.



Immersive VR design tools can help rangatahi with spatial meaning making.

Expand your toolkit

- + Learn new things: working with rangatahi is context based; your toolkit should be malleable and expanding. Try online tutorials; if you want to learn how to make digital tools, get to know software designers and engage in interdisciplinary collaboration.

Many thanks to my collaborators whose generosity, knowledge and trust helped form my thesis and the tips in this guide.

An Architect's Guide to Rangatahi Agency.

Summarised from (a) Rangatahi Project. by Mitra Homolja

2021

Fig.139 (Left and right) An Architect's Guide to Rangatahi Agency booklet pages.

Closing chapter

Conclusion

This thesis explored how architects can pursue a value-based approach to collaborating with rangatahi at the messy front end of design processes. While focusing on **agency of rangatahi in the design process, and the evolving role that architects have to play in the awhi (care) of this agency**, I have undertaken three incubator projects alongside my co-researcher; they explore how spatial understanding can occur via the use of visuospatial languages and immersive tools. The findings of this research can be condensed into the following three lessons:

Rangatahi agency: is more than just about youth being in the room, it is about youth being actively engaged with at the decision-making table. Our approach began by first acknowledging rangatahi as experts in their own right. There should not be prerequisites for rangatahi to participate in decision-making about spaces which will directly impact them; if there are, it is the architect's role to awhi and facilitate spaces (physical or virtual) where rangatahi feel empowered to share.

Collaborative processes that lead to collaborative outcomes: collaborating with rangatahi, with industry and within academia is reflective of the real world. The only way to know what real people need is to engage with real people. In research and industry, these human-centred contexts should be engaged with as such; live interactions which lead to tangible outcomes and commonality.

An evolving architectural toolkit: should be malleable, and expanding, not limited. In order to facilitate

spatial understandings with rangatahi, architects need to expand their toolkit of visuospatial languages. This is dependent on context, ability and the needs of rangatahi. Through our engagements, we explored how communication can be enriched, with a particular focus co-opting emerging design tools such as video, PC game simulations, virtual reality and augmented reality. These media are all useful communication tools and have the capacity to bridge communication gaps between architects and rangatahi.

Where to next

The Youth Hub: although it has been postponed for the time being, FIELD plan to weave the Youth Hub game into the curriculum in several Christchurch schools. This is part of a larger education package about vulnerable youth, housing, well-being and space. We are currently waiting on this package to be put into action.

Youth Learning Centre: we are also anticipating the responses of Kiribati youth; the Youth Learning Centre game has been sent and is ready for facilitation. I look forward to seeing how FIELD interpret this kōrero and implement rangatahi ideas into their developed design.

Ngāti Toa Education Space(s): we plan to facilitate a wānanga with Ngāti Toa rangatahi in the near future. We hope to see this project progress alongside rangatahi, in the spirit of “Ngāti Toa-ness.”

A Mana ki te Mana Process: as it was created with flexibility in mind, we will be looking for opportunities to further test and develop this process by pursuing collaborative projects with collaborative people.



Fig.140 A Mana ki te Mana Table team photo.



Fig.141 A Mana ki te Mana Table team photo.

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Fig.1 Tuckey, E. (2020). *Ellie through the lens of a rangatahi at Takapūwāhia Puna* [HoloLens screen capture].

Fig.4 St George, D. (2020). *Student Design Awards Installations Portraits* [Photograph]. Reprinted with permission.

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Fig.33 Homolja, M., & Tuckey, E. (2020, July 17). Amiria Kiddle *Reflections on Youth Hub Game and collaboration interview* [Interview video still].

Fig.33 Homolja, M., & Tuckey, E. (2020, August 3). Andrew Just *Reflections on Youth Hub Game and Kiribati Game Interview* [Interview video still].

Fig.35 FIELD Studio. (n.d.). Concept design for the Youth Hub project [Architectural render]. Reprinted with permission.

Fig.40 Tuckey, E. (2020). First iteration UI storyboard [Digital graphic].

Fig.53 Homolja, M., & Tuckey, E. (2020). Meeting with Kiribati team [Zoom screen capture].

Fig 64 Tuckey, E. (2020). Youth Learning Centre game on desktop computer [Photograph].

Fig.69 Homolja, M., & Tuckey, E. (2020, July 17). Amiria Kiddle *Reflections on Youth Hub Game and collaboration interview* [Interview video still].

Fig.70 Homolja, M., & Tuckey, E. (2020, August 3). Andrew Just *Reflections on Youth Hub Game and Kiribati Game Interview* [Interview video still].

Fig.71 Homolja, M. & Tuckey, E. (2020). Takapūwāhia rangatahi Engagement four [Video Still].

Fig.72 Homolja, M. & Tuckey, E. (2020). Rangatahi at Te Aro [Photograph].

Fig.73 Homolja, M. & Tuckey, E. (2020). Takapūwāhia rangatahi Engagement four [Video Still].

Fig.74 Homolja, M. & Tuckey, E. (2020). Takapūwāhia rangatahi Engagement four [Video Still].

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Fig. 77 Homolja, M. & Tuckey, E. (2020). Pre engagement [Photograph].

Fig. 78 Tuckey, E. (2020). Rangatahi using HoloLens [HoloLens screen capture].

Fig. 80 Homolja, M. & Tuckey, E. (2020). Engagement one [Video still].

Fig. 83 Homolja, M. & Tuckey, E. (2020). Brief notes [Photograph].

Fig. 84 Tuckey, E. (2020). Rangatahi using HoloLens [HoloLens screen capture].

Fig. 85 Homolja, M. & Tuckey, E. (2020). Te Aro Campus 1 [Photograph].

Fig. 86 Homolja, M. & Tuckey, E. (2020). Te Aro campus 2 [Photograph].

Fig. 87 Homolja, M. & Tuckey, E. (2020). Te Aro campus 3 [Photograph].

Fig.99 Tuckey, E. (2020). Engagement four [HoloLens screen capture].

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Fig.101 Tuckey, E. (2020). Spatial brief [HoloLens screen capture].

Fig.103 Homolja, M. & Tuckey, E. (2020). Jershon's translation [Photograph].

Fig.104 Homolja, M. & Tuckey, E. (2020). Tayla's translation [Photograph].

Fig.105 Homolja, M. & Tuckey, E. (2020). Camryn's translation [Photograph].

Fig.106 Homolja, M. & Tuckey, E. (2020). Tayla's translation [Photograph].

Fig.107 Homolja, M. & Tuckey, E. (2020). Kaleb's translation [Photograph].

Fig.112 Homolja, M. & Tuckey, E. (2020). Brief package [Digital graphic].

Fig.113 Homolja, M. & Tuckey, E. (2020). Brief package [Digital graphic].

Fig.114 Tuckey, E. (2020). Spatial sheets [Digital graphic].

Fig.121 Homolja, M. & Tuckey, E. (2020). A Mana ki te Mana Process [Digital graphic].

Fig.123 Homolja, M. & Tuckey, E. (2020). A Mana ki te Mana Table [Digital graphic].

Fig.127 Homolja, M. & Tuckey, E. (2020). Posters [Digital graphic].

Fig.128 Homolja, M. & Tuckey, E. (2020). Polaroids [Digital graphic].

Fig.129 Homolja, M. & Tuckey, E. (2020). Youth at NZIA [Digital graphic].

Fig.130 Homolja, M. & Tuckey, E. (2020). Youth at NZIA [Digital graphic].

Fig.131 St George, D. (2020). *Student Design Awards Installations Portraits* [Photograph]. Reprinted with permission.

Fig.134 Homolja, M. (2020). Ellie Tuckey dining room reflection [Interview still].

Fig.135 Tuckey, E. (2020). Mitra Homolja dining room reflection [Interview still].

Fig.137 Homolja, M. & Tuckey, E. (2020). Troubleshooting HoloLens [Photograph].

Fig.140 St George, D. (2020). *Student Design Awards Installations Portraits* [Photograph]. Reprinted with permission.

Fig.141 St George, D. (2020). *Student Design Awards Installations Portraits* [Photograph]. Reprinted with permission.

Appendix 1: Ethics Committee Documentation



An Approach to Decolonising the Architectural Process through Co-design

— Information Sheet for Focus Group Participants —

You are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

Who are we?

Our names are Ellie Tuckey and Mitra Homolja, and we are Master of Architectural Studies students at Victoria University of Wellington. This research project is work towards our theses.

What is the aim of the project?

In Aotearoa New Zealand, Māori voices have been systematically marginalised in euro-centric processes. This research asks how can design processes, explored through the lens of decolonisation, enhance meaningful inclusion and contribute towards social sustainability?

The purpose of this research is to explore decolonisation and understand how it fits in architectural design processes. The scope of the research is limited to the initial stages of the design process: understanding the values of the people who the architecture will be built for.

Your participation will support this research by including your insights from your own reality and experience. Your insights and values will form the foundations of the co-design process. This research has been approved by the Victoria University of Wellington Human Ethics Committee (Application ID: 0000028597).

How can you help?

You have been invited to participate because of your previous involvement in co-design projects or because you are eager to participate in a new co-design project tailored to your community. If you agree to take part, you will be part of a focus group [specific location of focus group TBD]. We will ask you questions about your age, your whakapapa, ethnicity, your previous experiences with co-design, your opinions about the value of co-design, your opinions about the built environment in your community and how you see the future of that built environment unfolding. It will also include creative expressions (drawing, making, photography), and virtual and augmented reality experiences, all of which will be voluntary. If you choose to participate in the VR or AR experiences, you will use goggles to view concept designs or spaces in order to make decisions about these proposed ideas.

The focus group will take approximately one and a half hours. We will video record the focus group with your permission. The video will also be made available to you to review and redact parts or all of it should you feel it misrepresents you or makes you feel uncomfortable. You can withdraw from the focus group at any time before the focus group begins. You can also withdraw while the focus group is in progress, though it will not be possible to withdraw the information you have provided up to that point as it will be part of a discussion with other participants. Once we have edited the video footage from the focus group, you are entitled to review it and choose the level of anonymity you wish, or request that your face/voice not be shown in the footage at all.

What will happen to the information you give?

This research is confidential to the degree you wish to keep it. This means that the researchers named below will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation unless you consent to it. However, you should be aware that in small projects your identity might be obvious to others in your community. Creative outputs made by you will be filmed and photographed with your consent and understanding that it may be exhibited at the end of the research. You will be fully acknowledged as the author if you wish, and it will be made clear that it is your work and not the researchers.

Once we record you, you will be given multiple opportunities to review footage and ensure you are comfortable with it. You will be given the opportunity to choose your level of identifiability/anonymity (outlined below) upon review of the footage. This will be discussed with you and personalised to your level of comfort.

1. I will be identifiable. My face will be shown and my voice will be heard. My contributions will be attributed to me.
2. I will be semi-identifiable. My face will be hidden but my voice heard. My contributions will be attributed to me.
3. I will possibly be identifiable by people I know. My face will be hidden but my voice heard. My contributions will not be attributed to me directly.
4. I will be anonymous. Neither my face nor my voice will be shown. My contributions will not be attributed to me.

What will the project produce?

The information from this research will be used in our Masters reports and presentations. We also intend to disseminate our collaborative findings in a community exhibition towards the end of the year, which you will be invited to collaborate on and attend. This will include a short documentary-style film, created from the footage recorded at these focus groups. The research outcomes may also be used in academic publications, student design competitions and our work portfolios, however, the research and film won't be used on social media without seeking additional permission from Ngāti Toa Rangatira.

If you accept this invitation, what are your rights as a research participant?

You don't have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- o choose not to answer any question;
- o ask for the recorder to be turned off at any time during the focus group;
- o withdraw from the focus group while it is taking part however it will not be possible to withdraw the information you have provided up to that point;
- o ask any questions about the study at any time;
- o be able to review any footage of you and ask for it to be removed from any dissemination of the research;
- o be able to read any reports of this research by emailing the researchers to request a copy.

If you have any questions or problems, who can you contact?

If you have any questions, either now or in the future, please feel free to contact us:



An Approach to Decolonising the Architectural Process through Co-design

— Consent to Participate in Focus Groups —

This consent form will be held for 5 years.

Researchers: Ellie Tuckey and Mitra Homolija, Wellington School of Architecture, Victoria University of Wellington.

- o I have read the Information Sheet and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- o I agree to take part in video recorded focus groups.

I understand that:

- o I am agreeing to keep the information shared during the focus groups confidential.
- o All activities in the focus groups (including drawing, making, photography, virtual and augmented reality experiences) are voluntary and I can opt out of any activity at any time.
- o I can withdraw from the focus group while it is in progress however it will not be possible to withdraw the information I have provided up to that point as it will be part of a discussion with other participants.
- o The identifiable information I have provided will be destroyed on 01/12/2025.
- o I understand that the findings may be used for a Masters report, presentation and short film; all of which will be made publicly available.
- o Should I choose to be anonymous, my name will not be used in reports and utmost care will be taken not to disclose any information that would identify me.
- o I understand that the observations and recordings will be kept confidential to the researchers and the supervisor until it is disseminated with my approval, or not disseminated at all should I choose to opt out.

I consent to information, opinions, or creative outputs which I have given being filmed: Yes No

I understand I will be given an opportunity to review the footage taken of me, choose my level of identifiability/anonymity, and be given an opportunity to redact any footage, prior to any dissemination to the public: Yes No

I would like to receive a copy of the final reports and video footage and have added my email address below: Yes No

Signature of participant: _____

Name of participant: _____

Date: _____

Contact details: _____

An Approach to Decolonising the Architectural Process through Co-design

— Information Sheet for Youth Participants —

Kia ora! You are invited to take part in this research. Please read this information with a parent or guardian before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

Who are we?

Our names are Ellie Tuckey and Mitra Homolja, and we are Master of Architectural Studies students at Victoria University of Wellington. This research project is work towards our theses.

What is the aim of the project?

This research considers how can design processes, explored through the lens of decolonisation, enhance meaningful inclusion and contribute towards social sustainability. In other words, we want to understand how your creative ideas can fit in architectural design processes. We want to invite you to be part of a focus group (a group activity) where we can explore how you see the world and how we can design architecture with the help of your perspective. Your participation will support this research by voluntarily providing your insights from your own reality and experiences. Your personal insight and values will be the foundations of the co-design process. This research has been approved by the Victoria University of Wellington Human Ethics Committee (Application ID : 0000028597).

How can you help?

You have been invited to participate because you are eager to participate in a new co-design project tailored to your community. If you agree to take part you will be part of a focus group. We will ask you and other participants questions about your age, your whakapapa/ethnicity, your opinions about the value of co-design, your opinions about the built environment in your community and how you see the future of that community unfolding. It will also include creative activities (drawing, making, photography), and virtual and augmented reality experiences, all of which will be voluntary. If you choose to participate in the VR or AR experiences, you will use goggles to view concept designs or spaces in order to make decisions about these proposed ideas.

The focus group will take approximately one and a half hours. We will video record the focus group with your permission. The video will also be made available to you to review and take out parts or all of it should you feel it misrepresents you or makes you feel uncomfortable. You can withdraw from the focus group at any time before the focus group begins. You can also withdraw while the focus group is in progress. However, it will not be possible to withdraw the information you have provided up to that point as it will be part of a discussion with other participants. Once we have edited the video footage from the focus group, you are entitled to review it and choose the level of anonymity you wish, or request that your face/voice not be shown in the footage at all.

What will happen to the information you give?

This research is confidential to the degree you wish to keep it. This means that the researchers named below will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation unless you consent to it. However, you should be aware that in small projects your identity might be obvious to others in your community. Creative outputs made by you will be filmed and photographed with your permission and understanding that it may be exhibited at the end of the research. You will be fully acknowledged as the author if you wish, and it will be made clear that it is your work and not the researchers.

Once we record you, you will be given multiple opportunities to review footage and ensure you are comfortable with it. You will be given the opportunity to choose your level of identifiability/anonymity (outlined below) upon review of the footage. This will be discussed with you and your parent/guardian and personalised to your level of comfort.

1. I will be identifiable. My face will be shown and my voice will be heard. My contributions will be attributed to me.
2. I will be semi-identifiable. My face will be hidden but my voice heard. My contributions will be attributed to me.
3. I will possibly be identifiable by people I know. My face will be hidden but my voice heard. My contributions will not be attributed to me directly.
4. I will be anonymous. Neither my face nor my voice will be shown. My contributions will not be attributed to me.

What will the project produce?

The information from this research will be used in our Masters reports and presentations. We also intend to disseminate our collaborative findings in a community exhibition towards the end of the year, which you will be invited to collaborate on and attend. This will include a short documentary-style film, created from the footage recorded at these focus groups. The research outcomes may also be used in academic publications, student design competitions and our work portfolios, however, the research and film won't be used on social media without seeking additional permission from Ngāti Toa Rangatira.

If you accept this invitation, what are your rights as a research participant?

You don't have to accept this invitation if you don't want to. If you do decide to participate, they have the right to:

- choose not to answer any question;
- ask for the recorder to be turned off at any time during the focus group;
- withdraw from the focus group while it is taking part however it will not be possible to withdraw the information you have provided up to that point;
- ask any questions about the study at any time;
- be able to review any footage of you and ask for it to be removed from any dissemination of the research;
- be able to read (or have explained) any reports of this research by emailing the researchers to request a copy.

If you have any questions or problems, who can you contact?

If you have any questions, either now or in the future, please feel free to contact us:

An Approach to Decolonising the Architectural Process through Co-design

— *Consent to Participate in Focus Groups* —

This consent form will be held for 5 years.

Researchers: Ellie Tuckey and Mitra Homolja, Wellington School of Architecture, Victoria University of Wellington.

- I have read the Information Sheet with a parent/guardian and the project has been explained to me. My questions have been answered and I understand that I can ask further questions at any time.
- I agree to take part in video recorded focus groups.

I understand that:

- I am agreeing to keep the information shared during the focus groups to myself.
- All activities in the focus groups (including drawing, making, photography, virtual and augmented reality experiences) are voluntary and I can opt out of any activity at any time.
- I can withdraw from the focus group while it is in progress however it will not be possible to withdraw the information I have provided up to that point as it will be part of a discussion with other participants.
- The identifiable information I have provided will be destroyed on 01/12/2025.
- I understand that the findings may be used for a Masters report, presentation and short film; all of which will be made publicly available.
- Should I choose to be anonymous, my name will not be used in reports and utmost care will be taken not to disclose any information that would identify me.
- I understand that the observations and recordings will be kept confidential to the researchers and the supervisor until it is disseminated with my approval, or not disseminated at all should I choose to opt out.

I consent to information, opinions, or creative outputs which I have given being filmed: Yes No

I understand I will be given an opportunity to review the footage taken of me, choose my level of identifiability/anonymity, and be given an opportunity to redact any footage, prior to any dissemination to the public: Yes No

I would like to receive a copy of the final reports and video footage and have added my email address below: Yes No

Signature of participant: _____

Name of participant: _____

Date: _____

Contact details: _____

An Approach to Decolonising the Architectural Process through Co-design

— *Information Sheet for Parents/Caregivers of Participants* —

Kia ora! You and your child are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

Who are we?

Our names are Ellie Tuckey and Mitra Homolja, and we are Master of Architectural Studies students at Victoria University of Wellington. This research project is work towards our theses.

What is the aim of the project?

In Aotearoa New Zealand, Māori voices have been systematically marginalised in euro-centric processes. This research asks how can design processes, explored through the lens of decolonisation, enhance meaningful inclusion and contribute towards social sustainability?

The purpose of this research is to explore decolonisation and understand how it fits in architectural design processes. The scope of the research is limited to the initial stages of the design process: understanding the values of the people who the architecture will be built for.

Your participation will support this research by including your insights from your own reality and experience. Your insights and values will form the foundations of the co-design process. This research has been approved by the Victoria University of Wellington Human Ethics Committee (Application ID: 0000028597).

How can you help?

Your child has been invited to participate because they or you are eager for them to participate in a new co-design project tailored to your community. If you agree for your child to take part they will be part of a focus group [specific location of focus group TBD]. We will ask your child questions about their age, whakapapa, ethnicity, their opinions about the value of co-design, their opinions about the built environment in their community and they see the future of that built environment unfolding. It will also include creative expressions (drawing, making, photography), and virtual and augmented reality experiences, all of which will be voluntary. If your child chooses to participate in the VR or AR experiences, they will use goggles to view concept designs or spaces in order to make decisions about these proposed ideas.

The focus group will take approximately one and a half hours. We will video record the focus group with you and your child's permission. The video will also be made available to you and your child to review and redact parts or all of it should you feel it misrepresents your child or makes them feel uncomfortable. Your child can withdraw from the focus group at any time before the focus group begins. Your child can also withdraw while the focus group is in progress. However, it will not be possible to withdraw the information you have provided up to that point as it will be part of a discussion with other participants. We will be running the focus group under direct supervision of our supervisor, and will not be unattended at any point. We strongly believe in a family-friendly ethos, and we welcome and encourage you to attend the focus group your child is participating in. Once we have edited the video footage from the focus group, you and your child are entitled to review it and choose the level of anonymity you/they wish, or request that their face/voice not be shown in the footage at all.

What will happen to the information your child gives?

This research is confidential to the degree you and your child wish to keep it. This means that the researchers named below will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation unless you and your child consent to it. However, you should be aware that in small projects your identity might be obvious to others in your community. Creative outputs made by your child will be filmed and photographed with you and your child's consent and understanding that it may be exhibited at the end of the research. Your child will be fully acknowledged as the author if you and your child wish, and it will be made clear that it is your child's work and not the researchers. Once we record your child, you will be given multiple opportunities to review footage and ensure you are comfortable with it. You will be given the opportunity to choose your child's level of identifiability/anonymity (outlined below) upon review of the footage. This will be discussed with you and your child and personalised to your level of comfort.

1. Your child will be identifiable. Your child's face will be shown and their voice will be heard. Your child's contributions will be attributed to them.
2. Your child will be semi-identifiable. Their face will be hidden but voice heard. Your child's contributions will be attributed to them.
3. Your child will possibly be identifiable by people you/they know. Your child's face will be hidden but their voice will be heard. Your child's contributions will not be attributed to them directly.
4. Your child will be anonymous. Neither your child's face nor their voice will be shown. Your child's contributions will not be attributed to them.

What will the project produce?

The information from this research will be used in our Masters reports and presentations. We also intend to disseminate our collaborative findings in a community exhibition towards the end of the year, which you and your child will be invited to collaborate on and attend. This will include a short documentary-style film, created from the footage recorded at these focus groups. The research outcomes may also be used in academic publications, student design competitions and our work portfolios, however, the research and film won't be used on social media without seeking additional permission from Ngāti Toa Rangatira.

If you accept this invitation, what are your rights as a research participant?

You don't have to accept this invitation if you don't want to. If you do decide to let your child participate, they can:

- choose not to answer any question;
- ask for the recorder to be turned off at any time during the focus group;
- withdraw from the focus group while it is taking part however it will not be possible to withdraw the information you have provided up to that point;
- ask any questions about the study at any time;
- be able to review any footage of you and ask for it to be removed from any dissemination of the research;
- be able to read (or have explained) any reports of this research by emailing the researchers to request a copy.

If you have any questions or problems, who can you contact?

If you have any questions, either now or in the future, please feel free to contact us:



An Approach to Decolonising the Architectural Process through Co-design

— Consent for Child's Participation in Focus Groups —

This consent form will be held for 5 years.

Researchers: Ellie Tuckey and Mitra Homolja, Wellington School of Architecture, Victoria University of Wellington.

- I have read the Information Sheet and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- I agree to my child taking part in video recorded focus groups.

I understand that:

- I am agreeing to keep the information shared with my child during the focus groups confidential.
- All activities in the focus groups (including drawing, making, photography, virtual and augmented reality experiences) are voluntary and my child can opt out of any activity at any time.
- I can withdraw my child from the focus group while it is in progress however it will not be possible to withdraw the information they have provided up to that point as it will be part of a discussion with other participants.
- The identifiable information my child has provided will be destroyed on 01/12/2025.
- I understand that the findings may be used for a Masters report, presentation and short film; all of which will be made publicly available.
- Should I choose that my child be anonymous, their name will not be used in reports and utmost care will be taken not to disclose any information that would identify them.
- I understand that the observations and recordings will be kept confidential to the researchers and the supervisor until it is disseminated with my approval, or not disseminated at all should I choose to opt out.

I consent to information, opinions, or creative outputs which my child has given being filmed: Yes No

I understand I will be given an opportunity to review the footage taken of my child, choose the level of identifiability/anonymity, and be given an opportunity to redact any footage, prior to any dissemination to the public: Yes No

I would like to receive a copy of the final reports and video footage and have added my email address below: Yes No

Name of participant: _____

Name of parent/caregiver: _____

Signature of parent/caregiver: _____

Date: _____

Contact details: _____

An Approach to Decolonising the Architectural Process through Co-design

— *Information Sheet for Interview Participants* —

You are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

Who are we?

Our names are Ellie Tuckey and Mitra Homolja, and we are Master of Architectural Studies students at Victoria University of Wellington. This research project is work towards our theses.

What is the aim of the project?

In Aotearoa New Zealand, Māori voices have been systematically marginalised in euro-centric processes. This research asks how can design processes, explored through the lens of decolonisation, enhance meaningful inclusion and contribute towards social sustainability?

The purpose of this research is to explore decolonisation and understand how it fits in architectural design processes. The scope of the research is limited to the initial stages of the design process: understanding the values of the people who the architecture will be built for.

Your participation will support this research by including your insights from your own reality and experience. Your insights and values will form the foundations of the co-design process. This research has been approved by the Victoria University of Wellington Human Ethics Committee (Application ID: 0000028597).

How can you help?

You have been invited to participate because of your previous involvement in co-design projects or because you are eager to participate in a new co-design project tailored to your community. If you agree to take part, you will be part of an interview, either via Zoom, or face to face. We will ask you questions about your age, your whakapapa/ethnicity, your previous experiences with co-design, your opinions about the value of co-design, your opinions about the built environment in your community and how you see the future of that built environment unfolding.

The interview will take approximately one hour or less. We will video record the interview with your permission. The video will also be made available to you to review and redact parts or all of it should you feel it misrepresents you or makes you feel uncomfortable. You can withdraw from the interview at any time before the interview begins. You can also withdraw while the interview is in progress. Once we have edited the video footage from the interview, you are entitled to review it and choose the level of anonymity you wish, or request that your face/voice not be shown in the footage at all.

What will happen to the information you give?

This research is confidential to the degree you wish to keep it. This means that the researchers named below will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation unless you consent to it. However, you should be aware that in small projects your identity might be obvious to others in your community. Once we record you, you will be given multiple opportunities to review footage and ensure you are comfortable with it. You will be given the opportunity to choose your level of identifiability/anonymity (outlined below) upon review of the footage. This will be discussed with you and personalised to your level of comfort.

1. I will be identifiable. My face will be shown and my voice will be heard. My contributions will be attributed to me.
2. I will be semi-identifiable. My face will be hidden but my voice heard. My contributions will be attributed to me.
3. I will possibly be identifiable by people I know. My face will be hidden but my voice heard. My contributions will not be attributed to me directly.
4. I will be anonymous. Neither my face nor my voice will be shown. My contributions will not be attributed to me.

What will the project produce?

The information from this research will be used in our Masters reports and presentations. We also intend to disseminate our collaborative findings in a community exhibition towards the end of the year, which you will be invited to collaborate on and attend. This will include a short documentary-style film, created from the footage recorded at this interview. The research outcomes may also be used in academic publications, student design competitions and our work portfolios, however, the research and film won't be used on social media without seeking additional permission.

If you accept this invitation, what are your rights as a research participant?

You don't have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- choose not to answer any question;
- ask for the recorder to be turned off at any time during the interview;
- withdraw from the interview while it is taking part however it will not be possible to withdraw the information you have provided up to that point;
- ask any questions about the study at any time;
- be able to review any footage of you and ask for it to be removed from any dissemination of the research;
- be able to read any reports of this research by emailing the researcher to request a copy.

If you have any questions or problems, who can you contact?

If you have any questions, either now or in the future, please feel free to contact us:

An Approach to Decolonising the Architectural Process through Co-design

— Consent to Participate in Interview —

This consent form will be held for 5 years.

Researchers: Ellie Tuckey and Mitra Homolja, Wellington School of Architecture, Victoria University of Wellington.

- I have read the Information Sheet and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- I agree to take part in a video recorded interview.

I understand that:

- I can withdraw from the interview while it is in progress.
- The identifiable information I have provided will be destroyed on 01/12/2025.
- I understand that the findings may be used for a Masters report, presentation and short film; all of which will be made publicly available.
- Should I choose to be anonymous, my name will not be used in reports and utmost care will be taken not to disclose any information that would identify me.
- I understand that the observations and recordings will be kept confidential to the researcher and the supervisor until it is disseminated with my approval, or not disseminated at all should I choose to opt out.

I consent to information, opinions, or creative outputs which I have given being filmed: Yes No

I understand I will be given an opportunity to review the footage taken of me, choose my level of identifiability/anonymity, and be given an opportunity to redact any footage, prior to any dissemination to the public: Yes No

I would like to receive a copy of the final reports and video footage and have added my email address below: Yes No

Signature of participant: _____

Name of participant: _____

Date: _____

Contact details: _____

PROTOCOL DOCUMENT 1: INTERVIEWS

The interviews will be conducted as a means to identify participant values in regards to the built environment and to evaluate their responses to our interpretations of those values in the form of speculative designs. Interviews will be conducted with approximately 16 people, ranging in age, gender identity, ethnicity and architectural experience. Our intention is to implement and maintain an ethos of safety, privacy and comfort, with the intention that participants feel listened to and cared for throughout the research.

PRE-INTERVIEW PROTOCOL:

- Participants are contacted and recruited via snowball sampling strategy, where a contact person we have established an agreement with will organise people who are willing to participate in our research.
- Participants will be sent a documentation package, including our intention for the interview and consent forms for review. Participants will be given an opportunity to ask questions and offer suggestions in regards to the consent forms which they are signing.
- It will be made clear to participants about our intentions around deidentification of data, and that the filming and dissemination of filmed content is created with their choice of anonymity in mind.
- Participants can print the consent form, sign it, scan it and email it back to the researcher. If hard copy documents cannot be obtained, a digital copy, email, or a recorded verbal consent will be accepted.
- Once there is agreement and mutual understanding around protocol and respectful discussion, arrangements will be made for a time and a space for interviews via Zoom. Once it is safe to practice face to face, interviews may be arranged with social distancing and hygiene protocols in place (according to government guidelines in regards to COVID-19).

INTERVIEW PROTOCOL:

Zoom:

- Participants will be informed again that they are being recorded, and we will reiterate our intentions and their rights to opt out at any moment
- The recording device will be turned on
- We will ensure participants are comfortable and prepared to begin the interview
- Interviews lasting longer than half an hour will have a 5-10 minute break.

Face to face:

- Participants will be offered kai/refreshments prior to the interview
- Participants will be informed again that they are being recorded, and we will reiterate our intentions and their rights to opt out at any moment
- The recording device will be turned on
- We will ensure participants are comfortable and prepared to begin the interview
- Interviews lasting longer than half an hour will have a 5-10 minute break.

Interview Questions:

Note, questions may be altered in the interview however, the intent will remain the same.

- What are your opinions about co-design between architects and clients?
- What are your experiences of design processes?
- From your experiences, what are the positives and negatives in co-design between architects and clients? Is there value to it?
- What does 'decolonisation' mean to you?
- How would you describe the typical relationship between an architect and the end-user of a space?
- What does an architect do?
- What role does the client have in the design process?
- How do you best interpret spatial qualities? I.e. from a drawing, a plan, a collage etc.
- What has been the most rewarding experience you've had in a design process and why?
- Without naming specific people/organisations/communities, what has been the most disappointing experience you've had in a design process and why?

POST-INTERVIEW PROTOCOL:

- Thank them for participating and stop the recording.
- Reiterate that they will be given the opportunity to review the footage and have the opportunity to redact anything they do not feel comfortable with. They will be reassured that they will be part of the editing process.
- Once the footage is exported, a copy of the footage will be sent to them via email.

PROTOCOL DOCUMENT 2: FOCUS GROUP:

The focus groups will be conducted as a means of engaging participants in creative methods of research, and allow constructive discussions of values to occur. Each engagement will

take place in a space of their choosing*. Engagements will include korero and visual expressions (drawing, making, photography), VR and AR experiences. Participants will be invited to use tools provided (pens, pencils, paper etc.) and it will be emphasised that they can do as much or a little as they wish. There will also be an opportunity for them to use design tools of their own (ie. mobile phones). The purpose of these engagements is to facilitate discussions through various mediums between all participants and researchers, in the co-creation of knowledge. Our intention is to implement and maintain an ethos of safety, privacy and comfort, with the intention that participants feel listened to and cared for throughout the research.

*In person engagements will be subject to social distancing rules set by the New Zealand government due to the COVID19 situation. Should we not be able to engage in person, focus groups will be conducted via Zoom and other, similar, online networking tools.

PRE-FOCUS GROUP PROTOCOL:

- Participants are contacted and recruited via snowball sampling strategy, where a contact person we have established an agreement with will organise people who are willing to participate in our research.
- Participants will be sent a documentation package, including our intention for the interview and consent forms for review. Participants will be given an opportunity to ask questions and offer suggestions in regards to the consent forms which they are signing.
- It will be made clear to participants about our intentions around deidentification of data, and that the filming and dissemination of filmed content is created with their choice of anonymity in mind.
- Participants can print the consent form, sign it, scan it and email it back to the researcher. If hard copy documents cannot be obtained, a digital copy, email, or a recorded verbal consent will be accepted.
- Once there is agreement and mutual understanding around protocol and respectful discussion arrangements will be made for a time and a space for focus groups to occur. If it is safe to practice face to face, focus groups may be arranged with social distancing and hygiene protocols in place (according to government guidelines in regards to COVID-19).

FOCUS GROUP PROTOCOL:

Zoom:

- Participants will be informed again that they are being recorded, and we will reiterate our intentions and their rights to opt out at any moment
- The recording device will be turned on
- We will ensure participants are comfortable and prepared to begin
- Focus groups lasting longer than half an hour will have a 5-10 minute break
- The following rules will be outlined:
 - You do not need to agree with others, but you should listen respectfully as others share their views.
 - We would like to hear a wide range of opinions: please speak up on whether you agree or disagree.
 - There are no right or wrong answers, every person's experiences and opinions are important.

Face to face:

- Participants will be offered kai/refreshments prior to the focus group
- Participants will be informed again that they are being recorded, and we will reiterate our intentions and their rights to opt out at any moment
- The recording device will be turned on
- We will ensure participants are comfortable and prepared to begin
- Focus groups lasting longer than half an hour will have a 5-10 minute break
- The following rules will be outlined:
 - You do not need to agree with others, but you should listen respectfully as others share their views.
 - We would like to hear a wide range of opinions: please speak up on whether you agree or disagree.
 - There are no right or wrong answers, every person's experiences and opinions are important.

Focus Group Questions:

Note, different activities will be undertaken to target different questions. These activities will revolve around creative expression as described above.

- What does an architect do?
- What role does the client have in the design process?
- How do you best interpret spatial qualities? I.e. from a drawing, a plan, a collage etc.
- What does 'decolonisation' mean to you?
- Please take a look at this design. Do you think this reflects your values and why?
- What in this design can you relate to?
- If you could change anything in this design, what would you change and why?
- What places in your neighbourhood do you enjoy visiting and why?
- How do you enjoy spending your time? Where does this normally occur?
- How do you imagine this city will look in 10 years? 50 years?
- What is special to you?

PROTOCOL DOCUMENT 3:

VIRTUAL/AUGMENTED REALITY

Virtual reality might be used in the later stages of the focus groups in order to gauge participant reactions to various virtual reality experiences. The VR experiences will be based around existing sites and potential design interventions. They will not involve any content which could potentially cause discomfort or fear to participants. Our intention is to implement and maintain an ethos of safety, privacy and comfort, with the intention that participants feel

listened to and cared for throughout the research. We intend to follow the correct protocol as established by previous VR related projects at the Wellington School of Architecture. This involves providing enough information prior to interaction with VR tools, proper hygiene practices and care towards participants feeling any form of discomfort during the activity.

The AR and VR experiences will be done using an Oculus Rift VR headset and the HoloLens 2. We have no reason to believe that the content of these experiences would be upsetting to participants. This will be filmed, as their responses to the environments will be useful feedback for the development of the spatial outcomes. As with all other footage, participants will have opportunities to review the footage and decide on their level of anonymity for the final presentation. Refreshments and seating will be made available in case of any form of motion sickness. A clear space with a 2 metre radius will be provided so that there are no hazardous objects which could hinder or harm the participants. Participants will not be spending more than 10 minutes with the headsets on. We have both had experience with VR and AR as part of previous research. Both researchers have had previous experience conducting participants in virtual environments.

PRE-VR PROTOCOL:

- Pre-existing conditions such as epilepsy or migraines will be identified verbally prior to participants using the headsets.
- Participants will be informed verbally, in written form (information sheet) and visually (short video) about the use of VR and best practice when using VR tools.
- Participants will be given a brief description of the VR experience they are about to be part of.
- A suitable amount of clear space will be provided so participants can move without any restrictions.
- The participants will be guided by the researchers at all times.
- VR headsets and tools will be thoroughly cleaned with disinfectant wipes prior to any interaction with participants.

VR PROTOCOL:

- Participants will be able to explore the VR environment freely
- Participants will be shown conceptual ideas in virtual space and will be asked to verbally respond to them.
- As the primary risk that should be considered is severe motion or simulator sickness, we will verbally ensure that participants are comfortable, and that they have the right to remove the headset if they feel discomfort at any point.
- Participants might be prompted to turn a certain way or to comment on specific architectural forms
- Participants may be asked to critique the VR experience.

VR prompt Questions:

Note, questions may be altered in the interview however, the intent will remain the same.

- What are your initial feelings about this space
- What is a disadvantage of this space?
- Does any part of this space make you feel in a negative way? Why?
- Does any part of this space make you feel positive? Why?

- What would improve this space?
- Now that you have spent some time, how do you feel about this space?
- Does this space feel like it fits into your community?
- Does this space feel like it represents your community?
- Can you see yourself living in/inhabiting this space?
- Does this space reflect the values of your community?

POST-VR PROTOCOL:

- Headsets will be removed and disinfected
- Participants will be asked about their VR experience, and whether they see the value in such technology. They will also be asked if they are feeling well after the experience, and will be offered refreshments
- Thank them for participating and stop the recording.
- Reiterate that they will be given the opportunity to review the footage.
- Once the footage is exported, a copy of the footage will be sent to them via email.

FOOTAGE EDITING PROTOCOL:

- As well as the initial consent form to participate, our participants will be asked to sign a consent form upon approval of the final edited version of the footage (we estimate this to be at some point in December 2020). Up until that point, they have agency in the editing process.
- Editing techniques such as rotoscoping, silhouetting, and digital overlays may be used for participants who chose to not be identified
- Use of participants' voices only may be used if they are comfortable with this
- Camera angles avoiding faces will be favoured
- An original cut and a final cut will be made available to participants. Any concerns will be addressed on a case to case basis to ensure all participants are happy with the final outcome.

PROTOCOL DOCUMENT 4:

VIDEO FOOTAGE AND EDITING

Video footage will be taken of the interviews and focus groups, and will inform a short film that will help disseminate our research. We strongly feel that the privacy and comfort of our participants is a top priority, and take their agency in the process very seriously. Due to the sensitive nature of video footage, we intend to not only offer multiple opportunities of footage to be reviewed and critiqued by participants, but also a number of creative editing options which the participants might explore with us during the editing phase. We hope that this reflects our ethos of care, particularly with the dissemination of footage.

The final footage will be used for:

1. Our final thesis presentation/thesis defence
2. A community exhibition (estimated March 2021)

An Approach to Decolonising the Architectural Process through Co-design

— Consent to Use of Video Footage —

This consent form will be held for 5 years.

Researchers: Ellie Tuckey and Mitra Homolja, Wellington School of Architecture, Victoria University of Wellington.

- I have participated in a filmed focus group or interview.
- I have reviewed the footage that includes features of myself that could be identifiable.

I understand that:

- I understand that the observations and recordings will be kept confidential to the researchers and the supervisor until it is disseminated with my approval, or not disseminated at all should I choose to opt out.
- Should I choose to be anonymous, my name will not be used in reports and utmost care will be taken not to disclose any information that would identify me.
- The identifiable information I have provided will be destroyed on 01/12/2025.
- I understand that the findings of the research may be used for a Masters report, presentation and short film; all of which will be made publicly available.

Please select the level of identifiability/anonymity you wish to have in the final dissemination of this research:

- I choose to be identifiable. My face can be shown and my voice can be heard. My contributions should be attributed to me.
- I choose to be semi-identifiable. My face should not be shown but my voice can be heard. My contributions should be attributed to me.
- I choose to possibly be identifiable by people I know. My face must be hidden but my voice can be heard. My contributions should not be attributed to me directly.
- I choose to be anonymous. Neither my face nor my voice should be shown. My contributions will be attributed to an 'anonymous participant'.
- Other. Please state:

Signature of participant: _____

Name of participant: _____

Date: _____

Contact details: _____

An Approach to Decolonising the Architectural Process through Co-design

— Consent to Use of Video Footage —

This consent form will be held for 5 years.

Researchers: Ellie Tuckey and Mitra Homolja, Wellington School of Architecture, Victoria University of Wellington.

- My child has participated in a filmed focus group or interview.
- I have reviewed the footage that includes features of child that could be identifiable.

I understand that:

- I understand that the observations and recordings will be kept confidential to the researchers and the supervisor until it is disseminated with my approval, or not disseminated at all should I choose to opt out.
- Should my child or I choose to be anonymous, my child's name will not be used in reports and utmost care will be taken not to disclose any information that would identify them.
- The identifiable information I have provided will be destroyed on 01/12/2025.
- I understand that the findings of the research may be used for a Masters report, presentation and short film; all of which will be made publicly available.

Please select the level of identifiability/anonymity you wish to have in the final dissemination of this research:

- I consent to my child being identifiable. My child's face can be shown and their voice can be heard. My child's contributions should be attributed to them.
- I consent to my child being semi-identifiable. My child's face should not be shown but their voice can be heard. My child's contributions should be attributed to them.
- I consent to my child being possibly identifiable by people I/they know. My child's face must be hidden but their voice can be heard. My child's contributions should not be attributed to them directly.
- I want my child to be anonymous. My child's face must be hidden and their voice not heard. My child's contributions will be attributed to an 'anonymous participant'.
- Other. Please state:

Name of participant: _____

Name of parent/caregiver: _____

Signature of parent/caregiver: _____

Date: _____

Contact details: _____

Appendix 2: Education Space(s) Spatial Brief



THE BIG QUESTION

What do
Ngāti Toa Rangatahi
see for the future of
education in Porirua?

THE BIG IDEA

To have an education 'space' that creates a sense of **connectedness** between people and **natural, social and historical environments**. Through this connectedness, this space should **nurture openness** to multiple ways of learning and encourage a **sense of kaitiakitanga** over the physical space and the ways of learning.

HOW TO GET THERE

08

WHAT

what values should be imbedded into the space

HOW

how the 'what' comes alive in the space

TRANSLATION

our individual and collective interpretation of the 'how'

14

WHAT

Spaces which are flexible to different types of learning

HOW

1) A consideration of how the structure of a day is

influenced by space

2) Spaces that encourage interconnectivity of subjects

TRANSLATION

10

WHAT

A visual connection between people and the history of the iwi and the location

HOW

1) Ngati Toa stories being seen in and around the space.

2) Allowing spaces to contribute your own stories to the ongoing history of the iwi.

TRANSLATION

16

WHAT

Awahi towards the land

HOW

1) Thought is put into where materials come from and if they can be sourced locally and sustainably.

2) Every space needs to be working with nature instead of against it.

TRANSLATION

10

WHAT

Feeling comfortable to learn

HOW

1) The space should provide a sense of belonging through familiar architectural features and materials.

2) Providing spaces that encourage discussion rather than dictation through position, scale, movement and flexibility.

TRANSLATION



18

Any other ideas?

Any other opportunities?



