

A PERSISTENT BLINDNESS

*A POST- CURATION
NATIONAL ARCHITECTURE*

by

George Henry John McKnight

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

Victoria University of Wellington
Wellington School of Architecture

2021





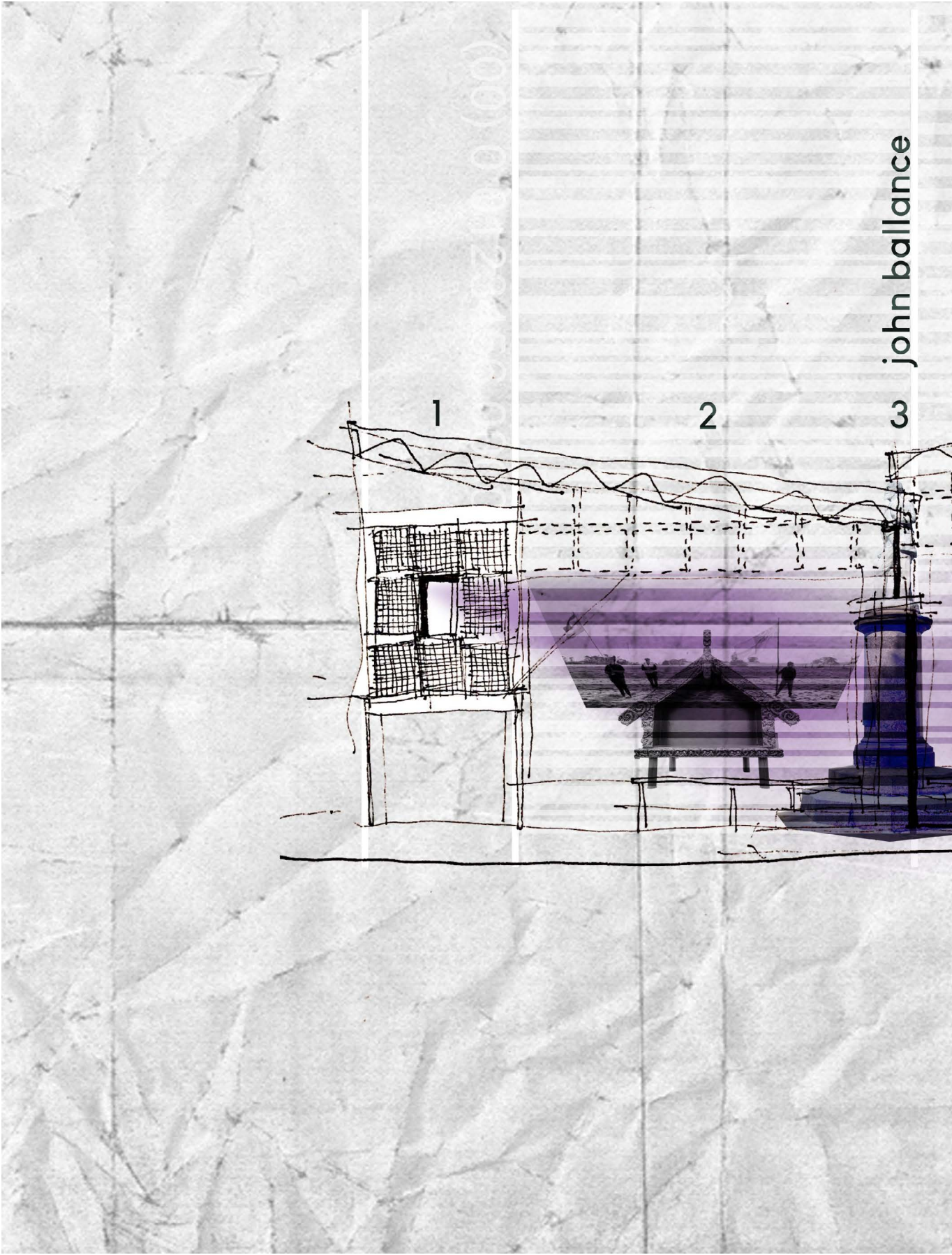
ACKNOWLEDGEMENTS

Family, I could not have done it without your support. There have been some ups and downs over the past five years, but all in all, you guys have been there for me.

Friends, you guys have been my go-to. Whether you are architecture based or not, you have listened to my stupid and silly ideas. There have been some great discussions (archi or not). Thank you to all that have grabbed me for a coffee or beer (or two) – these parts are probably the most memorable.

Here's to five years and many more lively years to come.

Michael, your patience has willingly led me to something that is bold and a little crazy. It's been a bumpy ride of a year (Covid and what not), so, thank you for all of the support. I'm proud of the outcome.



1

2

3

john ballance

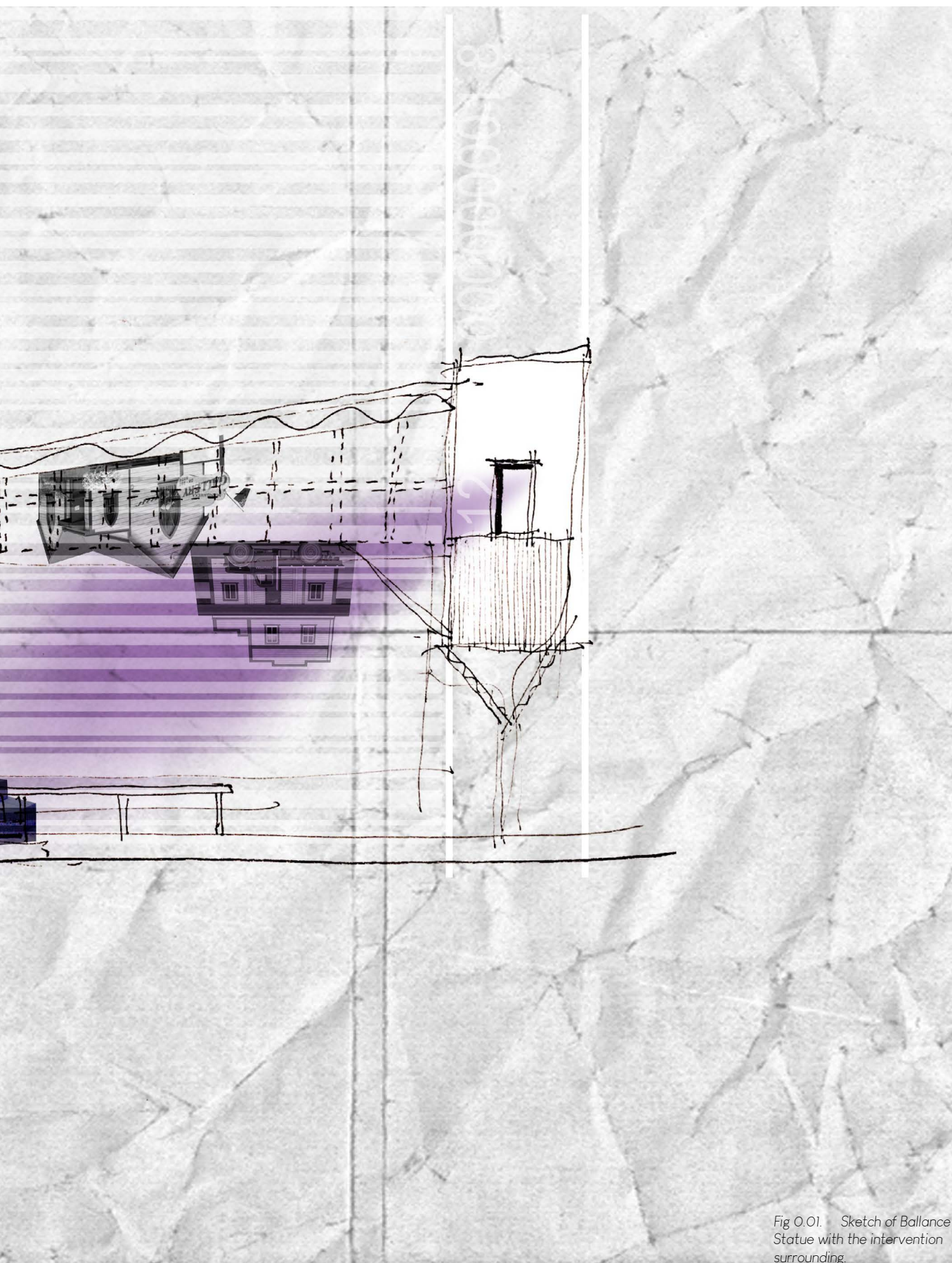


Fig O.01. Sketch of Balance Statue with the intervention surrounding.

CONTENTS

ACKNOWLEDGEMENTS	i
ABSTRACT	v
RESEARCH QUESTION	vii
INVESTIGATION DIAGRAM	viii
AIMS	ix
OBJECTIVES	x
METHODOLOGY	xi

WORKS CITED	P. 133
LIST OF FIGURES	P. 139

INTRODUCTION	P. 3
1. THEORETICAL CONTEXT THE MACHINE AGES	P. 7
2. LITERATURE CONTEXT CONTEMPORARY ARCHITECTURE, TECHNOLOGY AND SOCIETY	P. 15
3. DESIGN PHASE ONE THE THIRD MACHINE AGE	P. 29
4. PRECEDENT STUDY A NATIONAL ARCHITECTURE	P. 45
5. DESIGN PHASE TWO A THIRD MACHINE AGE MUSEUM	P. 61
6. DEVELOPED DESIGN THE MUSEUM OF THE NOW	P. 87
5.1 Zealandia Museum	P. 93
5.2 John Ballance Museum	P. 103
5.3 Parihaka Memorial Museum	P. 113
7. CONCLUSIONS	P. 125

ABSTRACT

Since the industrial revolution, technology has had a defining role in society. From the built environment to domestic needs, technology has increasingly automated the world; the world has become immersed and increasingly in service to these advancements. However, in a world saturated in technology, the real-world still matters; a persistent blindness to social, discriminatory and racial matters is still heavily ingrained and needs addressing.

This thesis is an investigation of the current machine age – a development of the First and Second Machine ages described by Banham, then Pawley, in the second half of last century. Today's 'Third Machine Age' is less mechanical – our machines are commercial, silent, and out-of-sight algorithms that use our own personal data as fuel: for the convenience of social media, we blindly provide our identities as grist to this mill.

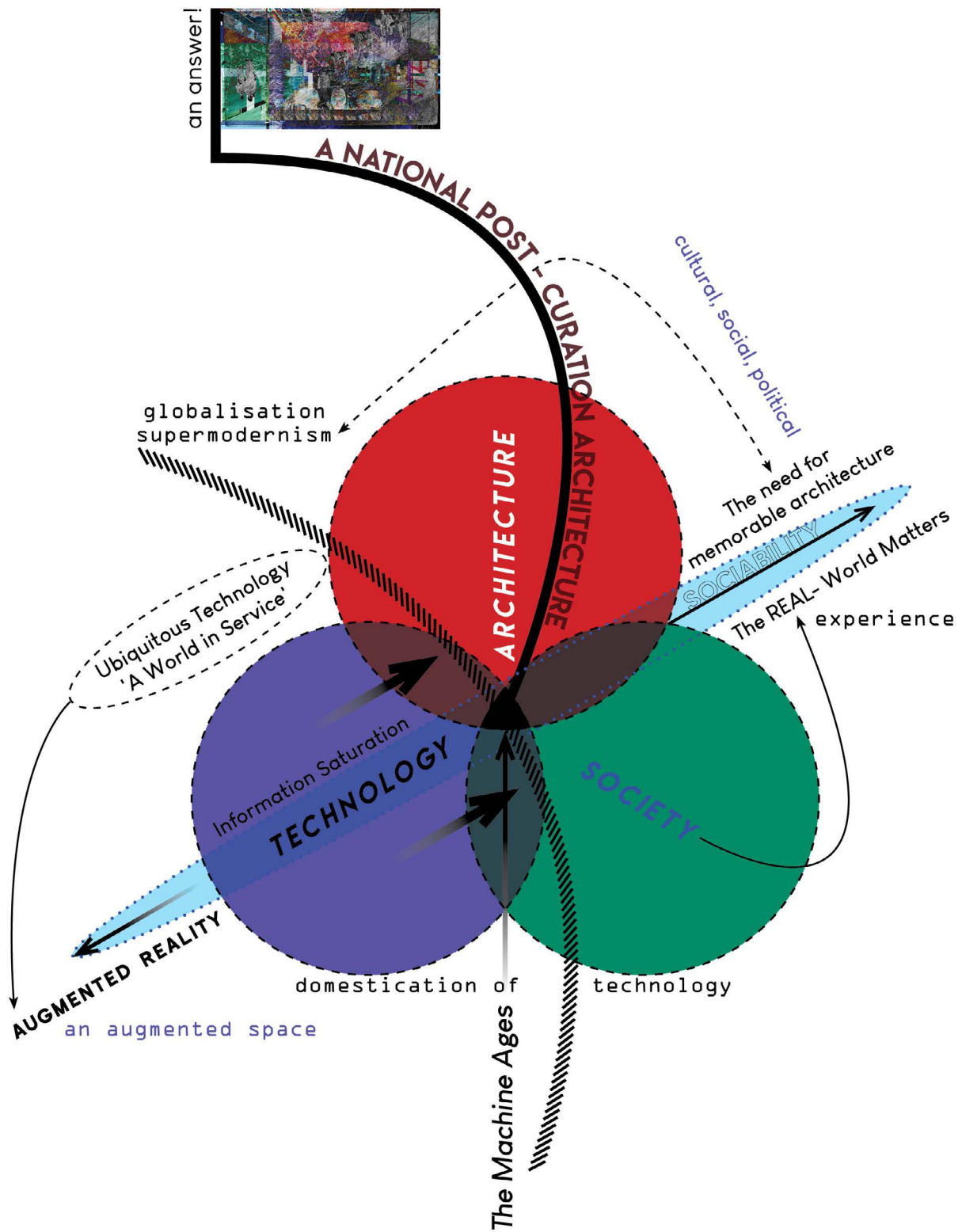
But there are also opportunities for a socially-engaged architecture in this digitally saturated and persistently blind Third Machine Age. This research explores the idea of a national museum for the twenty-first century (with its Third Machine Age implications), offering an alternative to the singular, authoritative (colonial) interpretation of national identity and its curation in static ('iconic') built form. The objective is a nimble, critically-engaged, digitally augmented and ephemeral place-based intervention that foregrounds multiple and competing cultural and personal histories.

In an age where the idea of 'place' is being challenged by the architectures of 'non-place' and physical experience is increasingly supplanted by virtual engagement, it is difficult for architecture to remain relevant. This thesis is a provocative statement of one such way that architects can take a stand and make socially meaningful contributions to the Third Machine Age.

RESEARCH QUESTION

How can
contemporary
architecture
be employed to
appropriately
address and
illuminate place-
specific contested
narratives in New
Zealand?

INVESTIGATION DIAGRAM



AIMS

- A** To define and arrive at an appropriate position on ‘contemporary architecture’ and the opportunities and drawbacks that come with it.
- B** To understand and arrive at an appropriate position on issues relating to contested cultural narratives in the New Zealand built environment.
- C** Test outcomes of Aims **A** and **B** in a design strategy and developed proposal for a national museum that appropriately addresses and illuminates place-specific contested narratives in New Zealand.

OBJECTIVES

A.1

Explore technological paradigms put forward by architectural theorists Banham and Pawley as First and Second Machine Ages.

A.2

Explore contemporary cultural paradigms that place architecture in current global/ corporate/ digital contexts.

A.3

Identify and define the characteristics of a contemporary architecture (as an extrapolation of Banham and Pawley's work (Objective A.1), placed within the context developed in Objective A.2)).

B.1

Explore recent local debates that have brought contested colonial and indigenous narratives to popular attention.

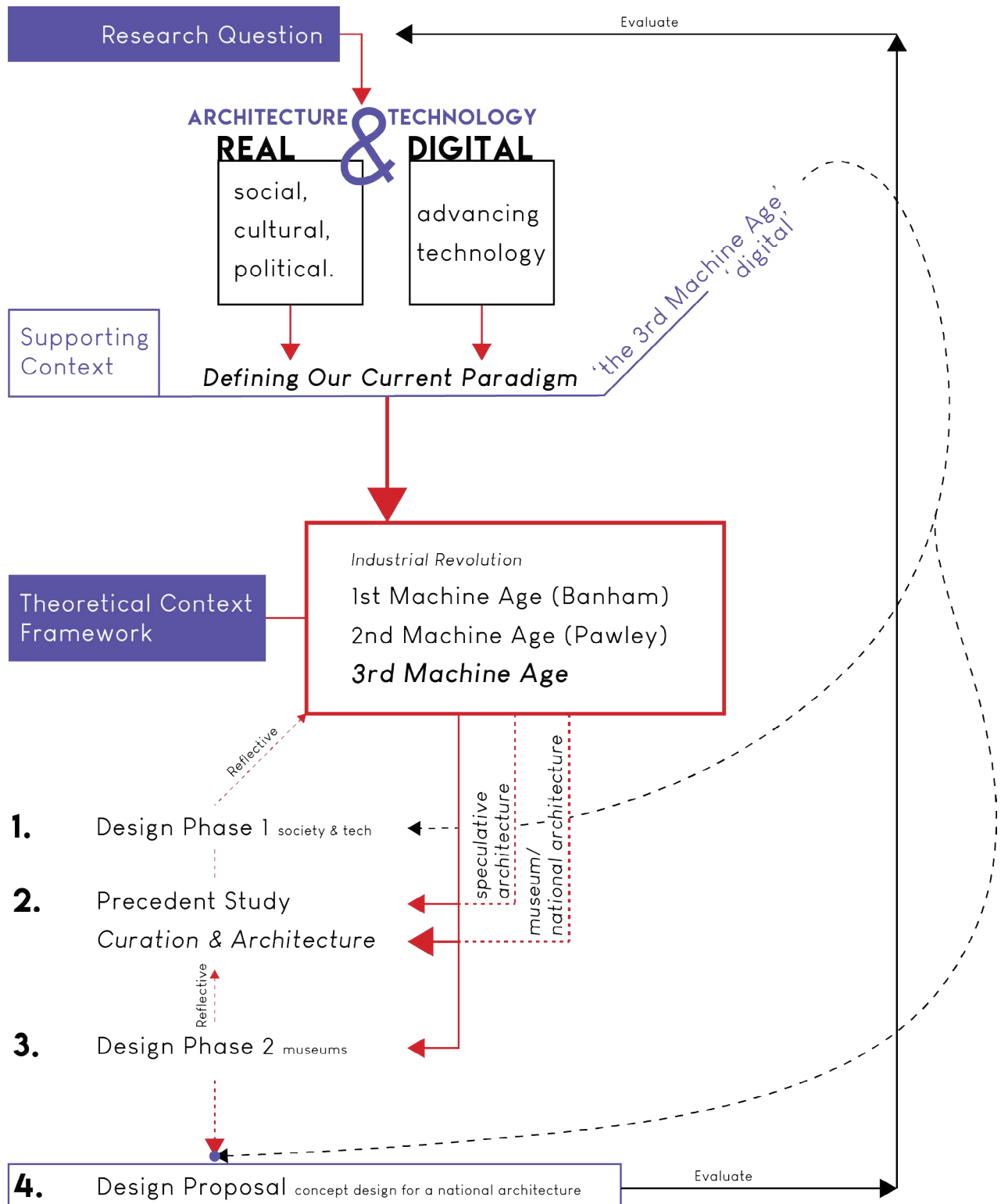
B.2

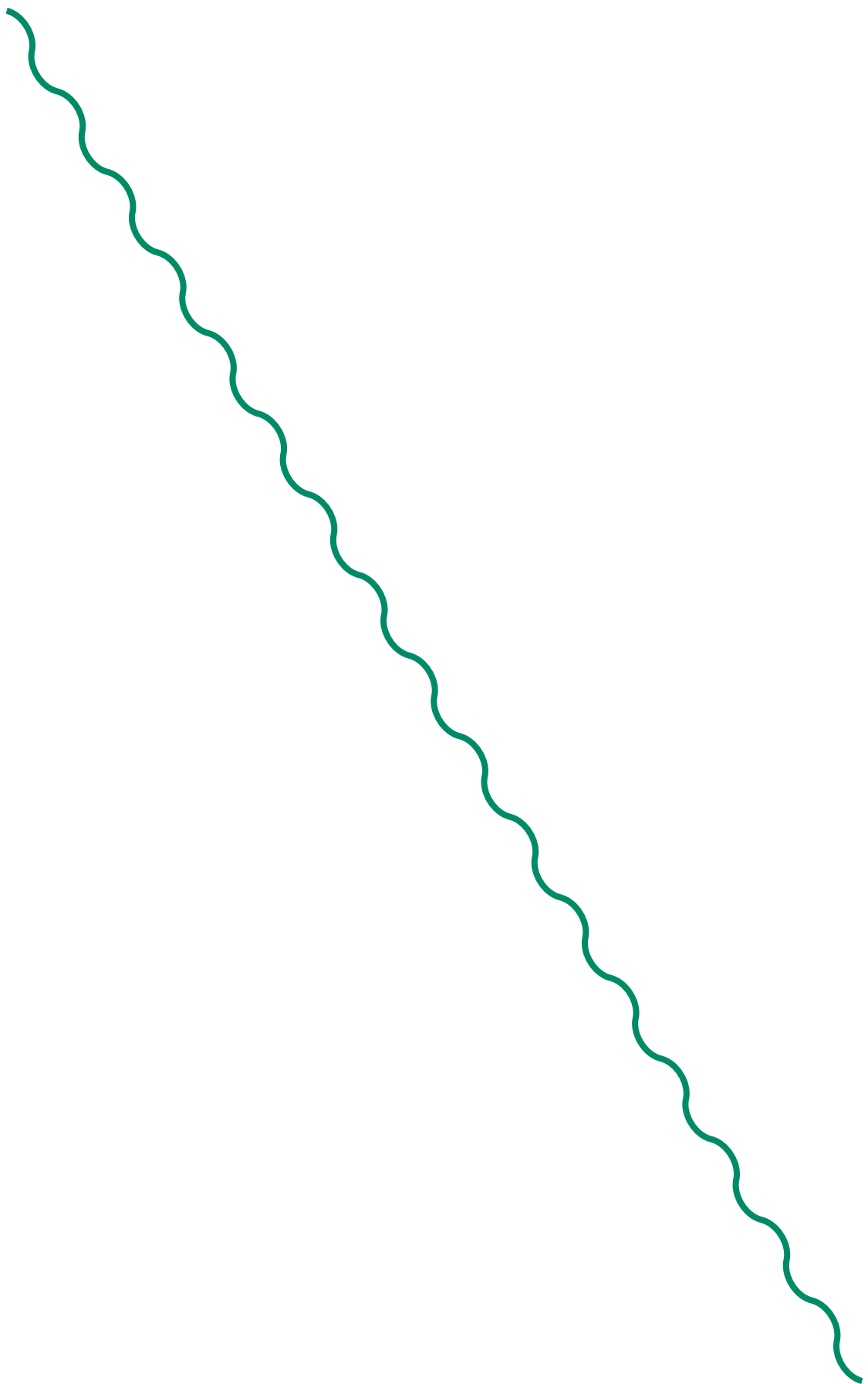
Explore national museums as significant cultural institutions where contested narratives may be seen to been 'curated' in 'major' architectural responses.

B.3

Develop a set of principles that must be observed in order to 'curate' contested narratives in built form (based on issues raised in Objectives B.1 and B.2).

METHODOLOGY





INTRODUCTION

INTRODUCTION

Violent Legalities, an exhibition held in Te Pataka Toi/ Adam Art Gallery “combines anthropology, art, architecture and software design to create an exhibition that provokes us to acknowledge the widespread, systematic and ongoing instances of violence against non- Pakeha in Aotearoa New Zealand” (Kiddle in *Architecture New Zealand*, 2020, p. 113).

The exhibited material focuses on terror, treaty and moral legalities. Kiddle (2020) highlights several issues with the exhibition in how it articulates the subjects. “Much of the material of focus centres on Māori communities, and yet there is no clear understanding of how connected the researches/ artists are to these communities”. The actual material, the way it is interpreted and represented; “those making the decisions to bring their conscious and unconscious biases ... to the table” lends the curation of narrative towards the sole curator (p. 113).

This thesis, *A Persistent Blindness*, illuminates’ opportunities and problems of our contemporary age. It combines technology and architecture that addresses social, cultural and political issues in a post- curation national architecture. It goes some way toward addressing the types of issues raised by Kiddle.

In our contemporary age, we live with the problems of ubiquitous technology: our world is saturated in information and increasingly in service to the uncontrollable forces of this technology. Both driven by and technological development and, perversely in spite of it, architecture clings to traditional ideas of authentic practice, rendering an image expressionless, bland and static. But, in this same technologically driven age, the real- world still matters. Our society deals with social, cultural and political issues. It deals with a disproportional westernised colonisers’ influence on place and people, inviting sole practitioners, be they architects, designers or creators, to define and/ or solve these issues usually with traditional ideas.

The question posed by this research arises out of contemporary digital opportunities that exist for an architecture that can illuminate social, cultural and political issues and allow for multiple ways to converse and interpret.

This thesis investigates the opportunities and problems of architecture and technology to define a position in our contemporary age and Third (digital) Machine Age. It transfers design and theoretical research into a user- centered national architecture that embraces

culture and people challenging static traditional notions of place.

Chapter one researches the historical advancements of technology through a theoretical lens specifically focusing on the symbiotic relationship between technology and architecture. The industrial revolution followed by the First and Second Machine Age, as defined by Reyner Banham and Martin Pawley, explores this relationship and sets the theoretical context and framework for the thesis.

Chapters two and three look at our contemporary relationship with technology, place and society and defines conditions for a Third Machine Age.

Chapter four explores a post- curation national architecture through the analysis of museums and curation spaces. It uses the framework established in chapter one to discover a potential Third Machine Age museum.

Chapter five explores and proposes a design outcome and chapter six reveals the developed design.

The design outcome invites conversation about what matters, allowing people to curate their own exhibitions and interpretations with augmented technology and architecture.

[The following text is a dense, handwritten manuscript, likely a letter or a page from a book. It is written in a cursive script and is mostly illegible due to the quality of the scan. The text appears to be a continuous paragraph or a series of connected sentences. The handwriting is fluid and somewhat slanted. There are some words that are more legible than others, but the overall content cannot be accurately transcribed. The text is written in dark ink on a light-colored paper. The margins are narrow, and the text fills most of the page area.]



THEORETICAL CONTEXT

THE MACHINE AGES

THE MACHINE AGES

INDUSTRIAL REVOLUTION

Since the start of the industrial revolution, the world has been influenced by the evolving advancements of technology. From the built environment to domestic needs, technology has automated the world. The world is now immersed and increasingly in service to these advancements.

The industrial revolution was “a process which gathered a particular momentum in the late eighteenth and early nineteenth centuries” (Hudson, 2009). An increase of world trade, rate of capital formation, autonomy in knowledge, increasing productivity, a growth of Laissez-faire and liberalised venture caused the unique process’ that are continued into the 21st century. This shift to internal consumption, the population boom and transition from agricultural to industrial based industry saw a great societal change that embedded the symbiosis between technology and society (Hudson, 2009). Following the industrial revolution, the evolution of technology has changed focus to address the needs of humans and domesticated life. From ownership to consumerism, it allowed humans to live easier.

All these changes have had implications for the built environment and architecture. *Theory and Design in The First Machine Age* (1980) by Reyner Banham and Martin Pawley’s

sequel, *Theory and Design in The Second Machine Age* (1990), present a coherent scheme for understanding the relationships between technologies and architectural developments of the twentieth century. The following section outlines the conditions of the machine ages.

FIRST MACHINE AGE

The First Machine Age outlined in the book *Theory and Design in The First Machine Age* by Reyner Banham, one of the most influential architectural historians of the time, critiques the attitude that gave shape to the modern movement or international style. From small to large technologies, the development of domesticated machines throughout the 20th century was a move away from the industrial scale mechanics. It also brought about a clash with the ornamental styles of the 19th century.

The 20th century transitioned to a domesticated technology: an age of ownership accompanied by an architecture that was clean, subtle and powerful. The age of ownership and the mass production of technology, enabled people to own the light, subtle and clean “fabulous 60’s” (Banham, 1980). “Miniaturization, transistorization, jet and rocket travel, wonder drugs, and new domestic chemistries, television, computer” and the list goes on.

THE FIRST MACHINE AGE

The age of ownership could offer the “effortless conquests of time and space” that was being explored at the time and with it came a technology readily available for the domestic environment (Banham, 1980).

The great architects of the early 1900s, the likes of Le Corbusier, Mies Van de Rohe and Walter Gropius, ‘the machine minders’ or the modernists, believed that a better way forward for society arose with access to this new technology. Society, architecture and culture would reflect the simple mechanics of the machines that drove society. They responded to technological advancements with simplification.

Banham, however, observed the shallowness of their ‘forward thinking’ endeavours. They simply “peeled off yesterday’s exterior embellishment and put on instead formalised novelties of quasi-simplicity”... a statement of “formalism and illusionism” not respondent to the advancements and materialistic functions of technology (Banham, 1980).

However, Dymaxion House by Buckminster Fuller, designed in 1927, addressed the availability of technology with a prefabricated design. It was a house fully integrated with the technology of the time, “harmonising environment and man,

and exploiting every benefit of science and technology” (Banham, 1980). It embraces and integrates technology of the age. Mechanical equipment was centred in the house, and it’s materiality more associated to that of the aircraft industry.

As time went on, the great architects of the early 20th century or as Banham describes, the ‘machine minders’, lost control of the growing force of the machine. This human-scaled and domesticated technology evolved into a machine far too smart and large for humans to categorise. Advancing technology drove information overload and, accompanied by public opinion, modern architecture was “now finally in disrepute” (Banham, 1980).

The ‘machine minders’ transformed into a society of self-believers and, in turn, developed a new age.



IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 1.01. Buckminster Fuller and a model of the futuristic Dymaxion House (Merin, 2019).

THE MACHINE AGES

SECOND MACHINE AGE

Theory and Design in the Second Machine Age, written in 1990 by architectural historian Martin Pawley, unpacked Banham's claims and argued that not much had changed since the First Machine Age.

Pawley (1990) writes architects and designers "are not in the sociology business but in the imaging business" (p. 4). The Second Machine Age, based around the 1970s to the 1980s, is predicted on the advancement of air travel, computer technology and the car rendering the availability of a technological world and its advantages. Pawley observed that the technology transfer to architecture did not see the same technological advancement. Where "[c]onstruction clung to its tradition of long-life, loose fit buildings: the car industry developed a new capacity to build short-life, tight fit cars" (Pawley, 1990).

The public, according to Pawley, wanted an escape route from the utopian world of modernism. The 'machine minder's lifeless mass public housing, a solution to a post-war housing shortage, did not fulfil social and cultural necessities. As Pawley notes, "[t]he active modern perspective of architecture as a tool in the re-organisation of society for the collective betterment of man gave way" (p. 24).

An answer to the lifeless brief era of modernist architecture, architects reformed old looks, into new and communicated the current culture, and technology aesthetic of the time. This repressive architecture now known as Post- Modernism was pitched (and built) as an answer to this utopian world.

Richard Horden, Richard Rogers and Michael Hopkins however were architects that to some degree embraced technological advancements in construction. Buildings reinforced the power at play with sleek, high- tech designs with materials and structure. However, this style was repressed with the public's conservative views who preferred the traditional aesthetics of colonial typology.

IMAGE REMOVED FOR
COPYRIGHT REASONS.

THE SECOND MACHINE AGE

Pawley (1990) calls for a solution to the overload of information that characterises the Second Machine Age, drawing attention to medieval architecture as one potential precedent – what he calls the ‘gothic solution’. He states,

“[g]othic cathedrals and churches were public information buildings. Their huge windows were picture screens designed to use natural light to convey visual information to large numbers of people” (p. 119).

The clarity of structure and design of gothic architecture provides an answer to public desire for a traditional architecture and from an architects perspective, one that could deal with the overload of information in the Second Machine Age.

The Second Machine Age celebrated the availability and power of technology extending the society of consumption, a place fixating on the ‘micro-aesthetic’, the image, and motifs rather than real-world issues. There was a disorder of information throughout architecture and society, established from the advancements of mechanical processes to electronic (which is discussed further on). Pawley outlines and gives conditions for a second machine age, but suggests that it is too late, that architects and designers are not taking advantage of technological progression and that

the power of technology was out of our reach. The search for meaning in this consuming and saturated power and the search for an architecture that deals or embraces these forces was non-existent.

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 1.02. (LEFT) Richard Rogers's Lloyd's Building, 1986 (Pawley, 1990, p. 33).

Fig 1.03. (ABOVE) Nectar Homes geodesic timber house, 1985. A product of technology plus micro-aesthetic (Pawley, 1990, p. 65).

THE MACHINE AGES

A NOTE ON SPECULATIVE ARCHITECTURE

As a society, we speculate about the possible world and how it might look like. Speculative architectural ideas were explored during the 1960s and 70s, 'the First Machine Age era', with the likes of Archigram, Archizoom and Cedric Price using design to critique the 'given is given' giving people the possibilities of the current technology.

Their radical ideas explored the potential of technology and its effect on society and architecture. These architects, ahead of their time or perhaps more *in* their time, as Banham might have defined it, answered a future problem of 'information saturation'. This influenced the decisions and outcomes in the design phases of helping to shed light onto a potential Third Machine Age.

Design is, by its nature, a speculation on possible futures. Every single architectural design drawing is exactly that.

"[T]he idea of possible futures and using them as tools to better understand the present and to discuss the kind of future people want, and, of course ones people do not want" (Dunne & Raby, 2013, p.2).

There are opportunities with technology and architecture to allow people to have unique experiences and architecture to respond to technology and society in ways that are memorable and progressive.

Though these architects show some possibilities, enabling us to dream and realise potential, these are unbuilt speculations and do not hold a position in the real world.

Fig 1.04. Section of 'The Plug-In City' by Archigram (Cook, 1964).

IMAGE REMOVED FOR
COPYRIGHT REASONS.

SPECULATIVE ARCHITECTURE

IMAGE REMOVED FOR
COPYRIGHT REASONS.

*Fig 1.05. 'The Plug-In City'
by Archigram (Chalk, 1964).*

2

L I T E R A T U R E C O N T E X T

**CONTEMPORARY ARCHITECTURE,
TECHNOLOGY AND SOCIETY**

ARCHITECTURE, TECHNOLOGY, SOCIETY

INTRODUCTION

Banham and Pawley's books outline 20th-century technological advancements and the implications for society and architecture. Pawley's book, published in 1990, shows how little has changed in how technology is influencing society and architecture from the criticism made by Banham a decades earlier. With the development of computer-driven, autonomous and immersive technology in the thirty years since Pawley, new problems and opportunities face the world. Technology has fragmented away from 'human- control', leaving us in a world in service to technology.

In reaction to and extending from the First and Second Machine Age, a theory can be formulated around discussion of our current paradigm. But rather than a Third Machine Age, our current digital age can be defined in terms of global economic systems and increasingly intelligent electronic devices. In order to understand our current age, the following chapter explores: globalisation, global architecture and place with relevance to technology and society.

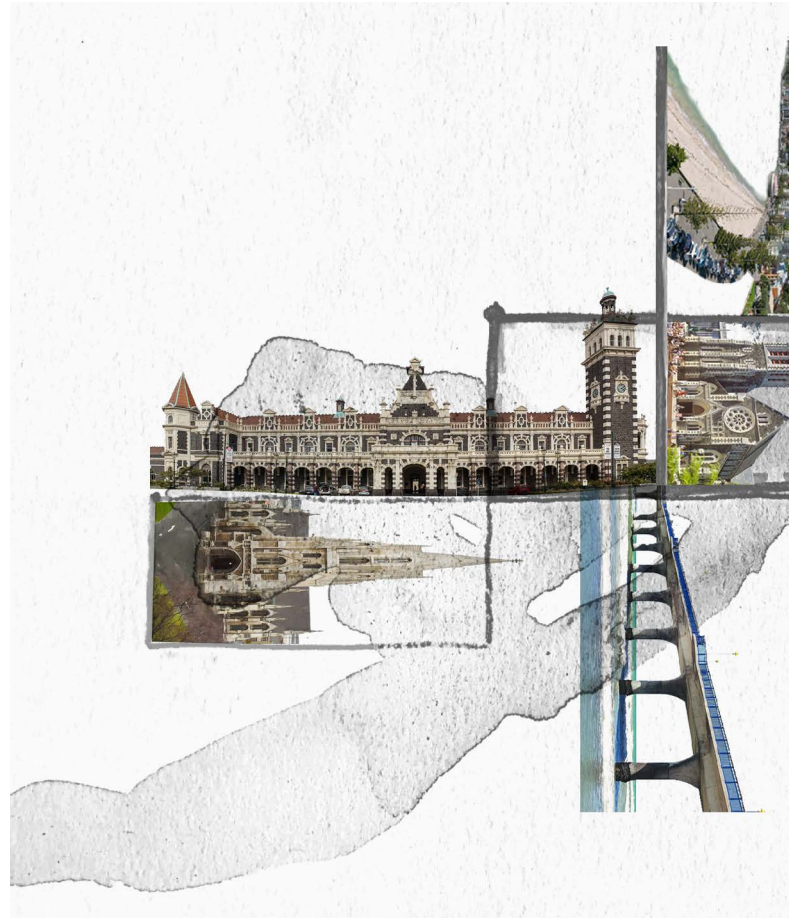
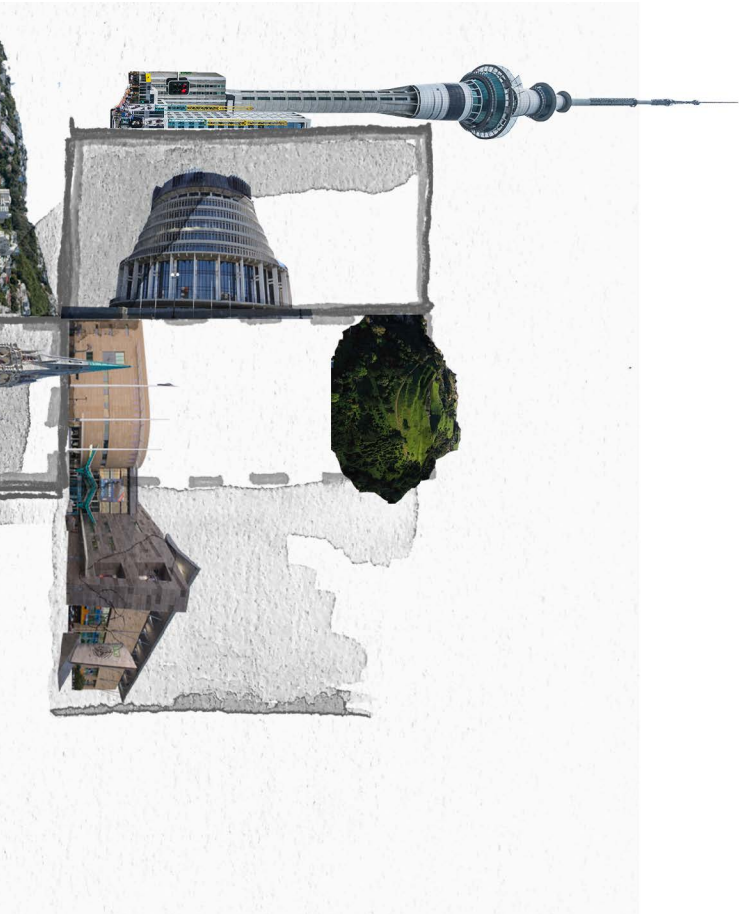


Fig 2.01. 'A global place'.
What if all of New Zealand's
landmarks were situated next
to each other?

SUPERMODERNISM



GLOBALISATION

GLOBALISATION

Globalisation has been established as a phenomenon since technology enabled us to fly across the world. People can travel to a place and feel comfortable due to the relatable environment. With the domestication of technology, our world is getting smaller and smaller, each a microcosm of another. Ibelings (2002) notes that everything is accessible, making the environments “familiar or is assumed to be familiar” in the reign of the western aesthetic (p. 64).

Technology has paved the way for global tourism. With advanced air travel, places once out of reach are now within hours. The influx of people in different parts of the world has created a place catering for visitors, draining cultural integrity, and replacing it with similar characteristics and predictive patterns. Ibelings (2002) noted, “tourists visiting these spots [have] no mental picture or even the slightest notion of the geographical location of their holiday destination, therefore not as strange as it might at first appear” (p. 150). The technological grip on the world has influenced place, rendering conditions of familiarity.

ARCHITECTURE, TECHNOLOGY, SOCIETY

SUPERMODERNISM - GLOBAL ARCHITECTURE

Supermodernism, an architectural style described by Hans Ibelings at the end of the 20th century, rejects the postmodernist era of symbolism.

“The focus is on an abstract architecture that refers to nothing outside itself and here, too, a lot of attention is devoted to formal reduction” (Ibelings, 2002, p. 62). The complexity of globalisation led, by the increase of technology, has tended toward an architecture that is expressionless, large and neutral.

In Ibelings', 'non- places' are defined as spaces where concerns of relations, history, and identity are erased. Such non-places are consequences to the mobility and consumption of globalisation. Airports and malls are examples of non- places that by nature are less reactive, leading to experiences that are meaningless (Ibelings, 2002, p. 65).

Many locations around the world are attractive due to their architectural, cultural, or natural beauties. We travel to see these locations in the flesh. Places like Las Vegas and cities in China have rendered a pastiche model of a cluster of landmarks or even whole cities that mirror reality to near perfection. As Ibelings (2002) explains “all these projects are deliberately intended as representations of authenticity, identity and meaning, the same qualities that crowds of tourists are increasingly searching

for in these vain days” (p. 70). The authenticity of place is diminished by architects and designers, creating a 'uniform' or 'autonomous' architecture mimicking an idealistic culture and influencing familiarity in place. He notes that, “autonomy applies to much contemporary architecture and urbanism... autonomous worlds that have little or nothing to do with their surroundings” (p. 78).

More recently, in 2020, the Trump administration passed an executive order promoting Beautiful Federal Civic Architecture, a project to 'unify' the country in classical architecture. This, it can be argued, is an example of autonomous architecture influencing the authenticity of place in much the same way.

In the current age of globalisation, from 2000 to 2020, technological integration with everyday life is an underlying ubiquitous force changing our social interaction and connection with place. With the public fixated on the micro-aesthetic, in architecture and increasingly in the digital world, there are opportunities for people to explore this fixation in experiences of identity, place and meaning.

Architects will continue to ignore technological advancements due to disarranged information and public opinion and therefore continue to communicate current culture with materialism and pastiche.

GLOBALISATION

Change is needed to current architectural presence, an architecture clinging to a traditional and authentic approach.

SUPERMODERNISM



Fig 2.03. 3 and 4 World Trade Center. Sleek glass skyscrapers a common sight around this area of New York (Author's own image, 2018).



Fig 2.02. Supermodern high rises replacing a once industrial area of Mexico City. Plaza Carso, Mexico City (Author's own image, 2018).

ARCHITECTURE, TECHNOLOGY, SOCIETY

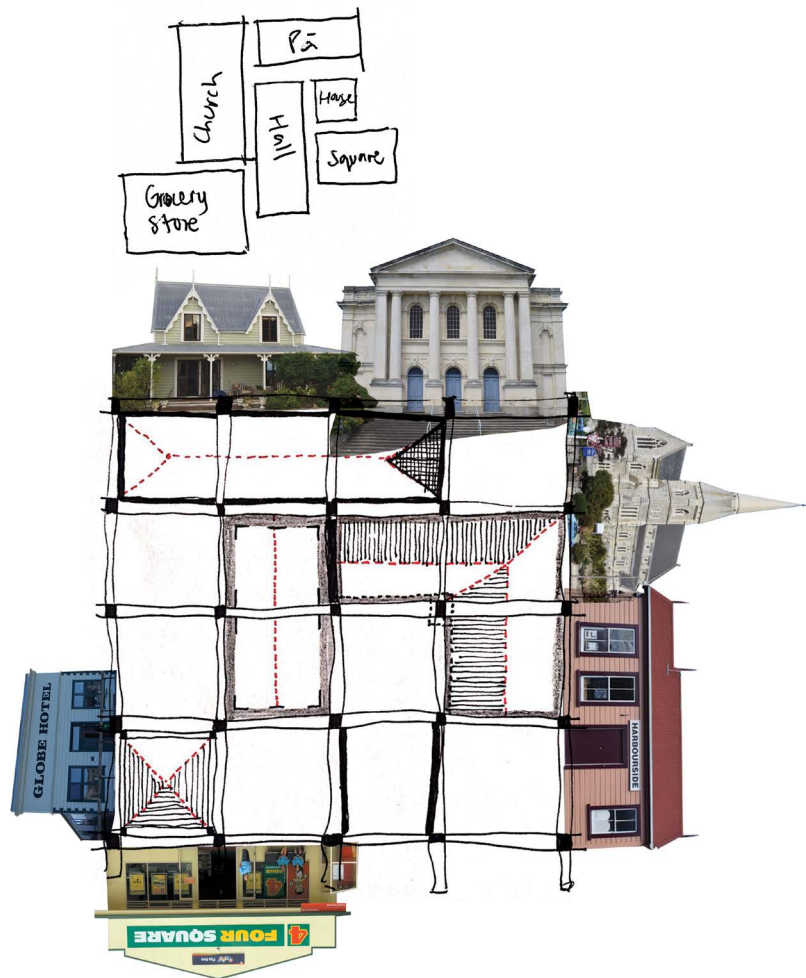


Fig 2.04. 'Globalisation- an intense place two'. A grocery store, hall, house, marae and a church.

TECHNOLOGY AND PLACE

TECHNOLOGY AND PLACE

The ubiquity of technology enables us to live our current lives. Technology is helping our societies become smart with data driving change in cities and helping them overcome their most pressing issues. Data addresses issues of security, pollution, traffic, and development. Traffic lights help keep the vehicles moving, GPS helps us travel to the places we need to go, and vehicles enable us to have a comfortable trip. Technology has a grip on our contemporary understanding of place.

The ubiquity of smartphones enables us to share, connect and socialise immediately with people all around the world. The experiences we have now, compared to a century ago, are near impossible to compare due to the increase of ubiquitous technology. In any given situation, the fact that “... pervasive media devices might go unremarked and unnoticed positions them among the ordinary, the habitual, the banal, and the everyday” (Coyne, 2010, p.73).

Technology can have an effect on our relation and contribution to place by adding another level of interpretive relation, aiding or hindering our experiences. Technology such as Google Maps, Google Earth and even games like Pokémon Go, invite a better understanding of place through their medium. They allow and encourage us to navigate and open up places not

experienced beforehand (Coyne, 2010, p. 71). Temporal immersion in these virtual worlds opens up opportunities and problems. Computers and video games immerse the user in a temporal environment. The virtual world opens up new experiences not faced before.

These virtual and augmented environments can make the user feel unique spatial experiences. They are able to explore these worlds as a removed role of self that is not like their physical original. It challenges social engagement, image and the reality of the real world. Since the global pandemic started in 2020, the world has become accustomed to Zoom, a video chat app that has changed how we interact with each other from the home to the office. Something brought upon by global pandemic has taught us how important and how immersed technology we are.

Space has been expanded through technology enabling many levels of interpretations that open up a liberal sociability. “Pervasive digital devices have obvious spatial aspects: phones connect across distances, GPS locates people in space, computer games and streamed media synthesise spatial environments ... all of these devices are distributed across space” (Coyne, 2010).

ARCHITECTURE, TECHNOLOGY, SOCIETY

There is also the augmented space of mobile phones and social media, a virtual extension of ourselves. “Social media has removed all the barriers of interaction and communication. We can communicate with our family, friends and relatives regardless of the distance we have” (Phogat & Sharma, 2015).

Varnelis adds that, with technology we can have “an extension of intimate, personal space into our surroundings” a ‘telecocoon’ (2006). This can be a positive enhancement or a demoralising experience. Technology has changed our social ways and can enable a “new kind of place-making, enabling us to dwell more creatively in both “real” and network space” (Varnelis, 2006).

Though technology gives a sense of presence and memorable experience, the fidelity of these experiences is problematic. When we imagine something, the direction or events of the place are of will from the user. That imagined or happening scenario has had pre-conceived or lived experiences, so we are able to feel a sense of presence. There is a consistency of technology influencing people into different worlds that may appeal as utopian but are actually an immersion of dystopic proportions. In the current world, we have a disorganised multiplicity of information. There are opportunities

for technology to reassert reality and enable a better understanding of our world. The fact is that there is no ‘real’ world anymore or even a binary sense of a real and virtual. Technologies’ immersion will increasingly mediate our experiences and have a supreme reign and influence on society and architecture bringing about more implications that potentially could have demoralising and dystopian effects.

There is an opportunity to use our current augmented space that society is embracing or in most cases sub-consciously embracing and with architecture communicate social, cultural and political implications that have been and are apparent today.

TECHNOLOGY AND PLACE

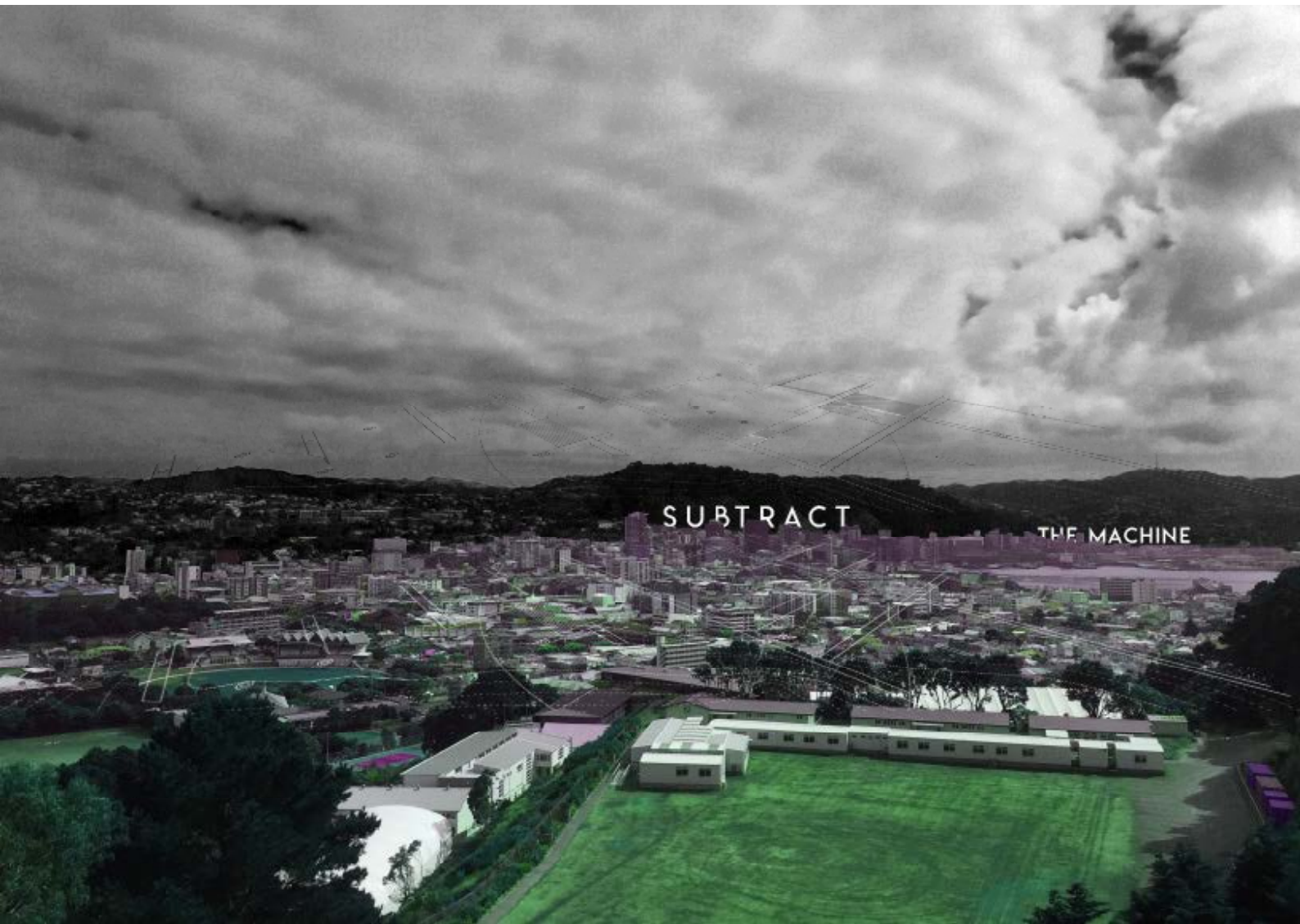


Fig 2.05. Subtract the machine. The relationship between technology and place (Author's own image, 2018).

THE REAL WORLD MATTERS

As much as technology has its own problems and influence on society, there are the 'real' realities of social and cultural problems. Real-world situations are 'real' and have direct meaningful effects on society.

What has been of discussion lately is our stubborn "persistent blindness" to discrimination. This "[b]uilt discrimination endures because it is often hard to change and knowledge on its own is not enough" (McCarthy, 2021). In a recent opinion piece, *The Politics of Public Spaces* in Stuff NZ, McCarthy discusses the discrimination happening in society. For too long, society has gone about life oblivious to the fact that there are still racial problems, discrimination and violence. "New Zealand's history of the built environment is clearly not immune from discrimination – whether it be the displacement of ethnic or poor communities by means of 'slum' clearance, motorway construction or gentrification..." (McCarthy, 2021). There is an increase of concern for social justice in society – something of a breakthrough for modern society. New Zealand's Treaty of Waitangi/ Te Tiriti o Waitangi is the grounding foundation of our contested history (a colonial history the outcome), but is now being challenged frequently in Treaty claim research. Throughout the world and in New Zealand, the rise of Black Lives Matter has created a snowball effect in change towards a

more just future, emerging from what is a violent legacy.

In a recent editorial of *Architecture NZ*, Barton discusses the problematic nature of contested statues and monuments around the world. "Many of these memorials have long been problematic – in America and Britain, representing slavery and in the Antipodes, the legacy of colonialism" (Barton, in *Architecture New Zealand*, 2020, p. 8). Statues are being toppled in the wake of Black Lives Matter protests, rightly so, and in New Zealand, similar matters are arising from what some think is a peaceful past of colonisation and racial matters. Captain John Fane Charles Hamilton, who killed Maori in the Waikato land wars, has been removed in Hamilton's Kirikiriroa Civic Square. In Wellington, statues such as Queen Victoria and Edward Wakefield were blindfolded with red scarfs. There are many statues standing in pride position in our parks, squares and avenues that celebrate a colonial history, remnants of blindness to their actual legacy and its effects on New Zealand of all ethnicities.

As much as technological influences have become a problem, real-world issues are still the most important.

THE REAL WORLD MATTERS

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 2.06. Captain Hamilton being removed from Civic Square, Hamilton (Yardley, 2020, as cited in McCarthy, 2021).

OUR CONTEMPORARY AGE = THE THIRD MACHINE AGE

The First Machine Age, an age of ownership and the Second Machine Age, an age of consumerism, are 'out of date'. Much has changed since Pawley wrote about the second machine age. The mechanism of the world has grown to a colossal size; a world lost in information. As Pawley (1990) states, "a state of war does exist, but not only between man and nature; between the age of science and the accumulated infrastructure of centuries as well" (p. 176). This war exists today, just on a grander scale. It is now 2020, and this war on technology, globalisation and economies has grown to a NASA spacecraft- so out of this world, it doesn't make sense.

The Third Machine Age is an age of ubiquitous technology within society, a technological grip on the world influencing place; the pervading nature of supermodernism, an architecture expressionless and meaningless clinging to a traditional and authentic approach; the phenomenon of non- place, a place with little or no relation to people and lastly an age demanding of the rise of social justice in society; a much-needed change to our persistent blindness. Though it does not sound much different to the theory and design of the second machine age by Pawley (we are still people of 'conscientious objection' and self-belief) it is a dual reality (an 'augmented' reality) that is real, that we must embrace- an age saturated in information and contested truths.

OUR CONTEMPORARY AGE = THE THIRD MACHINE AGE

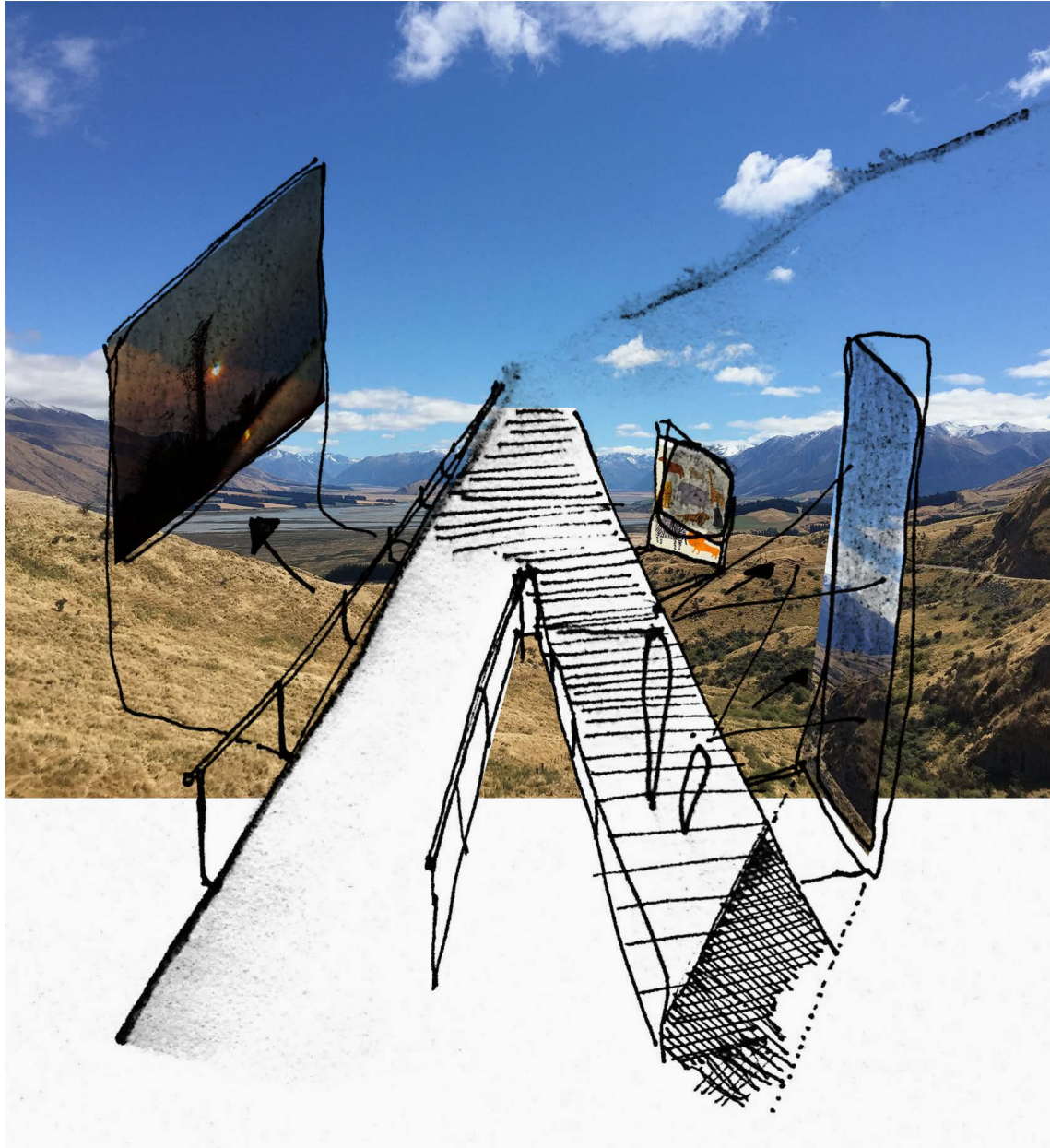


Fig 2.07. Think 'augmented connections' – what does augmented space do to our relationship with the real world?

EXPLORING OUR CURRENT AGE.

**HOW MIGHT TECHNOLOGY EFFECT OUR
RELATIONSHIP TO PLACE?**

WHAT DOES THIS PLACE LOOK LIKE?

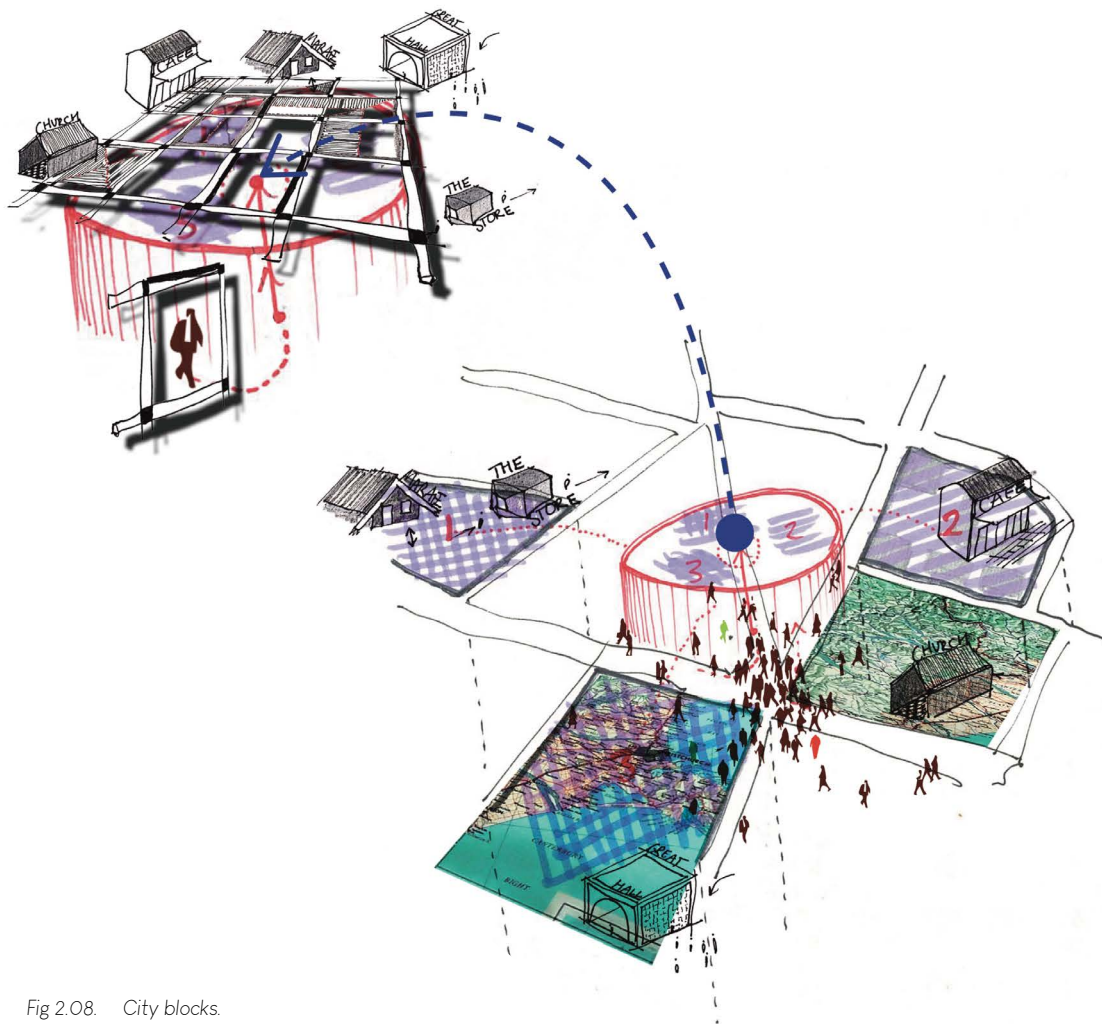


Fig 2.08. City blocks.
Gathering places that are
of interest and then realised
through augmented reality.



DESIGN PHASE ONE

THE THIRD MACHINE AGE

THE REAL AND VIRTUAL

ARCHITECTURE IN THE THIRD MACHINE AGE

The following chapter outlines the current digital and real-world opportunities for architectural design in our Third Machine Age. It shows how technology can render experiences obsolete but also enhance and replace them, bringing about real-world opportunities in our built environment that we see today.

Technology can render a place void of relatability through ubiquitous computing, where the likes of computer processes and designs take out satisfaction and memorable experience of process degrading the experience of the place.

Technological processes are a strange and crucial part of our relationship with technology. These technological narratives inform us of a humanised connection to technology. “[S]oftware languages determine how we currently understand, categorize, organize, and reference reality” (Lorenzo-Eiroa in Karandinou, 2018, p. 212). The metaphors associated with tasks that once were hand done and are now processed by data or aided by technology. For example, Shepherd (2003) states, “menus and windows on screen that operate like roller shutters, or time-lapse films of flower petals, as in the case of the iris shutter effect on the iPhone camera” (p. 189). Technology imitates reality, leading to a phenomenon of intelligence.

Technological processes reveal a clever process but with a facade of false identity.

People’s connections and relationships to technology interpret a new common place continually developing and evolving. Sociable places can become void of potential real social connections with the power of data and technology re-establishing place and the narrative associated.

Fig 3.01. Technology wrapping itself around buildings in Newtown. Projecting an image to change the experience of the place.



INTRODUCTION TO THE THIRD MACHINE AGE



Fig 3.02. Technology wrapping itself around buildings in Oamaru. Projecting an image to change the experience of the place.

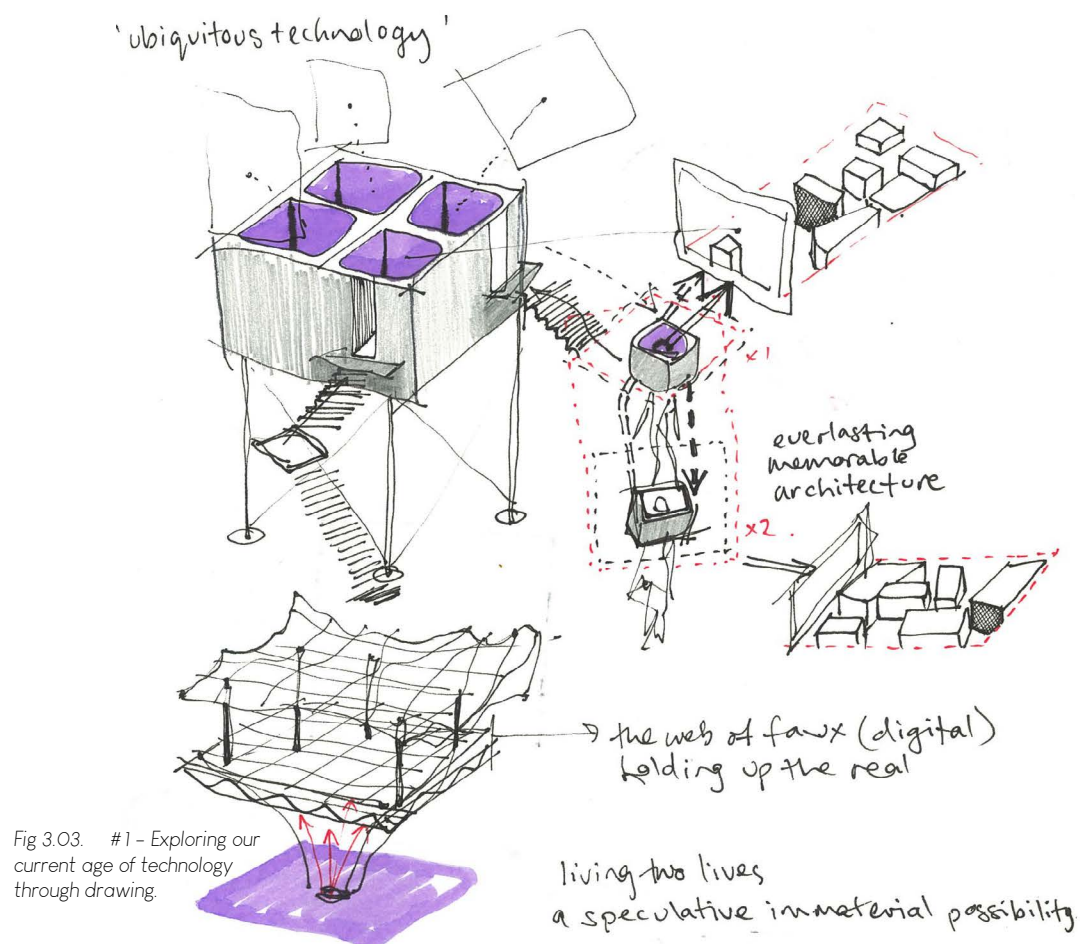


Fig 3.03. #1 - Exploring our current age of technology through drawing.

THE REAL AND VIRTUAL

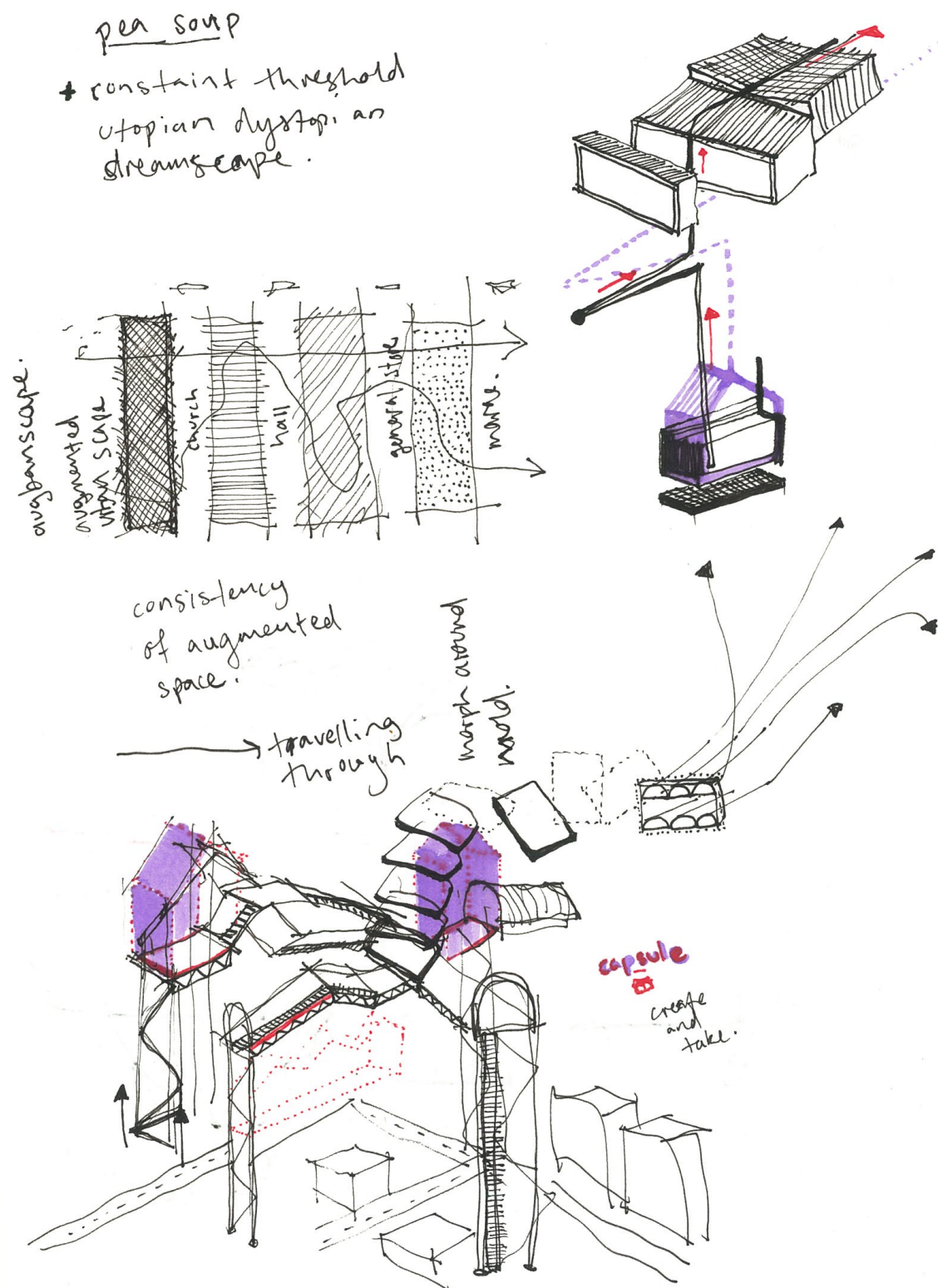


Fig 3.04. #2 - Exploring our current age of technology through drawing.

DRAWING OUT THE CURRENT AGE

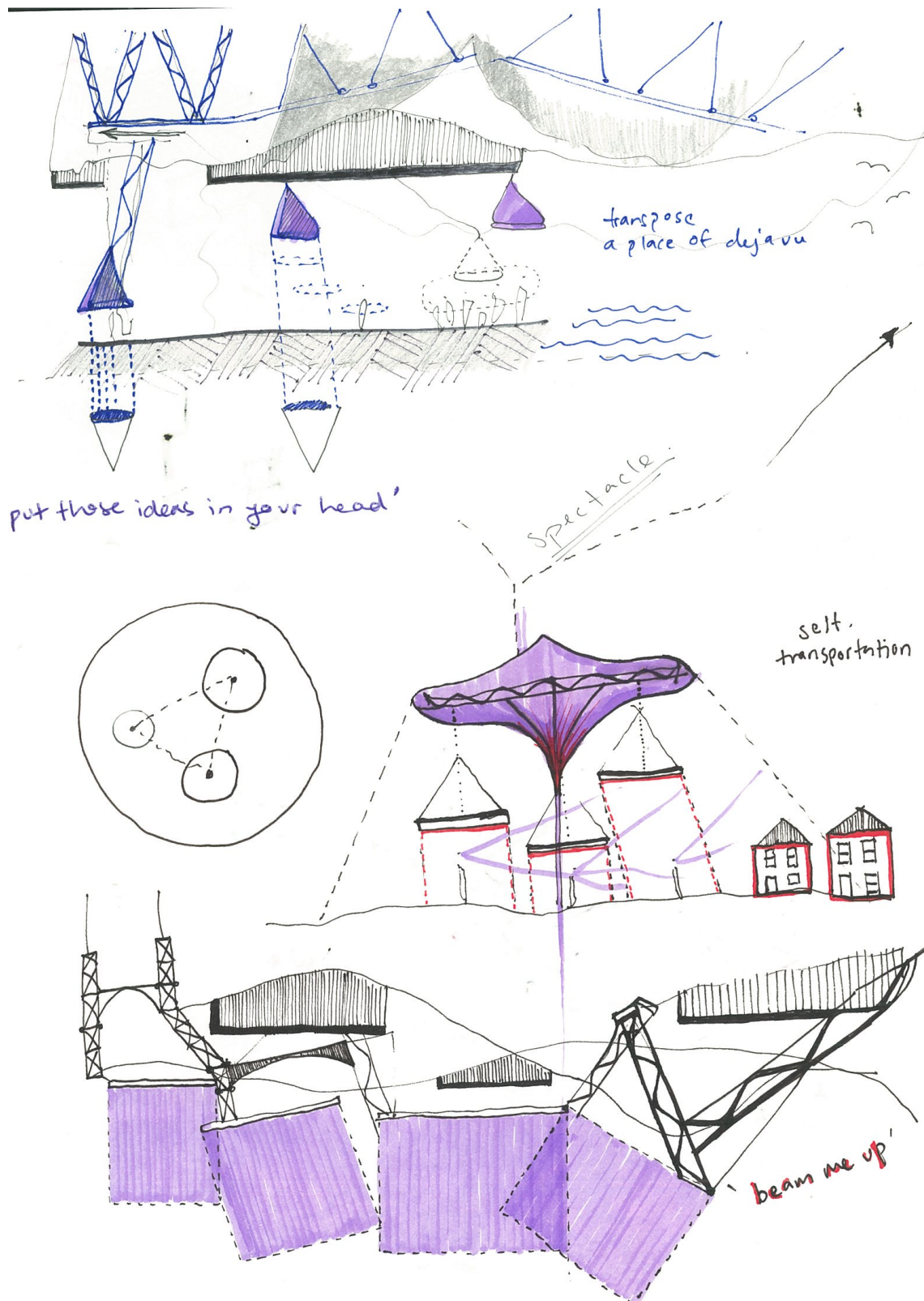


Fig 3.05. # 4 - Exploring our current age of technology through drawing.

THE REAL AND VIRTUAL

AUGMENTATION - DISCOVERING A NEW SPACE

Experience in technologically driven architecture is predictive, familiar and saturated in a world that is culturally and socially sophisticated. The possibility of augmented and virtual reality enables us to interpret possibilities. Since the 1990's an alternative virtual world has been developing. Augmented space is a phenomenon that addresses the commonplace of real and virtual. "Augmented space is the physical space which is 'data dense', as every point now potentially contains various information which is being delivered to it from everywhere" (Manovich, 2006, p. 223). Augmented space has domesticated the technological realm allowing people to have first-hand experiences.

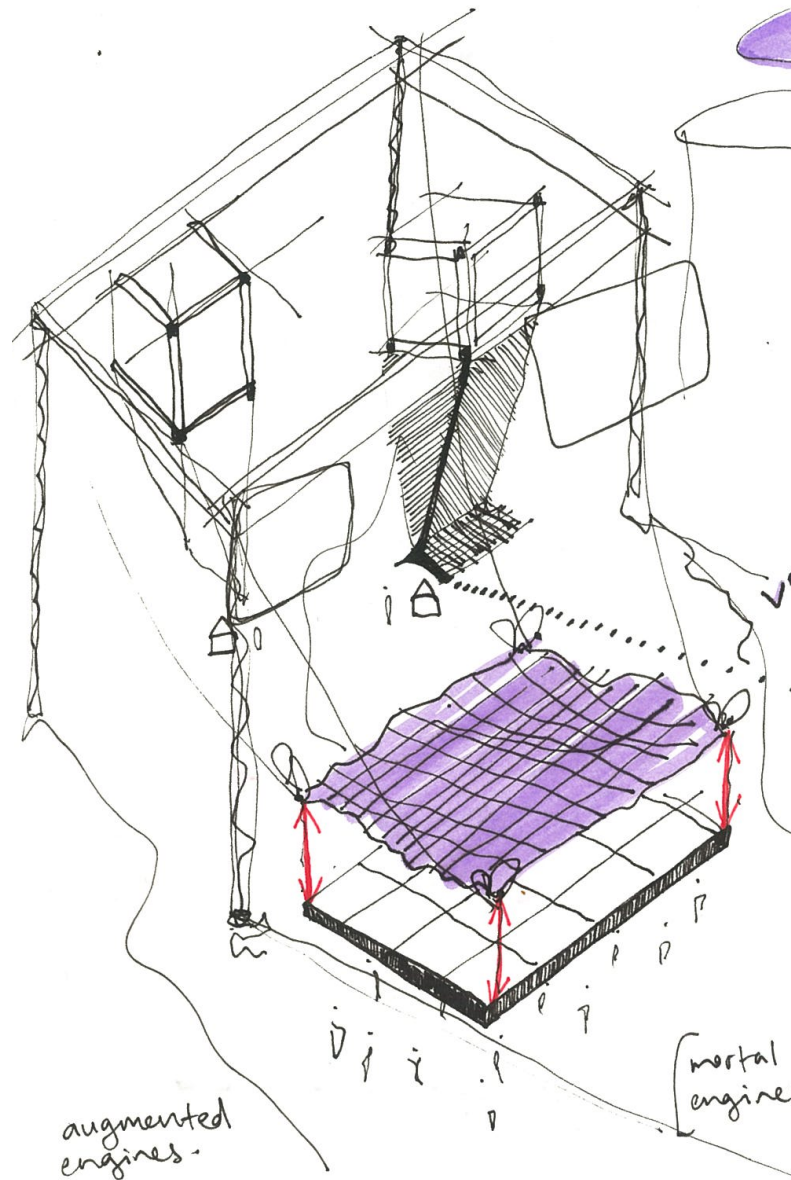


Fig 3.06. A machine like form travelling around New Zealand exhibiting the stories of towns and cities like Times Square and Shibuya Crossing.

DRAWING OUT THE CURRENT AGE

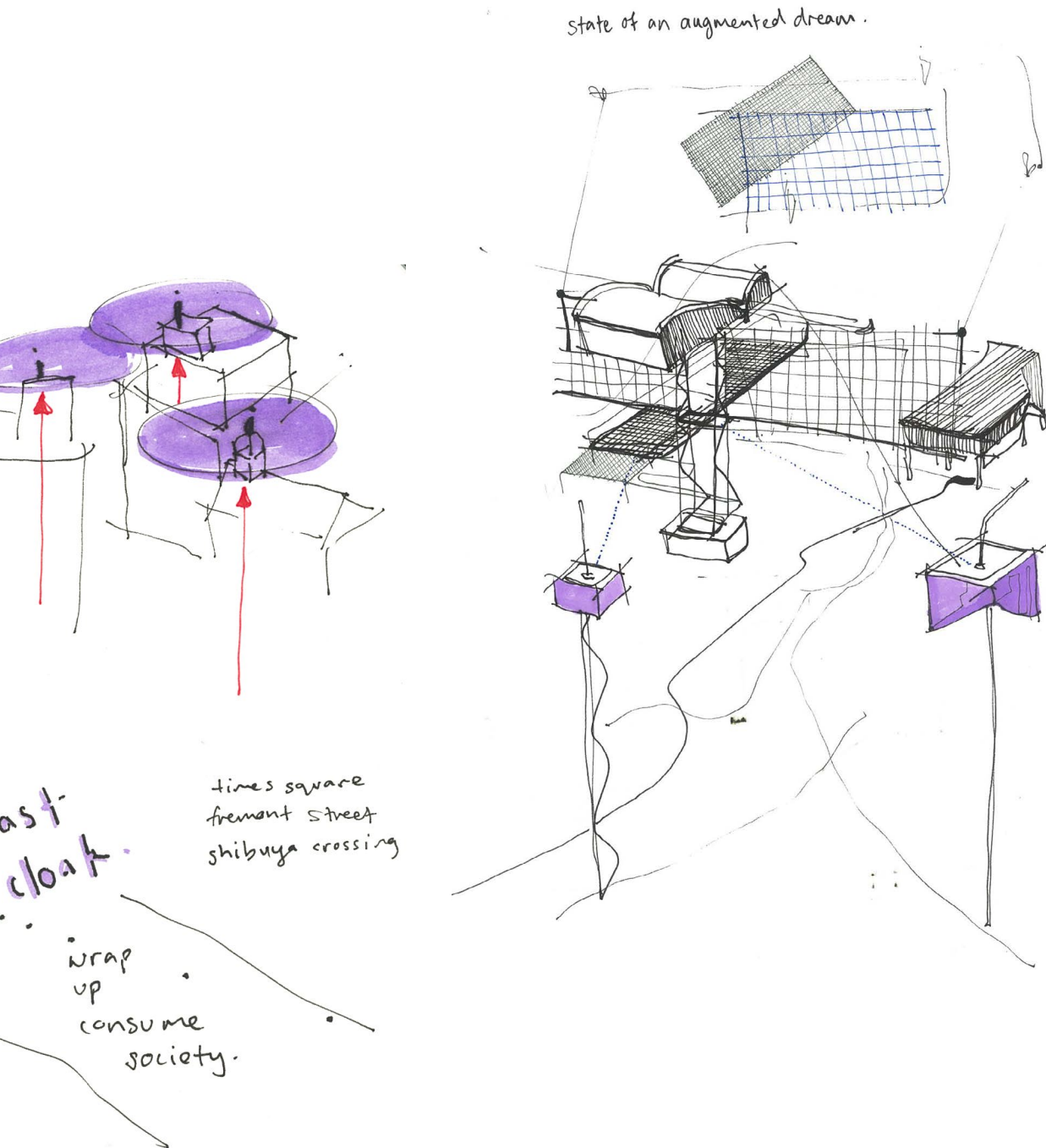


Fig 3.07. The potential to have places that were devoted to augmented realisations. What would the architecture look like?

THE REAL AND VIRTUAL

AUGMENTED REALITY

This domesticated world of augmented reality, a merge of real and virtual, is a hybrid space where people can realise an object in real life scenario through an app on a device, softwares or through augmented reality goggles. There are many options to realise digital forms in reality now. User friendly software such as Google AR Core and Adobe Aero enables the user to readily 'drop in' digital objects alter and move around in real life scenarios without having to learn to code. QR codes are used to locate and inform and even the likes of projectors and holograms bring virtually made objects into real space.

AR can improve our experience with the likes of smartphones enabling us to discover new places. Tourists in new environments gain a better understanding by using augmented reality through their smartphones.

Any potential points of interest "which visitors may easily miss if these are less well known or difficult to locate" can be located through augmented reality on smartphone devices (Ghouaiel et al., 2013). This use of augmented reality helps people find points of interest.

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 3.08. Adobe Aero
(Corazza, 2019).

AUGMENTATION - A REALITY

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 3.09. Google Just a Line
(Hoff, 2018).

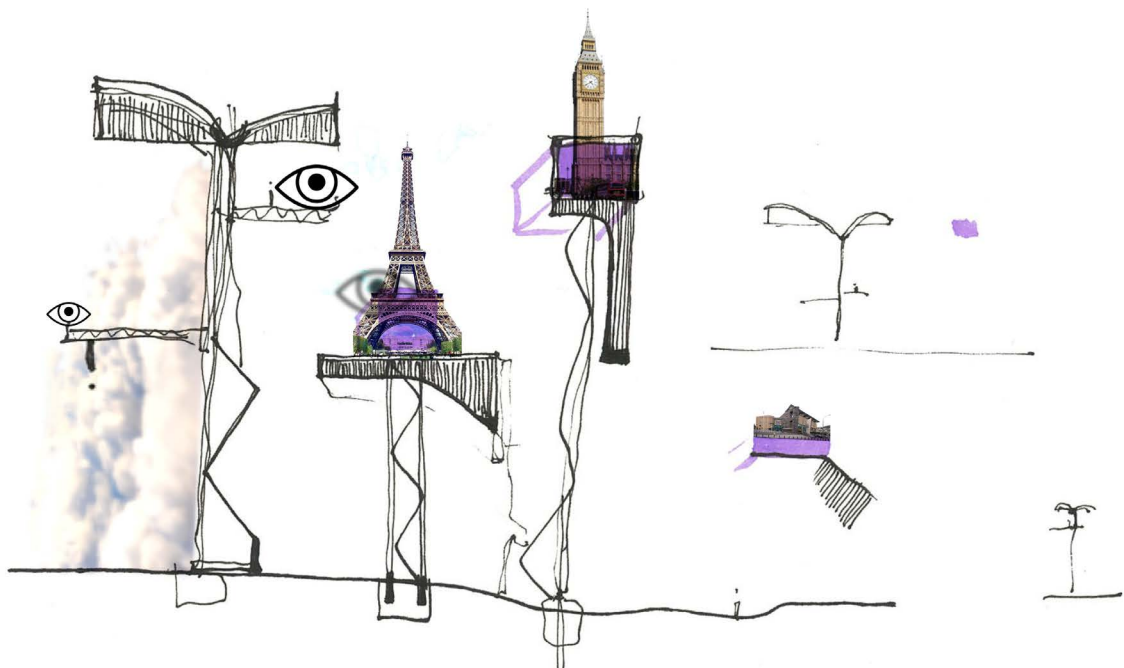


Fig 3.10. A set of structures
where landmarks are realised
through AR.

THE REAL AND VIRTUAL

AUGMENTATION - AN ARCHITECTURAL REALITY

Architecture and technology integrated together can create unique and memorable spatial experiences. These examples of how technology can enhance place show the possibilities of the augmented world.

Exhibitions, such as the examples below, show how augmented space can open up possibilities with space and tell what is not seen in the real world.

The Lighthouse Residence designed by Doug Aitken is a house applied with projected images. The projections narrate a document of ephemeral elements of the surrounding context in which it exists. “The artwork phases in and out of synchronicity with its surroundings, capturing the transformation of the environment as it shifts between the seasons, and drawing on both micro and macro views. With ‘lighthouse,’ Aitken connects with the living environment to explore ideas of disappearance and transformation” (Azzarello, 2020). It is a hybrid design that establishes temporality to the design and maintains its existence in an ever-changing world.

Janet Cardiff and George Bures Miller’s Audio Walks are audio and visual narrations guiding people through the city to reveal a mix of fiction and non-fictional history. These narrations augment the experience

of space, revealing qualities unseen. These stories bring up social and political implications of place. This specific audio walk reveals through audio and visuals through an iPod the historical accounts of Jews going off to concentration camps in Kassel, Germany. “Jews were taken from a different platform than what was believed ... in the video walk, we go to Platform 13; when you stand in that spot, there’s a modern train with people on it pulling away. It’s an overwhelming moment in the piece.” (Bures Miller cited in Cochran, 2018). Technology can become an educational tool revealing stories of the past and revealing them in a specific time and place.

Fig 3.11. Lighthouse (Aitken, 2012, as cited in Azzarello, 2019).

IMAGE REMOVED FOR
COPYRIGHT REASONS.

AUGMENTATION - AN ARCHITECTURAL REALITY

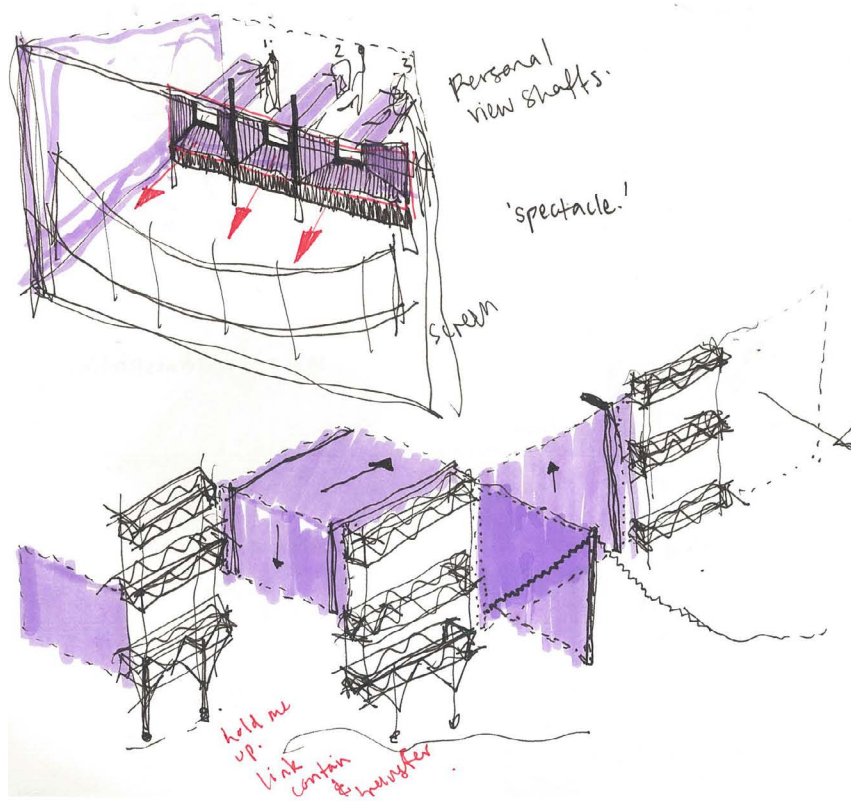


Fig 3.12. A potential architectural design where architecture and technology combine.

THE REAL AND VIRTUAL

THE REAL WORLD ISSUES/ MATTERS

The projection of George Floyd on the Confederate General Robert E. Lee Monument in Richmond, Virginia reveals how technology can raise awareness and promote change for the better. This monument, graffitied by protestors and projected with BLM (Black Lives Matter), as well as George Floyd's face, not only creates an intense and memorable experience but shows how the public can augment and change a place. This powerful stance, seen in the image by Graves, of people taking over and changing a monument in a public civic space reveals the disproportional westernised coloniser's influence on place and people.

In New Zealand McCarthy (2021) explains in a recent article, "[i]t's

only in 2019 that space was made available in Parliament's debating chamber to commemorate those killed in the New Zealand Wars in among equivalent memorials of overseas conflicts". This is an age of 'power to the people' and a demise of the political dictators in our environment. Public civic space should reflect the equivalent of a nation. In the United States, confederate monuments stand representing of a nation's founding. In New Zealand, colonial statues stand in important places at the heart of public spaces. These statues and places are a figure of the past, some are being removed, most are still positioned in pride of place.

It is only fair that our public spaces be representations of who we are.

‘AUGMENTED’ OPPORTUNITIES

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 3.13. In a recent National Geographic article—A projection of George Floyd on the Confederate General Robert E. Lee Monument in Richmond, Virginia. (Graves, 2020, as cited in Goldberg, 2020).

THE REAL AND VIRTUAL

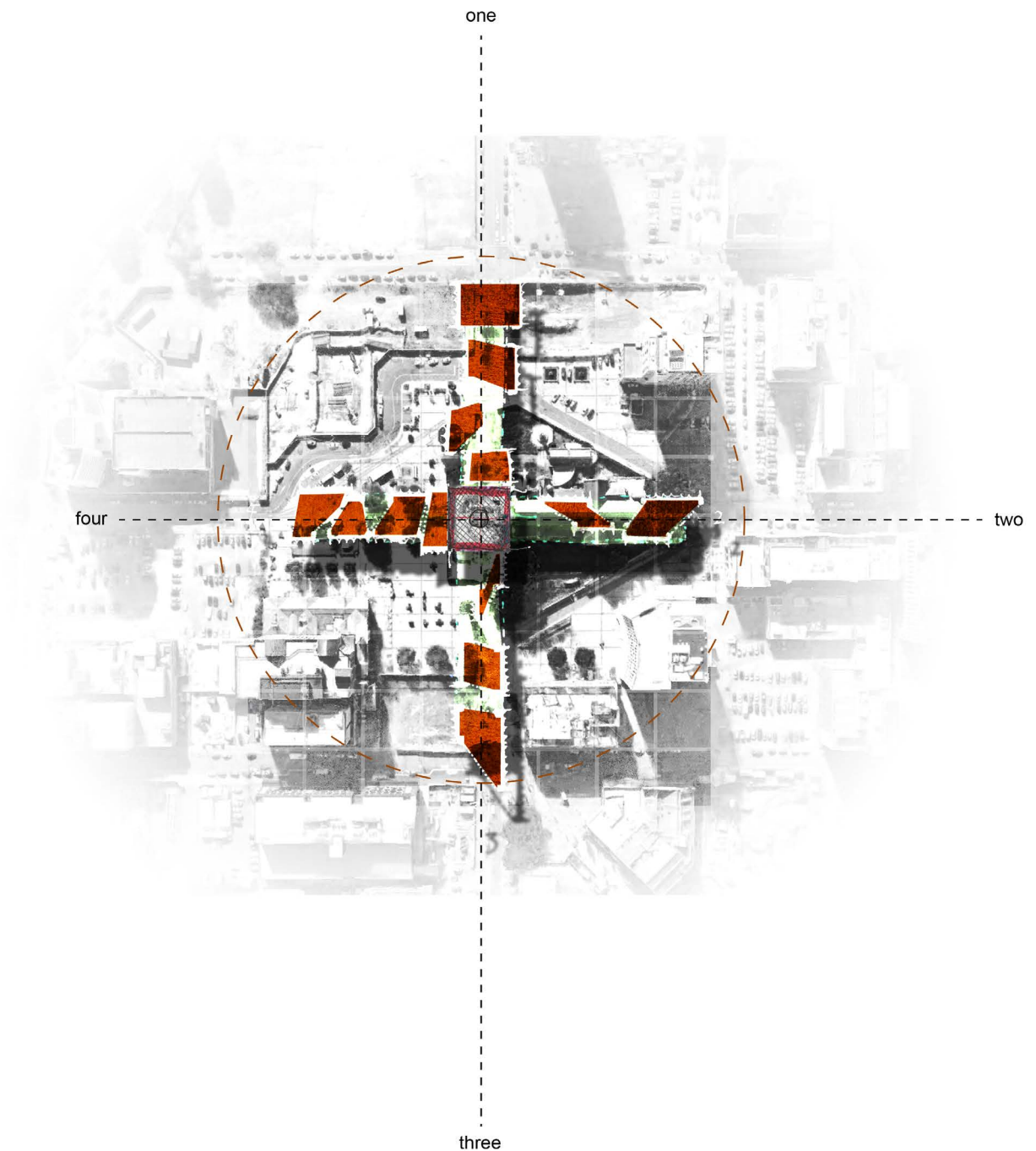


Fig 3.14. A place to speculate, a new type of 'National Architecture'. Cathedral Square, Christchurch.

‘AUGMENTED’ OPPORTUNITIES

‘AUGMENTED’ OPPORTUNITIES

In the Second Machine Age Pawley concludes,

“the information part of the city is assembling... [and] immobile architecture is disassembling... [p]ut together, these two images create a stereoscopic picture in which what was once the public realm, the civic vistas and spaces, the now clogged and useless streets and the crime-prone squares and parks of the city have been engulfed by the war zone and converted into an exhausting topography of obstructions”
(Pawley, 1990, p. 178).

Pawley is saying that too much information and a pastiche architecture has dire consequences – consequences that are all too evident in the world we currently live in.

In the Third Machine Age, there are opportunities to embrace technology to start to categorise this overloading of information. Architecture and

technology can be used to bring clarity and communicate current culture and social matters. It can teach people of real-world issues. Opportunity exists to use software on smartphones such as Google AR Core, where users can draw freely and create spaces, and Adobe Aero, where objects can be animated in real world scenarios to move about where the user pleases. The domestication of technology can enable people to create, share and interpret.

In the wake of BML, the removal of statues and monuments and realisation of our contested past, there is an opportunity to use architecture and the latest technology to illuminate our past and create a new type of ‘national public architecture’. An architecture that translates the availability of technology to the public, the importance of good and memorable architecture in society, and the goodbye to a pastiche world – seen through rose-tinted glasses.

1. *Journal of the American Medical Association*, 2000; 283: 2689-2695.



P R E C E D E N T S T U D Y
A NATIONAL ARCHITECTURE

A NATIONAL ARCHITECTURE

INTRODUCTION - MUSEUMS - A CIVIC PUBLIC SPACE

Museums are spaces where the public is invited to participate at a cultural level. They are a reflection of the best interests of the public. Previously mentioned was the monument of graffitied Confederate General Robert E. Lee. This is a similar cultural space to a museum, however, the public's interests are at heart.

In a recent article in *Architecture New Zealand* our local museums and galleries were of subject. As Barrie and Gatley (2020) state, all seek to express the 'now' in "facilities, exhibits and events that will draw people in and contribute to the richness of local life, particularly for those who, previously

might have felt museums and galleries were not places for them" (p. 119).

Museums and galleries can be seen as places of education or "the museum as-living-room" (Barrie & Gatley in *Architecture New Zealand*, 2020, p. 119). A place either as "extension(s) of the sequence of learning" or a place of "comfort and exchange". All in all, our local museums and galleries present curated interpretations that educate users about their (or other) places.

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 4.01. Natural History Museum in London (Trustees of the Natural History Museum, 2019).

Fig 4.02. (ABOVE RIGHT) 'A First Machine Age Museum' ("Maori Hall at the Dominion Museum, Buckle Street, Wellington," ca. 1936).

A FIRST MACHINE AGE MUSEUM

IMAGE REMOVED FOR
COPYRIGHT REASONS.

FIRST MACHINE AGE MUSEUM

Curation and Architecture

Traditional 'old school' museums such as the Natural History Museum in London and the original national museum for New Zealand, the Dominion Museum and National Art Gallery are examples of First Machine Age aesthetic and experience. Artefacts are exhibited in glass boxes and guarded behind red velvet ropes still prevalent in today's society. The scale of artefacts are relevant to the buildings size and are arranged in a circulation driven narrative. The aesthetic and experience of the space

suggests a machine like production line for viewing cultural artefacts, a brief understanding, rather than a space for conversation. The architecture is reflective of the eras style and location, grand and opulent, exerting authority and status in the city. The experience of the architecture 'unchangeable' due to the concrete construction and large light- filling windows.

A NATIONAL ARCHITECTURE

SECOND MACHINE AGE MUSEUM

The Second Machine Age is reflective in today's museum such as Te Papa Tongarewa, built in 1998 and National Museum of Australia founded in 1980 and later built in 2001 (the idea comes from the design of Te Papa). These museums invite people to participate and learn in a hybrid space (The Designing of Te Papa, 1998) (Reed, 2002).

Curation

Technology has had an increasing role in defining the experience of artefacts and objects for users in the museum. The artefacts or objects in the museum are showcased in curated exhibitions. Some are permanent, some are temporary, and categorised into relevant rooms. As Coon (2010) states, "in others, their role is clearly a reduced one; in still others, objects have virtually disappeared from galleries, replaced by other didactic devices—audio-visual, interactive technologies, and so on" (p. 20). In San Francisco Museum of Modern Art, "[t]he Learning Lounges are challenging for curators because they are hybrid spaces that breach the curatorial space with a personal and social space for education and engagement with the artwork" (Bautista, 2014, p. 111).

Museums have the opportunity to express participatory processes but

are bound by museum's authority and associated tradition. According to Bautista (2014),

"[m]useums are empowering their visitors with new digital experiments that allow common voices to be heard in the same space as curators— for online visitors to "curate" personalized online spaces and galleries, to judge works, and to be involved in other participatory practices— but the empowerment is bracketed within a deeply hierarchical space where the museum retains final authority over curation, installation, didactics, acquisition of works, and more" (p. 228).

Te Papa Tongarewa, the National Museum of New Zealand, exhibits a range of natural, cultural and social qualities of New Zealand. The exhibition spaces are both temporary and permanent and engaging with their design and information. Few exhibition spaces use the architecture as a means of influencing the user, neither does the architect use the architecture to inform or curate the exhibitions— there is a level of disconnect. The interior of Te Papa is a blank canvas, most of the walls painted blank with the curated exhibitions sitting just inside this. It allows curators to build whatever they please. A couple of exceptions are made, one being the Treaty

A SECOND MACHINE AGE MUSEUM

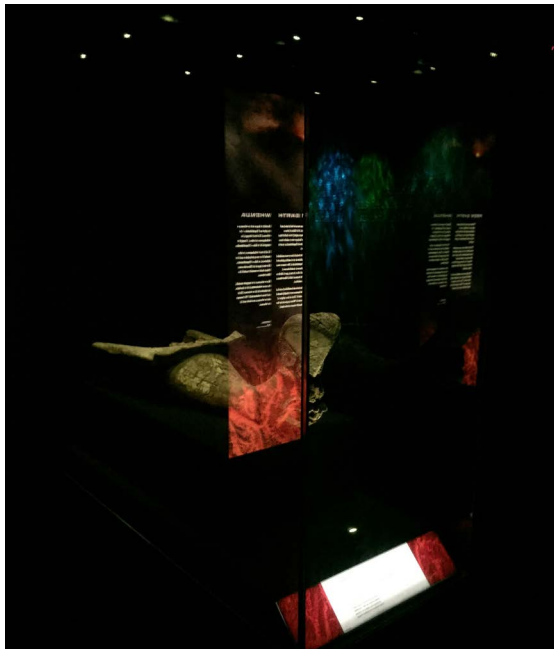


Fig 4.03. The interior of Te Papa showing an artefact in a glass box in a dark room (Author's own image).



Fig 4.04. An interactive exhibition in Te Papa showing the technology used. This permanent exhibition was updated and modernised in 2019 to keep up to date with technological and social change (Author's own image).



Fig 4.05. Another exhibition space showing a more traditional approach to exhibited artefacts (Author's own image).

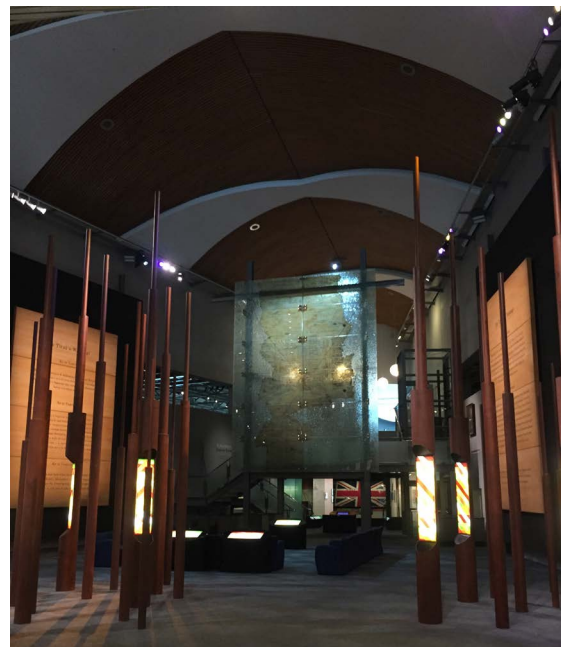


Fig 4.06. Treaty of Waitangi: Signs of a Nation a permanent exhibition located in the 'void' of Te Papa's building (Author's own image).



Fig 4.07. Image of Te Papa Tongarewa, Museum of New Zealand (Author's own image).

of Waitangi: Signs of a Nation a permanent exhibition located in the 'void' of Te Papa's building- a space in between the Maori half and pakeha half. The architecture signals this exhibition as being the centre of the museum and influences people to return to. The more permanent the exhibition, the more it has been integrated into the building.

At the National Museum of Australia, the building's layout and architecture allow exhibitions to express themselves. There is a narrative defined by the architect and an exhibition telling a narrative as well. "Rarely does an exhibit occupy a space designed around the story line" (Reed, 2002, p. 161). This allows the

exhibitions to speak freely from the architectural language. This duality of spaces reflects a complicated story of how to best represent a country's cultural and social implications in architecture.

Architecture

The Second Machine Age museums of today are more commonly associated to their architecture to be a defining role in the city. Take for example Frank Gehry's Guggenheim Museum causing the 'Bilbao effect'. It is more about the role of architecture and its economic opportunities for the cities. According to Conn (2010), "... all this new museum building, often showcasing the work of a fashionable

TE PAPA TONGAREWA

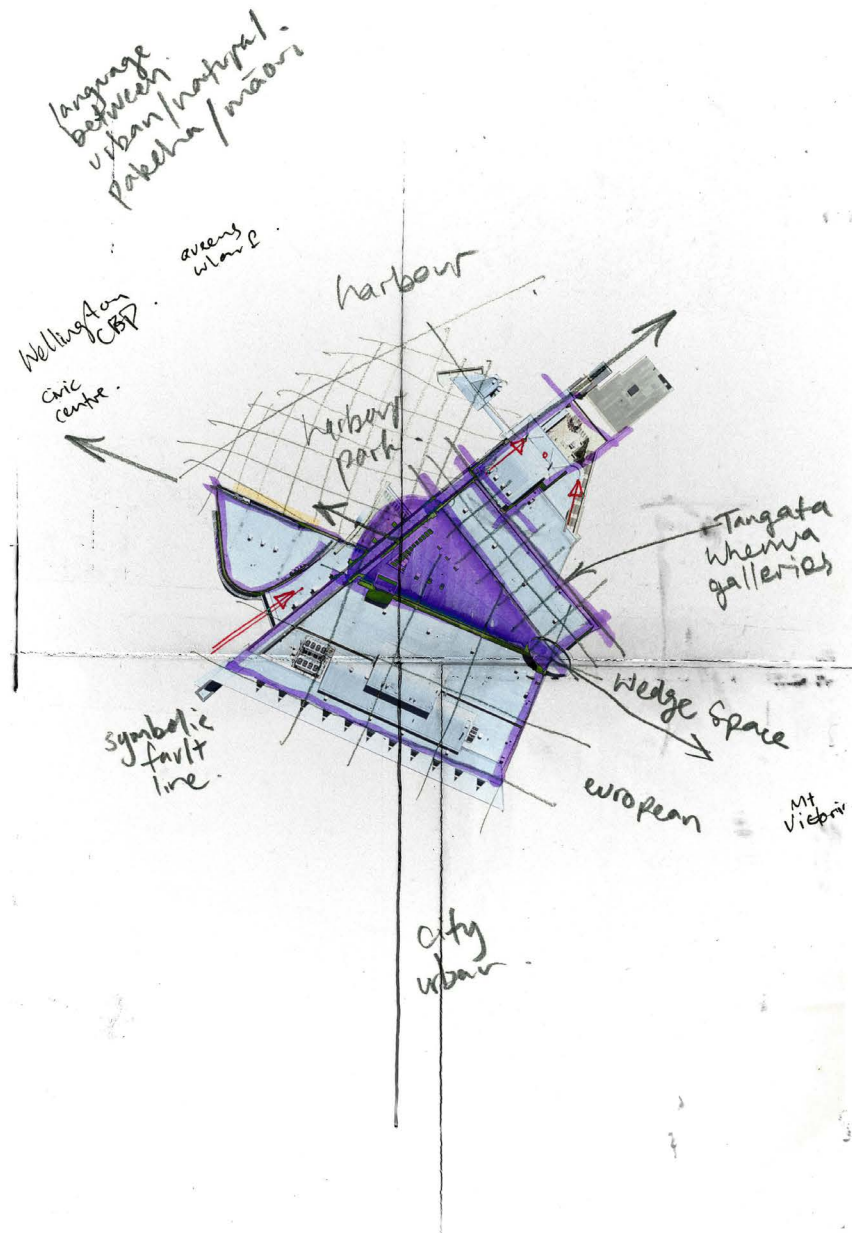


Fig 4.08. Analysis of Te Papa.

A NATIONAL ARCHITECTURE

architect, or ‘starchitect,’ hasn’t simply added to the inventory of museums” (p. 1). The artefacts themselves though see the same treatment as First Machine Age museums and therefore have a similar engagement from people. However, the material presence of the architecture is still relevant in the development of the museum. The image and presence of the museum, even in the digital age, is core in “defining their authenticity, authority, and most importantly, their idiosyncratic representations of place, culture, and community” (Bautista, 2014).

However, in New Zealand the problem for most of these spaces is the architecture that museums and galleries inhabit. The spaces are not typically reflecting the exhibitions and community entirely. As Barrie and Gatley (2020) state many “[reflect] the scales of towns and cities in which they are built... the majority... are adaptive reuse or renovation projects” (p. 119). Much of the architecture expresses a Second Machine Age culture. The architecture of museums is problematic currently: “steadily rising expectations coupled with ongoing underfunding will eventually stretch their more-with-less ingenuity to the point of crisis” (Barrie & Gatley in *Architecture New Zealand*, 2020, p. 119).

However, Te Papa’s form derives from the contextual narratives of the European urban grid, Te Ao Maori design and surrounding natural elements (The Designing of Te Papa, 1998). Te Papa may be able to adjust and update exhibitions and the technology over the decades to engage people but its architecture stays unchanged. The architecture is static, stuck in a time irrelevant to the issues of today. Socially we are influenced by the form and its experience through politicised narratives; the architect’s way to subconsciously influence the user. A person walking into the museum just sees it as a building with cultural significance, nothing to do with the applied narratives. Only the exhibition and its technology can alter our understanding and experience of the context as these can be updated and added over time. These are fitted to best interest.

In Australia, the National Museum of Australia (NMA) is a social historical museum exhibiting the knotted combination of the people and place of Australia. The museum sets to reveal the national identity of Australia in the city Canberra. It positions itself politically in line with Canberra city and parliament projecting itself to align itself with the other state capitals, contextualising and connecting itself with Australia (Reed, 2002). Its concept, a visual of knotted ropes, reflects the combination of people and

NMA

places that is Australian. The main hall generates its form from a 'subtracted knot'. The design is realised through the technology and the culture of the time with cutting edge technology such as the Boolean tool to subtract and divide forms (Reed, 2002).

Museums in a final sense are "places where knowledge is given shape through the use of objects and exhibitions" (Coon, 2010, p. 5).

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 4.10. Close up birds eye image of National Museum of Australia, Canberra, ACT. Note the use of colour and form to represent the stories of Australia (Reed, 2002).

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 4.09. Birds eye image of National Museum of Australia, Canberra, ACT (Reed, 2002).

A NATIONAL ARCHITECTURE

SPECULATIVE DESIGN - A PRECEDENT FOR THE THIRD MACHINE AGE MUSEUM

Cedric Price's Fun Palace speculates on a possible scenario where we allow the user to be the dictator of their own experience. Realised and designed around 1960, the First Machine Age era, Cedric Price's 'Fun Palace' creates a multi-functional space for its users. This case study is relevant to this thesis for its approach to an architecture that moulds to the user. What is also particularly interesting is how its timely technology is available to all- not just an object for the wealthy. It's a realisation of how and what technology can do to include the public in a technological experience.

"The Fun Palace would challenge the very definition of architecture, for it was not even a conventional 'building' at all, but rather a kind of scaffold or framework, enclosing a socially interactive machine - a virtual architecture merging art and technology" (Mathews, 2005, p. 75).

The overall scheme is one of the key drivers for a current, socially engaging, technologically enhanced, memorable architecture. The design translates well with it being a place of emerging art and technology. It renders the first machine age with all of its verve and vigour. These socially encompassing ideas drive an architecture that moulds to the user. This project challenged the then current day 1960's architecture with a theatrical

place where there were, "players and active participants in a drama of self-discovery" (Mathews, 2005, p. 76).

The sense of openness and mobility enables the structure to bring a set of opportunities where people derive their own narratives. It speculates the possibilities of architecture's capabilities today in a Third Machine Age setting. Spaces such as workshops, observation decks, an auditorium, theatre and exhibition area allow for people to engage with people creating a sociable environment and a culture of openness and freedom.

FUN PALACE

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 4.11. 'Interior
Perspective for Fun Palace'
(Price, ca. 1963).

IMAGE REMOVED FOR
COPYRIGHT REASONS.

Fig 4.12. 'Typical plan of
Fun Palace complex' (Price,
ca. 1964).

A NATIONAL ARCHITECTURE

IMAGE REMOVED FOR
COPYRIGHT REASONS.

*Fig 4.13. 'Fun Palace:
section showing potential use
of interior spaces' (Price, ca.
1963).*

FUN PALACE



THE THIRD MACHINE AGE MUSEUM

THE THIRD MACHINE AGE MUSEUM

Te Papa and NMA allow a problematic contemporary understanding of how a westernised culture and indigenous culture are reflected in a building. It is a contemporary reflection of a nation in architecture in the age of globalisation. Australia followed New Zealand with their National Museum located in Canberra representing its society. Both buildings, narrative derived, try to showcase complicated history with their architectural expressions and with the exhibitions themselves. The museums are set to reveal the identity of a nation. With time moving on, these museums are paralyzed in their context; stuck in the parameters of time.

Curation

The issues of place come about where the exhibition is held in an art gallery of an academic institute, “its dissemination limited to the middle-class few who frequent art galleries followed by a fiat white and Florentine” (Kiddle in *Architecture New Zealand*, 2020, p. 113). The exhibitions and the relevance to communities through New Zealand should consider where the exhibition is held and how it is formatted.

The current ‘post curation’ approach in museums such as technology engagement and learning zones are bound by the tradition and authenticity of housing artefacts in

a white box. In a post curation world technology can have a more defining role allowing the user to curate their experience dismissing the traditional role of the curator or architect.

“The digital age has spawned a participatory culture— particularly with the younger generation— that is accustomed to immediacy, visual enticement, less entry barriers, and an abundance of publicly available information” (Bautista, 2014, p. 5).

In *Architecture New Zealand*, an opinion piece by Simmons, discusses the importance of conversations. Conversation “forms the basis of our continually developing societies and ideals, through the testing and re-testing of what we believe” (Simmons in *Architecture New Zealand*, 2021, p. 15). Exhibitions in museums can be places of discussion. People, architecture and technology can negotiate what is of significance to the specifics of the community. “There are conspicuous absences, such as the dedicated museums often seen abroad {agriculture? design?} and specialist Maori and Pacific museums” (Barrie and Gatley in *Architecture New Zealand*, 2020, p. 119). Interpretation is at the heart of any history.

Architecture

From looking at the past an idea can be formed around the role of the

EXPLORING FORM

museum in our current third machine age. A museum now is not defined by the parameters of its context but by the people that inhabit it. The artefacts and objects that inhabit this place should be curated towards the individual and not curated by a biased curator. This opens up wide scope for potential and in turn create a more personalised experience.

The museum can become a speculative space, open to discussion, an architecture that truly molds to its people and context and a place for observation but also conversation. A Third Machine Age architecture, in this case a museum, reflects its people, an ever-evolving society and is an architecture where people and their beliefs are at the fulcrum. The space sets itself up for 'plugin' of narratives to reflect the best interests of its people.

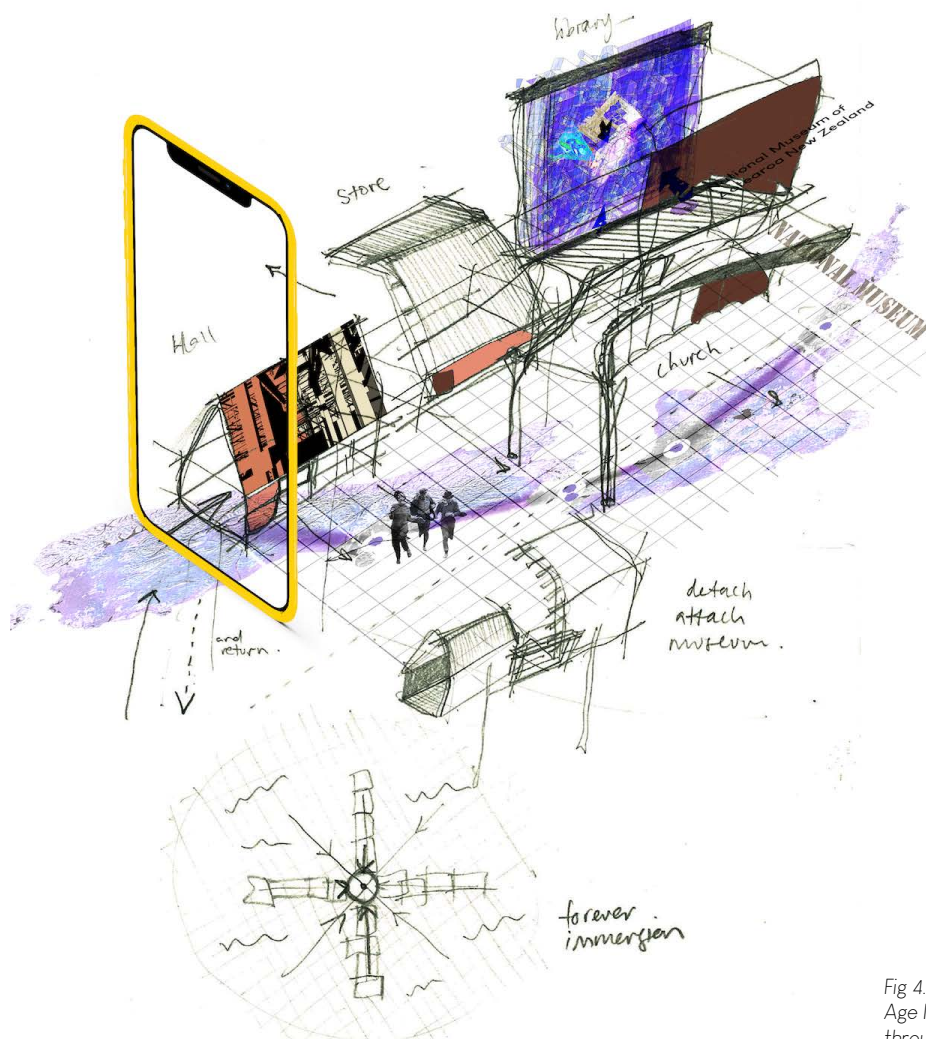


Fig 4.14. 'The Third Machine Age Museum' travelling through New Zealand.

[The following text is a dense, handwritten manuscript, likely a letter or a page from a book. It is written in a cursive script and is mostly illegible due to the quality of the scan. The text appears to be a continuous paragraph or a series of connected sentences. The handwriting is somewhat slanted and the ink is dark. There are some words that are more legible than others, but the overall content cannot be accurately transcribed.]



DESIGN PHASE TWO

THE THIRD MACHINE AGE MUSEUM

THE THIRD MACHINE AGE MUSEUM

DESIGNING THE THIRD MACHINE AGE MUSEUM

In the current world, globalisation caused by technological advancement is causing a sense of familiarity in architecture losing the integrity of culture and memorability in place. The agency of architecture contributes to place and therefore the sense of presence. It can shape and influence the experience for people. Architects and designers have an opportunity to make a difference to how we interact with our past and create a more immersive and memorable experience in architecture. They have the opportunity deal with real world issues such as social injustice and a saturation of information through current technology and architecture that best reflects people.

A Third Machine Age architecture should respond to our current world by giving people multiple ways to understand a specific place and for them to find their own interpretation- a sort of 'spatial clarity'. The space invites people to understand through architecture and technology tools enabling the user to find a personal experience and in turn becoming aware of the importance of the space they are in.

The Third Machine Age museum articulates the Third Machine Age by not involving itself directly with its context but rather allows the exhibitions tuned narrative to derive a sense of place and space for the user.

Architecture in the Third Machine Age does not politicise time or place like current static architecture expresses time and place. It disestablishes the political and social narratives with most architecture and place, opening up new interpretations of curating space and symbolic gestures that aren't discovered by a general observation.

The exhibition in the Third Machine Age museum allows the user to add and subtract objects, draw and alter. Augmented reality (AR) enables a series of narratives to explore that alter and change the arranged place- in this scenario are a series of contested statues in New Zealand. The exhibition can be approached from any direction. A user could start at the general exhibition and then go to the augmented experience. In a scenario a user could choose to only see one part of the exhibition or could choose to see everything. It illustrates that there is not only one way to interpret place (in this case the statue) giving way to levels of interpretations and participation.

A PLACE REFLECTING THE NOW

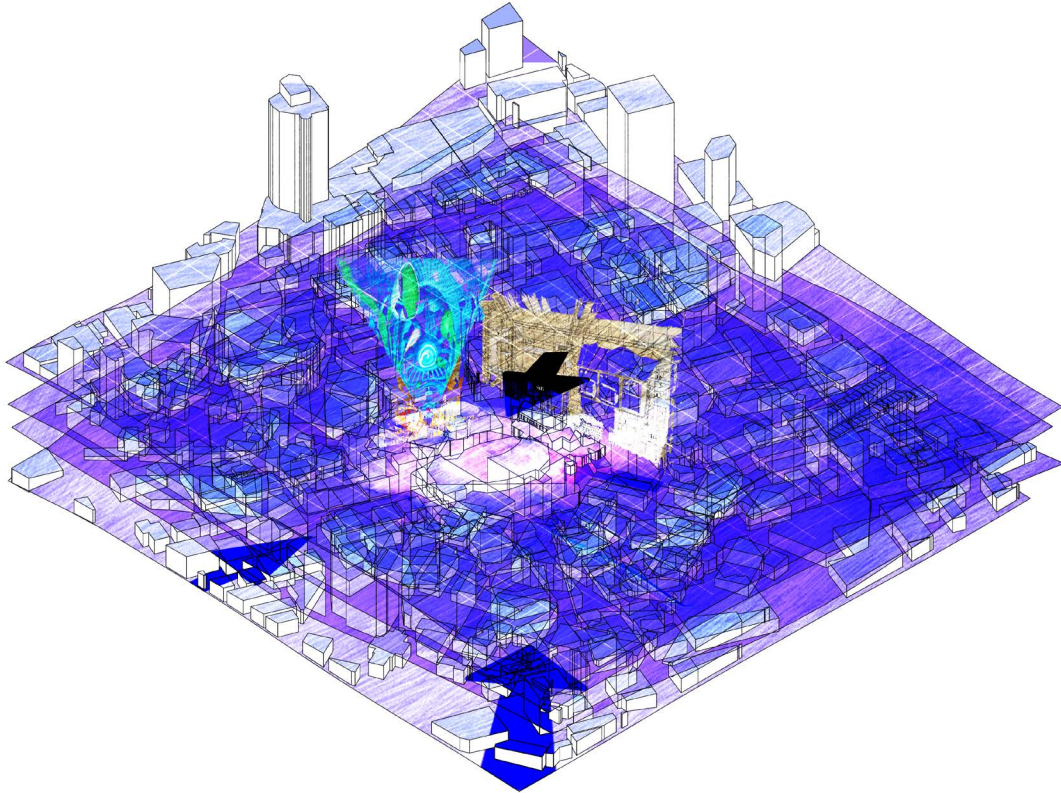


Fig 5.01. A Third Machine Age Museum located in the city centres.

Communities can design their own museums that best reflect and interpret the narratives of the place. We can use architecture and technology to drive a self-narrative into a political place defying traditional colonial typology and the constraints of underlying politics of the context increasing societal, cultural and political change throughout New Zealand.

The following chapter explores the design and idea of the Third Machine Age museum further focusing on the narrative of the statue and place as well as the augmented experience.

THE THIRD MACHINE AGE MUSEUM

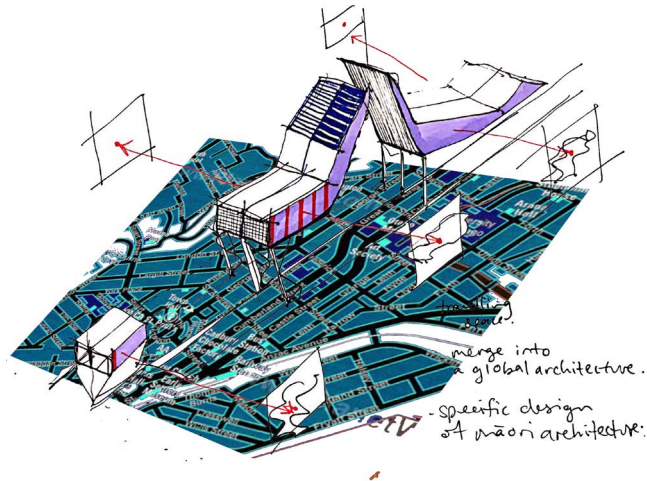


Fig 5.02. What does architecture look like in New Zealand? How might it decolonise European tradition?

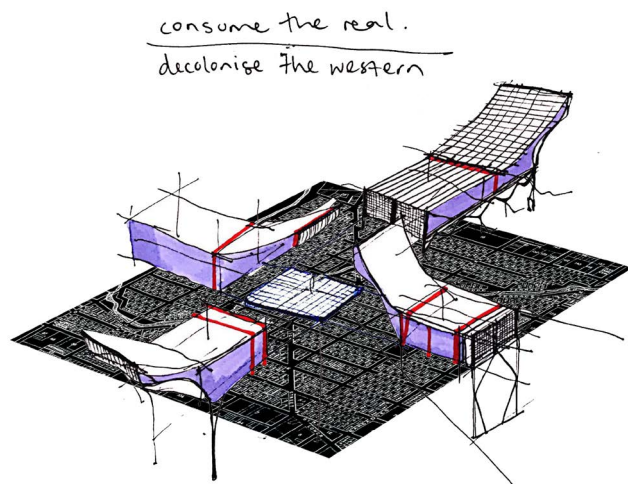


Fig 5.03. The architecture is designed to reflect a collective New Zealand architectural style. The museum is designed to be a centre point of communities, engaging people with stories of their place, like seen here covering the streets of Christchurch, New Zealand.

EXPLORING FORM

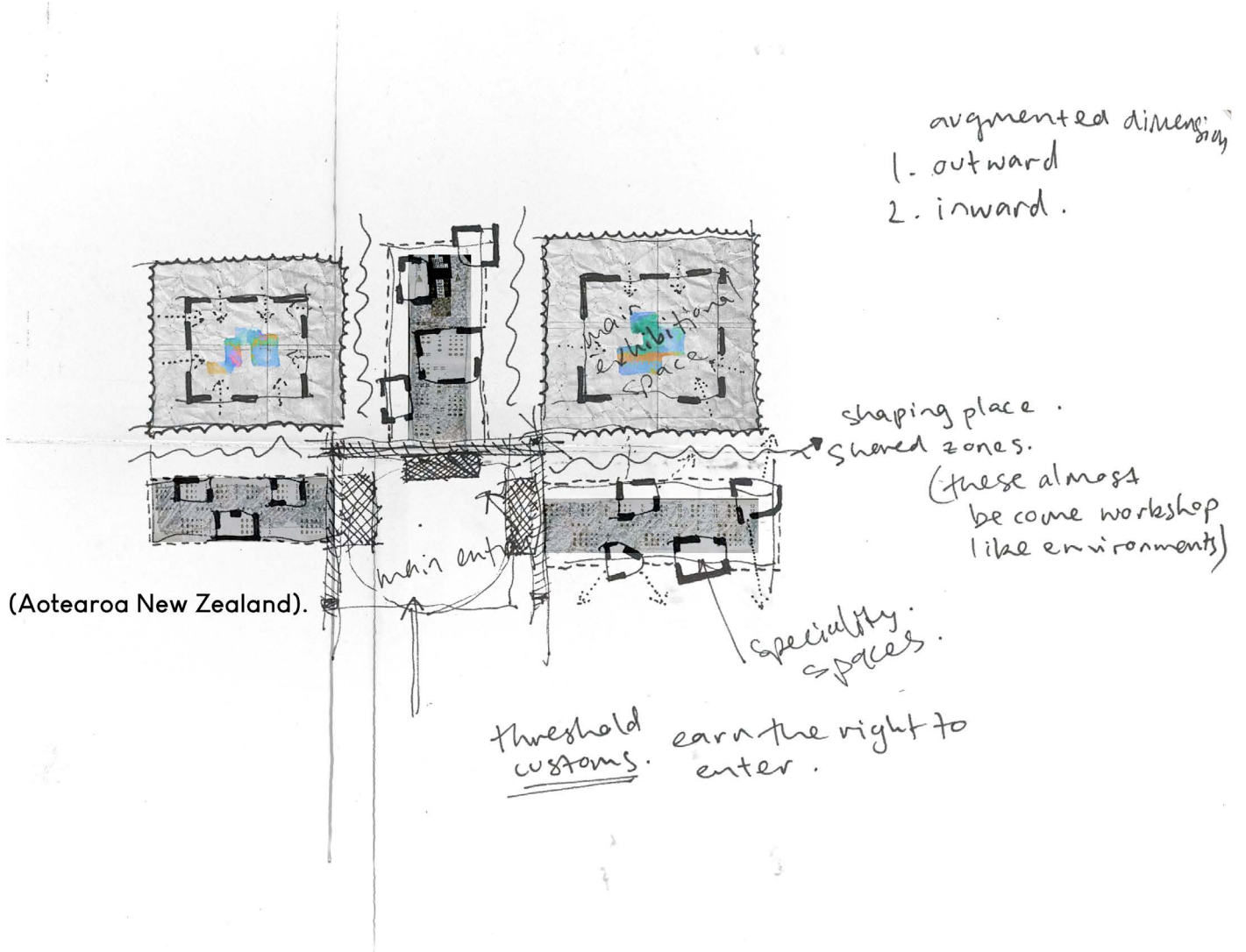


Fig 5.04. This concept reveals the potential of technology and architecture being able to engage people with stories. There are a smaller number of specialty spaces where users can engage with artefacts personally using augmented reality. There are shared exhibition zones where users can contribute to a larger communal space realising a space or artefact that reflects what people currently enjoy and feel leaving them with a memorable experience.

THE THIRD MACHINE AGE MUSEUM

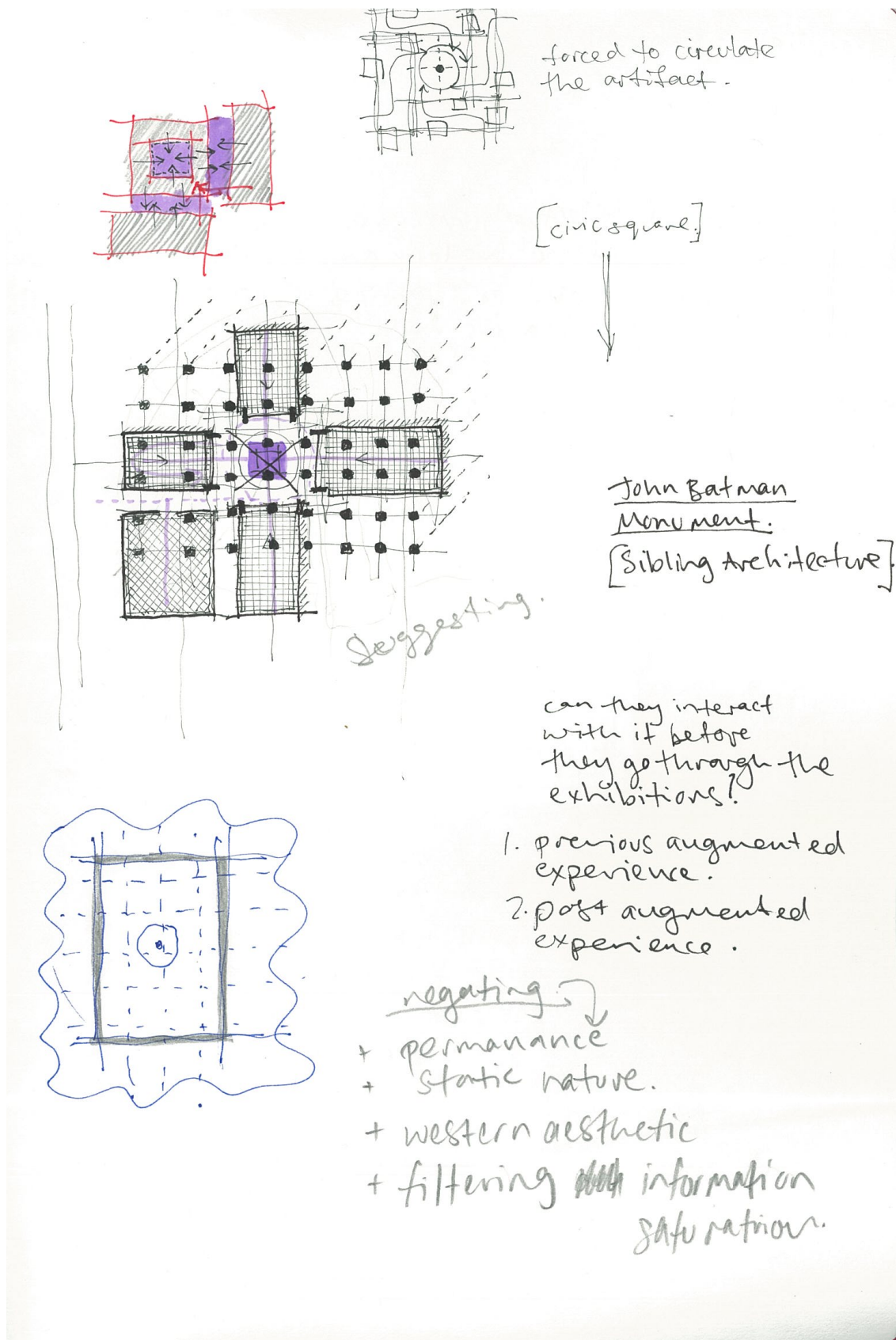
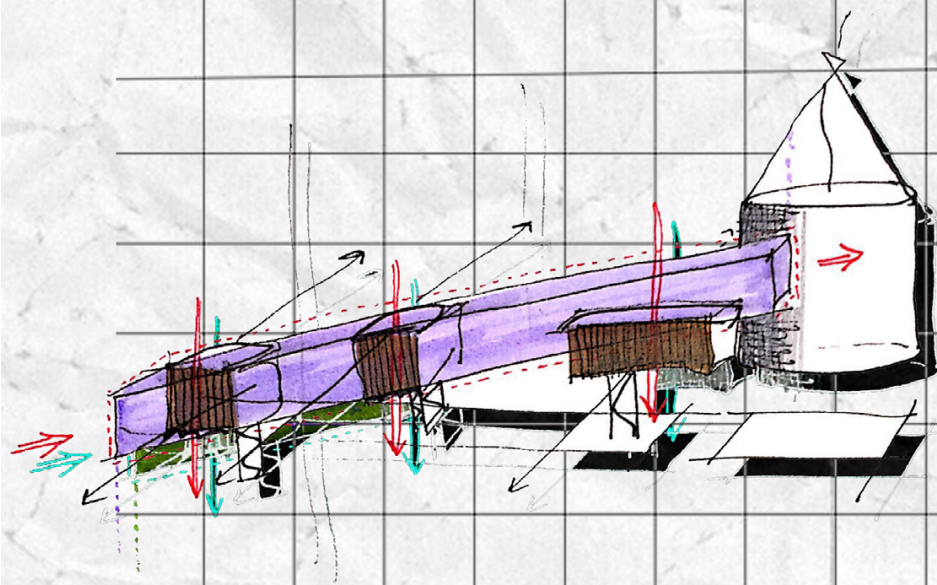
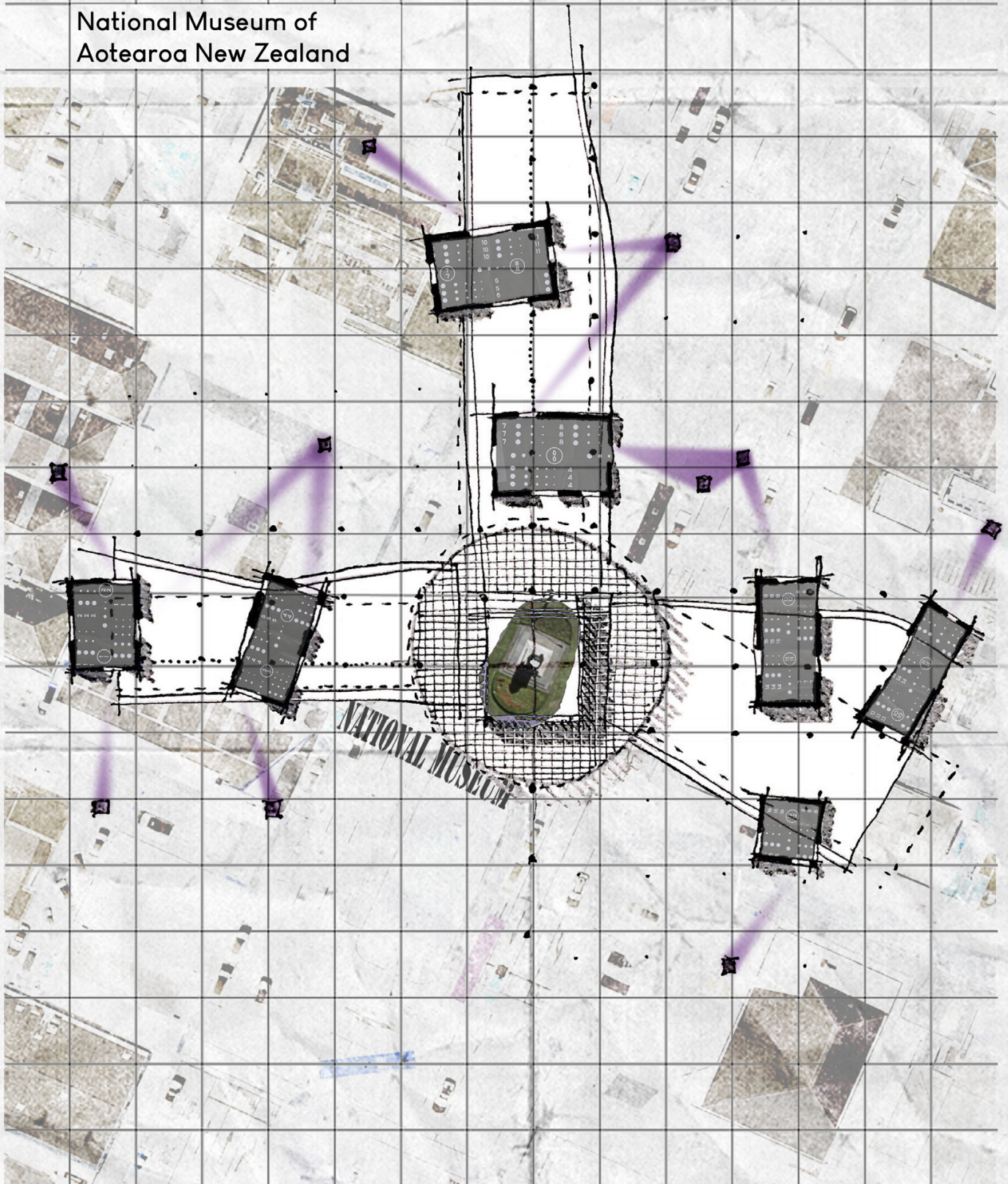


Fig 5.05. Forms suggest how people view the artefacts.



National Museum of
Aotearoa New Zealand



THE THIRD MACHINE AGE MUSEUM



Fig 5.07. Perspective one of the proposed kit set 'Museum of the Now'.



Fig 5.06. (PREVIOUS PAGE)
The virtual world 'holding up' the real world- technology's relationship with architecture.

Fig 5.08. Perspective two of the proposed Museum of the Now.

EXPLORING FORM

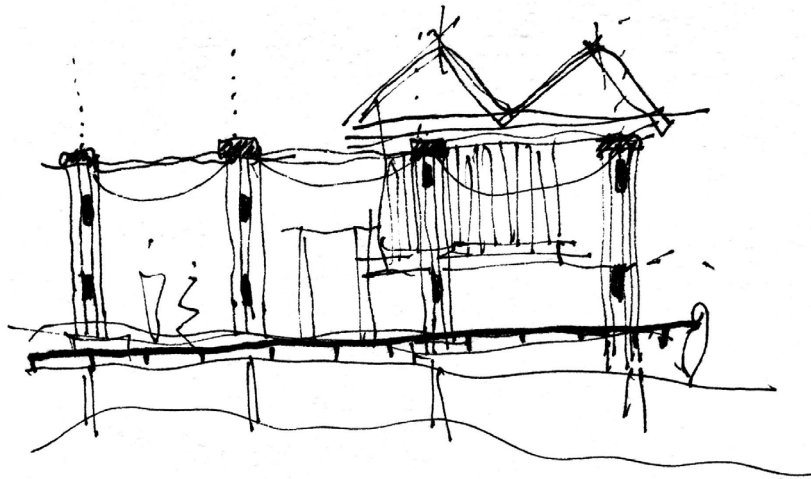


Fig 5.09. Quick sketch of how the 'realisation pods' (augmented reality zones) would interact with the pavilions.

THE THIRD MACHINE AGE MUSEUM

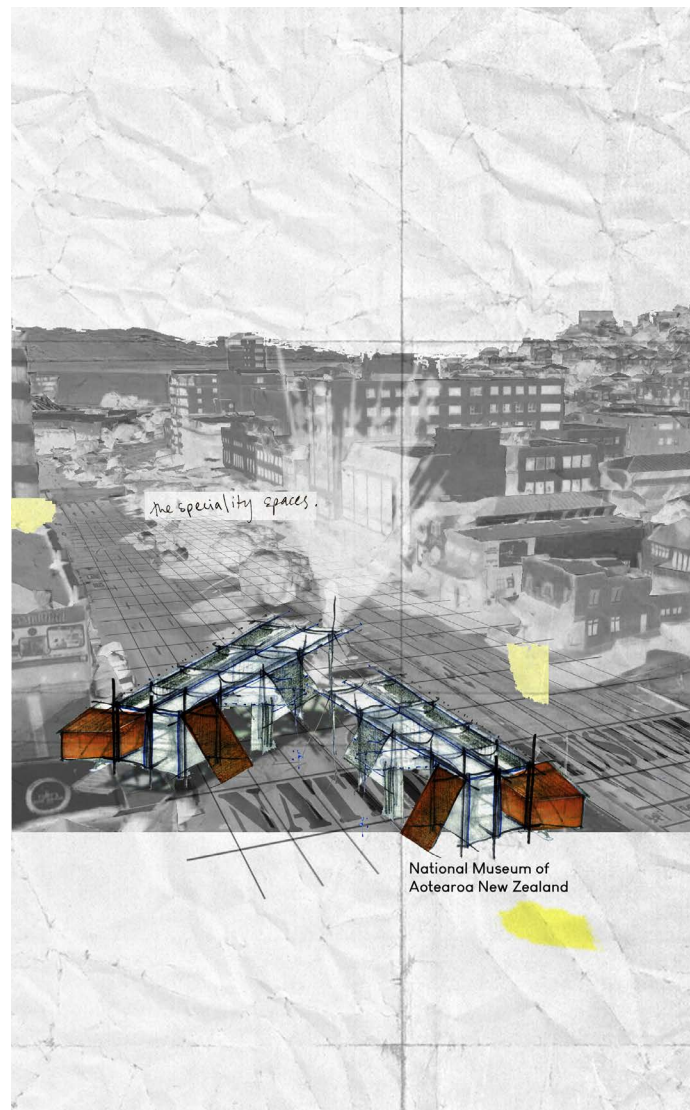


Fig 5.10. 'Form influencing space'. Trialing the mobile architecture on the Queen Victoria Statue, Cambridge/Kent Terrace, Wellington.

EXPLORING FORM

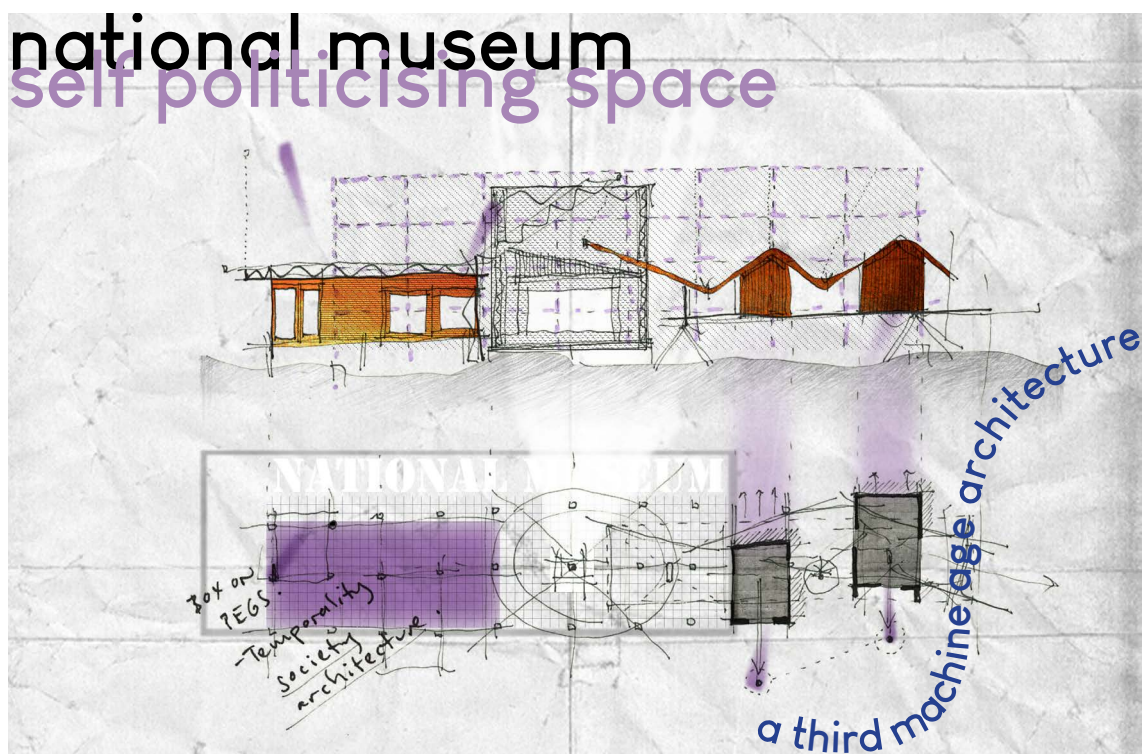


Fig 5.11. A depiction of a possible technologically influenced architecture. The museum is made up of a series of pavilions, pods, a core and overlaid with a technologically infused grid.

National Museum of
Aotearoa New Zealand





field

EXIT
NO

THE THIRD MACHINE AGE MUSEUM



Fig 5.13. A plan of a proposed museum surrounding the Queen Victoria Statue, Victoria Square, Christchurch.

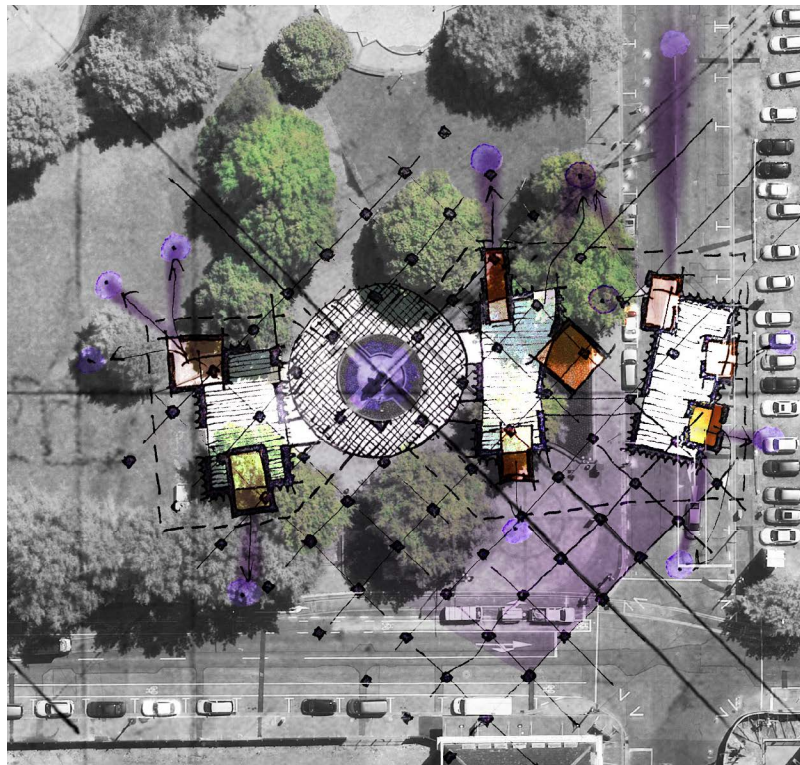


Fig 5.14. Close up plan. The architecture is designed to make a statement by taking over the surrounding streets. The orange, 'realisation pods' allow the user to see the augmented artefacts (purple).

EXPLORING FORM

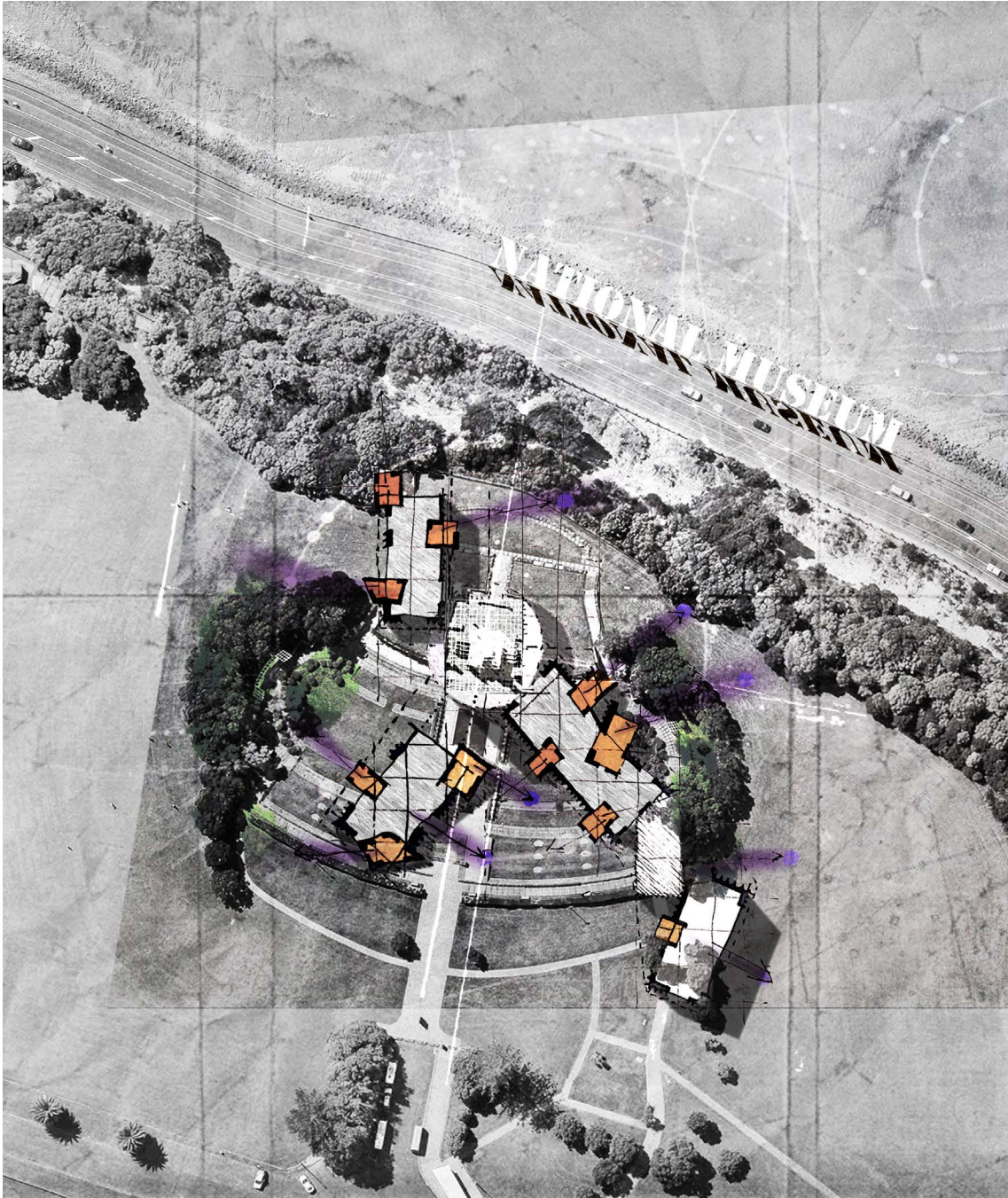


Fig 5.15. A national museum proposed for Bastion Point, Auckland.



National Museum of
Aotearoa New Zealand

Fig 5.16. A national museum planned to surround the Huntaway statue, Hunterville, Rangitikei. Though the statue symbolises the farming life of the surrounds it also could tell a story of hardship, colonisation and land reform.

EXPLORING FORM

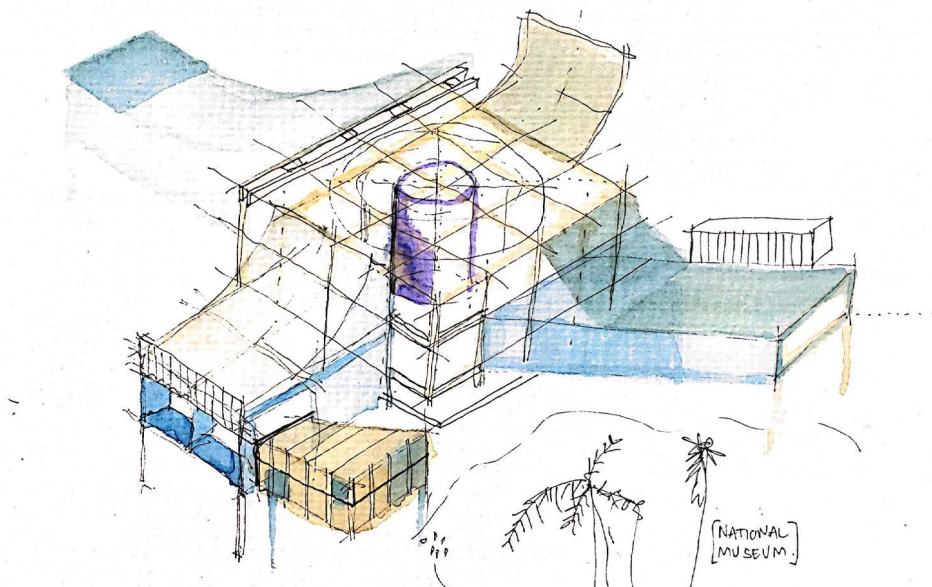


Fig 5.17. A proposal that is more about architectural expression than the narrative interpretation.

THE THIRD MACHINE AGE MUSEUM



Fig 5.18. Architecture and technology affecting place.

AN ARCHITECTURE THAT IS NOT SYMBOLIC

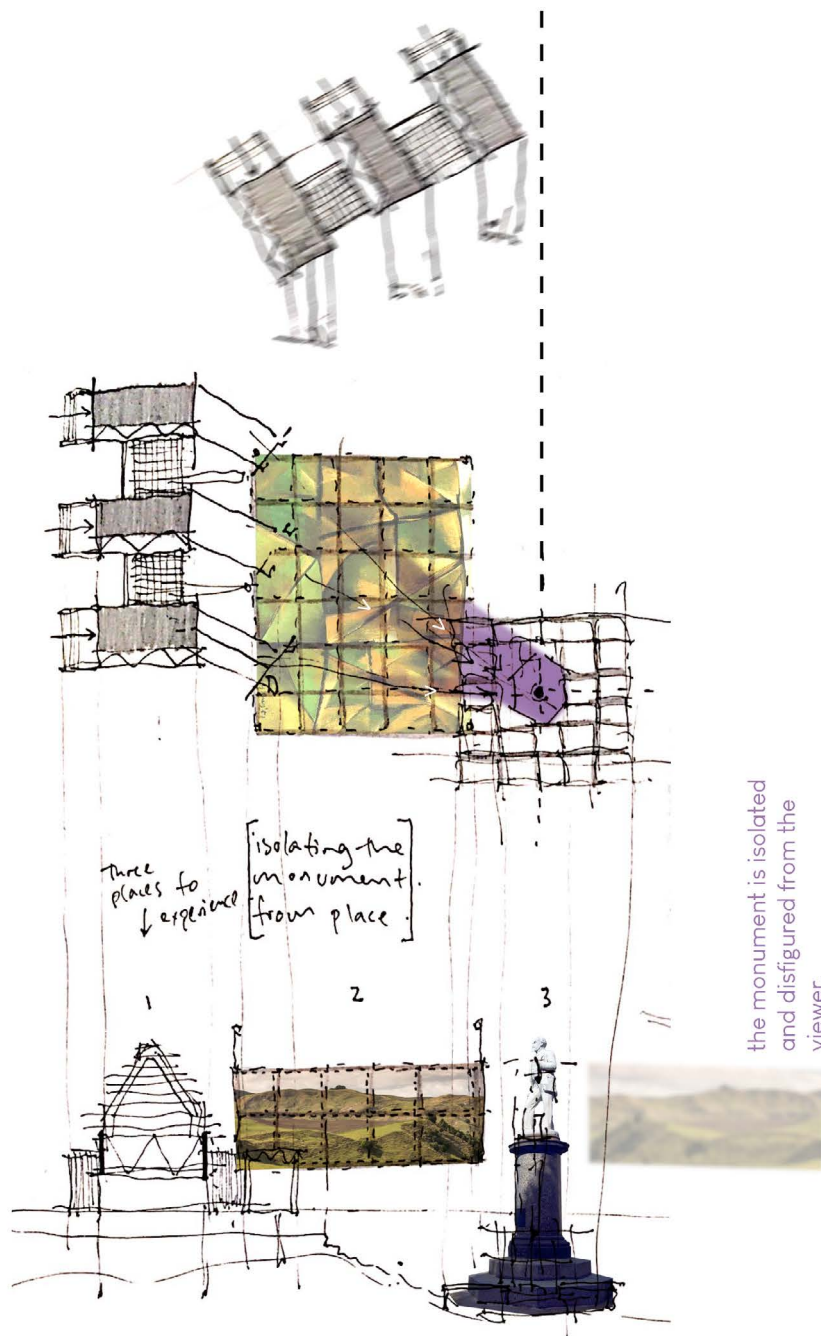


Fig 5.19. The marae/shed aesthetic paired with a scaffold grid. The statue's narrative effects the design of the architecture through its contested stories.

THE THIRD MACHINE AGE MUSEUM

A KIT OF PARTS

A SIMPLE ARRAY OF ELEMENTS TO FORM THE ARCHITECTURE.

The kit set structure alludes to openness due to its refined and limited elemental structure of scaffolding and timber elements. It gives availability for people to erect the museum where ever they see fit.

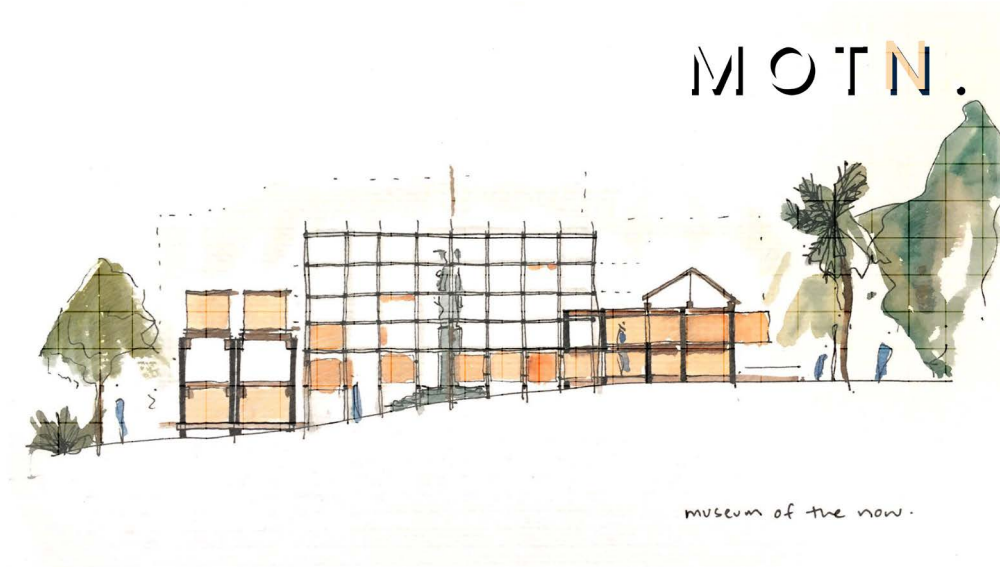


Fig 5.20. Sketch elevation of the proposed scheme.

A KIT OF PARTS

a /// post
b /// beam
c /// grating
d /// wall
e /// floor structure
f /// roof structure

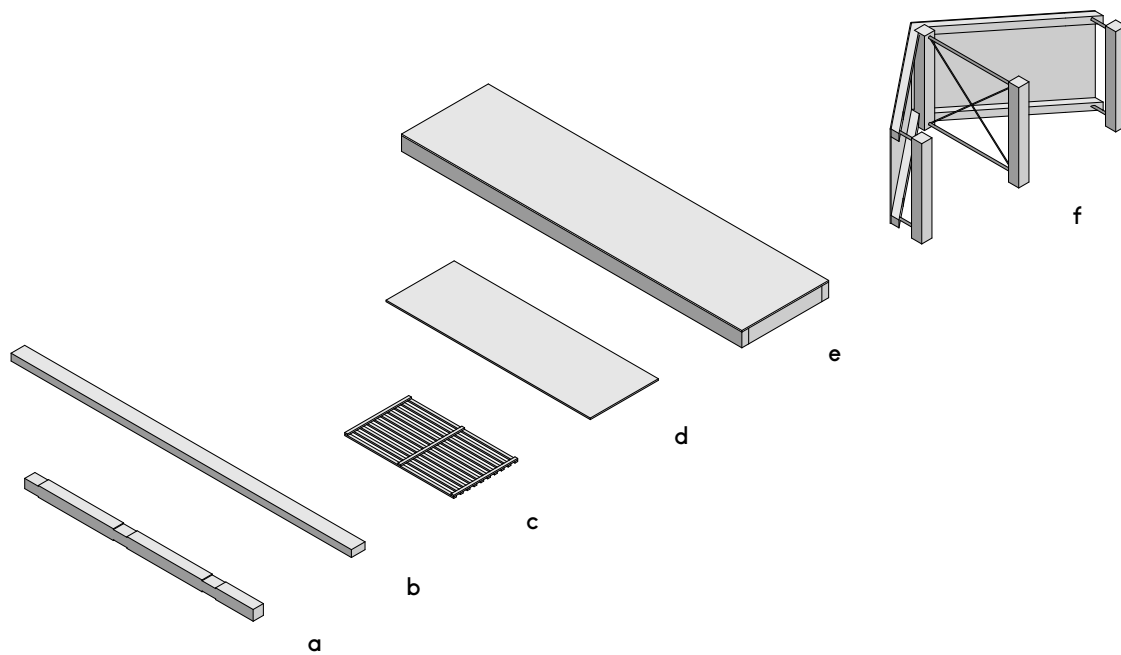
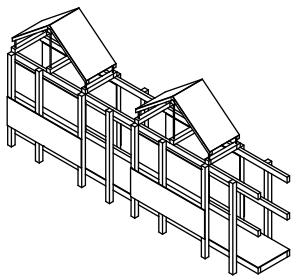
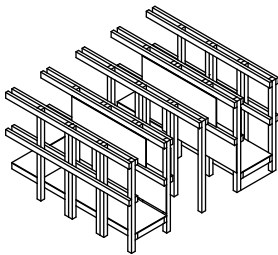


Fig 5.21. A diagram illustrating the kit of parts that can be assembled together by users to form the architecture.

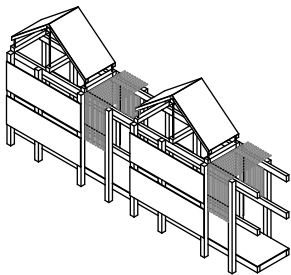
THE THIRD MACHINE AGE MUSEUM



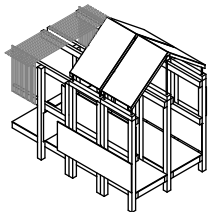
A



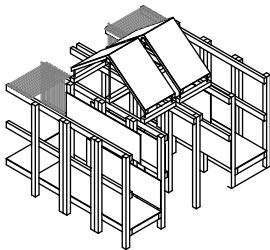
B



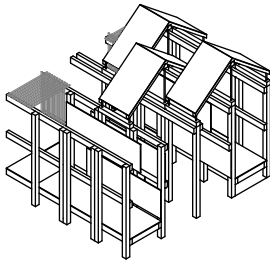
C



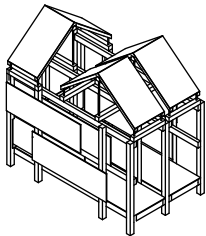
F



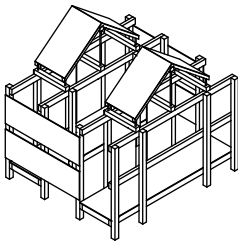
G



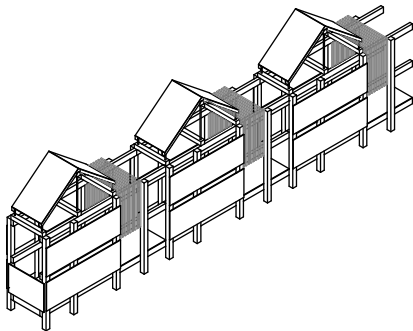
H



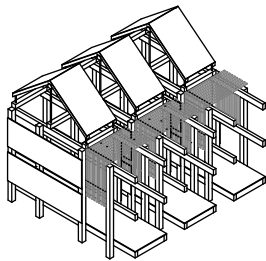
K



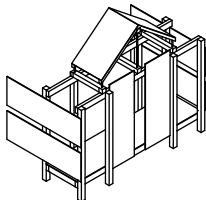
L



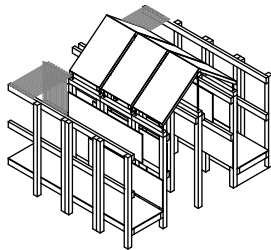
M



P

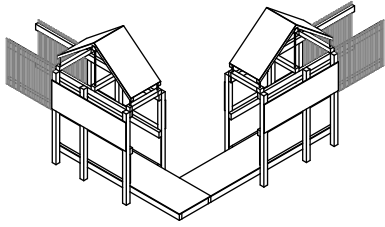


Q

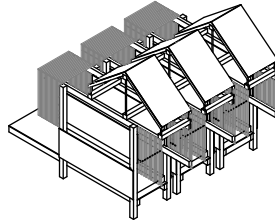


R

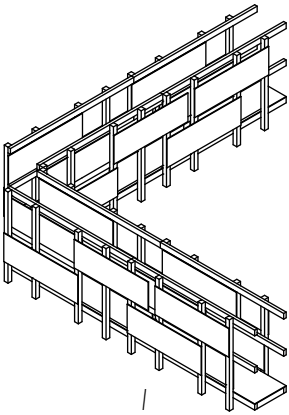
A KIT OF PARTS



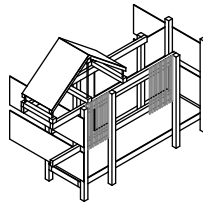
D



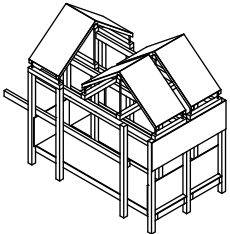
E



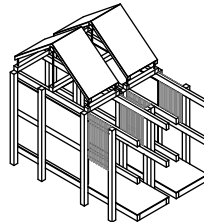
I



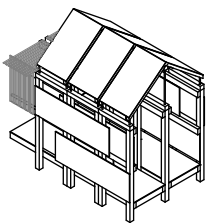
J



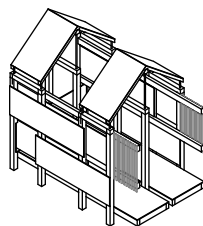
N



O



S



T

**AN ARRAY OF OPPORTUNITIES
TO REPRESENT NARRATIVES**

Fig 5.22. An array of opportunities. This shows the many ways the kit of parts can be assembled to form many different forms. This is determined by the user, the community or council to best interpret the stories of their place.

THE THIRD MACHINE AGE MUSEUM



Fig 5.23. The proposed design surrounding the John Ballance statue outside the Parliamentary Library, Wellington.

A KIT OF PARTS







D E V E L O P E D D E S I G N
A POST - CURATION NATIONAL
ARCHITECTURE

A POST- CURATION NATIONAL ARCHITECTURE

INTRODUCTION

The following examples show how people can curate their own interpretations and conversations by using [architecture](#) and [technology](#). These proposed interventions are developed from the previous chapter.

/// The museum design challenges the idea of space through augmented reality and a kit set architecture to re-establish place.

/// The statue is a means of exploring the form and experience associated.

/// The kit of parts and augmented reality allows all people to engage with the stories of their place.

The design outcome invites conversations about what matters, allowing people to curate their own exhibitions and interpretations with augmented technology and architecture ([a post- curation approach](#)).

A POST- CURATION NATIONAL ARCHITECTURE DESIGN EXAMPLES

5.1	ZEALANDIA MUSEUM	P. 93
5.2	JOHN BALLANCE MUSEUM	P. 103
5.3	PARIHAKA MEMORIAL MUSEUM	P. 113

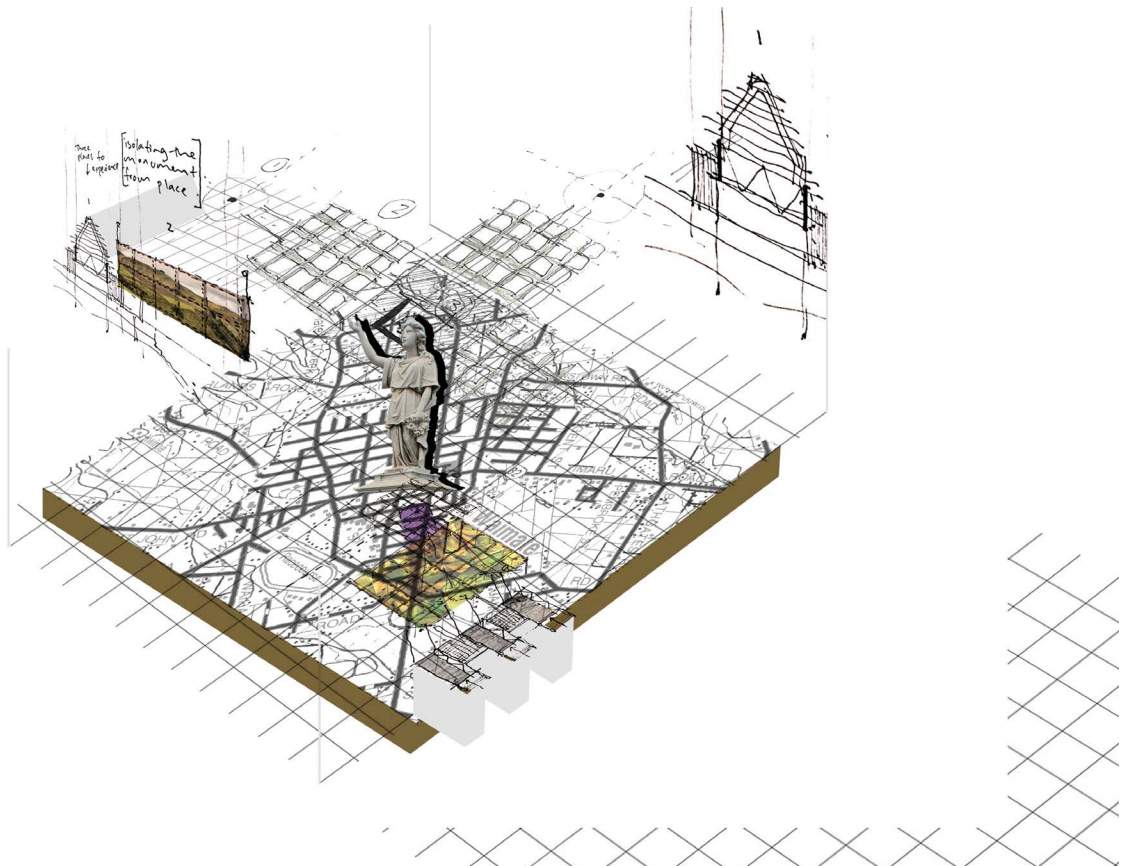
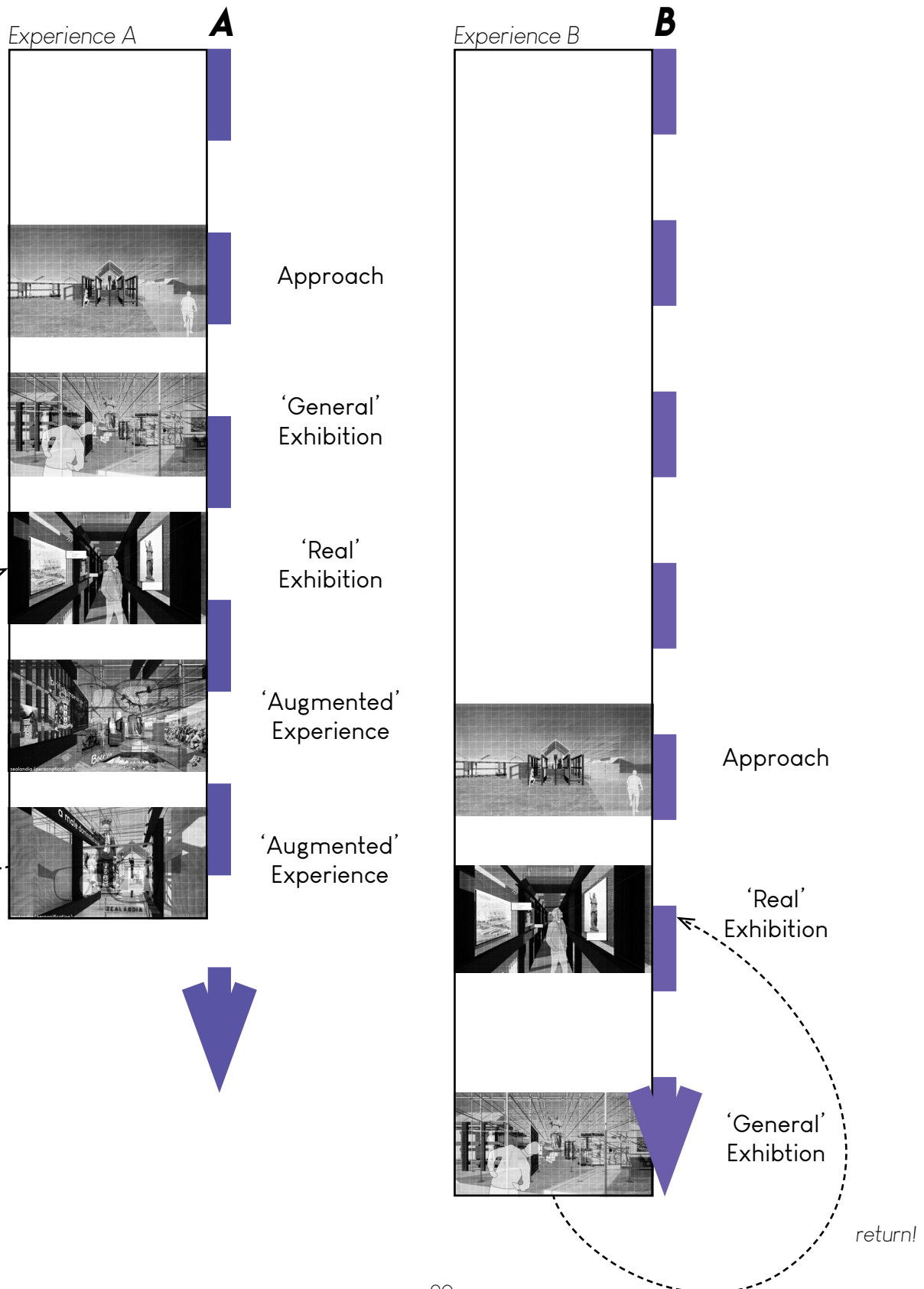


Fig 6.01. The Coloniser and Colonised. How the westernised grid gets applied. Waimate, South Canterbury.

A POST- CURATION NATIONAL ARCHITECTURE

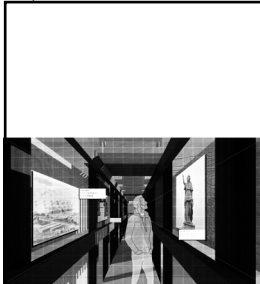
Example Experiences - the opportunities of interpretations in the museum.



EXPLORE - EXAMPLE EXPERIENCES

Experience C

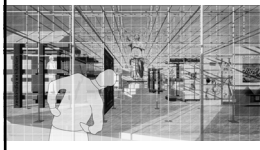
C



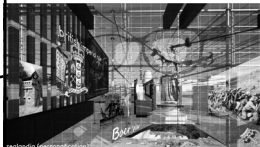
'Real'
Exhibition



'Augmented'
Experience



'General'
Exhibition



'Augmented'
Experience

return!



Experience D

D



'Real'
Exhibition



The example experiences bring to light how people can journey through the spaces. The exhibition can be approached from any direction. A person could start at the general exhibition and then go to the augmented experience.

In a scenario a person could choose to only see one part of the exhibition or could choose to see everything. It illustrates that there is not only one way to interpret the statue or place.

6.1

ZEALANDIA MUSEUM

ZEALANDIA MUSEUM

WAIMATE SOUTH AFRICAN WAR MEMORIAL

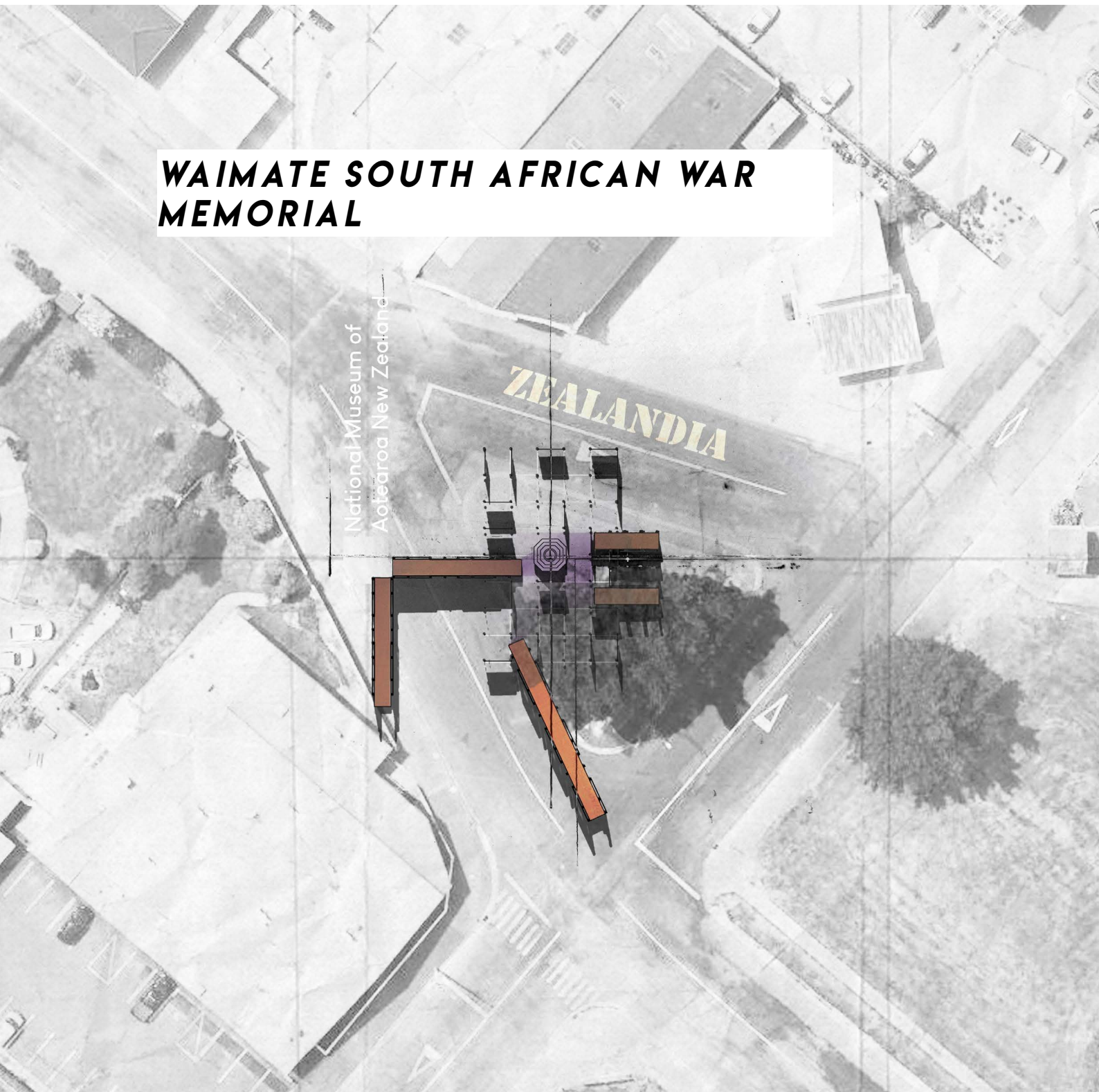


Fig 6.02. Design proposal
surrounding the Waimate
South African War Memorial
Waimate, New Zealand.

ZEALANDIA MUSEUM

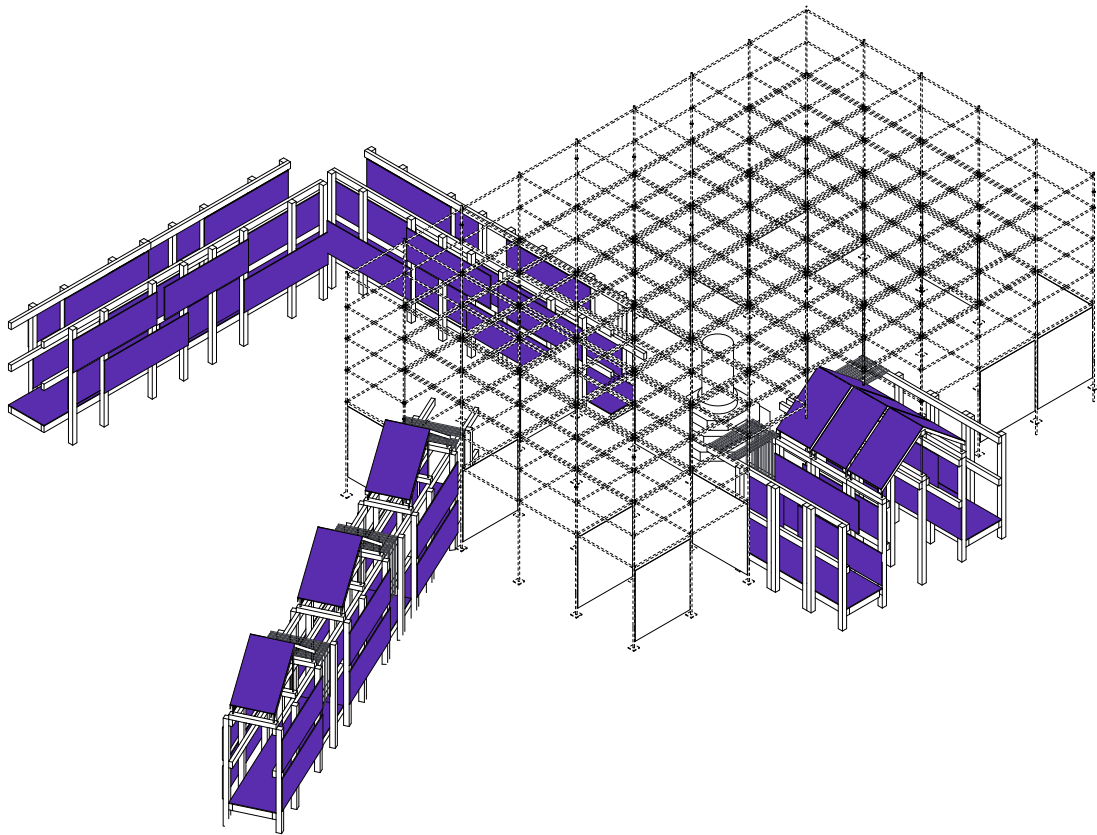


Fig 6.03. Axonometric drawing highlighting the three narrative derived exhibition spaces and scaffold grid.

A POST- CURATION NATIONAL ARCHITECTURE

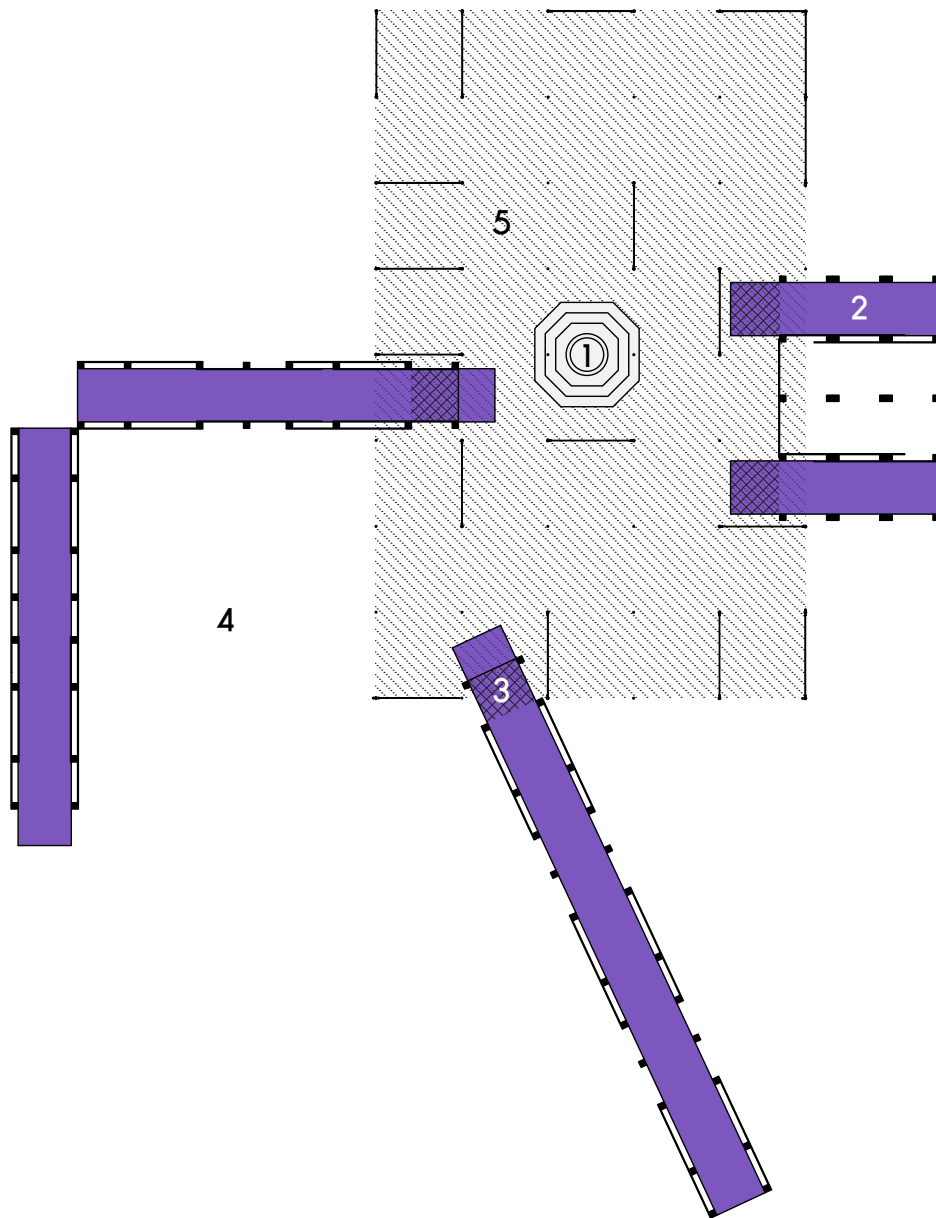


Fig 6.04. Spatial plan of the Zealandia Museum revealing the exhibition experience.

ZEALANDIA MUSEUM

1. Waimate South African War Memorial
2. 'Real' Exhibition (Kitset Architecture)
3. 'Augmented' Exhibition
4. 'Image' Exhibition
5. 'General' Exhibition (Scaffold Structure)

A POST- CURATION NATIONAL ARCHITECTURE

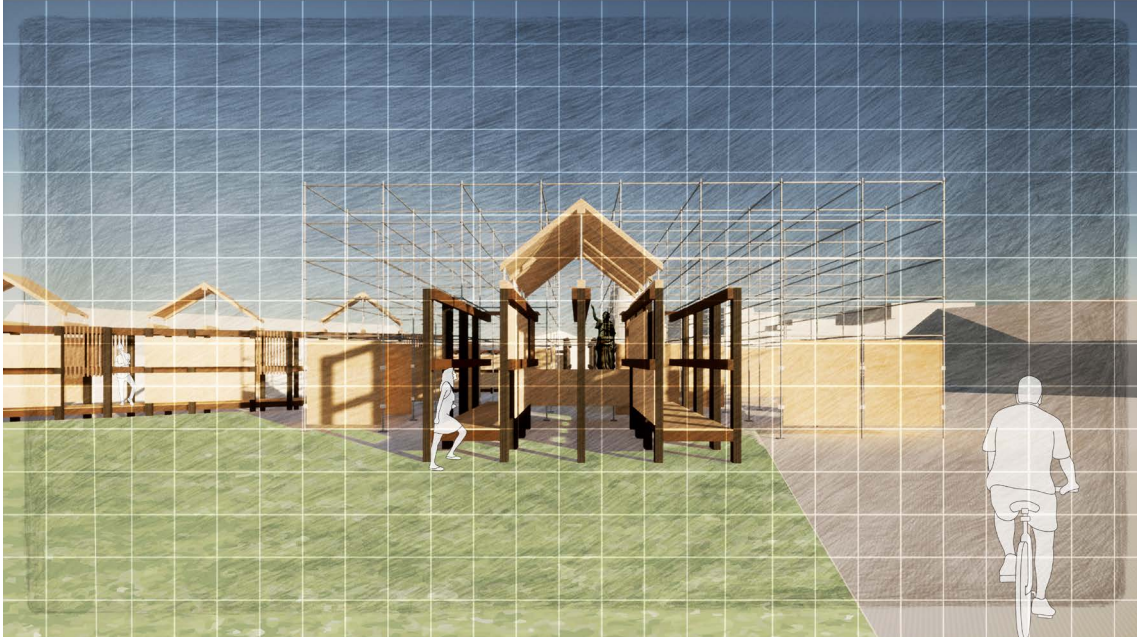


Fig 6.05. Approaching one of the kit set forms. This museum's structures are based off three narratives of Zealandia.



Fig 6.06. Looking through the grid structure to Zealandia. The grid, in this case, represents the westernised tradition of dividing the land up to a 'humanised' proportion. It also allows a series of walls to be implemented to exhibit the stories of the statue.

ZEALANDIA MUSEUM

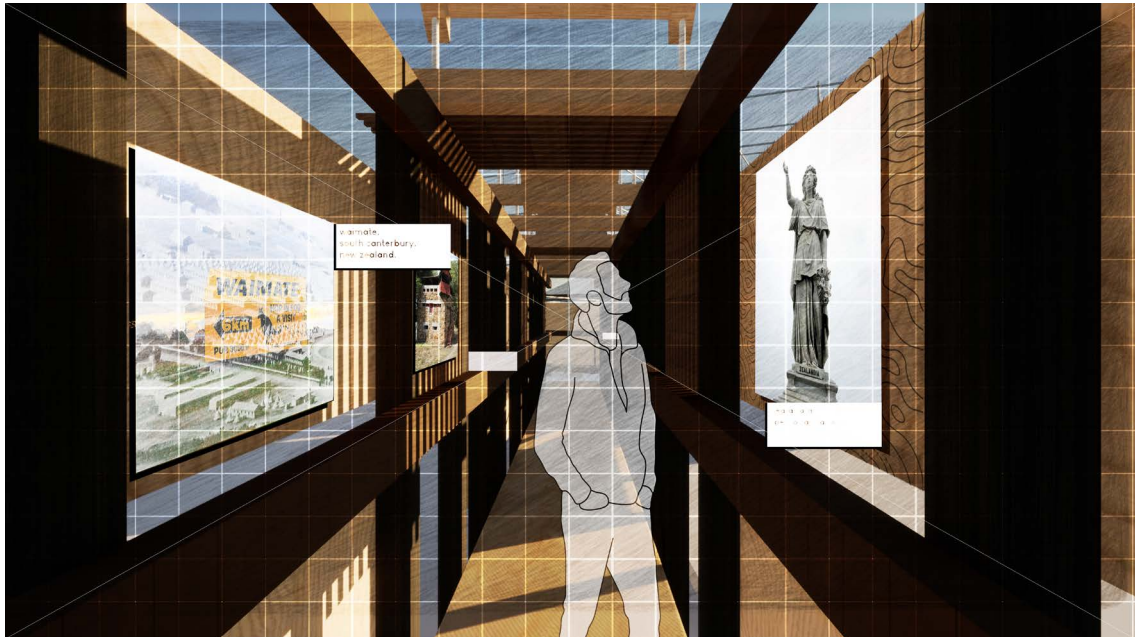


Fig 6.07. One of the kit set forms exhibiting the stories of Zealandia and the Boer War.

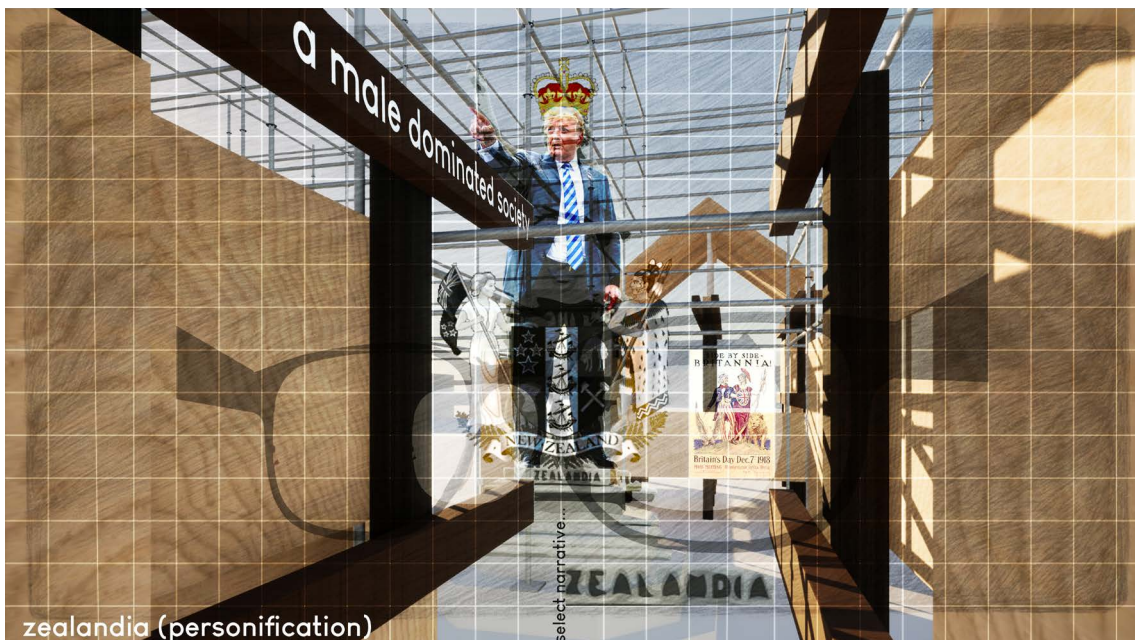


Fig 6.08. An augmented experience where Zealandia's representation of 'a male dominated society' is augmented with a figure of Donald Trump. The augmentation of contested statues like this one can be augmented by the user.

A POST- CURATION NATIONAL ARCHITECTURE

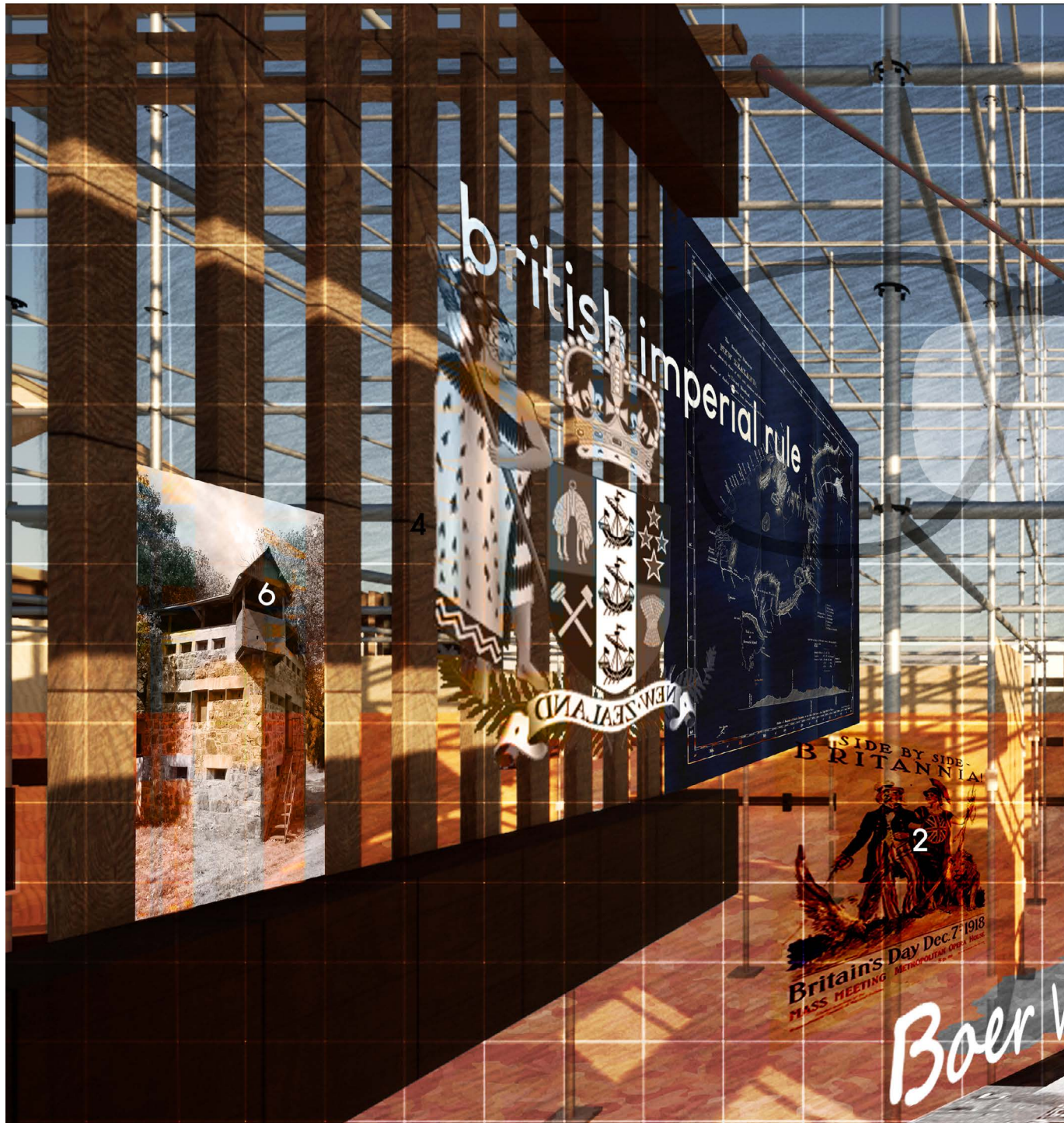


Fig 6.09. Another augmented experience where the narrative selected by the user chooses to interpret Zealandia as being fought by warriors with taiaha.

ZEALANDIA MUSEUM



6.2

JOHN BALLANCE MUSEUM

**JOHN
BALLANCE
MUSEUM**

JOHN BALLANCE MUSEUM

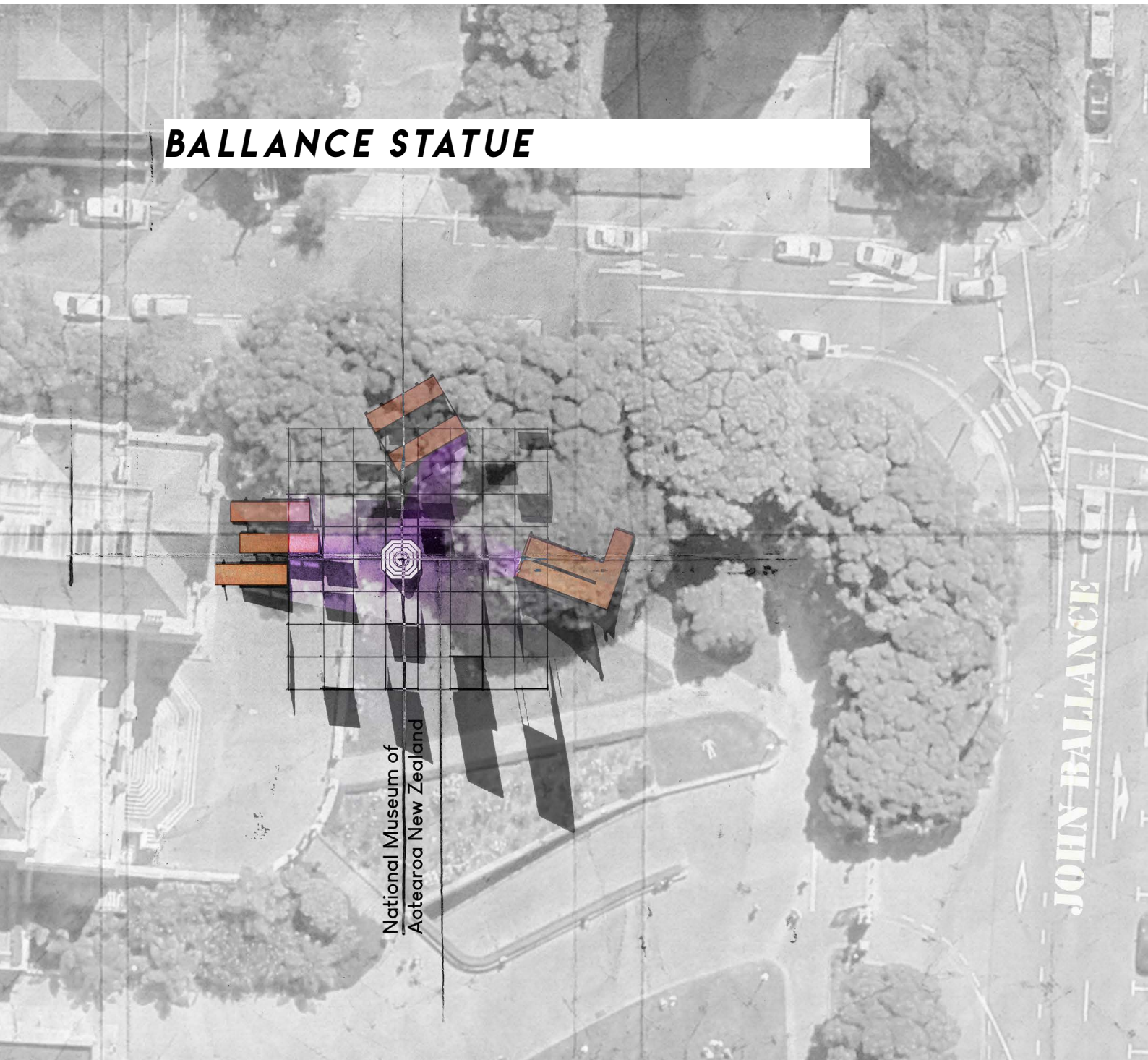
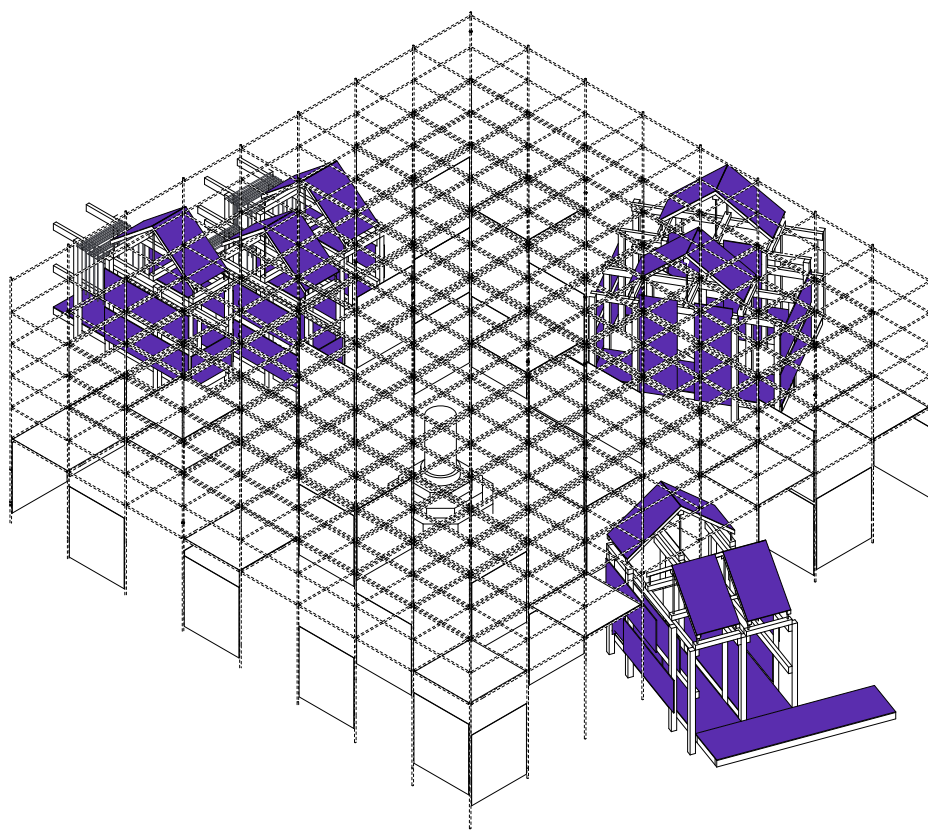


Fig 6.10. Design proposal surrounding the Balance Statue, Wellington, New Zealand.



JOHN BALLANCE MUSEUM

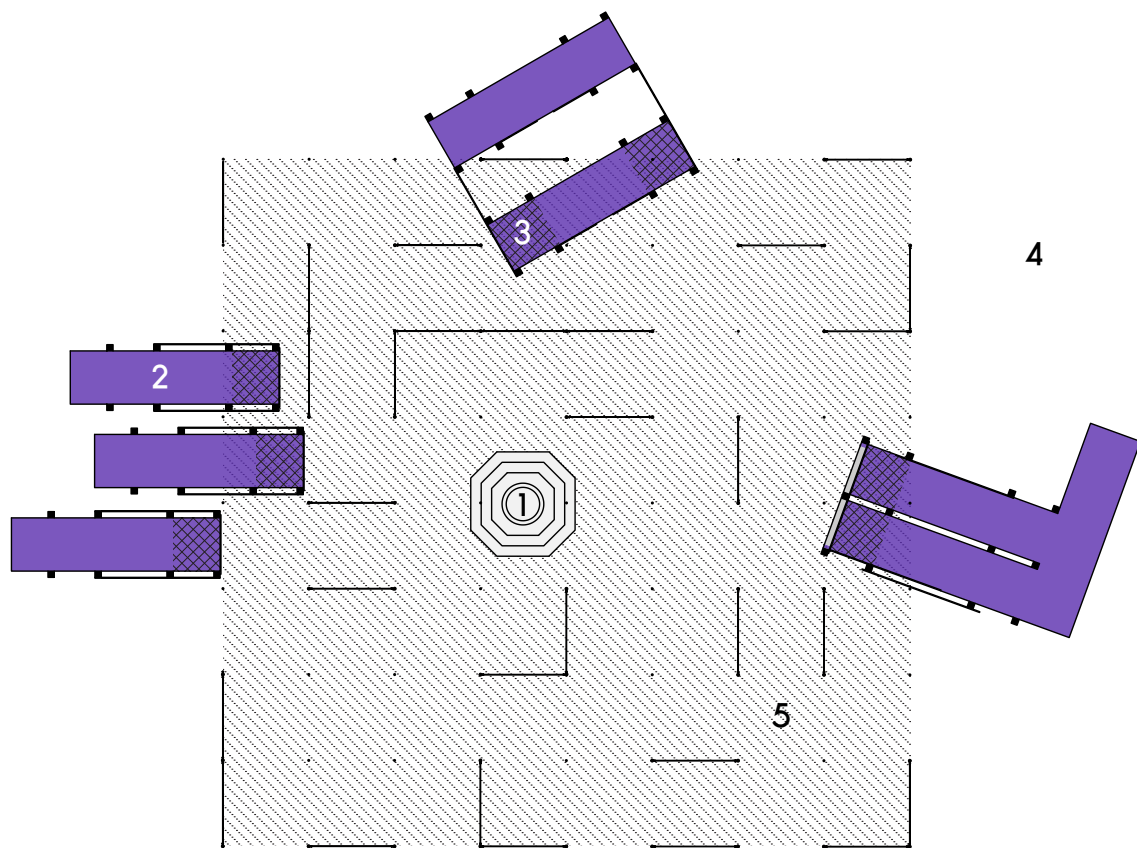


Fig 6.12. Spatial plan of the John Ballance Museum revealing the exhibition experience.

SPATIAL PLAN

1. Ballance Statue
2. 'Real' Exhibition (Kitset Architecture)
3. 'Augmented' Exhibition
4. 'Image' Exhibition
5. 'General' Exhibition (Scaffold Structure)

JOHN BALLANCE MUSEUM



Fig 6.13. Approaching one of the kit set forms. The statue is disfigured by the architecture removing the powerful image of the statue.



Fig 6.14. The architecture allows people to create their own space. Here, stories are revealed to teach people about the statue.

MUSEUM OF THE NOW

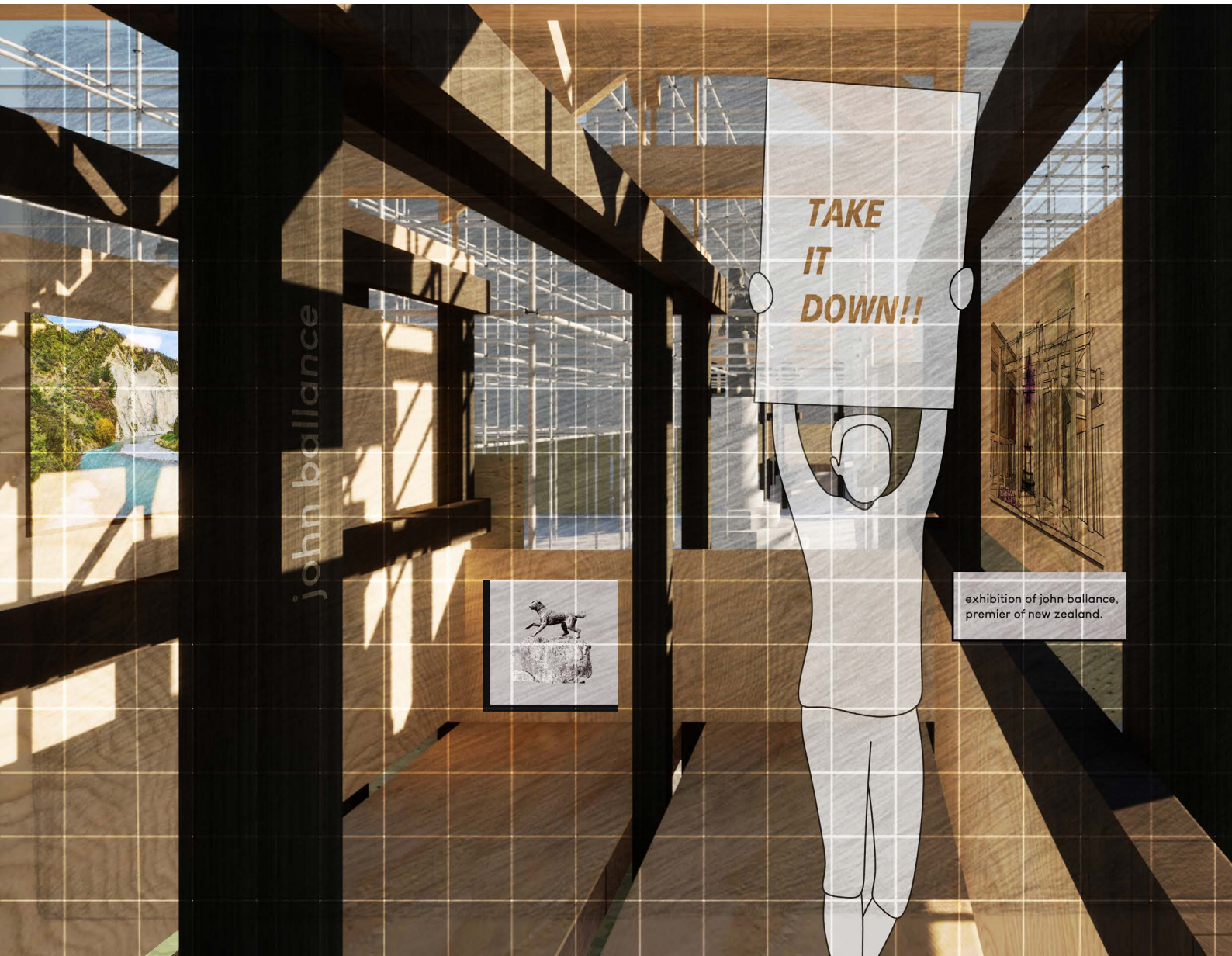


Fig 6.15. The kit set architecture brings to life a story of John Ballance.

JOHN BALLANCE MUSEUM

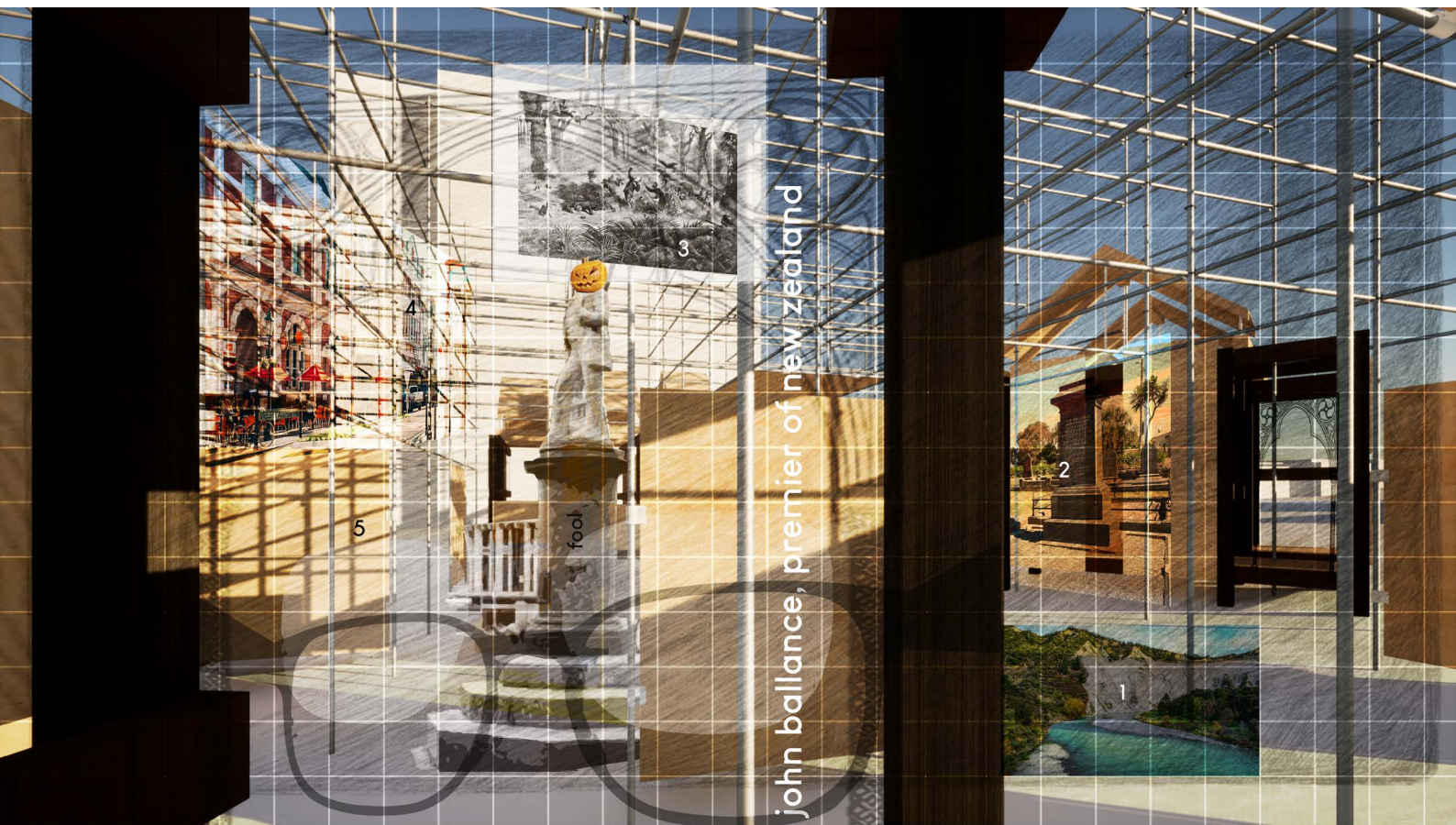


Fig 6.16. An augmented experience showing a multitude of stories.

MUSEUM OF THE NOW

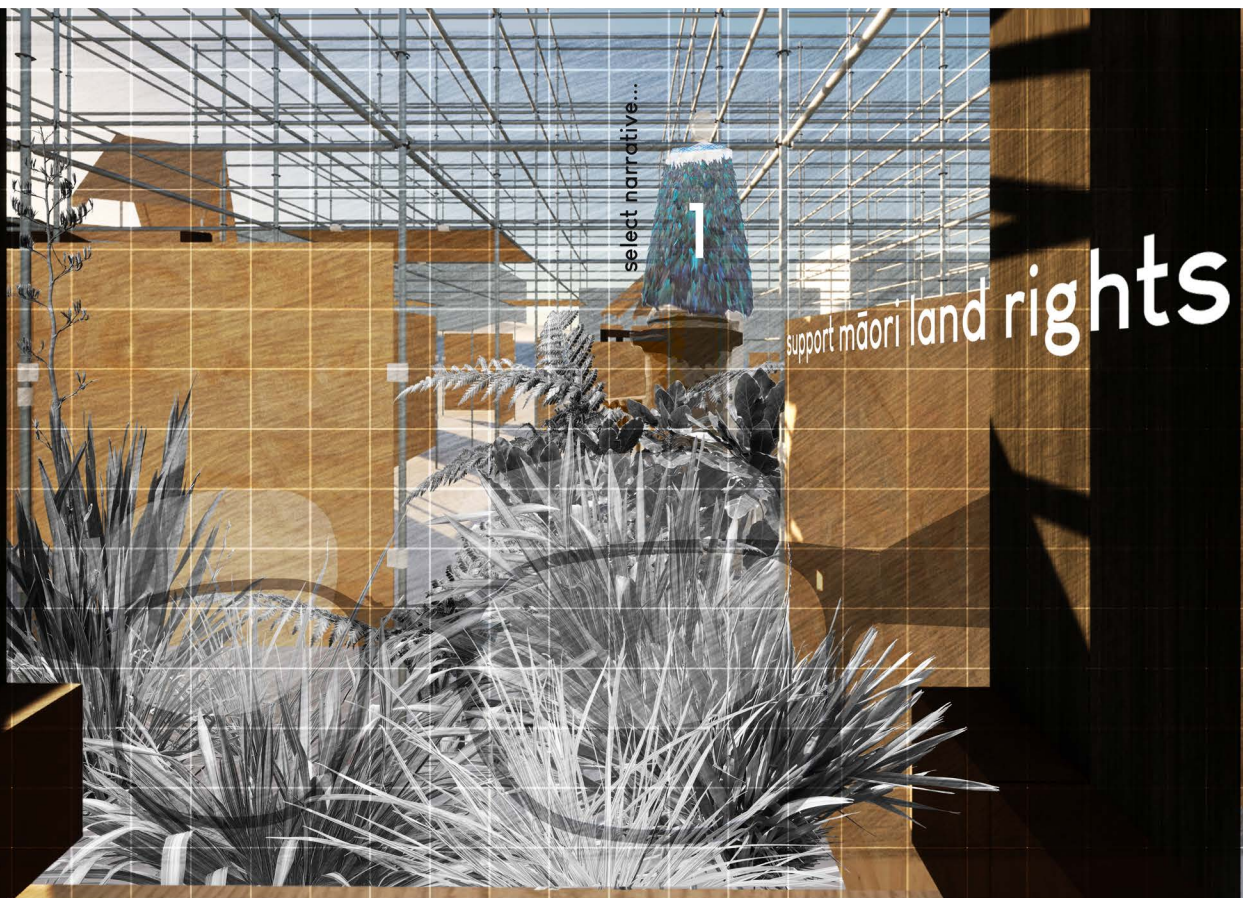


Fig 6.17. An augmented experience showing John Ballance adorned with feather cloak.

6.3

MUSEUM OF THE NOW

**PARIHAKA
MEMORIAL
MUSEUM**

PARIHAKA MEMORIAL MUSEUM

The architecture steps out of the way.
Augmented reality takes over the
architecture to further explore how
people can change the space. The
'real' environment can only go so far
limiting the narratives and the user's
interpretation.

The augmented experience allows
anger and chaos to be heard.

The user takes full control.

MUSEUM OF THE NOW

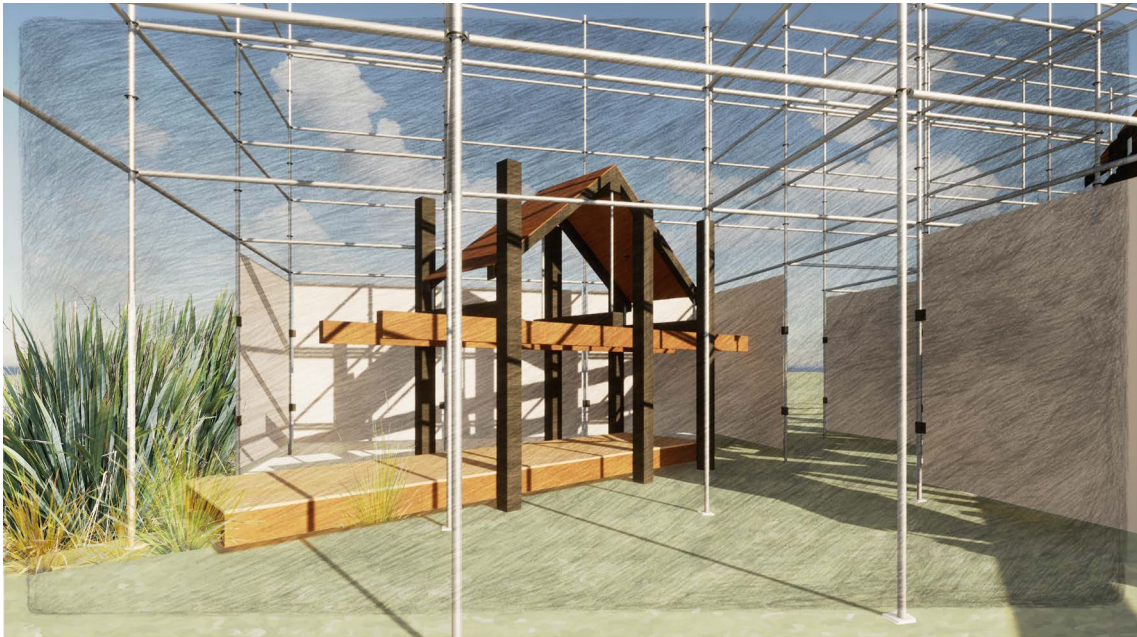


Fig 6.18. The architecture becomes an artefact in amongst the scaffold. The form suggests a New Zealand style of architecture.

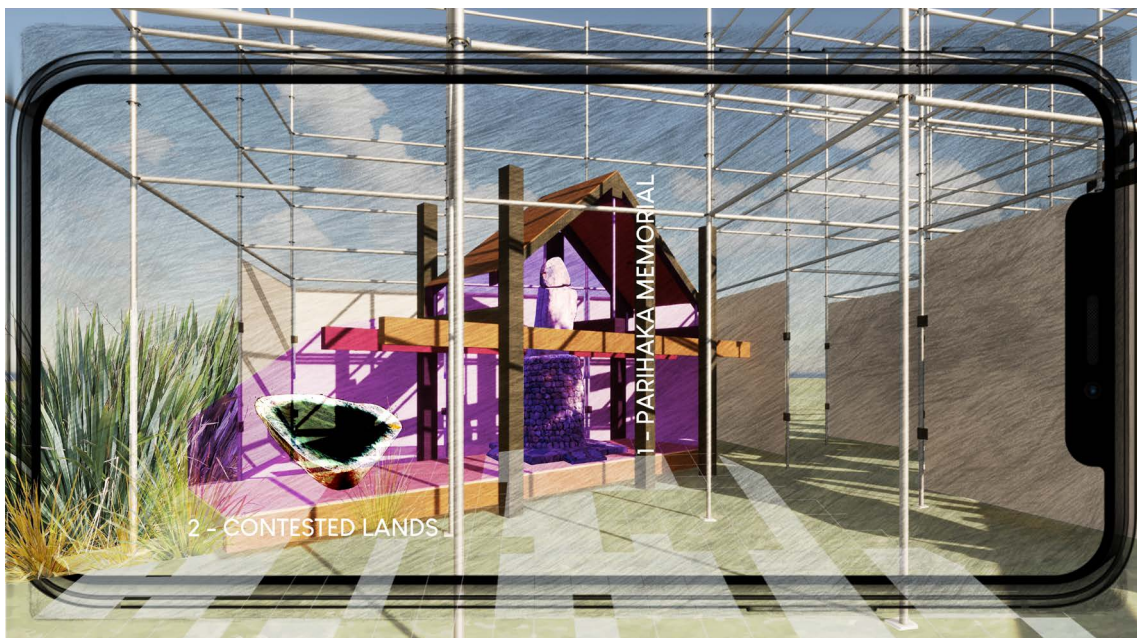


Fig 6.19. The architecture becomes a plinth for the augmented artefacts.

PARIHAKA MEMORIAL MUSEUM



Fig 6.20. The architecture creates spaces for stories to be told.



Fig 6.21. An augmented experience. What sense of presence is left in the space when the artefacts are removed?

MUSEUM OF THE NOW



Fig 6.22. Looking through one of the forms. The architecture creates spaces for the curators to exhibit.

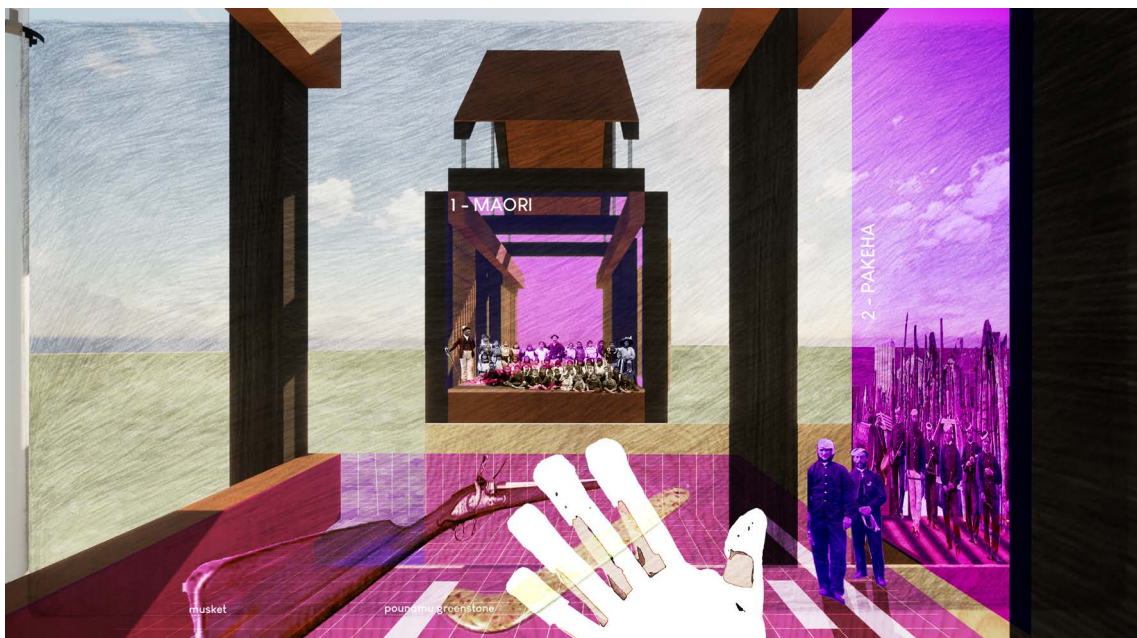


Fig 6.23. The form comes to life with augmented reality. The use of haptic gloves to select and move objects in the space gives the user more freedom.

PARIHAKA MEMORIAL MUSEUM

**INTERPRETATION IS AT THE HEART OF
ANY HISTORY.**

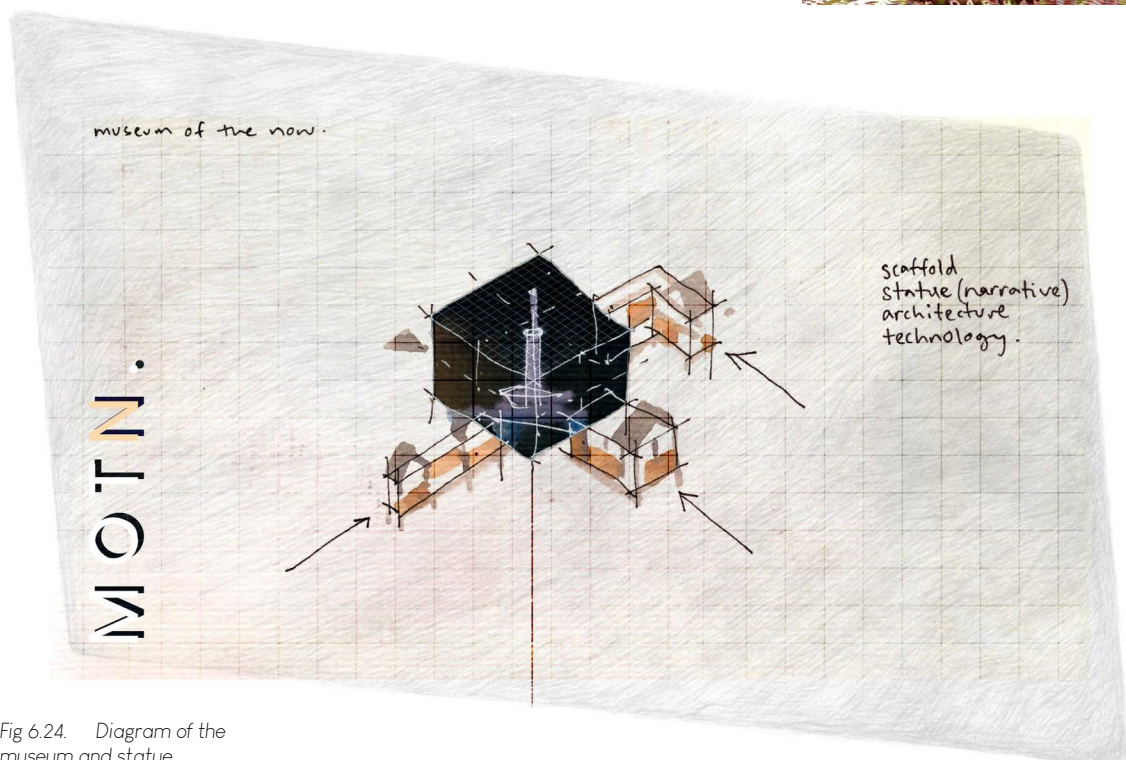


Fig 6.24. Diagram of the museum and statue.

MUSEUM OF THE NOW

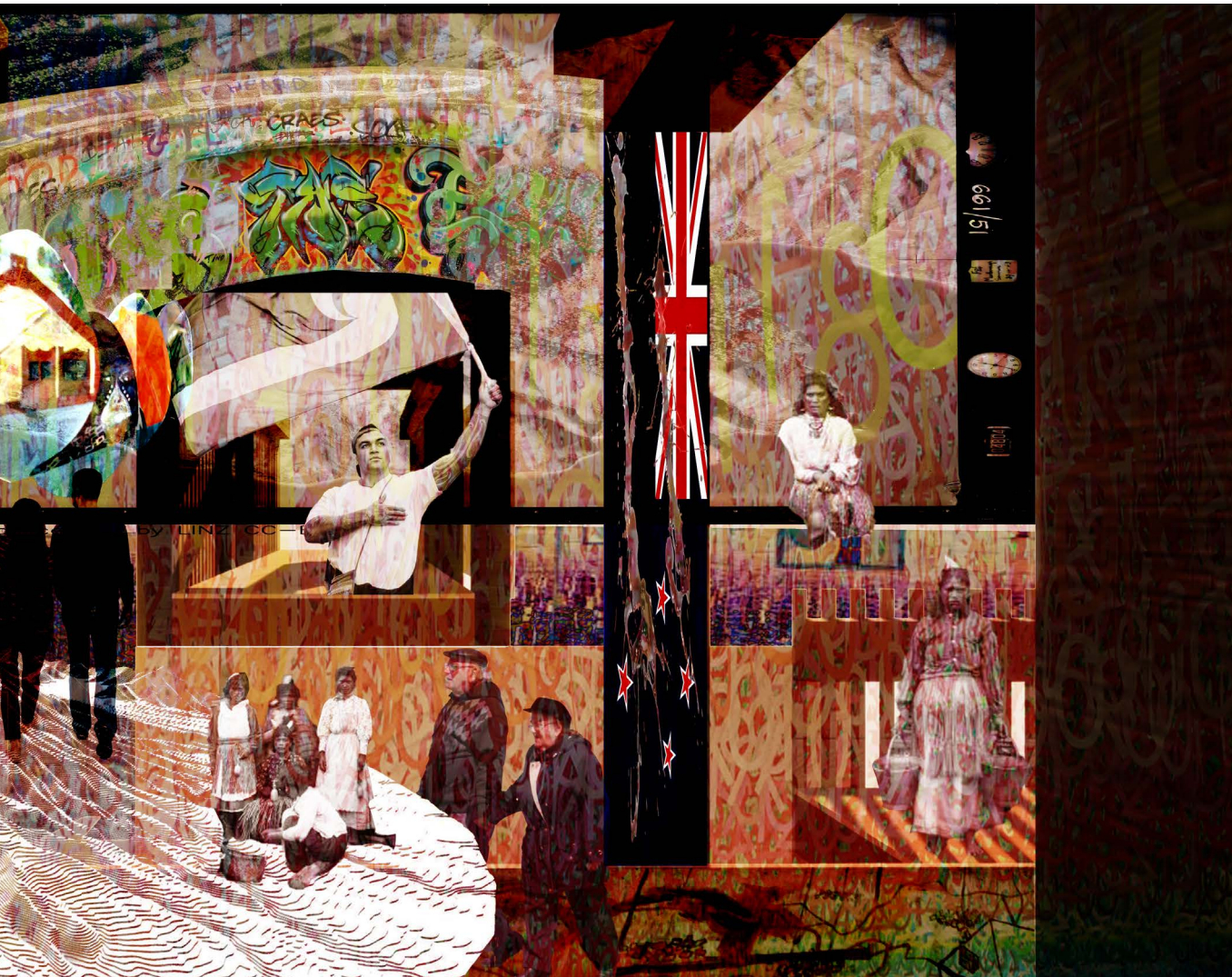
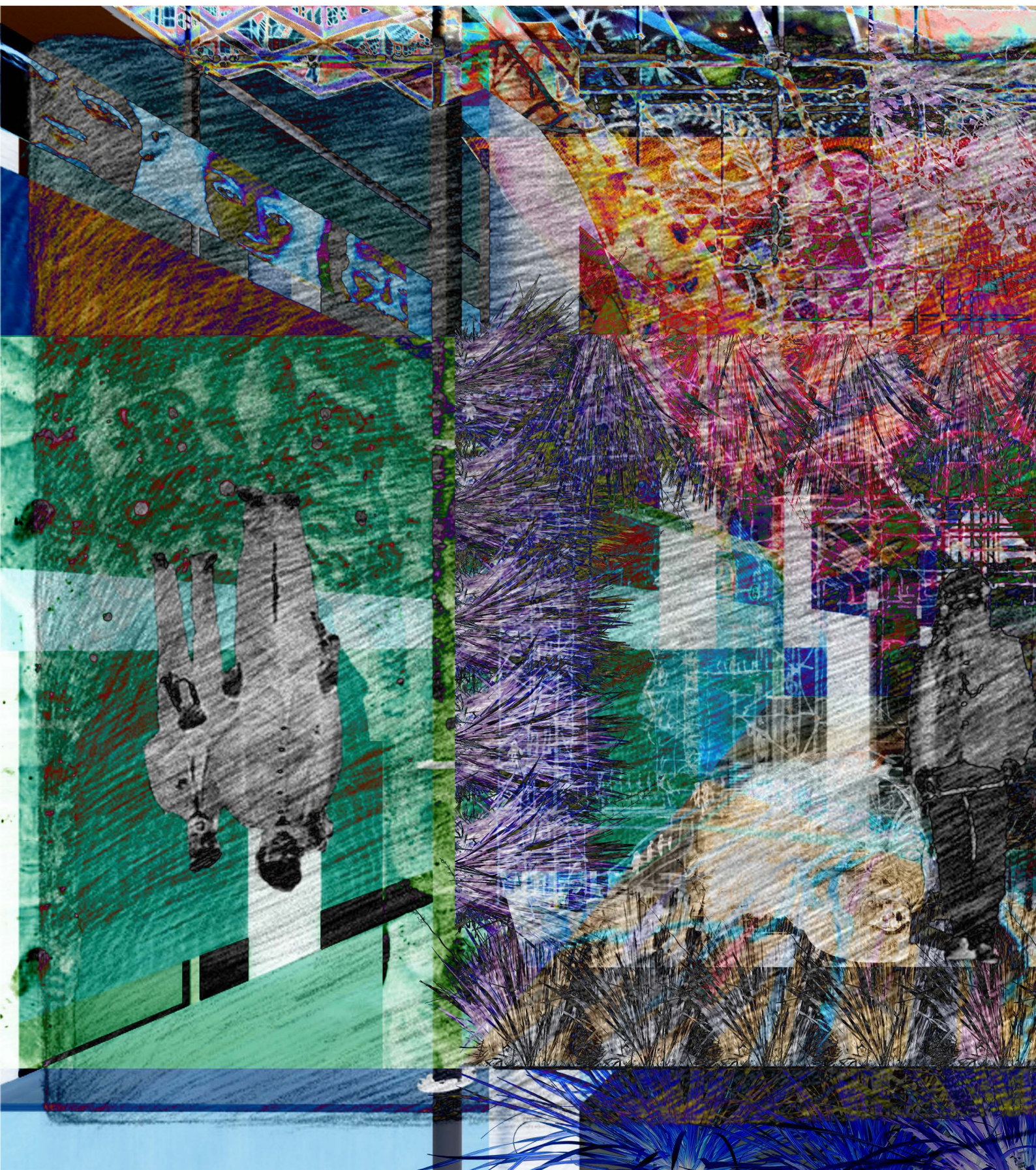
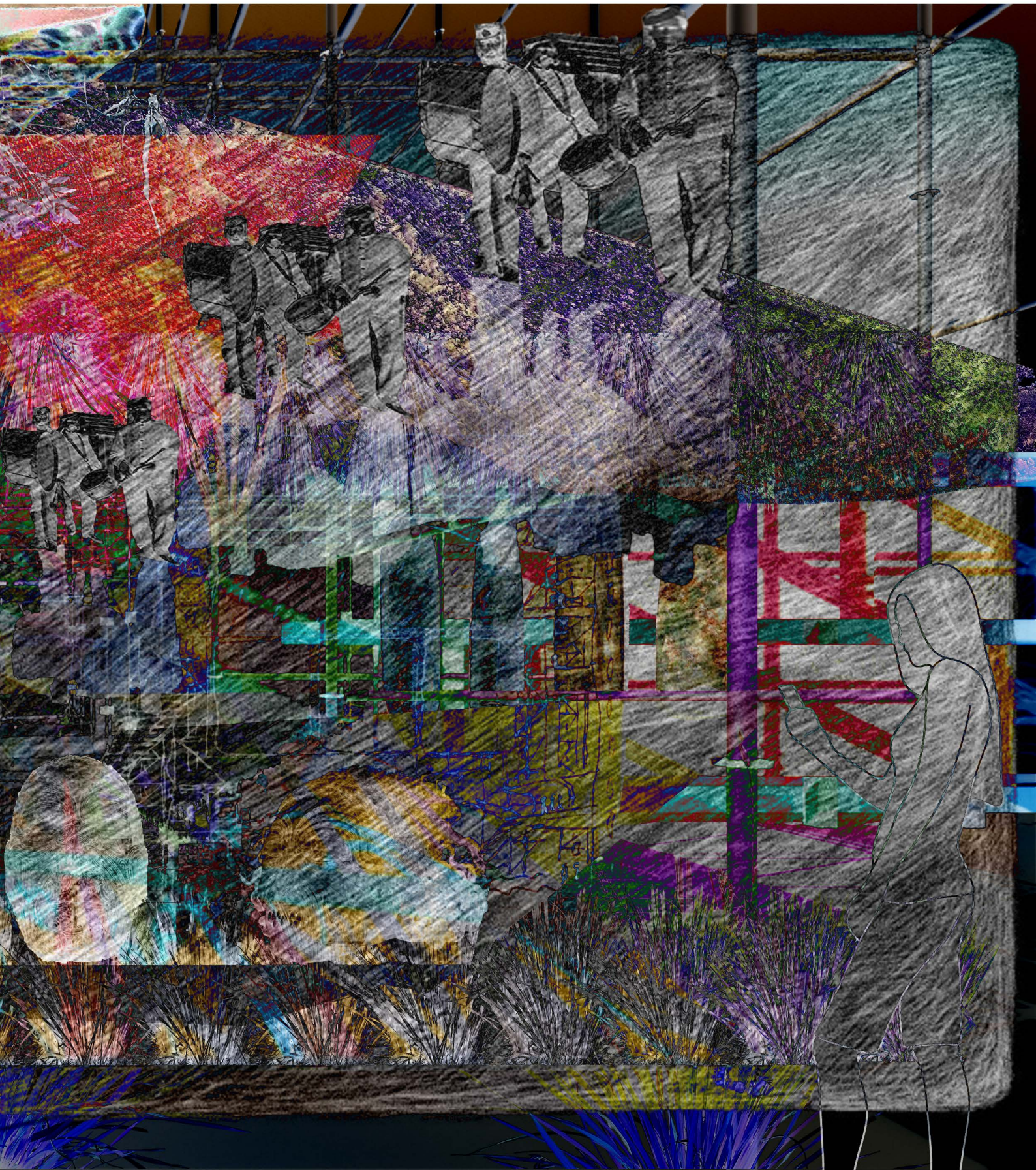


Fig 6.25. An iteration of the above illustration illuminating a series of stories. The user starts to blur what is real and virtual.

Fig 6.26. (PP. 121) The voices of people take control. Any sense of familiarity of the architecture is lost.

Fig 6.27. (PP. 123) 'Conversation and interpretation'. A representation of stories at the Parihaka site.









[The following text is a dense, handwritten manuscript, likely a letter or a page from a book. It is written in a cursive script and covers the majority of the page. Due to the image quality and the nature of the handwriting, the specific words and sentences are largely illegible. The text appears to be organized into several paragraphs, with some lines indented. There are some markings that could be interpreted as punctuation or section breaks, but they are not clear enough to transcribe accurately. The overall appearance is that of a historical document or a personal correspondence.]

C O N C N S N O I S



CONCLUSIONS

CONCLUSION AND REFLECTION

The aim of this thesis was to investigate the problems and opportunities of the digital and real-world and formulate with architecture a space where people and voice was at the heart.

It situated contemporary technological developments by extending machine age frameworks outlined by Banham and Pawley, a theme used to position and find our current age- the 'Third Machine Age' or, we may call this now 'The Third (subtract the Machine, add the Digital) Age'.

In our current age place and culture are plagued by a western aesthetic. Architecture is problematic, its style expressionless, large, neutral and uniform.

A new world has evolved where some are able to feel new and wonderful experiences, but this world is also problematic and social injustice has dire consequences. This technological world we live in, saturated in information.

Society, now and into the future, will always be affected by the reign of technology. We live in an age of ubiquitous technology. The power of its force is 'untouchable' but its domestication useful. Augmented reality has created a dual reality where we are able to realise objects, things and place in real time. Technology may

have a reign on society but when it comes down to real underlying issues of society; the real- world matters.

The National Post- Curation Museum is a design proposal that attempts to address these issues, cuts to the chase and embraces readily available user-friendly technology and easy to assemble architecture that deals with the importance of culture, place and politics. Its clarity and simplicity provides an answer to the information saturated world we live in. It develops a user- friendly space with many ways to interpret.

The museum allows multiple levels of curation. It invites conversations and interpretations across a space traditionally approached 'top down' by a single curator in the First and Second Machine age. In the Third Machine Age, the first level of curators 'curate' narratives through the architecture. These people: mayors, the homeless and workers (just an example) set up a place/ narrative derived framework for a medley of users to come along and curate interpretations through technology. The users as curators manipulate the architecture by interpreting narratives by choices through augmented reality. The connectedness across narratives between two levels of curation defies the linear approach to understanding and representing place.

The, 'what to do' with our contested statues and places centred at the fulcrum of many public spaces can be answered with this design proposal. The architectural outcome is a product of an unwanted history. It is important that we learn from our past so we can go forward in the future, 'Ka mua, Ka muri' – architecture and technology can be that change. Society, if able to converse, share and interpret something that is of a public and civic nature, can evoke change.

The design is only one solution to a large swathe of problems with societies understanding and use of architecture and technology. Technology can be worked into all architecture to create user friendly and memorable space. Architecture can go further than the current traditional 'bricks and mortar' approach. Further research could have been done into the action of augmented reality and the exploration of this technology as well as more innovative materials that reflect our digital age. In the First and Second Machine ages materiality was a focus in conveying the aesthetic and experience of architecture. Third Machine Age architecture, in this case, is more concerned about less visible contextual elements such as people, culture and the importance of conversation deriving an ephemeral and nimble architecture. An architecture offering itself to the people will invite innovation and be

reflective of current culture.

The findings and design have the potential to re- establish how we embrace technology, converse and interpret our history and think about the role of our national architecture as being at the fulcrum and reflection of our towns and cities.

It challenges the idea of national history and associated identity by inviting people to share and collaborate decolonising the dominant. The design allows voices to be heard in a public civic space and hopefully radiate a change throughout society. It has the opportunity to decolonise the western reign and associated narratives of Aotearoa New Zealand and start a conversation about our turbulent history and pave a new way forward.

"Decolonisation... takes individual and collaborative action to root out the weeds of colonisation and provide space for Indigenous ways of knowing and being – and more besides. All together, these actions can lead to radical personal and societal change"

(Mercier in Imagining Decolonisation, 2020, p. 42- 43).

The design does not necessarily decolonise but helps to create conditions in which decolonising

CONCLUSIONS

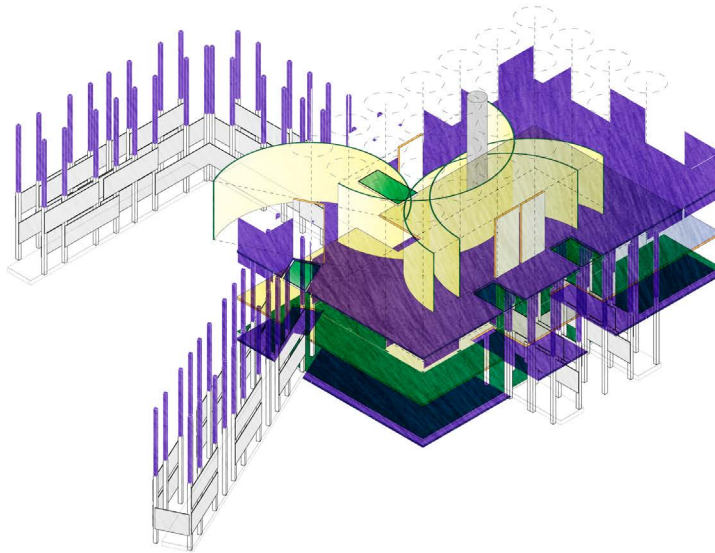
acts can be enacted as provocative challenges to current societal ways.

But most of all the design challenges the 'starchitects' and designers and the cultural art they practice- an architecture bland and meaningless. The architectural aesthetic should not be placed as key to a practice's image rather the associated people and places.

*Here's to the demise of the prejudice
'starchitects' and designers!*

CONCLUSIONS

The Proposed



What could have been proposed...

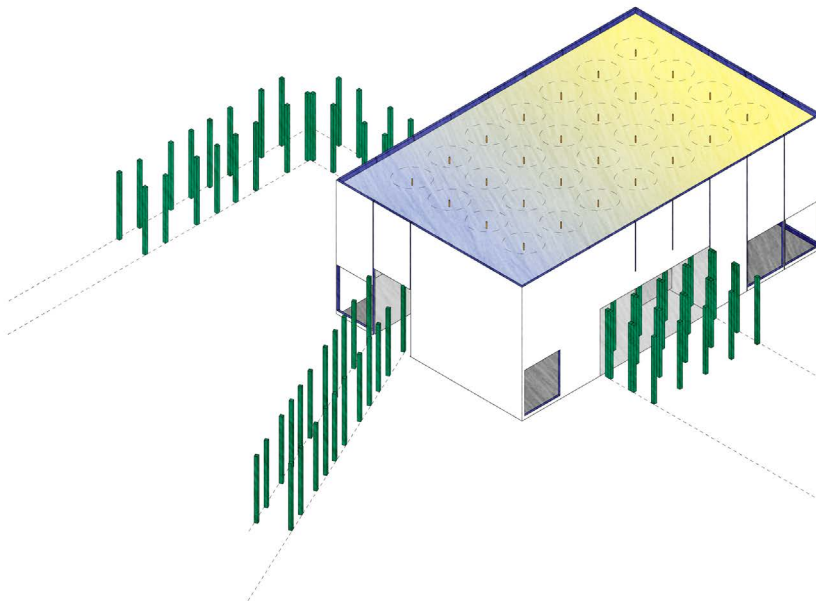
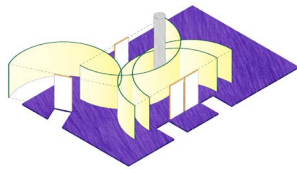


Fig 7.01. (THIS PAGE
AND LEFT) An abstract
interpretation of the
experiences

Augmented Interpretation



Real Interpretation

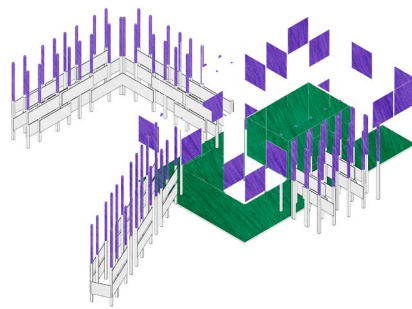
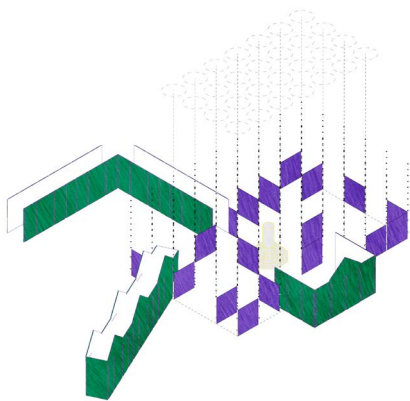
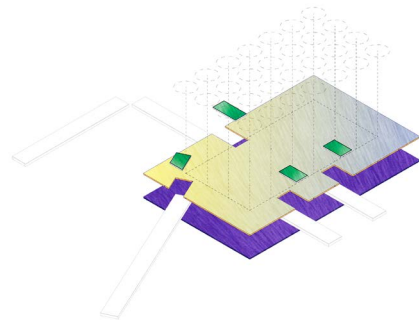
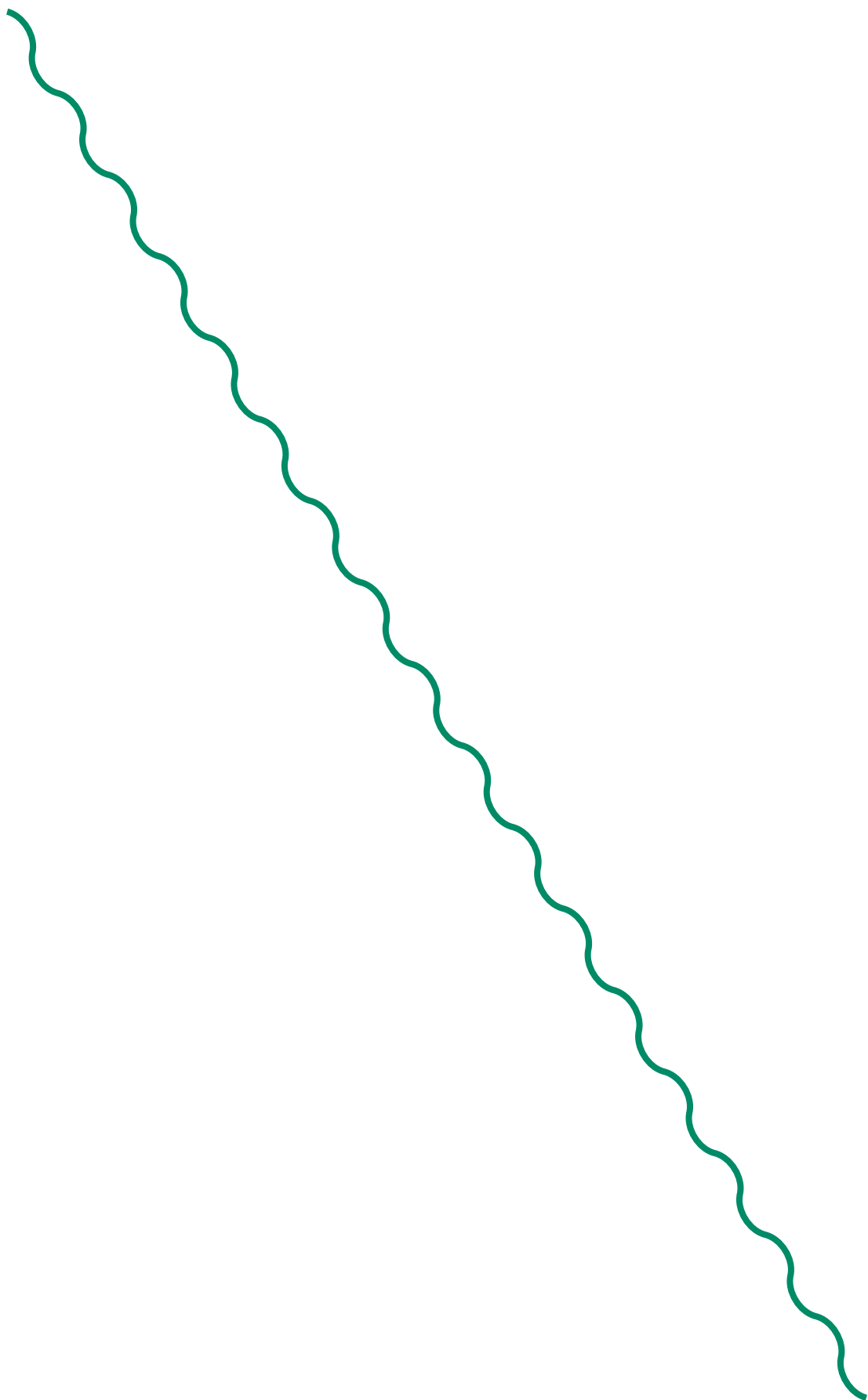


Image Interpretation



Interaction Interpretation





WORKS CITED

WORKS CITED

- Azzarello, N. (2020, May 25). *Doug Aitken's 'lighthouse' is an architecture-wrapping installation of changing landscapes filmed throughout the seasons*. Designboom | Architecture & Design Magazine. Retrieved May 25, 2020, from <https://www.designboom.com/art/doug-aitken-lighthouse-video-series-05-25-2020/>
- Banham, R. (1980). *Theory and Design in the First Machine Age*. Architectural Press.
- Barrie, A., & Gatley, J. (2020, December). *Recent Museums and Galleries*. *Architecture New Zealand*, 6, 119–121.
- Bautista, S. S. (2014). *Museums in the digital age: Changing meanings of place, community, and culture*. AltaMira Press.
- Calleja, G. (2011). *In-Game: From Immersion to Incorporation*. MIT Press. <http://ebookcentral.proquest.com/lib/vuw/detail.action?docID=3339299>
- Chalk, W. (1964). *Capsule Homes, Tower and Capsule Elevations, plans and details*. [Black ink line on tracing paper with colour printed fill]. Deutsches Architekturmuseum, Frankfurt. Retrieved February 15, 2021, from <https://www.archigram.net/portfolio.html>
- Cochran, R. D. (2018, November 1). *Fooling Reality: A Conversation with Janet Cardiff and George Bures Miller*. Sculpture. Retrieved November 11, 2020, from <https://sculpturemagazine.art/fooling-reality-a-conversation-with-janet-cardiff-and-george-bures-miller/>
- Conn, S. (2010). *Introduction: Thinking about Museums*. In *Do Museums Still Need Objects?* (pp. 1–19). University of Pennsylvania Press. <https://www.jstor.org/stable/j.ctt3fh6rd.3>
- Cook, P. (1964). *Plug-In_City, Max. Pressure Area, Long Section*. [Black ink line on tracing paper, mounted with colour film and felt-tipped pens]. Gilman Collection, MoMA, New York. Retrieved February 15, 2021, from <https://www.archigram.net/portfolio.html>
- Corazza, S. (2019, November 3). *Introducing Adobe Aero: Step into a New Reality*. Adobe Blog. Retrieved February 15, 2021, from <https://blog.adobe.com/en/publish/2019/11/04/introducing-adobe-aero-step-into-a-new-reality.html>
- Coyne, R. (2010). *The Tuning of Place: Sociable Spaces and Pervasive Digital Media*. MIT Press. <http://ebookcentral.proquest.com/lib/vuw/detail.action?docID=3339132>
- Dunne, A., & Raby, F. (2013). *Speculative Everything: Design,*

Fiction, and Social Dreaming. The MIT Press. <http://helicon.vuw.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=672907&site=ehost-live>

Goldberg, S. (2020, December 8). 2020: *The Year In Pictures*. 54 *Photographs From An Unforgettable Year*. National Geographic. Retrieved February 24, 2021, from <https://www.nationalgeographic.com/magazine/graphics/2020-the-year-in-pictures-feature>

Heidegger, M. (1993). *The Question Concerning Technology and Other Essays*. Harper and Row.

Hoff, J. (2018, March 20). *Just A Line is another Google AR Experiment, now an app*. Android Community. Retrieved February 15, 2021, from <https://androidcommunity.com/just-a-line-is-another-google-ar-experiment-now-an-app-20180320/>

Hudson, P. (2009). *The Industrial Revolution*. Bloomsbury Publishing Plc. <http://ebookcentral.proquest.com/lib/vuw/detail.action?docID=1778888>

Ibelings, H. (2002). *Supermodernism: Architecture in the Age of Globalisation*. NAI Publishers. *Imagining Decolonisation*. (2020). Bridget Williams Books Ltd.

Karandinou, A. (2018). *Data*,

Architecture and the Experience of Place. Taylor & Francis Group. <http://ebookcentral.proquest.com/lib/vuw/detail.action?docID=5596871>

Kiddle, R. (2020, October). *Exhibition: Violent Legalities*. *Architecture New Zealand*, 5, 113.

Mahuika, N. (2020). *Ko wai matou? Who are we?* Oral History Conference.

Maori Hall at the Dominion Museum, Buckle Street, Wellington. (ca. 1936). [Glass negative]. Alexander Turnbull Library, Wellington, New Zealand. Retrieved February 15, 2021, from https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE139586&dps_custom_att_1=emu

Mathews, S. (2005). *The Fun Palace: Cedric Price's experiment in architecture and technology*. *Technoetic Arts: A Journal of Speculative Research*, 3(2), 73–91. <https://doi.org/10.1386/tear.3.2.73/1>

McCarthy, C. (2021, January 29). *The Politics of Public Spaces*. *Stuff*. Retrieved February 15, 2021, from <https://www.stuff.co.nz/opinion/124006954/the-politics-of-public-spaces>

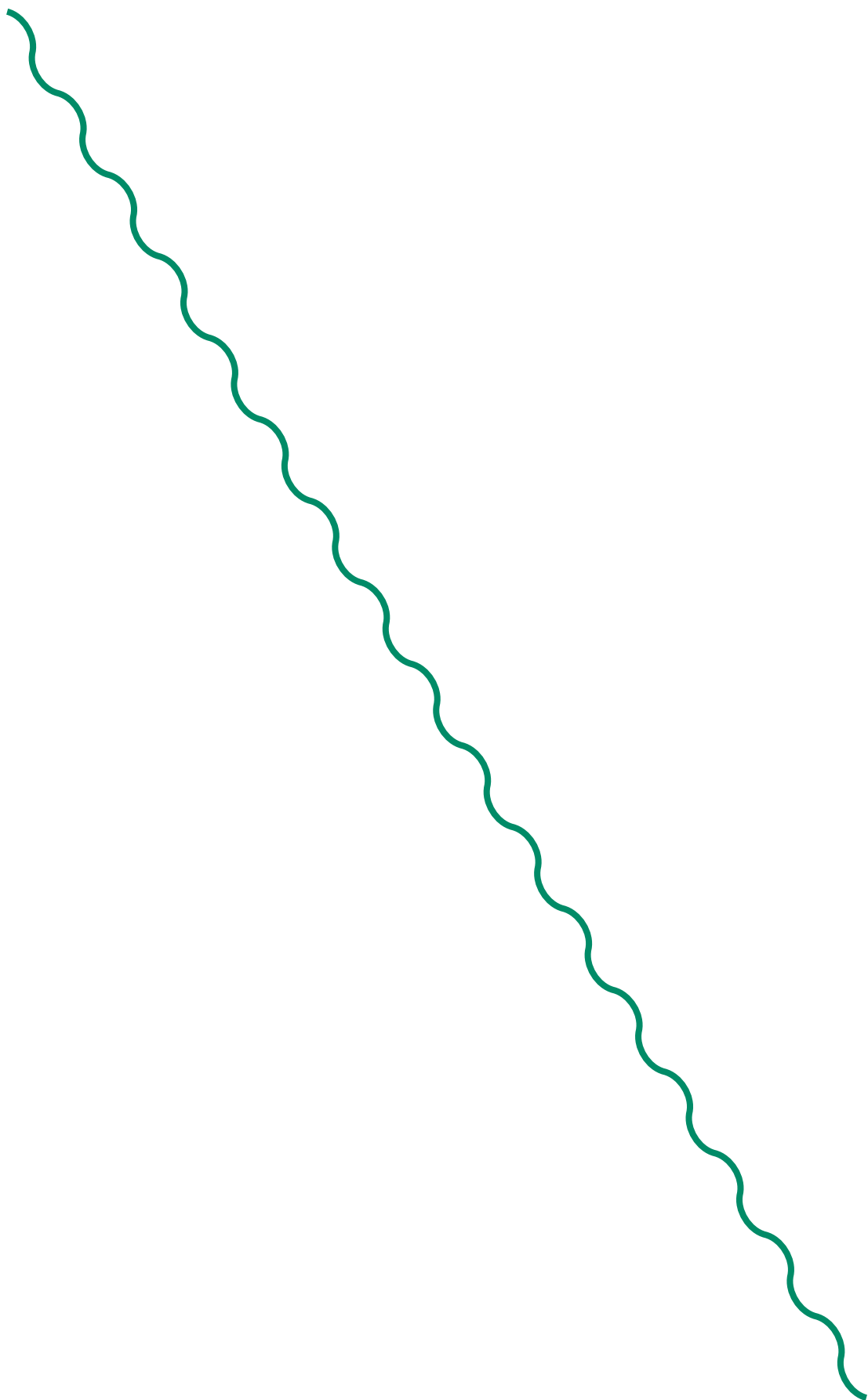
Merin, G. (2019, February 9). *AD Classics: The Dymaxion House / Buckminster Fuller*. *ArchDaily*. Retrieved February 15, 2021, from <https://www>.

WORKS CITED

- archdaily.com/401528/ad-classics-the-dymaxion-house-buckminster-fuller
Pawley, M. (1990). *Theory and Design in the Second Machine Age*. Basil Blackwell.
- Phogat, S., & Sharma, K. (2015). *Social Media Transforming Society*. International Journal of Advanced Research in Computer Science; Udaipur, 6(1). <http://search.proquest.com/docview/1674900017/abstract/DC5B37DDE72F49B3PQ/1>
- Price, C. (ca. 1963). *Fun Palace: section showing potential use of interior spaces*. [Ink, coloured pencil and felt-tip pen on paper]. Cedric Price fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montreal. Retrieved February 15, 2021, from <https://www.cca.qc.ca/en/search/details/collection/object/309694>
- Price, C. (ca. 1963). *Interior perspective for Fun Palace*. [Diazotype; verso: blue ball-point pen sketch]. Cedric Price fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montreal. Retrieved February 15, 2021, from <https://www.cca.qc.ca/en/search/details/collection/object/309693>
- Price, C. (ca. 1964). *Typical plan of Fun Palace complex*. [Adhesive film on gelatin silver print mounted on masonite (tm) board]. Cedric Price fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montreal. Retrieved February 15, 2021, from <https://www.cca.qc.ca/en/search/details/collection/object/400675>
- Reed, D. (2002). *Tangled destinies: National Museum of Australia*. Images PubGroup.
- Shepherd, P. (2003). *Artificial Love: A Story of Machines and Architecture*. MIT Press. <http://ebookcentral.proquest.com/lib/vuw/detail.action?docID=3339612>
- The Designing of Te Papa: Architecture New Zealand examines Te Papa's concepts design structure*. (1998, February). Architecture New Zealand.
- Trustees of the Natural History Museum. (2019, March 27). *Natural History Museum: Record-breaking visitor numbers for the Natural History Museum in London and Dippy on Tour*. Retrieved February 14, 2021, from <https://www.nhm.ac.uk/press-office/press-releases/record-breaking-visitor-numbers-for-the--natural-history-museum-.html>
- Varnelis, K. (2006). *History & Theory: Goodbye Supermodernism*. *Architecture*, 95(7), 55–57.

BIBLIOGRAPHY

- (45) Archigram, Peter Cook: What is architecture? – YouTube. (n.d.). Retrieved 5 May 2020, from https://www.youtube.com/watch?v=uvWgWs_2svc
- Cook, P. (2003). *The City, Seen as a Garden of Ideas*. The Monacelli Press.
- Cook, P. (2015). Not to be Taken Seriously: Kiosks, Roadside Joys and Other Things That are Beneath Architectural Contempt. *Architectural Design*, 85(3), 56–63. <https://doi.org/10.1002/ad.1901>
- DeLanda, M. (2005). Space: Extensive and Intensive, Actual and Virtual. In I. Buchanan & G. Lambert (Eds.), *Deleuze and Space* (pp. 80–88). Edinburgh University Press; JSTOR. <https://www.jstor.org/stable/10.3366/j.ctt1r2c49.8>
- Gehl, J. (2010). *Cities for People*. Island Press.
- Jackson, J. B. (1994). *A Sense of Place, a Sense of Time*. Yale University.
- Jacobs, J. (1992). *The Death and Life of Great American Cities* (Vintage Books Edition). Vintage Books.
- Jencks, C. (1991). *The Language of Post Modern Architecture* (6th ed.). Rizzoli.
- Jo, S. (2003). Aldo Rossi: Architecture and Memory. *Journal of Asian Architecture and Building Engineering*, 2(1), 231–237. <https://doi.org/10.3130/jaabe.2.231>
- Lynch, K. (1960). *The Image of the City*. The MIT Press.
- Norberg-Schulz, C. (1975). *Meaning in Western Architecture*. Praeger.
- Shepard, M. (2011). *Sentient City: Ubiquitous computing, architecture, and the future of urban space*. The Architectural League of New York.
- Stenson, M. W. (2017). *Architectural Intelligence*. The MIT Press.



LIST OF FIGURES

LIST OF FIGURES

(Figures not listed are author's own 2018, 2020, 2021).

Fig.

- 1.01 **Buckminster Fuller and a model of the futuristic Dymaxion House.**
Merin, G. (2019, February 9). AD Classics: *The Dymaxion House / Buckminster Fuller*. ArchDaily. Retrieved February 15, 2021, from <https://www.archdaily.com/401528/ad-classics-the-dymaxion-house-buckminster-fuller>
- 1.02 **Richard Roger's Lloyd's Building, 1986.**
Pawley, M. (1990). *Theory and Design in the Second Machine Age*. Basil Blackwell.
- 1.03 **Nectar Homes geodesic timber house, 1985. A product of technology plus micro- aesthetic.**
Pawley, M. (1990). *Theory and Design in the Second Machine Age*. Basil Blackwell.
- 1.04 **Section of 'The Plug- In City' by Archigram.**
Cook, P. (1964). *Plug-In_City, Max. Pressure Area, Long Section*. [Black ink line on tracing paper, mounted with colour film and felt-tipped pens]. Gilman Collection, MoMA, New York. Retrieved February 15, 2021, from <https://www.archigram.net/portfolio.html>
- 1.05 **'The Plug- In City' by Archigram.**
Chalk, W. (1964). *Capsule Homes, Tower and Capsule Elevations, plans and details*. [Black ink line on tracing paper with colour printed fill]. Deutsches Architekturmuseum, Frankfurt. Retrieved February 15, 2021, from <https://www.archigram.net/portfolio.html>
- 2.06 **Captain Hamilton being removed from Civic Square, Hamilton.**
McCarthy, C. (2021, January 29). The Politics of Public Spaces. Stuff. Retrieved February 15, 2021, from <https://>

www.stuff.co.nz/opinion/124006954/the-politics-of-public-spaces

3.08

Adobe Aero.

Corazza, S. (2019, November 3). **Introducing Adobe Aero: Step into a New Reality.** Adobe Blog. Retrieved February 15, 2021, from <https://blog.adobe.com/en/publish/2019/11/04/introducing-adobe-aero-step-into-a-new-reality.html>

3.09

Google Just a Line.

Hoff, J. (2018, March 20). Just A Line is another Google AR Experiment, now an app. Android Community. Retrieved February 15, 2021, from <https://androidcommunity.com/just-a-line-is-another-google-ar-experiment-now-an-app-20180320/>

3.11

Lighthouse.

Azzarello, N. (2020, May 25). *Doug Aitken's 'lighthouse' is an architecture-wrapping installation of changing landscapes filmed throughout the seasons.* Designboom | Architecture & Design Magazine. Retrieved May 25, 2020, from <https://www.designboom.com/art/doug-aitken-lighthouse-video-series-05-25-2020/>

3.13

In a recent National Geographic article- A projection of George Floyd on the Confederate General Robert E. Lee Monument in Richmond, Virginia.

Goldberg, S. (2020, December 8). *2020: The Year In Pictures. 54 Photographs From An Unforgettable Year.* National Geographic. Retrieved February 24, 2021, from <https://www.nationalgeographic.com/magazine/graphics/2020-the-year-in-pictures-feature>

LIST OF FIGURES

(Figures not listed are author's own 2018, 2020, 2021).

- 4.01 **Natural History Museum in London.**
Trustees of the Natural History Museum. (2019, March 27). *Natural History Museum: Record-breaking visitor numbers for the Natural History Museum in London and Dippy on Tour*. Retrieved February 14, 2021, from <https://www.nhm.ac.uk/press-office/press-releases/record-breaking-visitor-numbers-for-the-natural-history-museum-.html>
- 4.02 **'A First Machine Age Museum'.**
Maori Hall at the Dominion Museum, Buckle Street, Wellington. (ca. 1936). [Glass negative]. Alexander Turnbull Library, Wellington, New Zealand. Retrieved February 15, 2021, from https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE139586&dps_custom_att_1=emu
- 4.09 **Birds eye image of National Museum of Australia, Canberra, ACT.**
Reed, D. (2002). *Tangled destinies: National Museum of Australia*. Images PubGroup.
- 4.10 **Close up birds eye image of National Museum of Australia, Canberra, ACT. Note the use of colour and form to represent the stories of Australia.**
Reed, D. (2002). *Tangled destinies: National Museum of Australia*. Images PubGroup.
- 4.11 **'Interior Perspective for Fun Palace'.**
Price, C. (ca. 1963). Interior perspective for Fun Palace. [Diazotype; verso: blue ball-point pen sketch]. Cedric Price fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montreal. Retrieved February 15, 2021, from <https://www.cca.qc.ca/en/search/details/collection/object/309693>

4.12

'Typical plan of Fun Palace complex'.

Price, C. (ca. 1964). Typical plan of Fun Palace complex. [Adhesive film on gelatin silver print mounted on masonite (tm) board]. Cedric Price fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montreal. Retrieved February 15, 2021, from <https://www.cca.qc.ca/en/search/details/collection/object/400675>

4.13

'Fun Palace: section showing potential use of interior spaces'.

Price, C. (ca. 1963). *Fun Palace: section showing potential use of interior spaces*. [Ink, coloured pencil and felt-tip pen on paper]. Cedric Price fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montreal. Retrieved February 15, 2021, from <https://www.cca.qc.ca/en/search/details/collection/object/309694>