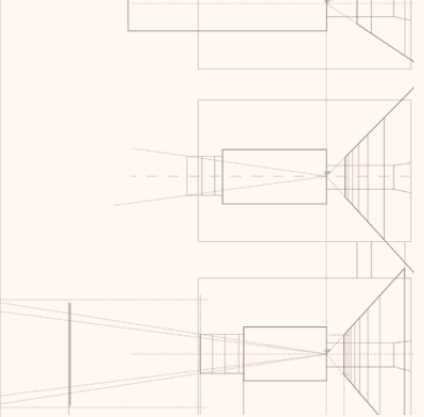
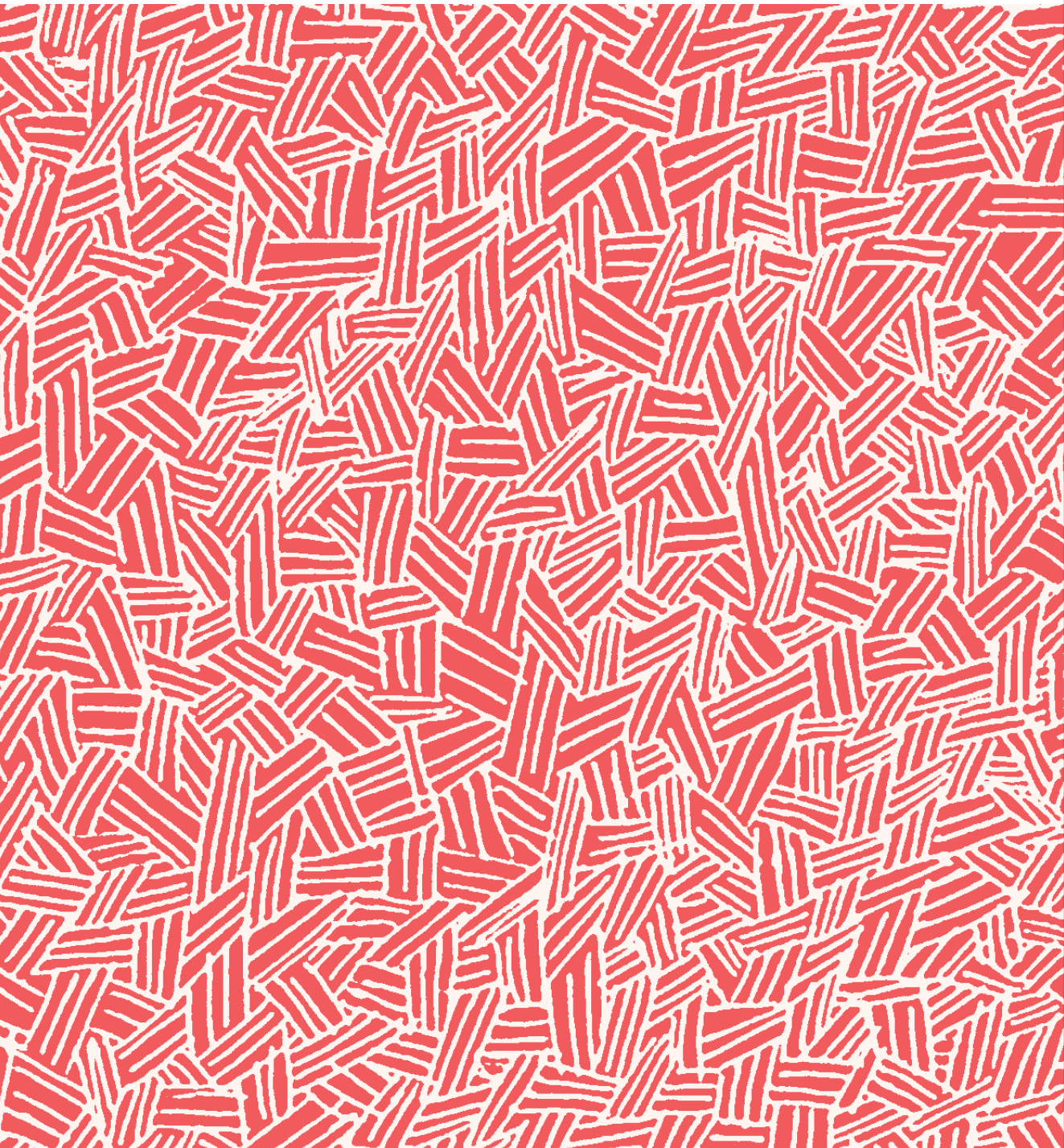


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NZIA Central Innovation
**5th Year Student
Design Awards**
2017



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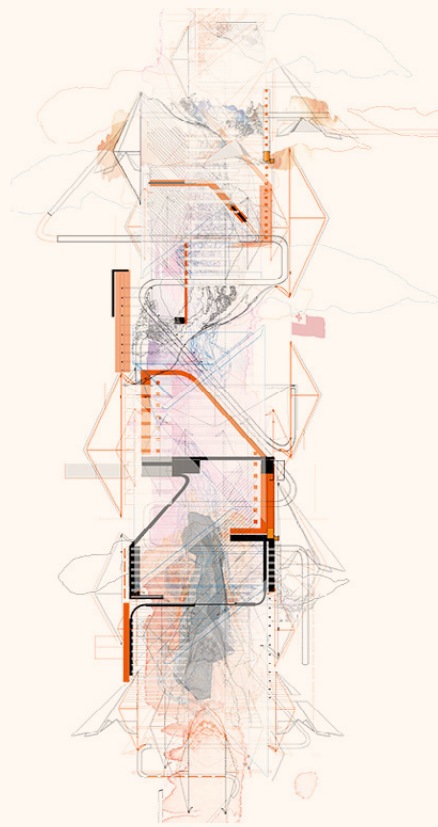


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Illustrations by:
1. Jessica Wright
2. Stacy Mountfort
3. Marisha Aya
4. Mustafa Mora
5. Ryan McCully
6. Lucy Vete



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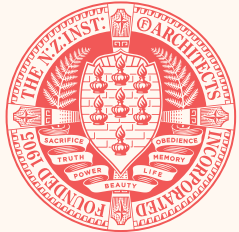
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Illustration on reverse
by Ayla Raymond-Roberts

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NZIA Central Innovation 5th Year Student Design Awards 2017



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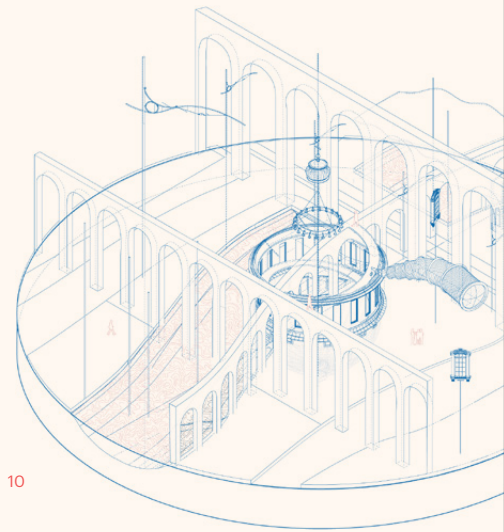


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9

- Illustrations by:
- 7. Lucy Vete
 - 8. Mustafa Mora
 - 9. Jessica Wright
 - 10. Ryan McCully
 - 11. William Howse
 - 12. Ayla Raymond-Roberts



10



11

12



New Zealand
Institute of Architects
Incorporated



NZIA Central Innovation
**5th Year Student
Design Awards
2017**

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The NZIA Central Innovation 5th Year Student Design Awards

The NZIA Central Innovation Fifth-Year Student Design Awards is an annual competition in which 12 final-year students (four each from New Zealand's accredited schools of architecture at Unitec, the University of Auckland and Victoria University of Wellington) present their thesis projects to a jury of architects with excellent professional credentials.

The awards, held annually since the late 1990s, and this year held in Auckland from 30 Nov – 1 Dec, provide an interface between academia and professional practice. Through a format of explanation and interrogation, students are exposed to high-level inquisition on a neutral ground, outside the familiar comfort of the university surrounds.

The composition of the jury is an essential ingredient in the success of the awards programme. As has become customary, the jury was convened by the sitting NZIA President, in 2017 Christina van Bohemen. Sitting alongside Christina were Auckland-based architect Jon Rennie, who has significant experience designing public and multi-unit residential projects, and Sydney-based architect Rachel Neeson, whose practice, Neeson Murcutt

Architects, has worked on many award-winning and high-profile public and residential projects throughout Australia.

It has also become customary for the international juror to present a prize-giving lecture. In 2017, at Auckland's Heritage Hotel, the venue of the student exhibitions and presentations, Rachel surveyed her practice's work through twin lenses of "sense and sensibility", discussing how the alchemy of logic and spatial intelligence — "the eyes of the skin" — can lead to more compelling architecture. The night's culminating act was the conferral of the winner's prize and two highly commended awards.

As is usually the case, the scope of student work was varied, ranging from ambitious speculative projects and imaginative reworkings of heritage buildings to studies of process and of more ethereal qualities – time, perspective, memory – and the ways in which these qualities can amplify the experience of architecture. The nature of the exhibitions and the accompanying presentations were also varied, with finalists drawing upon analogue and digital presentation devices to convey their ideas.

What themes can be drawn from this year's student cohort? Speaking generally, many of the presented works could be considered potentially feasible. For instance, Andrew Frankum, from Unitec, used a drone and photogrammetry to survey Motu Kōkako island in the Bay of Islands for a site for single-user, stay-over accommodation. Andrew's touch-the-ground lightly concept was tailor-made for Motu Kōkako's rocky surface. Another Unitec student, William Howse, questioned ways of re-adapting Dunedin's original Morningside cable-car station, now a light commercial building, back to its intended use. Andrew introduced transparency to the building, stripped away decades of accretion, and celebrated the original structure.

Ayla Raymond-Roberts, from the University of Auckland, was the only competition entrant to broach the important question of housing

provision in Auckland's older suburbs. Ayla's solutions envisaged a gentler type of density, flexible enough to provide accommodation for occupants in varied life stages.

Victoria University's Gerard Finch was also motivated by a real-world problem – the incredible volume of waste produced by the construction industry. His impressive project, *Defab*, added a twist to the application of prefabricated building technologies: at end of life, these constructions can be disassembled and recycled into new structures. For this project, Gerard was highly commended by the jury.

Waste also provided the motivation for Unitec's Hannah Stephenson, although her response to the subject veered away from the practical to the fantastical and satirical. Hannah's towering Material Redistribution Leisure Centre, rising from Auckland's Spaghetti Junction, is a highly visible rejoinder to the "out of sight, out of mind" approach to rubbish disposal practiced by many city dwellers.

For other finalists, inspiration was found in cultural heritage, memory and connection. From his research into the fates and fortunes of Iraq's Marsh Arabs and study of Arabic geometric patterning, Mustafa Mora, from the University of Auckland, conceived of a vast *House of Wisdom* at the confluence of the Tigris and Euphrates Rivers. Understanding the importance of water to urban communities in India, Unitec's Marisha Aya devised a toolkit of architectural responses to provide not just potable water but social spaces for communities to enjoy.

For University of Auckland student Lucy Vete, the cosmology, history, social reality and diasporic memory of Tonga provided the motivation for a project that used architecture as a catalyst for cultural emergence and imagining. Lucy balanced the pragmatic provision of public spaces along a long straight road between lagoon and sea with higher-level cultural concepts. Her project *Shifting Grounds* was the overall winner in the 2017 Student Design Awards.

The rigorous application of process was another theme evident this year. Inspired by a Mies van De Rohe perspective drawing of his famed Barcelona Pavilion, Jessica Wright, from Victoria University, developed her own drawing machine to extrapolate plan views from perspective in an attempt to gain insight into the modernist master's building. For Victoria University's Ryan McCully, the notion of collective memory as an artefact to be treasured inspired an investigation of communal loss in post-earthquake Christchurch.

Occasionally at the Student Design Awards the jury is challenged by a project that sits outside what traditionally would be considered "architecture". This year, a filmic study by LiWen Choy questioned the nature of architectural presentation, and indeed representation.

LiWen's *Architectonic of Loneliness* drew upon narrative sequences from a Haruki Murakami novel, reinterpreting them phenomenologically as scenes viewed from two perspectives. The jury applauded LiWen's concern for perception and experience, and the University of Auckland student was highly commended for his work.

The experience of space – and especially how to make real spaces more experiential in response to the prevalence of online excursions – was also central to Stacy Mountfort's project. The Victoria University student approached the design of a performing arts centre cut into the slopes of Wellington via various studies in light, form and materiality.

The New Zealand Institute of Architects acknowledges the support given to the 2017 Student Design Awards by Central Innovation, and congratulates all the entrants on the quality of their presentations and exhibitions. The Institute wishes the students all the best for their careers in architecture.

**New Zealand Institute of Architects
February 2018**

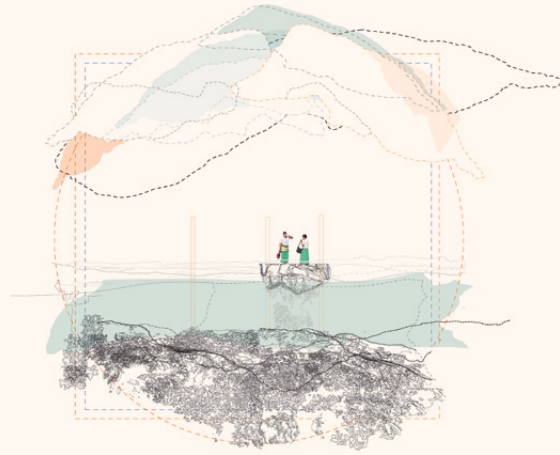
Winner
2017 NZIA Central Innovation
Student Design Award

Lucy Vete

University of Auckland School
of Architecture and Planning



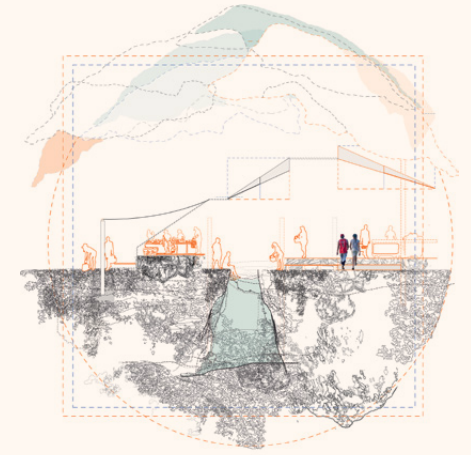
Cross Section A
1:150



Cross Section B
1:150

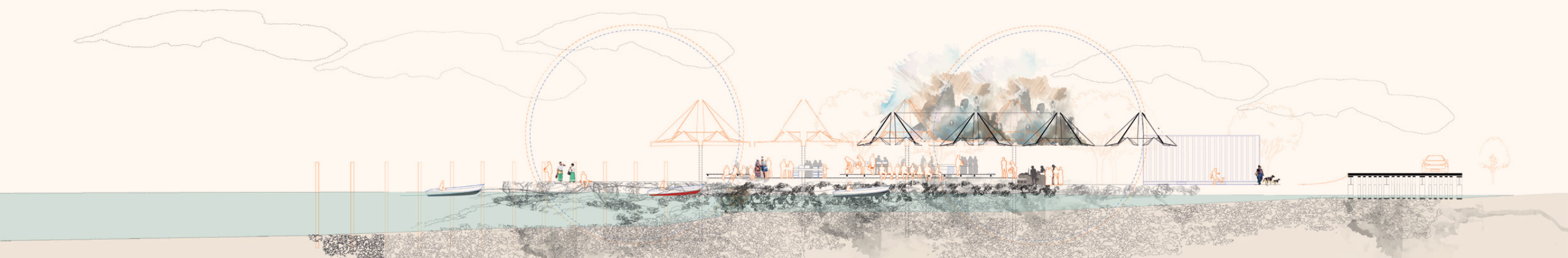
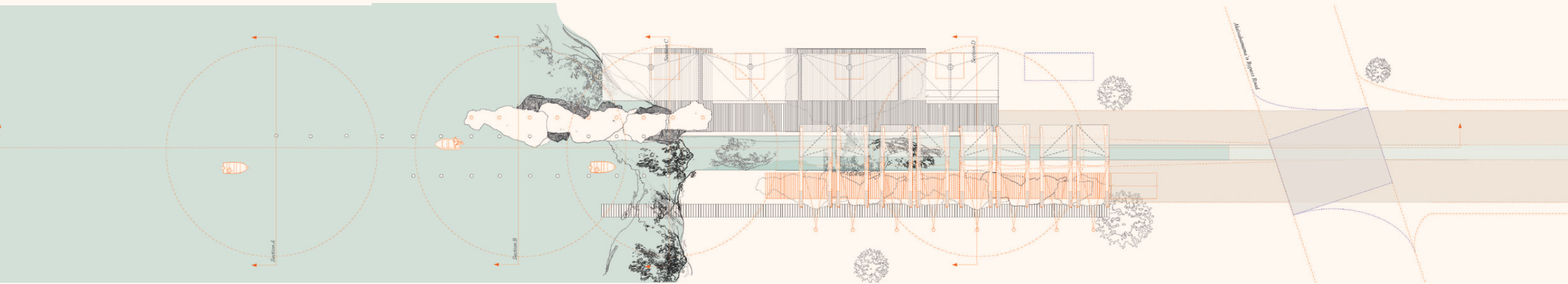


Cross Section C
1:150



Cross Section D
1:150

Below Cross-sections,
plan view and elevation
showing connections
between the proposed
arrival market, canal and
Fanga'uta Lagoon.



Lucy Vete

The University of Auckland School of Architecture and Planning

Shifting Grounds

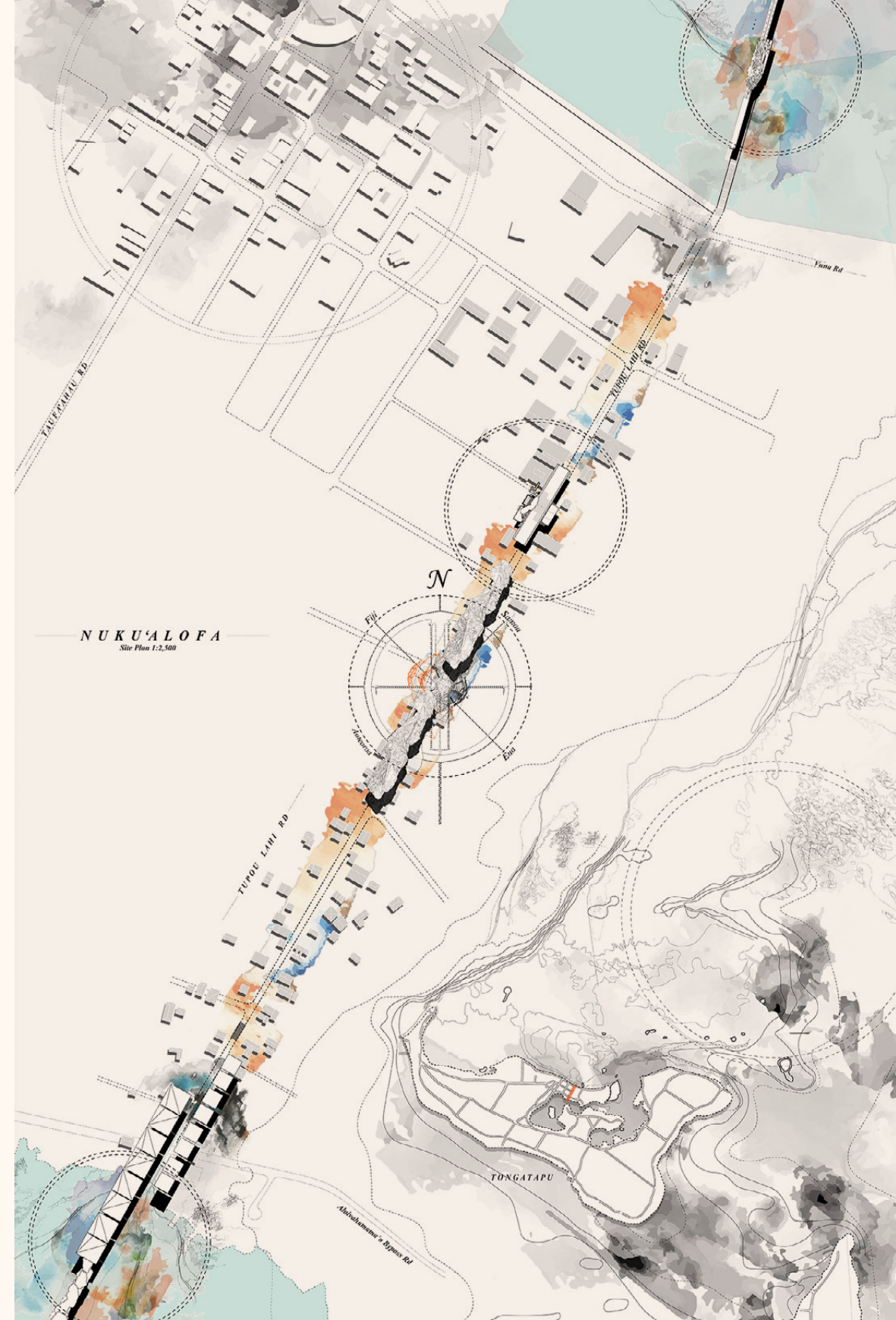
This speculative project portrays Tonga through the projective lenses of cosmology, history, social reality and diasporic memory. As a 'home,' 'homeland,' and 'imaginary homeland,' Tonga exists as a malleable construction of ideas, stories, traditions and histories. This project draws upon these conceptions and imagines how architecture can be used to stimulate progression and movement in Tonga's present and future. Along the north-western axis of Tupou Lahi road, at the heart of Nuku'alofa, Shifting Grounds presents a linear trajectory of social spaces between two bodies of water. From a produce market and canal at the Fanga'uta Lagoon, through public structures and a tectonic imagining of the cosmological 'Giant Toa Tree', to Tuli Hopo, a leaping-off point into the South Pacific Ocean, architecture functions as a catalyst for emergence and imagining.

Citation

Lucy's scheme was an impressive exercise in cultural exploration and site development. It was supported by considerable research and interrogation of both personal and architectural motivation, and moved fluently between different scales. It had a spatial richness as well as cultural resonance, and captured a migrant's experience and an isolated maritime condition. The imaginative project was coherently realised and excellently presented, and the architectural spaces it proposed were well-drawn and compelling.

Left Abstract study.

Right Plan showing Tupou Lahi Road's relationship to Nuku'alofa, with Fanga'uta Lagoon, bottom left, and the South Pacific Ocean, top right.

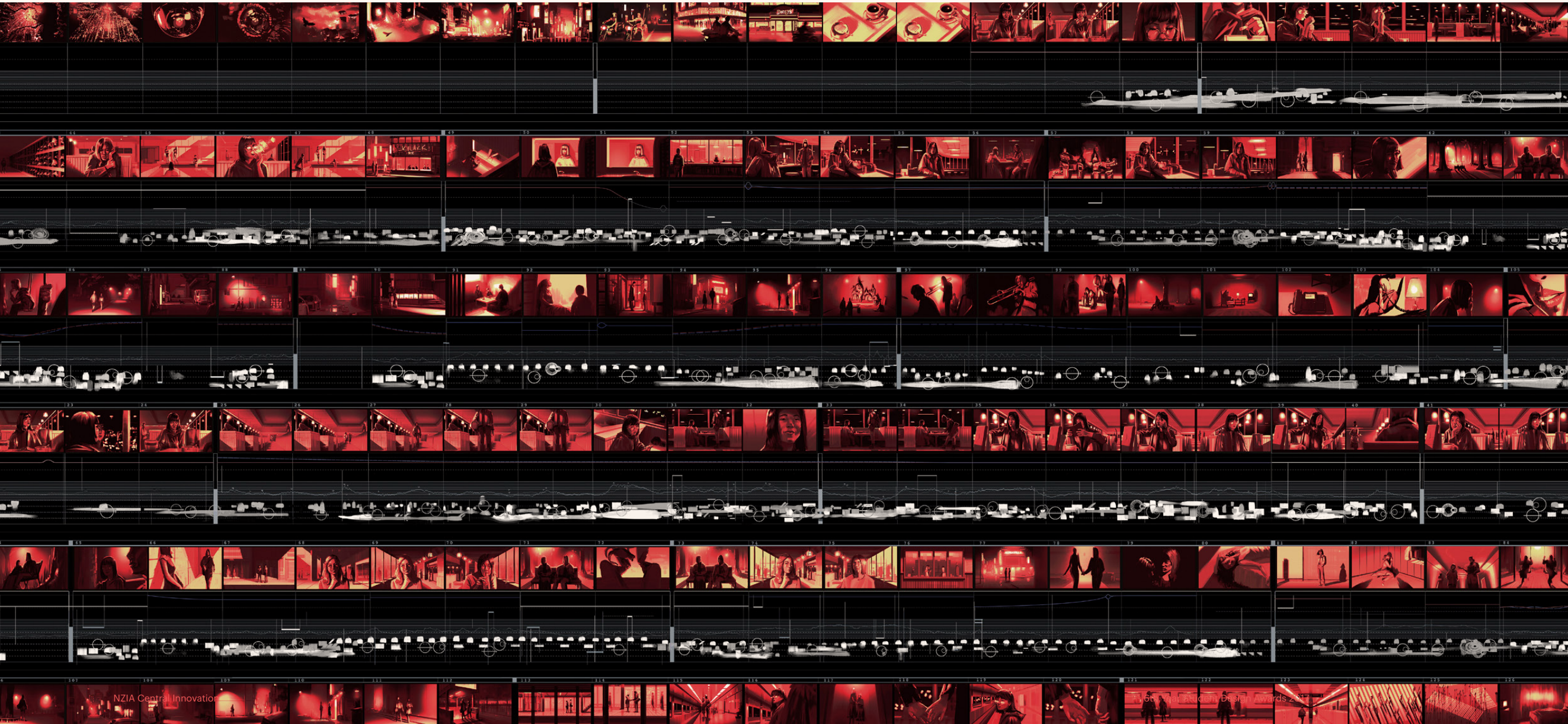


Highly Commended
2017 NZIA Central Innovation
Student Design Award

LiWen Choy

University of Auckland School
of Architecture and Planning

Below Storyboards depicting sequences of scenes with associated digital notation.



LiWen Choy

University of Auckland School
of Architecture and Planning

Architectonic of Loneliness

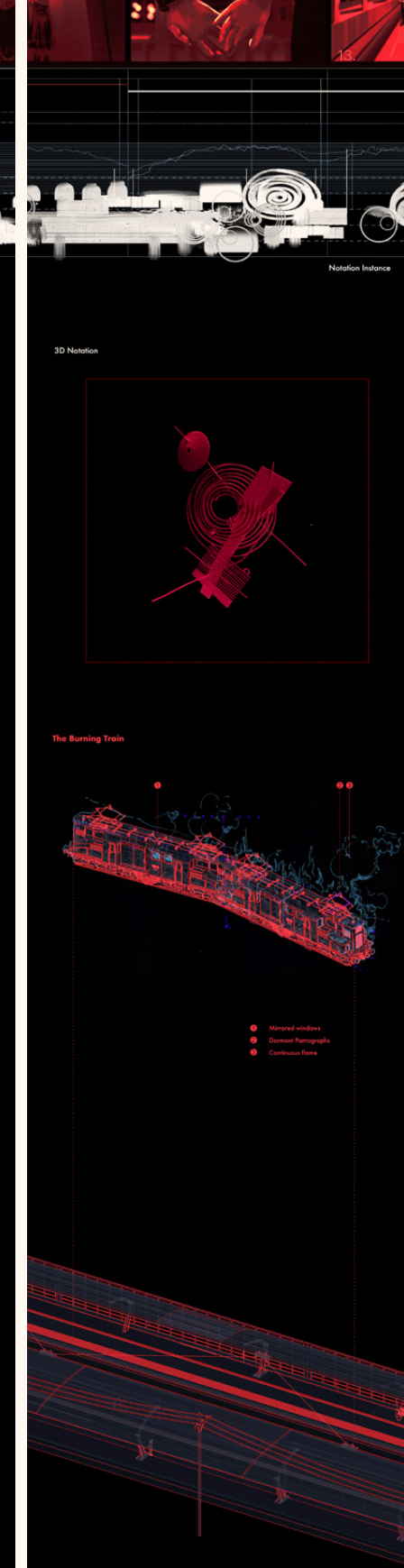
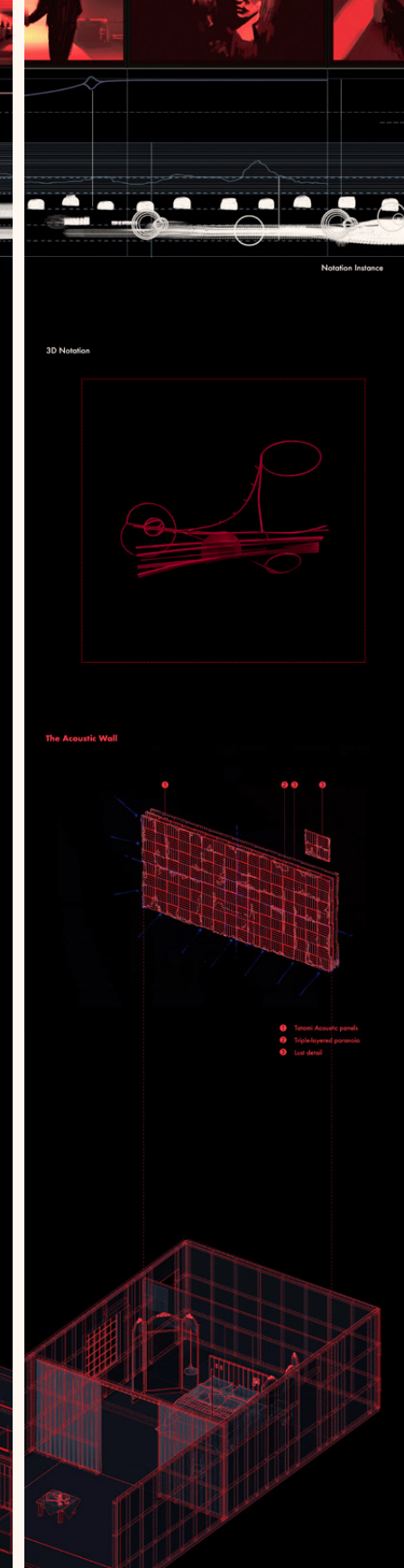
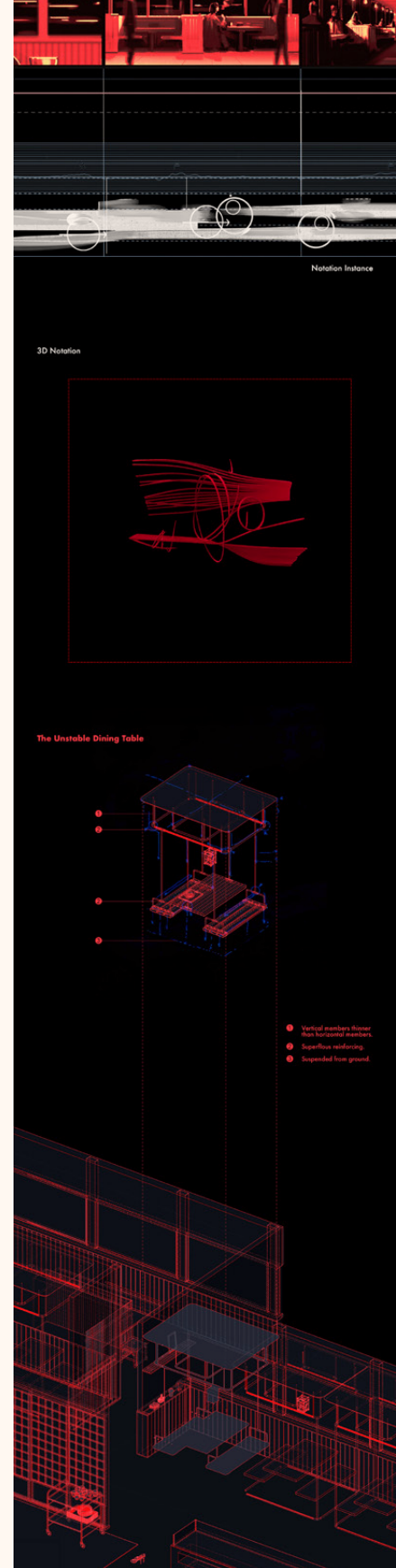
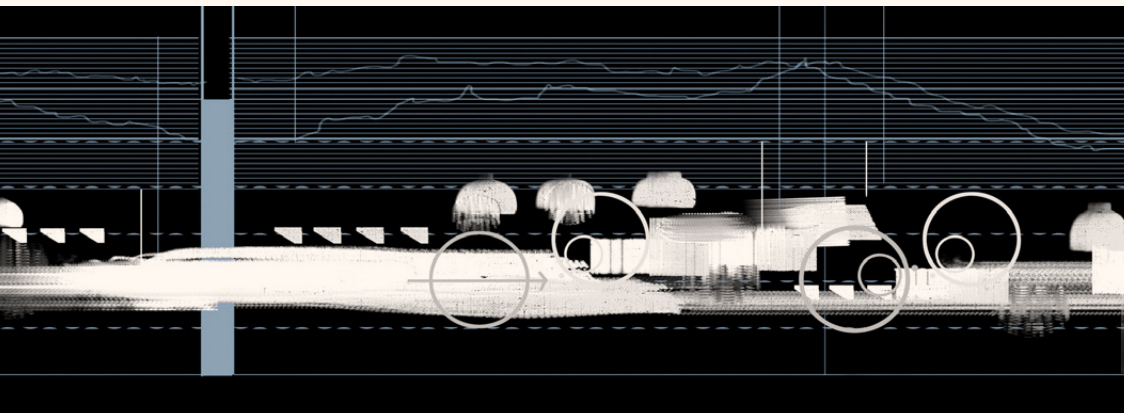
The *Architectonic of Loneliness* employs a narrative script – provided by readings of Haruki Murakami's *After Dark* – as the point of departure for design exploration. The various sequences of events were first storyboarded, before a system of invented notations was applied to transcribe phenomenological events into architectural elements. In the filmic study a wall becomes a texture of lust, a door transforms into the geometry of terror, windows are the surfaces of longing, and dining tables the extrusions of loneliness.

Below Detailed view with scenes for notation circled.

Right Depiction of the relationships across scenes between instances of notation, the 3D notation and the architectural response.

Citation

In his ambitious, sensitive and very well-realised project, LiWen explored the temporal and personal experience of architectural spaces. Not only that, he expressed the experience of the same spaces from the perspectives of two people involved in a close relationship. Using several media, and a bespoke notation system, LiWen produced a compelling and sophisticated response to the challenge of expressing a multi-dimensional narrative.

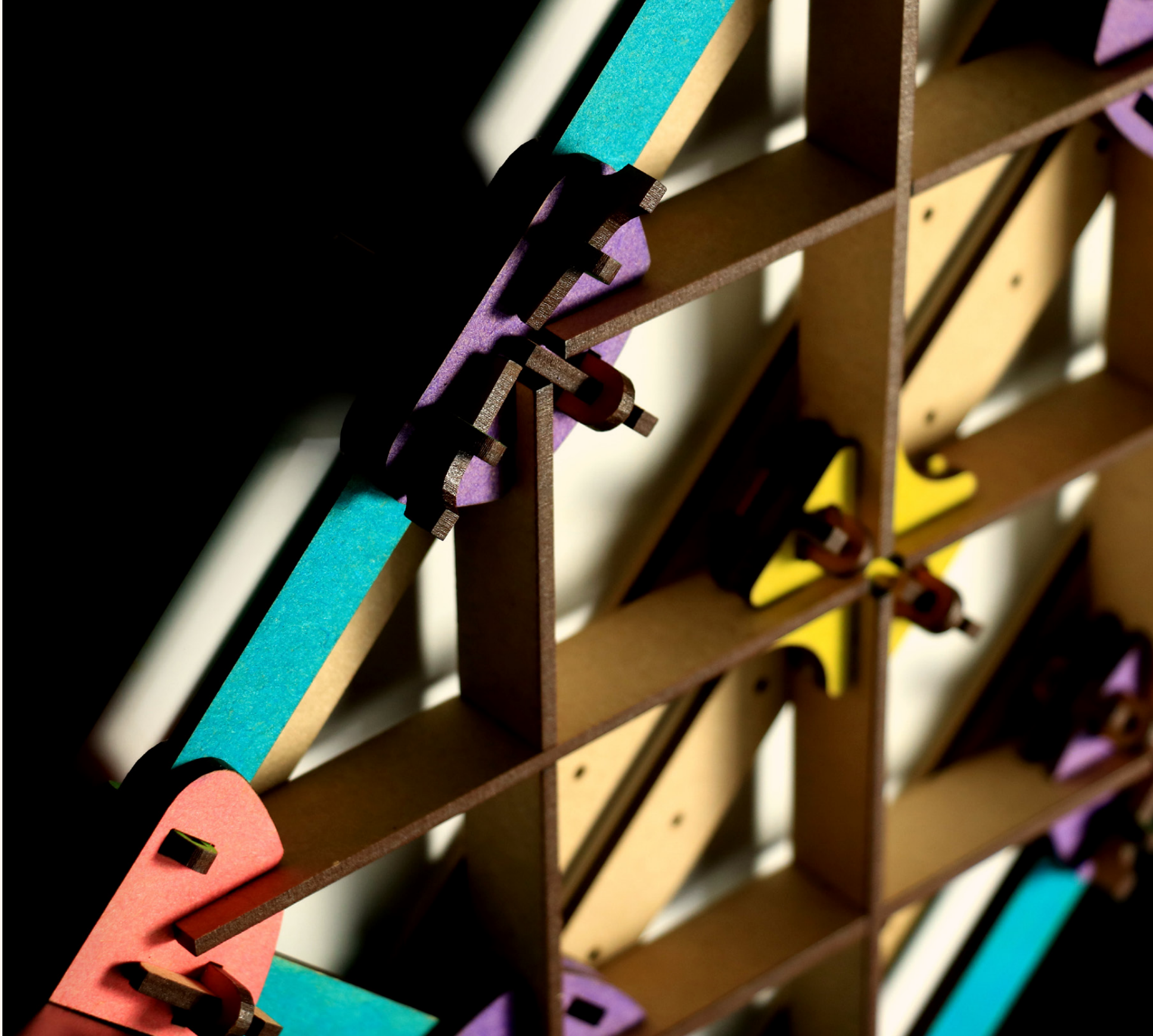


Highly Commended
2017 NZIA Central Innovation
Student Design Award

Gerard Finch

Victoria University of Wellington
School of Architecture

Right Model constructed using the xFrame building methodology. The modular structural plywood system was developed to enable the direct reuse of all building components.



Gerard Finch

Victoria University of Wellington School of Architecture

Defab

In response to a statistic that fifty per cent of all New Zealand's waste is generated by the construction sector, *Defab* seeks to determine the potential capacity of the architect to reduce and eliminate end-of-life building waste. The proposed solution is a highly efficient, expandable and modular structural-plywood system that allows buildings to be deconstructed at end of life and constituent parts re-used. The self-spanning structure allows all components of a building to be mechanically fastened. For further efficiencies it is also discontinuous, that is, made up of timber sections of no longer length than 1.2 metres.

Citation

This sophisticated study, borne of an impressive amount of research and analysis, is motivated by the need for a solution to a problem of real concern: the reduction of waste in the building industry. Through trial, error and a willingness to experiment, Gerard has extended and built upon an existing body of knowledge and worked through many of the complexities required for a circular construction economy. It is to be hoped that this exhaustive work has a continued life beyond this thesis project.



Left Views of model showing assembly of CNC-routed parts.

Right Detailed views of the modular, self-bracing system, which was "designed for deconstruction".



Marisha Aya

Unitec Department of Architecture

Urban Bhishti

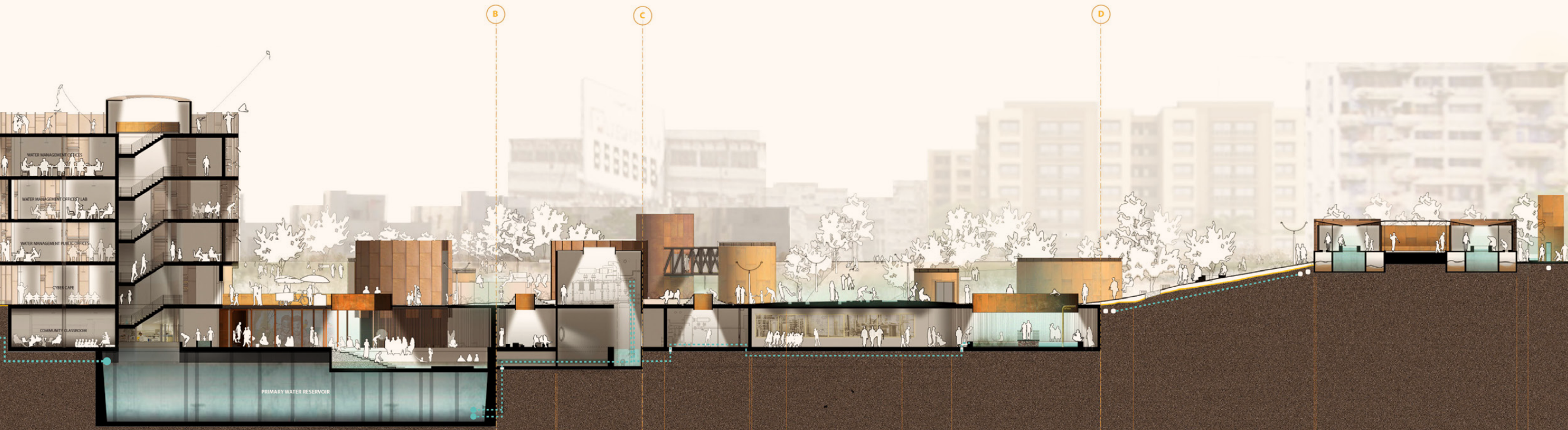
Building on the language of traditional Indian water architecture, *Urban Bhishti* establishes an architectural infrastructure for the collection, filtration, storage and delivery of water. The project aims to increase social acceptance of collective water use as a sustainable alternative to the increasing commodification of water, and celebrates the 'sacred and profane' relationships India's citizens have with water. This project's solutions are a kit-of-parts of scalable elements that could be tailored to fit most urban conditions in India. Combined, the elements create a functional social infrastructure suitable for community use in both wet and dry seasons.

Citation

Marisha's project was an intelligent and sympathetic synthesis of the provision of essential infrastructure and the establishment of much-needed communal space. The supply of potable water in an Indian city was the occasion for a sophisticated exercise in urban place-making. Marisha's presentation was coherent and confident; her scheme was underpinned by comprehensive analysis, a clear understanding of context, and sympathy for the needs of a community.

Below Cross-section of scheme showing relationships between primary reservoir and other structures.

Right Integrated social areas include a stepped pool, top, and recreation area, below.



Andrew Frankum

Unitec Department of Architecture



Motu Kōkako

This response to a Motu Kōkako Ahu Whenua Trust's brief for a small structure for short stays on the cherished 'hole in the rock' island forgoes the status quo of excavations and piling in favour of non-invasive surface connections. Through a detailed digital survey of the island's contours and foliage revealed an ideal site was identified. Using fabrication workflows, a building module was developed that fits the selected site like a glove.

Citation

Andrew's scheme for a small pod-like structure on an ecologically fragile island was inventive and sensitive, and informed by deep analysis of the site and painstaking research into fabrication and material selection. The project married modern drone technology and good old-fashioned legwork. The experimentation and dedication that went into developing an appropriate methodology for non-interventionist architecture was most impressive.

Left Cross-section of the accommodation pod.

William Howse

Unitec Department of Architecture



Left Renders of the station entrance, top, and carriage turning circle, below.

Below Building cross-section.



Functional Heritage

A response to the Dunedin Lightrail Heritage Trust's proposal to reconstruct the Mornington Cable-Car Line, this project investigates ways of adapting the original cable-car depot into a modern transport hub – a rare example of a building being re-adapted, after many years of alternative uses, for the purpose for which it was originally conceived. Taking cues from global heritage precedents, the study strips back the accretions of years past to reveal layers of historical construction, and proposes additional architectural interventions, including alternative representation and new functions, to reconnect the building to the “iron web”.

Citation

William's research and study draws attention to an important issue facing cities almost everywhere: how to handle buildings that are not heritage-listed yet are treasured and valuable elements of a city. William's personal commitment to this project, deep thinking around the ways heritage can activate communities, and systematic approach to uncovering context is inspirational.



Ryan McCully

Victoria University of Wellington School of Architecture

Christchurch Through the Looking Glass

This project posits that a city's cultural heritage identity is not solely defined by its architectural artefacts, but by how people have experienced those artefacts over time and in relation to one another. In themselves, those experiences can also be considered as essential artefacts. Using earthquake-devastated Christchurch as an example, this work seeks to preserve cultural memory through architectural drawing and narrative. Through the creation of a Christchurch 'dreamscape', essential heritage experiences are returned to the collective consciousness of the city's inhabitants.

Citation

The loss of collective memory of a place following a civic disaster is not an easy subject to handle. However, Ryan's imaginative, fantastical and philosophical study, which lies somewhere between dream and reality, delves deeply into the potential for an alternative representation of heritage and memory among Christchurch's fractured buildings.

Below Cathedral Square, large section.



Mustafa Mora

University of Auckland School
of Architecture and Planning



Left Learning spaces integrated into the structure's circulation areas.

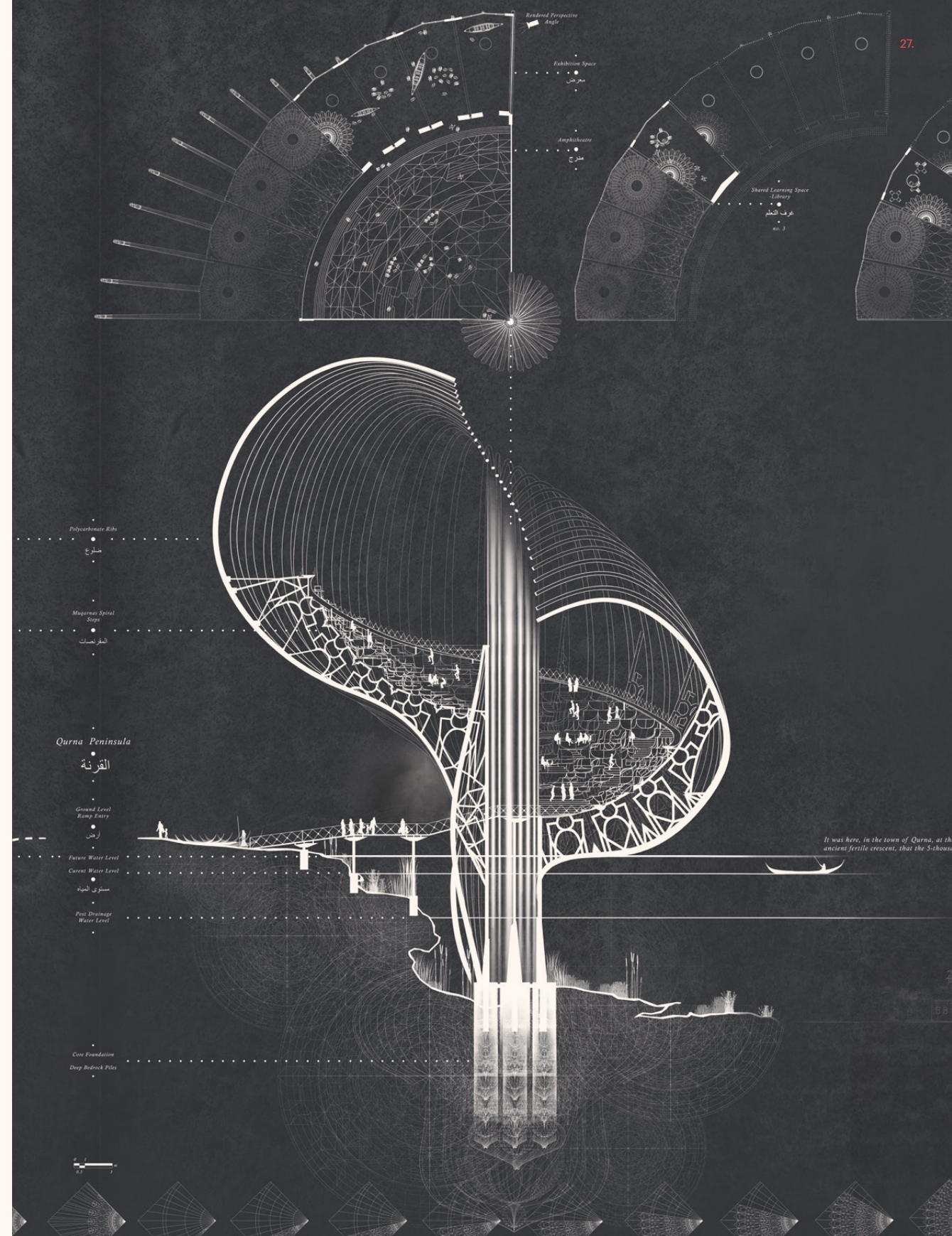
Right Cross-section of structure.

The Five-Thousand Year Line

Undertaken using freehand and measured geometrical drawing techniques, this project proposes a large House of Wisdom for Qurna, a city at the confluence of the Tigris and Euphrates rivers. Like the thirteenth-century Baghdad library from which the study draws inspiration, the House of Wisdom is an open environment for the sharing of culture, history and knowledge. The building draws on the traditions and architectural language of Marsh Arabs, including reed huts and boats, and symbolises the tragedy many regions in the Middle East have faced, including the displacement caused by the draining of the area's marshlands under Saddam Hussein. The design aspires to be a beacon of hope for the region.

Citation

This engaging and romantic scheme was prompted by a personal desire to explore and connect with the culture of an ancient civilisation, and assist the revival of a war-damaged eco-system. The proposed House of Wisdom drew on and celebrated the Mesopotamian tradition of learning and scholarship, and the region's architectural history. Mustafa's project had an ethereal, even mystical quality.



Stacey Mountfort

Victoria University of Wellington School of Architecture

Transient Crossings

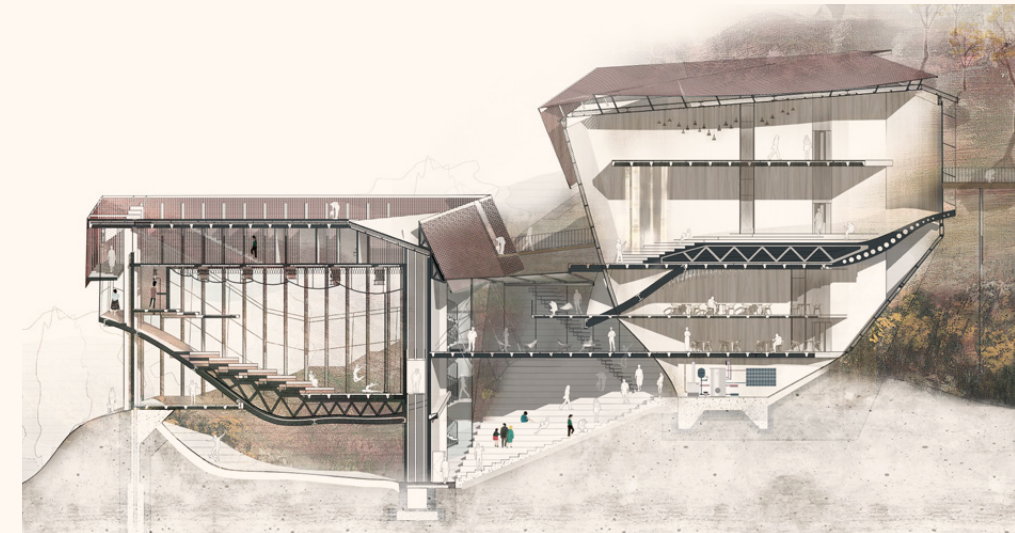
In today's media-rich world, life is more and more often experienced through screens and images. We have become spectators in a world mediated by images rather than embodied in the physical world, and architecture has become an art of the printed image rather than a palpable experience. This design investigation asks how the embodied experience of space can be intensified through the articulation of light, form and materiality. From small and medium-scale investigations, which test strategies in colour, form and materiality, a large-scale concept for a dance and drama precinct was developed that connects Victoria University of Wellington with the city.

Opposite page, top
Longitudinal section of the drama and theatre building.

Right The building embedded into the landscape with mirror pool in foreground.

Citation

This broad, immersive study takes its first steps in abstract landscape watercolours before moving up in scale to large buildings that aim to stitch together the urban fabric between Wellington's university and city. In her ambition to enliven the experience of architecture, Stacey has found delight in light and form, and revels in the juxtaposition between material delicacy and mass.



Ayla Raymond-Roberts

University of Auckland School
of Architecture and Planning



Muryo Jitaku

This study counters the assumption that higher-density built environments require high- or mid-rise construction while also responding to a common trope of New Zealand's housing stock; that is, despite being large, our homes aren't designed with careful regard to the changing circumstances of their occupants. Through the investigation of the alternative forms of detached dwelling that could exist in the interstitial spaces between existing suburban houses, a new housing typology, flexible enough to cater to the needs of occupants at various life stages, has been designed.

Citation

Ayla's scheme addressed two topical issues: the wastefulness and excess of our inherited suburban housing models, and the need to produce housing that responds to changing family circumstances. The clever scheme, beautifully realised and excellently presented, featured impressive attention to detail.

Left Cross-section of a house configured for working professionals.

Below

1 House interior configured for working professionals.

2 House interior configured for young families.

3 House interior configured for elderly occupants.



Hannah Stephenson

Unitec Department of Architecture



Dirty Little Secret

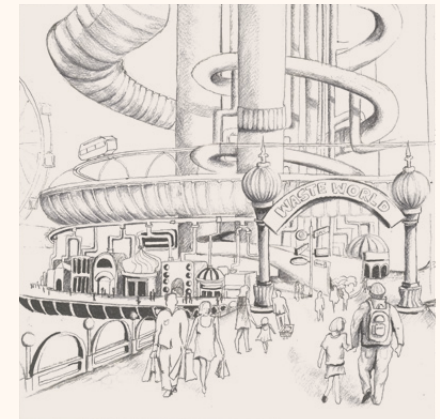
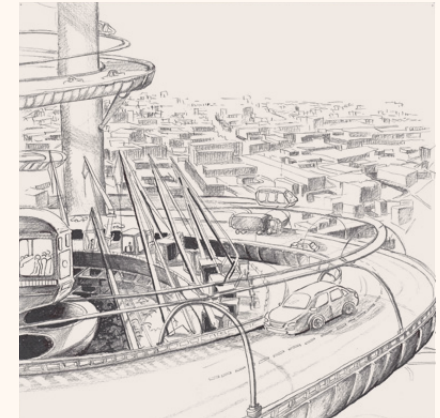
Waste is a rarely discussed social taboo, especially for New Zealanders who take pride in the nation's environmentally friendly image. Hidden in landfills, waste is rendered out of sight and out of mind. This satirical project proposes that a new waste solution – a Material Redistribution Leisure Centre – be writ large on the Auckland skyline. Located at the heart of Spaghetti Junction, the structure is an obvious response to Auckland's growing amounts of waste. It offers ideas about more transparent waste management solutions and illuminates the ridiculousness of current practices.

Citation

Hannah's project was based on the premise that people – in this case, the citizens of Auckland – should confront the waste that our society produces. But the scheme doesn't rub our faces in our rubbish. Rather, Hannah proposes a more playful encounter with our detritus. The process of waste collection and recycling sorting is turned into a visitor attraction; that way, we might be persuaded away from our careless, landfilling ways.

Left Pencil sketches of 'Waste World'.

Right 'Waste World' arising from Spaghetti Junction, Auckland.



Jessica Wright

Victoria University of Wellington School of Architecture

Bringing the German Pavilion Home

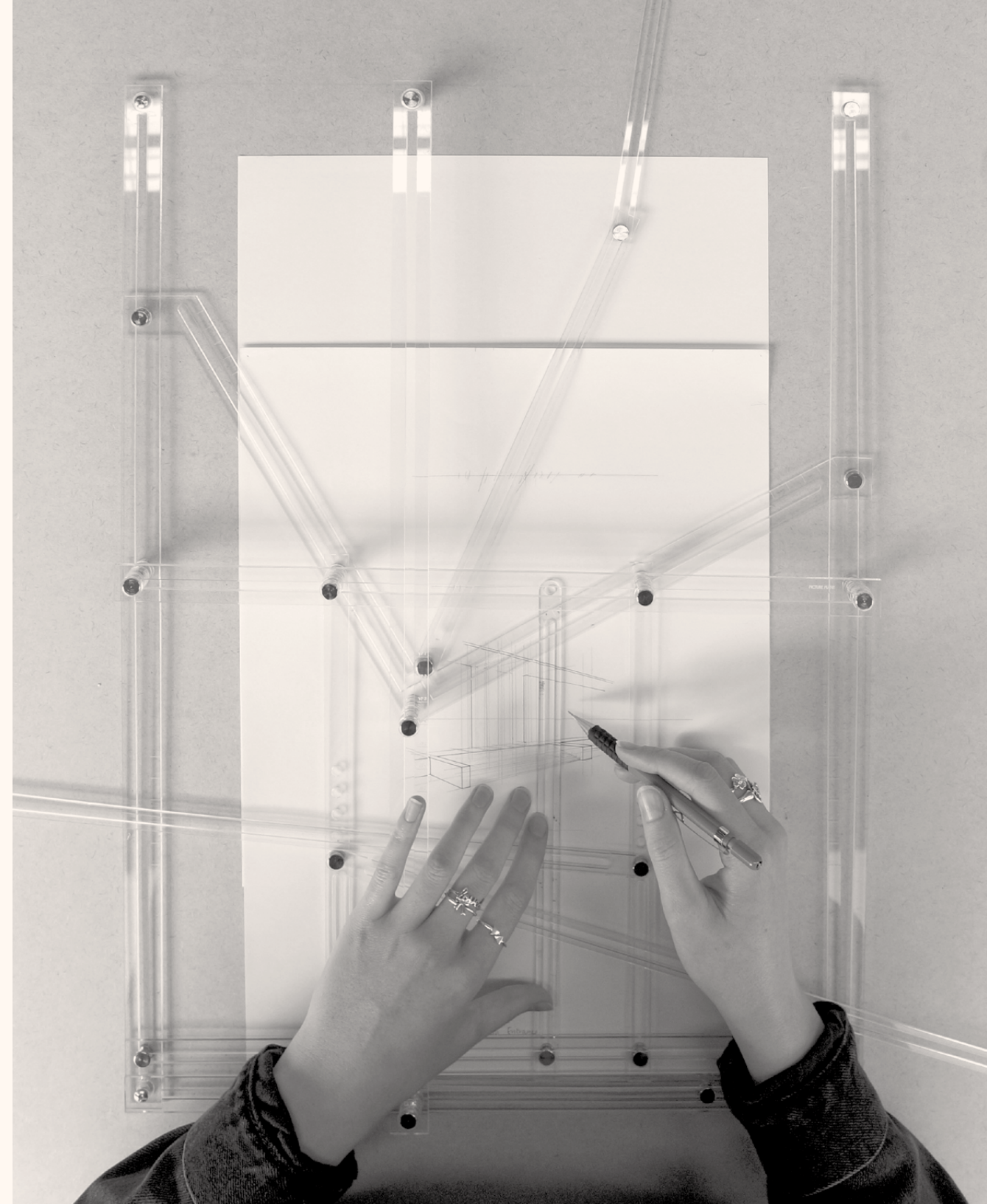
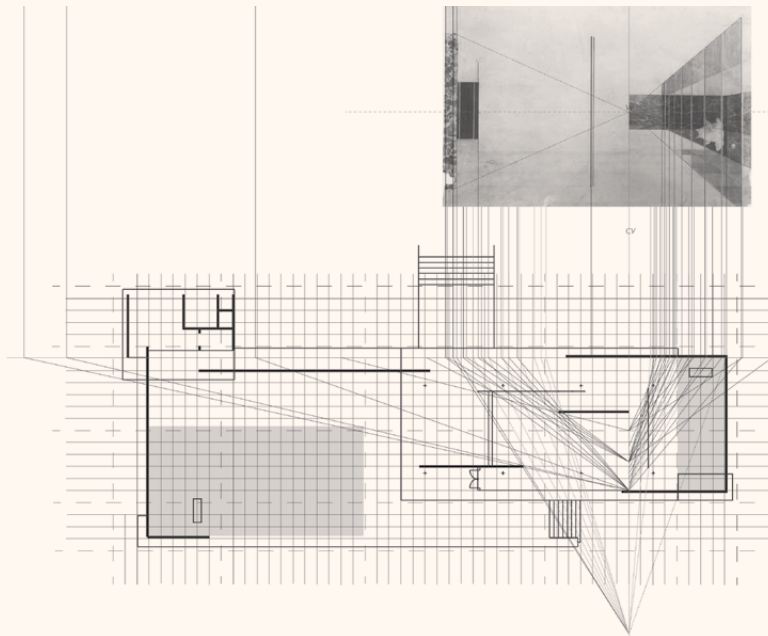
This project of “geometric restitution”, perception and perspective was borne of a fascination with a Mies van der Rohe perspective drawing of the Barcelona Pavilion interior. Conceived with a circular rhetoric, the project analyses the Barcelona Pavilion, and seeks to link van der Rohe with another German architect, Karl Friedrich Schinkel. Numerous drawing studies, undertaken via a purpose-built ‘drawing machine’, culminated in the design of a sculpture gallery – art designed in architecture – that reinterprets both the Barcelona Pavilion and Schinkel’s Altes Museum in Berlin.

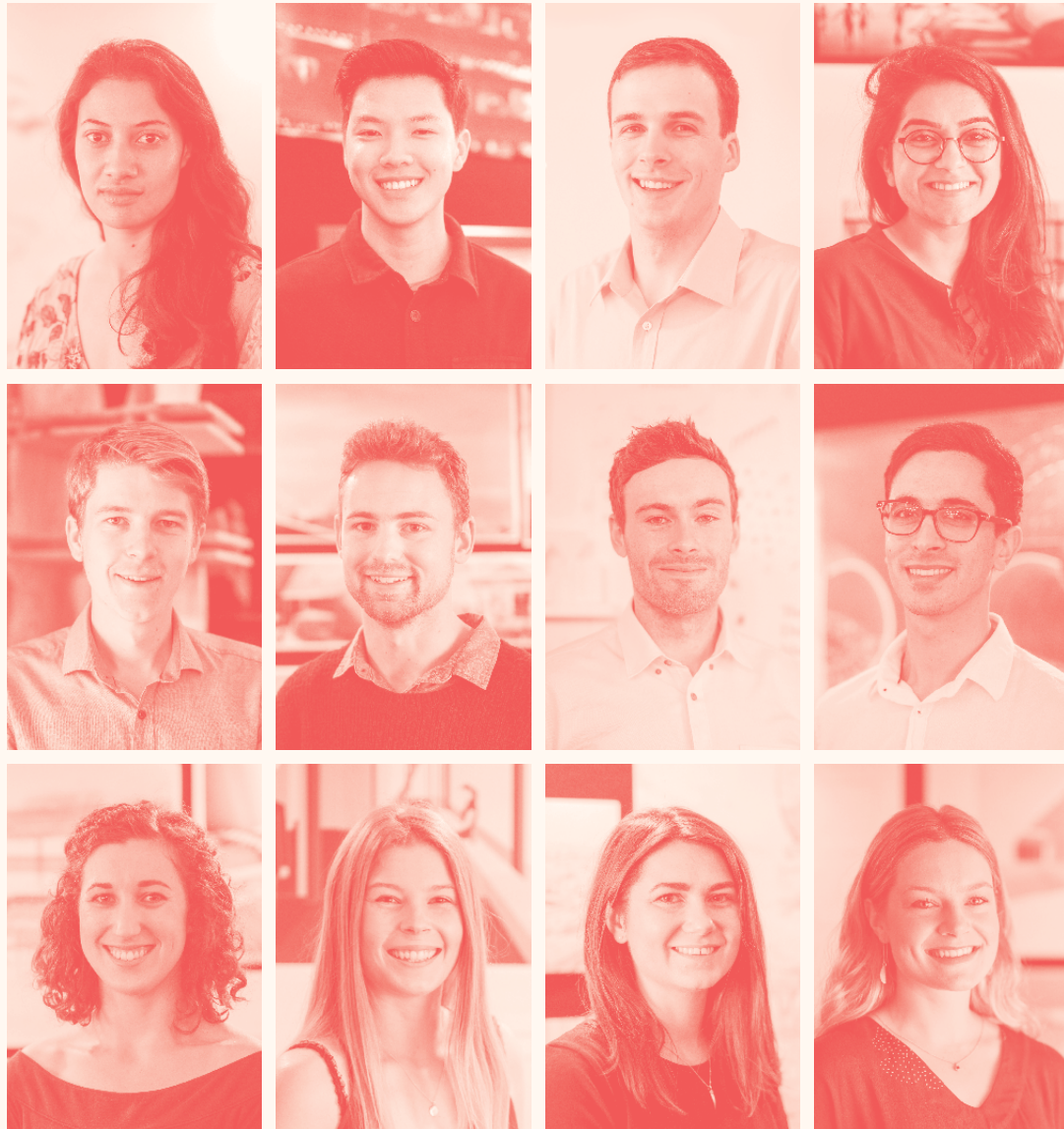
Citation

Jessica’s ambitious project sought to reinterpret and make connections between two famous modernist buildings – Mies van der Rohe’s Barcelona pavilion and Karl Friedrich Schinkel’s Altes Museum. The drawing machine she devised to pursue the project exemplifies her exhaustive methodology, and impressive commitment to her project.

Right Geometric restitution of pavilion perspective.

Facing page The bespoke drawing machine.





Photography: David St. George

Top row **Lucy Vete, LiWen Choy, Gerard Finch, Marisha Aya**
 Middle row **Andrew Frankum, William Howse, Ryan McCully, Mustafa Mora**
 Bottom row **Stacey Mountfort, Ayla Raymond-Roberts, Hannah Stephenson, Jessica Wright**



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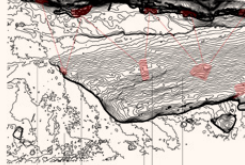
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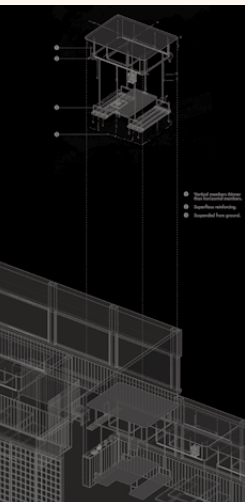
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 14. Andrew Frankum
 15. William Howse
 16. LiWen Choy
 17. Gerard Finch
 18. Stacey Mountfort



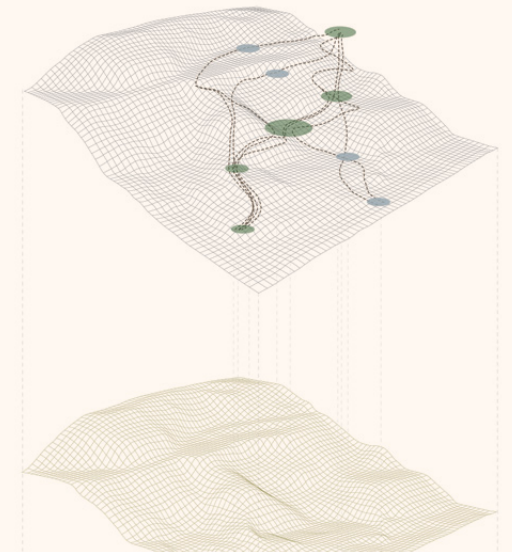
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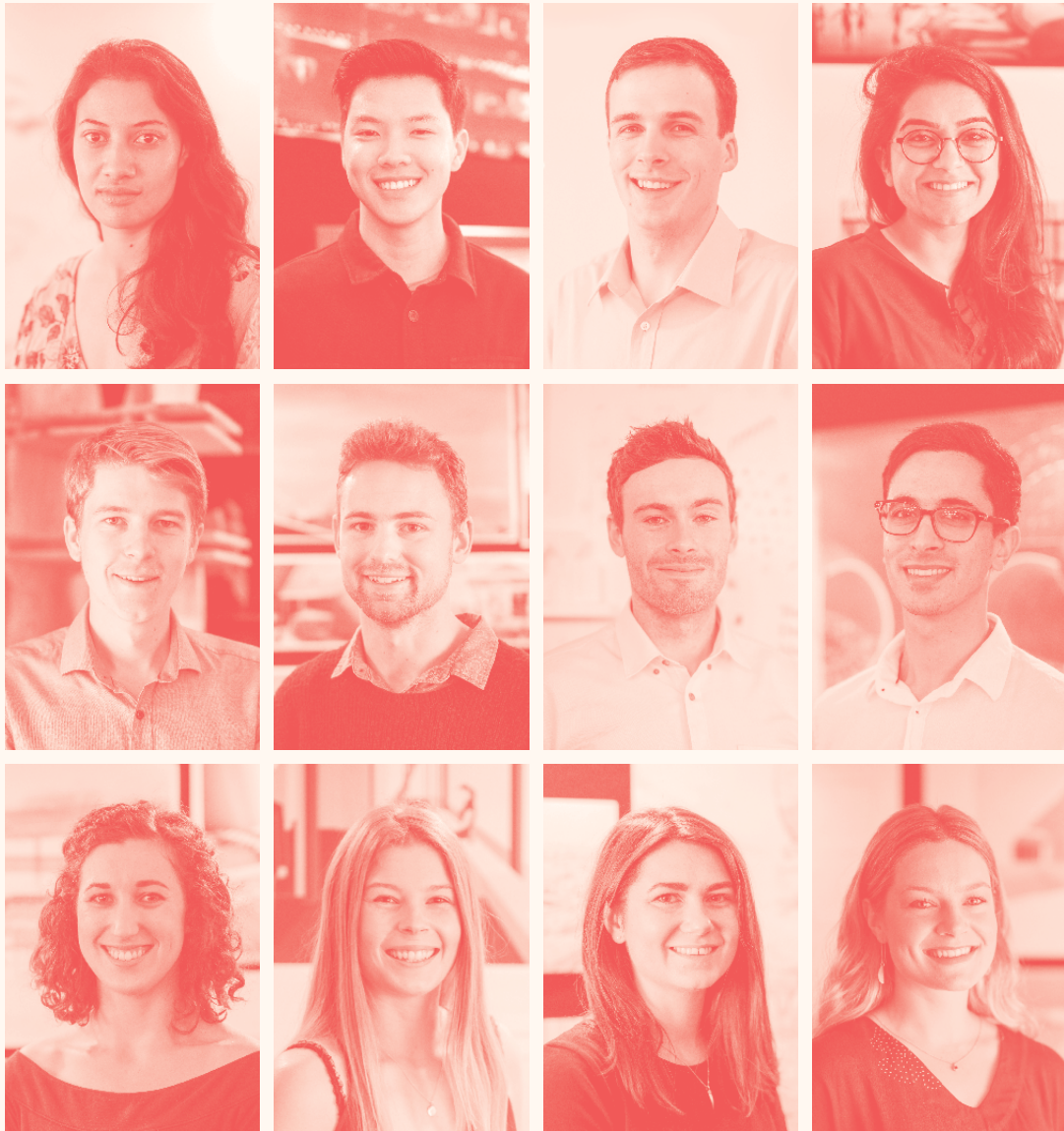
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16



18



Photography: David St. George

Top row
Middle row
Bottom row

Lucy Vete, LiWen Choy, Gerard Finch, Marisha Aya
Andrew Frankum, William Howse, Ryan McCully, Mustafa Mora
Stacey Mountfort, Ayla Raymond-Roberts, Hannah Stephenson, Jessica Wright

Judges

Christina van Bohemen

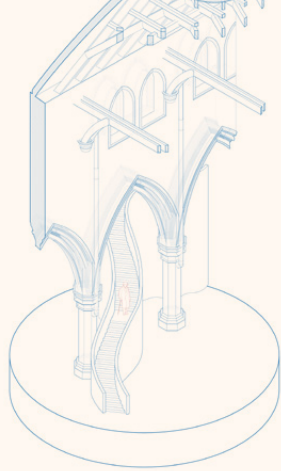
Christina is the President of the New Zealand Institute of Architects and a director of award-winning Auckland practice Sills van Bohemen Architects. Christina has served on the NZIA Council, was chair of the Auckland Branch from 2008-2010, was a presenter of the Institute's Graduate Development Programme from 2008-2012 and has served on numerous New Zealand Architecture Awards juries.

Rachel Neeson

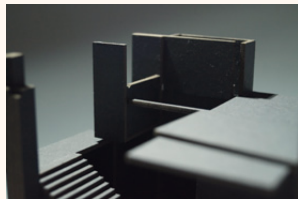
Rachel is principal of Neeson Murcutt Architects, the celebrated Sydney-based practice she established with Nick Murcutt in 2004. Neeson Murcutt has produced an outstanding series of projects, across a wide range of types, which have been duly recognised in a series of eminent awards. The practice's work has been presented at the Venice Architecture Biennale in 2006, 2008 and 2016.

Jon Rennie

Jon Rennie is a principal with Athfield Architects and is based in the firm's Auckland office. Jon has a particular interest in public projects and urbanism and has led numerous significant projects for Athfields, including the redevelopment of Devonport Public Library. In 2016, he was a member of the creative team that produced Future Islands, the New Zealand exhibition at the Venice Architecture Biennale.



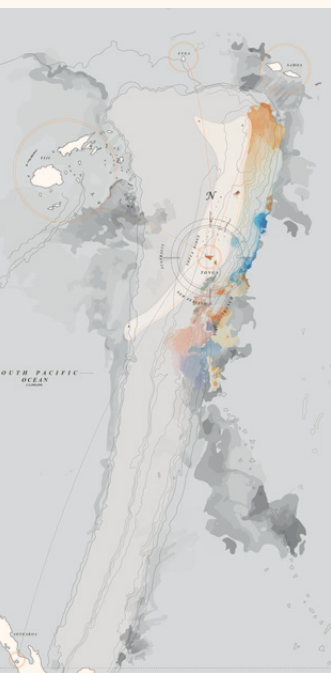
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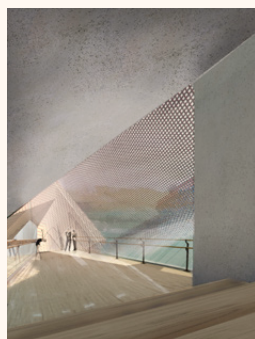


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20. Jessica Wright
21. Ayla Raymond-Roberts
22. Lucy Vete
23. Stacy Mountfort
24. Hannah Stephenson



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