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Wetlandscape

Wetlandscape

Towards an expanded definition of edges

An exegesis presented in partial fulfilment of the
requirements for the degree of Master of Design

Massey University, Wellington
New Zealand

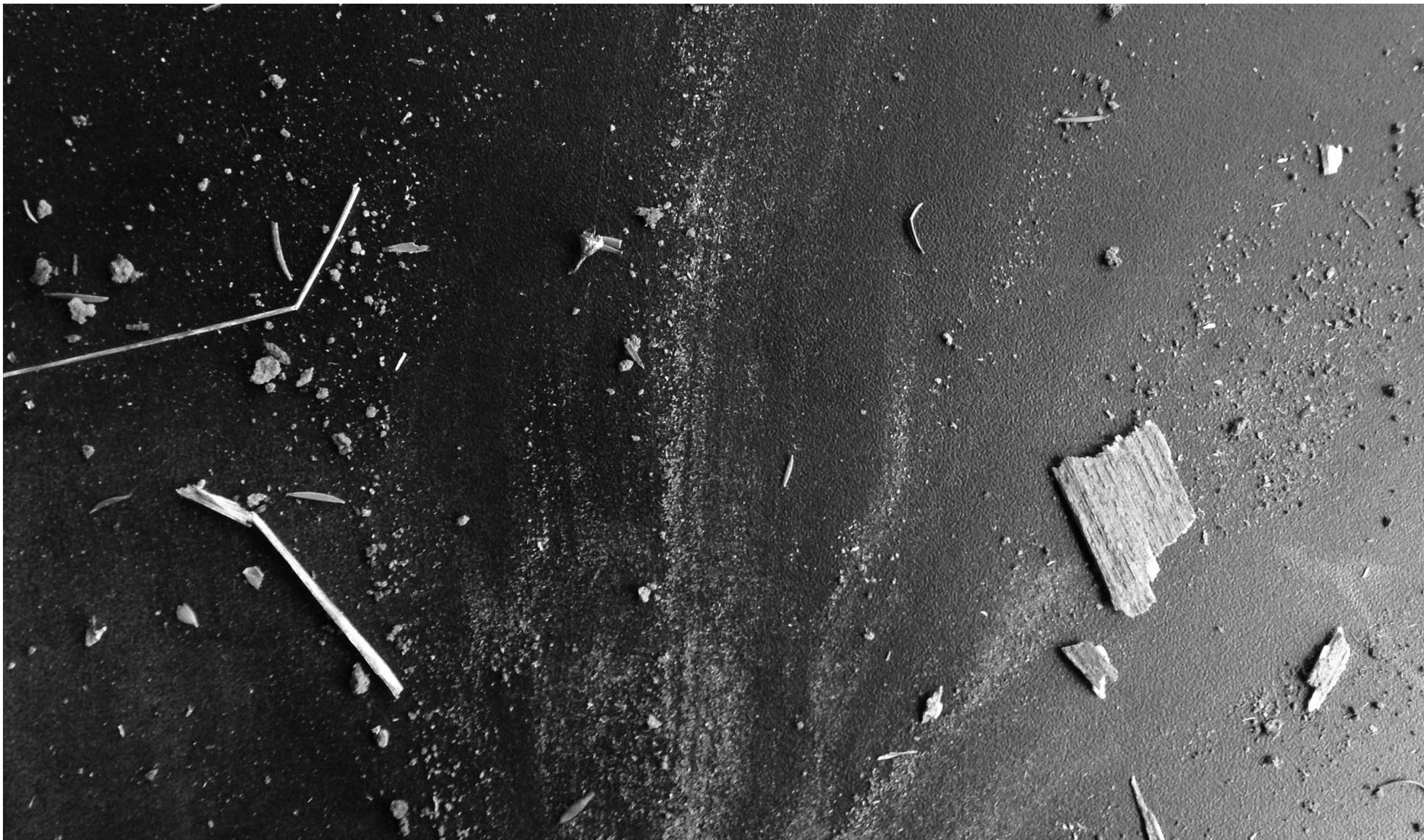
Jessica Clarkin
2014

Abstract

Over the course of an afternoon walk I explore and critically reflect on my Master of Design project Wetland-scape. I look to expand the definition of edges through the design of a walkway within their complex of beautiful native wetlands on the Rarangi vineyard for industry partner Wither Hills. This project is deeply rooted in ecology and uses design as a tool to deal directly with the implications of the eradication of wetlands within New Zealand. Wither Hills and I look toward a future of restoration and maintenance of these natural zones. The poetic journey through the site traverses through eight evocative follies designed to encourage wine tourism enhanced by site-specific design. I discover the ubiquitous quality of architecture to generate mood and atmosphere through sensitive treatment of materials and space. As a spatial designer I engage in the realms of landscape architecture, architecture and design to traverse the field of space making in the landscape. This text describes the wanderlust of design through the production of a landscape narrative which positions the sensate body as an important figure in enabling unique experiences within architecture and environment.

Acknowledgements

I would like to thank the people who have supported me during my Master of Design study. Firstly I wish to express a sincere thank you to my wonderful supervisors Julieanna Preston and Antony Pelosi for sharing both your time and wisdom with me I thank you for your continual guidance and critique. I have been tremendously fortunate to work with many outstanding individuals in the Master of Design studio this year, thank you all for listening and the many late night chocolate supplies. A huge thank you to Massey University for the Masterate scholarship I could not have survived the year without it and I am extremely grateful. This project would not have been possible without Wither Hills Winery, in particular Jacqueline MacLaurin and Rex Butt whose passion and dedication towards the rehabilitation of wetlands within their Rarangi vineyard is inspiring. Thank you for sharing this treasure with me. Thank you to my family for their constant enthusiasm and support. Hayley for her excellent editing skills, Michelle for her encouragement, And my parents, I will forever be appreciative of your love of the outdoors, a passion that you have passed on to me. And finally thank you James for bearing with me through the ups and downs of this project, your understanding and ability to keep me smiling through out it all has been amazing.



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Preamble

Grid reference: NZMS 260 P28 956750

Area: 200ha

Wetland: approx 50ha

Altitude: <5km

Bioclimatic zone: Coastal



Edge (*noun*)

the outside limit of an object, area, or surface.

(*verb*)

to give an edge to (something)

to be on the edge of (something)¹

The Rarangi Wetlands are “the most valuable unprotected area of the Wairau ecological region”²

This wetland “includes a mosaic of coastal communities that are not represented elsewhere in NZ in our system of reserves”³

In this design-led, practice based, Master of Design thesis I walk the boundaries between Spatial Design, Landscape Architecture and Architecture as I seek to conceptually expand the definition of edges in the context of a wetlands walkway design.

The world is abundant with edges. In a creative design practice, edges mark the boundaries of what is knowable and they explore the territories beyond. In this exegesis, edges are discussed in relation to my practice and process of design, as well as within my conceptual and theoretical framework. Edges imply a porous frontier that can be easily found within the landscape whether they take the form of the edge of a forest or wetland, or they are a boundary between two ecological zones.⁴ edges can be readily discussed in relation to the responsibility of designers to motivate change. Designers have always had the inherent ability to use their creativity to prompt change; I believe designers need to expose an edge before change can happen.

Like many designers with concern for the natural environment, I have reached an edge within my realm of design. There is increasing awareness around depleting ecologies, lack of clean water supplies and dissolving habitats in the world that is leaving many landscapes in strife. The global water crisis is expected to accel-

erate as the population is predicted to increase by 70 million every year for the next 20 years and there are not enough fresh water sources to sustain such growth.⁵ It is essential to employ design in order to combat the strife that will otherwise be brought to the landscape. In this Master of Design research project I have partnered with Wither Hills Winery to attend to a landscape feature unique to New Zealand. Wither Hills is a company currently working diligently on the restoration of a vulnerable and severely threatened complex of wetlands on their coastal Rarangi Vineyard, Blenheim. The region of Marlborough is dealing with the implications of having lost 90% of its native wetlands; this is in accordance with the rest of New Zealand, having also lost 90% on a national scale.⁶ These wetlands have endured years of mistreatment and extensive modification by previous owners who grazed cattle, logged, flooded, extracted water and let invasive weeds overtake native plants.⁷ Since 2009 Wither Hills have committed to nurture the five wetlands located among hectares of producing grapevines. A total of 3000 natives trees, shrubs and grasses have been planted in the wetlands so far as a result of Wither Hills' comprehensive restoration plan.⁸

Wither Hills procured my help to envision their goal to showcase these wetlands to the public through a

walkway designed with sustainability and accessibility in mind. Involvement in this project is a first step toward my personal goals to enhance spaces through thoughtful design responses and to encourage preservation and exploration of the other precious natural zones.

We New Zealanders love to explore our own backyard. We also love to show it off to visitors who travel from all parts of the world to witness our special landscapes. My project will expose this beautiful natural environment to the public as well as create a niche tourist experience for Wither Hills that takes advantage of the wine tour culture. This design will enable Wither Hills to welcome the public to access and experience the fragile wetlands. It will also allow them to showcase their commitment to environmentally sensitive wine growing and production to wine buyers from across the globe.

This project represents a significant expansion of my Bachelor of Design (HONS) research project to a higher level as it explores the spatial aspects of a landscape in greater detail and exhibits increased concern for ecological issues. I have developed a passion for ecology and design, in particular wetlands. I have acquired a heightened awareness of how fragile our world has become and how important it is for me as a designer of space to think about the repercussions of bringing more objects

into the world. How can I make sure I can leave a positive footprint behind? I do not want to be a producer of stuff. I enjoy working within nature and exploring sites, getting in touch with the earth and having a thoughtful response to those spaces. I endeavour to challenge the norm with respect to the ways of designing for the land in New Zealand, particularly the ways of design practised by the Department of Conservation (DOC), in order to prove that design is important when constructing within the landscape. There are many walkways within New Zealand that I believe are lacking the positive impact of a designer. This project poses a critique of many of the current DOC and regional council walkway developments. I hope to find new ways to experience and enhance New Zealand's natural spaces. (Fig.1,2,3,4)

This project is explored through the discipline of Spatial Design. Spatial Design expands the definition of edges as a creative practice by migrating liberally into many other fields of design. Often dominated by interior environments or performance design its focus is on space making. Spatial Design does not fit into the traditional discipline of architecture but is within the same family and uses the language of architecture to communicate design intentions. Massey University defines Spatial Design as a "practice of imagining, forming and constructing spatial and temporal environments"

as within its curriculum it explores the "corporeal and theoretical conditions of architectural and virtual environments and performance events. Offering opportunities to rethink space, to be innovative and speculative."⁹ The boundaries are flexible within the field of Spatial Design as to how design briefs are interpreted and explored. I have come to define Spatial Design within the realms of landscape, venturing deeply into place making and generating experiences within natural sites. I am not only concerned with the inhabitation of people but also with the ecologies and habitats within the milieu of landscape. Spatial Design is a relatively new discipline often occupied by people from varying backgrounds such as architecture. This has allowed me as a Spatial Designer to draw from a wide pool of knowledge to research work by artists, designers, landscape architects and architects to further expand the practice of Spatial Design.

Covering 50Ha of wounded wetlands within a busy vineyard, the scope of this project is so large that it would require a team of designers to fully develop and construct. Wither Hills desires a walkway within the wetlands to create a unique wine tour experience for their visitors and clients. This type of project highlights how important collaborative interdisciplinary design is, as I am dealing with a very complex and fragile



Fig.1. Miranda Bird Hide, Miranda



Fig.3. Lake Ngaroto, Te Awamutu



Fig.2. Howarth memorial wetland, Te Aroha

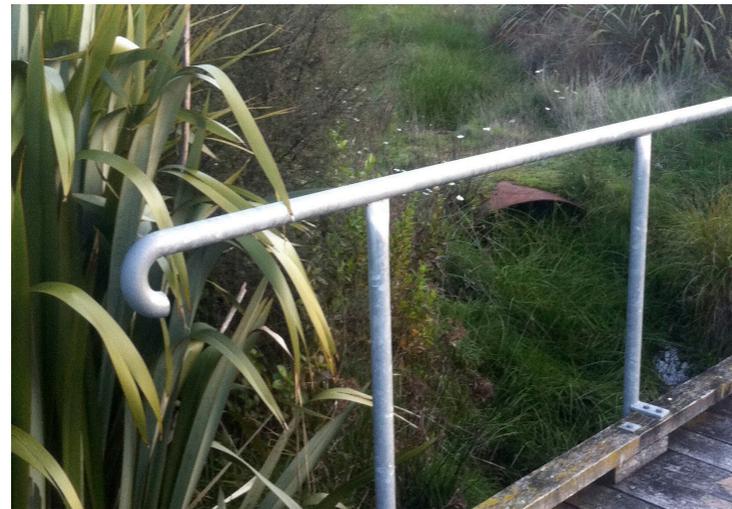


Fig.4. Kopurererua valley reserve, Tauranga

landscape. To reach its fullest state of potential, it would require the expertise and opinions of numerous people, including ecologists, experienced landscape architects and engineers. I bring to the table something unique in comparison to a landscape architect student because of my understanding on how to generate temporal and material experiences and utilise innovative spatial concepts to enrich environments.

On my intrepid journey of design I sought out special sites in the wetlands that I call nodes, defined by Merriam Webster Dictionary as "a place where lines in a network cross or meet".¹⁰ I started with over 30 nodes and eventually selected eight special sites to develop. These nodes are spaces of inspiration that each design has evolved from and sits within. Each node was recorded and surveyed meticulously. These eight sites are seminal to the formation of the master plan of the walkway as linking paths between each node; each node marks the location of a sensuous and tactile folly. (See liftout) The Oxford Dictionary describes the term folly as a "costly ornamental building with no practical purpose."¹¹ I liken the word folly to the way Bernard Tschumi spoke about Park La Villette "follies, in structural terms, are very simple buildings" but they are highly conceptual spaces of movement and event.¹² In Tschumi's broader sense of folly, they are described as having a strong dialog with their

environment and to be architectures of liberation rather than confinement.¹³ (Fig.5) The follies I have designed through this project are mostly micro architectures that are sensitive responses to their respective node. They have a close bond with the landscape and plant life around them and on foot each one of them remains connected. I discover a lot of my designs through daydreaming and getting lost in thought through walking in the fresh air. I build up a large knowledge base of site materials and precedents and over time the design evolves through visualisations, quick sketching and modelling. The walkway I have designed is an experience, evolving a deep conversation between mind, body and the earth.

Edges appear in the way that I work. I am a raven; I pick apart and hunt down concepts and precedents and I often find myself inspired by people from a variety of creative practices. I collect treasures that inform my design and allow me to rethink space in unique ways. I think this is due to the nature of Spatial Design and its flexibility to adapt into many other creative disciplines. I believe that as a spatial designer I am approaching an edge within the practice of space-making in the landscape. I can envisage a shift occurring that departs from a hard edge of landscaped, manicured, controlled natural spaces and moves towards the creation of softer

edges where the existing natural landscape and flora is highlighted. Many designers around the world are starting to celebrate the true substance of the site and as a result, they are relinquishing long-standing practices that aim to constrict nature. Edges make themselves present through my process; as I organise my ideas into sections and boxes they start seeping out over time and the edges between each start to blur and merge into one holistic vision for the design. I expand my own practice by having systems and process in place to stay in control of the project such as keeping things in folders, clear files, bottles and snaplock bags. I use labels and post-it notes to excessively organise things and admittedly also use this as a great form of procrastination. Within one particular part of my design process I have exposed edges. I have used a large wall in the postgraduate studio where I pinned up images and working documents for each of the eight nodes. They started off orderly and precise, each node having its own boundaries or place to occupy on the wall. As the year passed by I indulged in using the wall excessively; I included all of my ideas and developments. The wall grew fantastically wild and the invisible edges between the nodes began to blur and fuse. (See app. Wall development) Through this visual process the follies began to naturally develop and link up to become part of one story and one walkway.

How to use this book

In each of the following chapters I discuss relevant theorists and precedents who have informed my design in some way, weaving them in and out of the experience of the wetland.

There are two voices present. One is of my theoretical or imagined self, walking through the wetlands walkway that I have designed, describing the pure haptic pleasure of walking within, discovering, sensing, and immersing myself in the experience of each folly, defined by this typeface.

The other voice is of my critical self, reflection on the decisions made, theorists explored and the effect precedent work had on my design choices. This exegesis acts as a journey of discovery and reflection; it takes the form of an afternoon walk, defined by this typeface.

The walk traverses through different seasons and frames an experience of environment and physical changes to the landscape. Like the design of the walkway there is no set beginning or end or right way to walk; you are welcome to start the journey from anywhere, and take your time exploring each node.

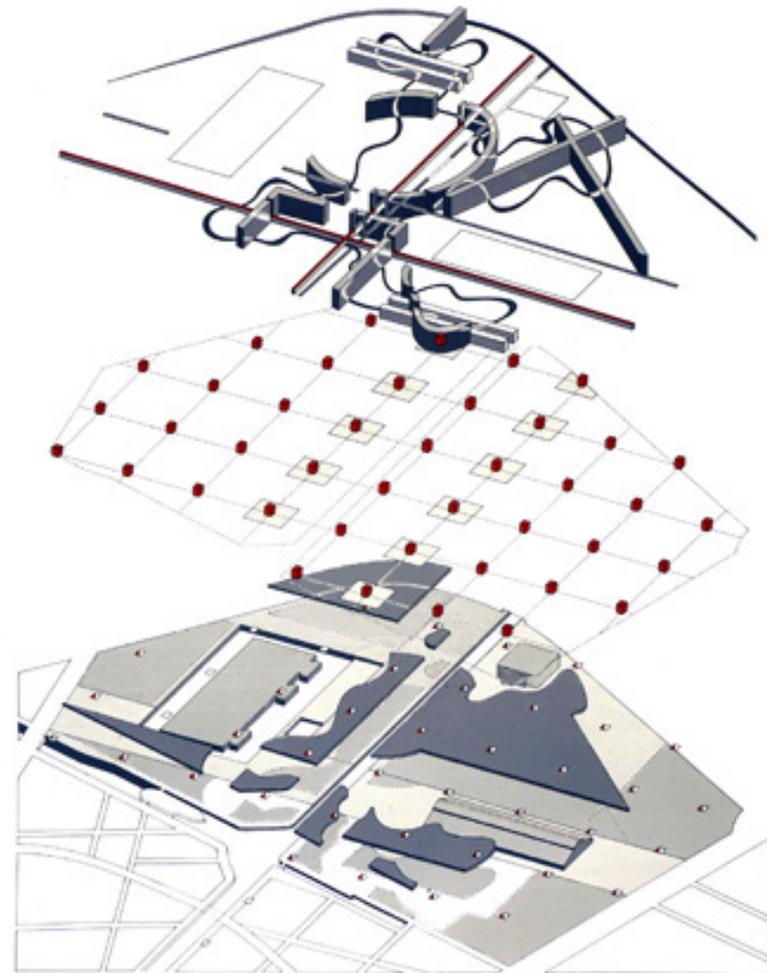


Fig.5. Bernard tschumi, *Park de la Villette*



Endnotes

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- ² John Preece, *The Rarangi Wetland Complex : Conservation values, hydrology, impacts of groundwater extraction* (Marlborough: WetlandsNZ, 2007), i.
- ³ G. Y. Walls, *Botanical/ecological Notes on the Cloudy Bay Coast, Marlborough from Wairau River to Rarangi* (Nelson, NZ: Botany Division DSIR, 1977).
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- ⁶ Preece, *The Rarangi Wetland Complex*, 5.
- ⁷ Ibid, 3.
- ⁸ Wither Hills, *Wither Hills, Biodiversity Fund and Marlborough District Council Rarangi Wetlands Project Report*, June 20, 2011, 1-11.
- ⁹ "Spatial Design@Massey," accessed January 5, 2014, <http://www.spatialdesign.ac.nz/>.
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- ¹³ Ibid, 13-15.

Mai Mai

-41.40656, 174.02314

Summer

Veraison

31°C

1:00 p.m.

20 Min

The truck tyres crunch over the loose gravel track, kicking up a wake of dust that leaves behind a thick, dry taste of drought in the air. A mai mai stands at the beginning of my afternoon journey. The sun is high in the air, only footprints remain of those who gathered here earlier in the day.

Calm and quiet, the day stretches out into the cool, still pond. The water is an opalescent blue reflecting scattered clouds, flax and Manuka from its mirrored surface. With stilted legs a shelter traverses the edge between water and land. As I approach I hear a faint buzz as insects skip across the surface of the pond. I slowly survey the flat landscape, hugged by soft mountain ranges except where it fades out into the sea. I spot the remains of three large kahikateas, trees that would have once dominated this area. I tie my jacket around my waist.



When I was first introduced to the Rarangi Vineyards and its five hidden wetland treasures I was overwhelmed; the sheer scope of the project was intimidating. Landscape Architect James Corner's extensive body of design practice made me feel more confident by encouraging me to develop a close bond with the site and to think deeply in relation to the landscape.¹ Corner has long been a protagonist for my thoughts on site. I was inspired by Corner's site measures, images composed of layers of site history, geology and ecology that allowed him to look deeper than just the visual surface of a site.² His writing has motivated me to not just look towards the future but more importantly, the past, to understand the complexities of place.³ It is a challenge to wade through the dense milieu of natural, historical and cultural content, but this is important because the marks we make on the earth reflect not only ourselves, but have an effect on the environment and ecology of a site. Any design operating with this value becomes a new chapter in the history of that place.⁴

Applying Corner's theories to the Rarangi vineyard, I measured the space by listening, feeling, collecting, recording and exploring. This allowed the site to become smaller somehow and more manageable as I became more acquainted with it. These measures became instrumental towards my design process.

Corner describes landscape as a medium to work with. Like any artist when approaching a fresh canvas, a landscape architect does not necessarily know what form will come out whilst working within each site, but with the collected measures as tools, the design will start to emerge naturally throughout the process.⁵ Corner's influence on my design allows this kind of project to reach beyond a surface treatment; it encourages the design to have a purpose and strong connection to the land via the designer's knowledge of the site. These concepts can be strengthened by collaboration with professionals such as ecologists and/or geologists. The designer can then draw on and analyse plant and habitat information, as well as soil and climate data in order to build an appropriate design response and a stronger design concept for each node.

The sky is an azure blue and the sweet smell of drying silage wafts in the air. This quaint shelter resembles a mai mai, a shelter used in duck season where hunters stay concealed in the landscape. Rather than preying on birds, I enter seeking information as well as relief from the beating sun. I pass through the coarse, splintered timber entrance and discover that the space inside is big enough for a small gathering of people. Perforated, weathered steel wraps around the structure like a staple harnessing it to the earth. Wind and daylight seep through the steel

leaving disrupted patterns over my being similar to those found creeping through trees and decorating a forest floor. My focus is drawn to the striking view of the Wither Hills and the larger Mt Tapi.

I am excited by work that focuses on facilitating a person's ability to rediscover a beautiful, picturesque landscape by framing different moments within it. The Norwegian Tourist Route serves as successful example of this aim. (Fig.6,7) Initiated through the Norwegian Public Roads Administration, the project includes a series of well-adapted, functional facilities that work to enhance a visitor's experience.⁶ This was achieved through the sensitive selection of materials and basic geometric forms of the structures. Their success at achieving clear and precise transitions between the edge of architectural intervention and the natural landscape inspired my decision to design follies within the site. The architects involved in this project have done well to carefully consider the placement of each of the structures in the landscape in relation to the state of the surface of the land.⁷ You can find their work either placed into hard rock crevasses and natural valleys or sitting on stilts delicately above soft land, water or cliffs. This sensitive and thoughtful treatment of landscape is a good example of what the Department of Conservation (DOC) currently isn't yet achieving within the landscapes

of New Zealand. New Zealand would benefit through employing projects like the Norwegian tourist route.

Though encompassing a much larger scale than my own project, The Norwegian Tourist Route demonstrates how to achieve a cohesive journey experience that includes multiple designs throughout several different parts of a complex landscape. I was drawn to one particular development in this project, the Trollstigen or 'trolls ladder', a lookout point perched within a dramatic mountain pass designed by Norwegian firm Reilt Ramstad Architects.⁸ (Fig.8,9) It demonstrates to me a respectful and delicate treatment of the site paired with the appropriate choice of materials for the environment. The Trollstigen draws its form from the jagged rock terrain taking on a fractured geometric shape. The materials have been selected to blend into the environment with concrete as strong as the rock it sits on top of and with similar colouring. Weathered steel blends with the clay soils and aged surfaces of old rock. The edge of the platform is a transparent glass barrier allowing the structure to span out into the sky.



Fig.6. Saunders & Wilhelmsen, *Aurland Lookout*



Fig.7. Holmebakk, *Sohlbergplassen viewpoint*



Fig.8. Reiulf Ramstad Architects, *Trollstigen*



Fig.9. Reiulf Ramstad Architects, *Trollstigen*





Endnotes

- ¹ James Corner, "Representation and Landscape," in *Theory in Landscape Architecture: A Reader* (University of Pennsylvania Press, 2002), 147.
- ² James M. Corner, *Taking Measures across the American Landscape* (New Haven ; London: Yale University Press, 2000), XV.
- ³ Corner, "Representation and Landscape," 147.
- ⁴ Ibid, 148.
- ⁵ James Corner and Alan Balfour, eds., *Recovering Landscape: Essays in Contemporary Landscape Architecture* (Sparks, NV: Princeton Architectural Press, 1999), 145.
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- ⁸ "Trollstigen Tourist Route by Reiulf Ramstad Architects," *Dezeen*, accessed November 7, 2013, <http://www.dezeen.com/2012/07/07/trollstigen-by-reiulf-ramstad-architects/>.
- ⁹ Ibid.

The Sensate Bridge

-41.40432, 174.02444

Summer

Veraison

29 °C

10:15 a.m.

2.30 Min

"I am not in space and time, nor do I conceive space and time; I belong to them, my body combines with them and includes them."¹

As I stroll through the vineyard my path skirts the edges of unruly tree forests and healing fresh water wetlands. Summer illuminates the green vines abundant with plump reddening grapes. The ground is dry and cracking in the heat; I feel it shifting under my feet. I follow a trail forged by the walkers before me and approach a bridge that slices through a small wetland. I climb up a few short steps that elevate me in the landscape; this is the sensate bridge.

Swaying and stirring in the wind as if it were alive, metal reeds chime together creating a natural harmony with the elements. Only light breezes make their way through the natural buffers within the landscape to activate this crossing. The harsh summer light penetrates the metallic surfaces making them warm to touch. I brush my hands lightly through the mass of rods to create my own music within the wetland.

Harry Bertoia, who explored motion and sound more intently than my self, created his own music through his practice. He was a furniture designer turned sculpture who worked closely with architects to design large-scale installations. In the late 1960's Bertoia was investigating sound sculptures that would shake and shiver creating a deep reverberating sound when activated through touch.² He enhanced his practice through the exploration between different metals and compositions of materials to create his harmonic structures. (Fig.10) His studies have significantly influenced the design of the sensate bridge. I was attracted to the vertical geometry's and the aspect of personal engagement in Bertoia's work.³ My ambition for this folly was to straddle the edge between land and water as a crossroads between the start and finish of the loop track. I was saddened when studying the plants on the vineyard site to find that my favoured plant, the bulrush which makes up ten percent of the site was seasonal and would die out every winter. This plant became the inspiration for this folly and a dialogue between Bertoia's works and my own was found. The metal rods manifest as an edge between the artificial/man made and nature drawing an emphasis on the temporarily and flux of the landscape. The metal rods surrounding the bridge move gracefully and continuously with the touch of a hand or wisp of wind. Some rods have 'seed heads' that amplify the sound

when they connect in the momentum. Like a ghost in this landscape that is hardly noticed through out the year in this sheltered site, the wind is revealed through this sonorous passage, highlighting the consonance between the landscape and the climatic elements.

The thin fragile reeds that retreat with each winter now endure all seasons, remembered in this structure. This bridge speaks as an ode to bulrush in the temporal environment. I muse about summers spent on the farm at home, memories from places far away, resonating with each other through the smell of the heating earth, the calming quite and sense of being alone and free from the busyness of life.

Among many important thinkers in history to muse about memory and the lived dynamic between the body and the world, French phenomenological philosopher, Maurice Merleau-Ponty has to be my favourite. He talked of, as David Seamon summarised, how we make sense of the world through our 'lived body', a body that has explored the world through a holistic sensory experience.⁴ The body informs and is informed by lived experiences, influencing the way the surroundings are perceived. To put it simply, the senses are the vehicle by which we understand our environments

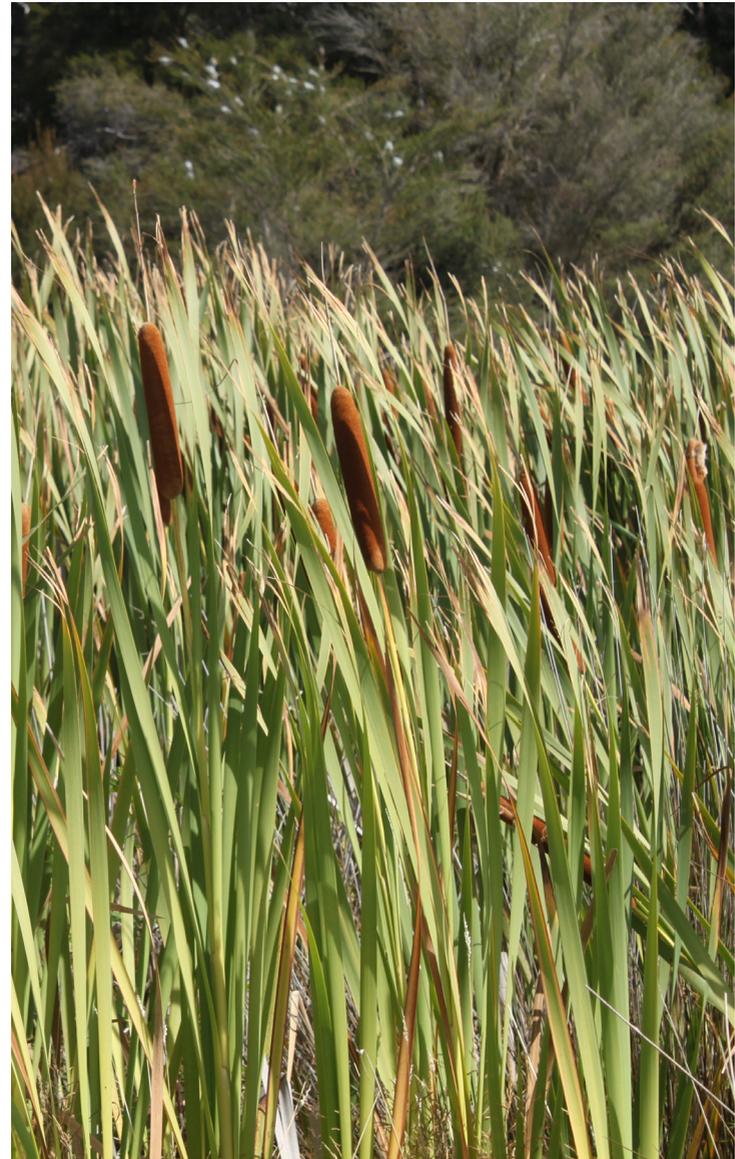
by transgressing the boundaries between the body and the world.⁵ This is a position that I agree with and have employed in this design project. Merleau-Ponty's writing has enriched my thoughts around the engagement of people with architecture and space allowing me to contemplate the lived body that moves through the wetland. Merleau-Ponty could be said to promote the here and now, because of the emphasis he puts on phenomenology and sensation "My body is the fabric into which all objects are woven, and it is, at least in relation to the perceived world, the general instrument of my comprehension."⁶ To have many experience in life was important to Merleau-Ponty because this was how he believed we expanded our minds and got to know the world, to learn via our bodies.

In each of the follies I have considered the five senses. Some of senses govern more than others; in the sensate bridge hearing could be understood as the more dominate sense. However, I always aim to create an immersive sensorial experience. In the case of the bridge, the touch and sight of the rods evoke the idea of rushes and reeds, the smell and taste of the air and the sensations of the temperature of the environment create mood and atmosphere as well as help to evoke memory. Overall each of the senses is important and impact how the bridge is experienced.

I get glimpses through gaps in the mass of metal bulrush that expose the abundance of surrounding plant life. Water collected in the metal tray bases that the thin metal bulrush stem from is reflecting and multiplying the rods in the horizontal plane. Birds bathe in the gaps between the rods. The floor surface of the bridge echoes as I take each step; the design enhances the intimacy of the spaces through the constraint of the boundaries on each side. I can hear the workers gossiping amongst the vines as they start the summer harvest.

The landscape is experienced through the body. Architectural theorist Juhani Pallasmaa is an advocate of the senses supporting human experiences within the designed world. Through his widely circulated text *The Eyes of the Skin*, Pallasmaa offers a compelling criticism of the historical domination of sight within architecture, believing the failure of modern design is due to its distance from man and negligence of all its senses.⁷ Pallasmaa saturates his arguments with examples, arguing the importance of a holistic sensory experience through architecture. I connect with much of Pallasmaa's writings as they have helped to reinforce my relationship with the writing of Maurice Merleau-Ponty on Phenomenology. However, I do think that his focus is still dominated by vision, "Good architecture offers

shapes and surfaces moulded for the pleasurable touch of the eye.”⁸ Pallasmaa often starts and ends his discussions around the sense of sight. He is encouraging the use of the other senses in the design process however not disproving the dominance of the eye within his own arguments. All of the senses are important to evoke mood and atmosphere but I have found that in some of the follies certain senses seem more dominant. Sight and framing the landscape is a key part of my project and is sometimes the most obvious sense to recall but this does not mean that all of the senses are not in play just that they not always materialize as bluntly as sight. Like Pallasmaa, I believe in an osmotic relationship between the body and the world, and that our experience of space would be incomplete without the combination of all five senses.⁹ I have ensured that I immerse myself through corporal experience to ensure all my senses are engaged within each folly.



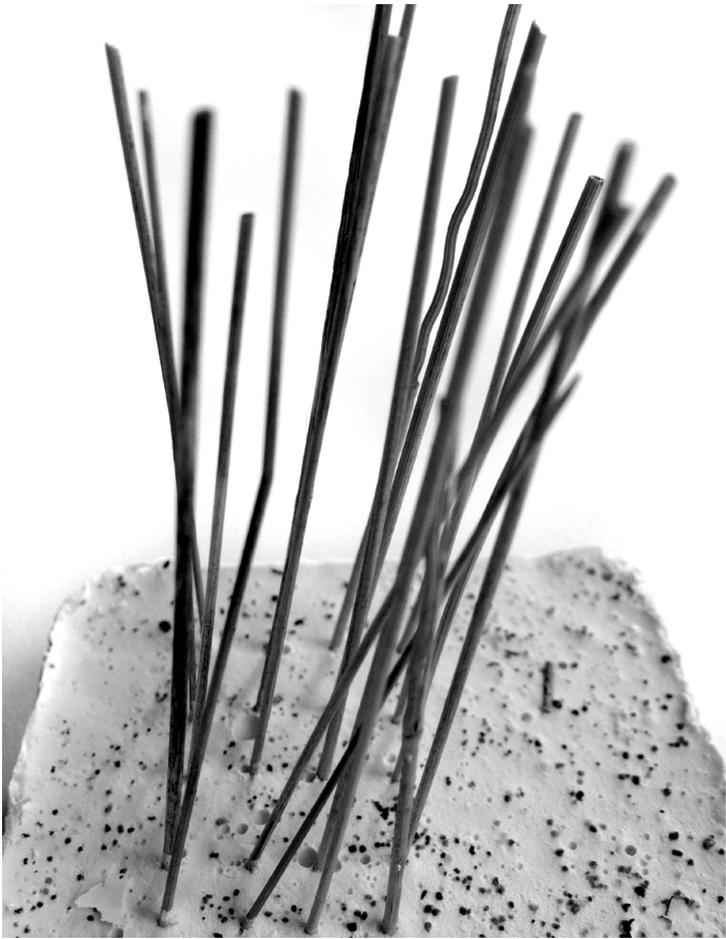
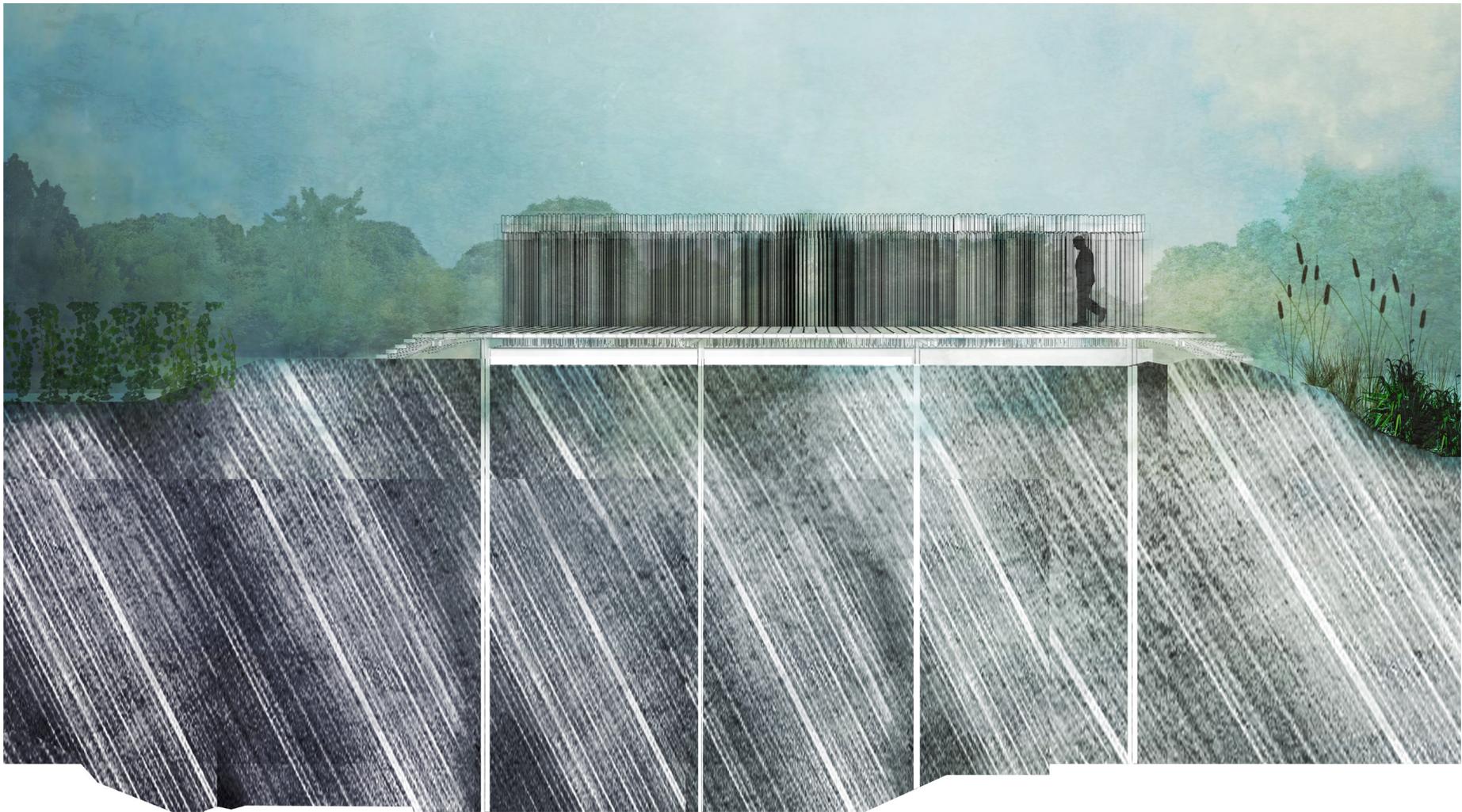


Fig.10. Bertoia, *Sound Sculpture*





Endnotes

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- ² June Kompass Nelson, *Harry Bertoia: Sculptor* (Detroit: Wayne State University Press, 1970), 42, 37.
- ³ *Daniella On Design - Harry Bertoia, Sculptor of Sound*, accessed 4 June, 2013, http://www.youtube.com/watch?v=OFr7hBCxRdg&feature=youtube_gdata_player.
- ⁴ David Seamon, "Merleau-Ponty, Perception, and Environmental Embodiment: Implications for Architectural and Environmental Studies," 2010, 1.
- ⁵ *Ibid.*, 6.
- ⁶ Merleau-Ponty, *Phenomenology of Perception*, 235.
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- ⁸ *Ibid.*, 44 .
- ⁹ *Ibid.*, 41.

Framing Landscape

-41.40312, 174.0231

Autumn

Harvest

17°C

2:15 p.m.

8 Min

"We have an interest in landscape when we feel the need to stretch our eyes."¹

I travel from the vines, fruitful and full of vigor, to the wetland forest. A cool air drapes over me as I move under the cloak of trees. Large solid structures perching on the former beach ridges are enticing me. Low ferns endemic to this area brush my ankles as leaves crunch beneath my feet. A fantail flies close to me catching the small insects I disturb with my forward motion.

Framing Landscape

Rigorous walker and traveler through thought, Rebecca Solnit is a writer with a passion for history and landscape. In her book *Wanderlust* she discusses her romantic taste for walking within the landscape as a tool to meander through your mind and thoughts.² Solnit's writing initiated my thinking about how people will walk, follow paths and experience the wetlands. This is a mode of thinking that largely influenced the composition of the wetlands design master plan. I hope that the walkway allows for some form of wanderlust, an impulse to explore and be nomadic, to slow the pace and be immersed in the environment.³ The master plan is constructed through eight follies linked by a series of concrete stepping slabs, boardwalks and earth trails situated throughout the undulating terrain. A walker's movement is not constricted, but guided enough so that they have the ability to get lost in thought but not lost in the wild of the wetland.⁴ The importance of having some control within the wetlands is for the protection of establishing natives and to avoid destruction of the wetlands by foot traffic I direct walkers on one course to minimize damage of habitat.

The smell of the forest floor slowly rotting twists up into the air. Propelled by large wings, the newly discovered stone moth makes itself known. My feet proceed with a knowledge of their own.

I love walking; it has been a part of my life for as long as I can remember, growing up on a farm with a father who had worked as a ranger in the New Zealand forest service. I spent my summers tramping and exploring many walkways in New Zealand as well as earning pocket money working on the farm. These experiences developed a close bond to landscapes within New Zealand, as if they are embedded within me. I believe I engage in the realm of landscape architecture through my discipline of Spatial Design as a result of this childhood history and my evolving passion for the protection and restoration of our environments.

I stroll towards two rusted steel frames with deep roots in the land. Soft light streams through perforated patterns in the weathered steel, adorning the loose sandy soil. I enter one of the two frames, cutting off my peripheral vision to look out and admire stripes of wild wetlands and aging vines. Between the vines the corridors are strewn with cover crops and kept free of weeds via mechanical under vine weeding. Birds gorge themselves on grapes after tearing holes in the expansive white mesh that protect the grapes; they disappear into it, reminiscent of a heavy fog.

The landscape itself is a slow sequence of events or series of edges. The Cor-ten frames are designed as windows of observation for the landscape. Through each

frame a walker can observe growth, decay, denudation and seasonal effects. The frames emphasize temporality within landscape, silently recording the process of restoration within the site. Landscape Architects Matthew Potteiger and Jamie Purinton discuss through their book *Landscape Narratives*, landscapes as “not only a background but as an eventful figure and process that engenders stories.”⁶ There are layers of important information riddled through Rarangi Vineyard so each time it is visited something new could be discovered. Within the Rarangi walkway I have tried to encourage a walker to find stories and narrate their own journeys within the site, facilitated through markers and follies placed within the walkway loop. Walkers are provided with snippets of information along the way as line images and text are etched into and/or cut out of Corten steel leaners and panels. However, the idea of the wetlands walkway is to open them up for chance encounters and to provide opportunities for discovery. When creating the master plan I allowed for a myriad of different experiences throughout the site, which is rich with a huge diversity of plant life, land use and unique land formations between the sea, hills and township. The follies I have designed allow for contemplation, observation and experience of this complex site. Each folly aims to emphasise the distinctiveness of this site as each node was selected because it possesses and communicates a particular

idea or many important things about the wetlands.

Framing Landscape

I feel the fading sea breeze and pull my jacket up around my shoulders. Tall Kanuka trees dominate this small slice of the past as around them three hundred recently planted saplings rediscover their old home. Leaves have collected on the apex of the frame. I find shelter here. I brush my fingers across the flaking weathered steel that leaves its traces on my skin. A long-winged cicada lives within an opening in the frame; it releases a series of stretched resonant chirps.

Without intending to, I have become what you could call a minimalist designer. I believe in the attitude of ‘truth to materials’ and I have a great love of the quirky innate characteristics of simple everyday materials. I design with basic geometric volumes stripped down to hold only the essentials of what is necessary such as the structure and the ability to shelter or seat people forgoing excessive embellishments. When I design it is not just about the physical qualities of the follies, I am also interested in the dialogue that architecture has with the environment. How the earth, air, sky and natural light evoke a spiritual dimension or atmosphere into the interiors of the follies. I repeat basic forms to keep order and create relationships between each folly as well as allow for ease of construction and minimization of waste

material. This mode of minimalist design has been greatly influenced by two projects that both frame the landscape and support a person's experience through the landscape. Into The Landscape is set on the edge of a beautiful lake in Seljiod, Norway. (Fig.13,14) Rintala Eggertsson Architects deal directly with the stories of the site for a point of departure.⁶ An integral part of this project is to create a walking narrative through the majestic landscape. The architecture mimics characteristics of the landscape to anchor them into the land without dominating the scenery. A similar project with the purpose of mediating natural phenomena to a larger audience is the Tudela-Culip Restoration Project by EMF architects.⁷ (Fig.11,12) Their project, much like my own, deals with land that has high ecological and geological value. The project is all about revealing and celebrating the original land use through a series of architecture constructions with different conditions for experiencing the space. Only a few consistent construction details are repeated through the site paired with a robust and limited pallet of materials. This project is a great example of how Cor-ten steel integrates and thrives within wet landscapes; it is a resistant and robust material.





Fig. 11. EMF, *Tudela-Culip restoration project*

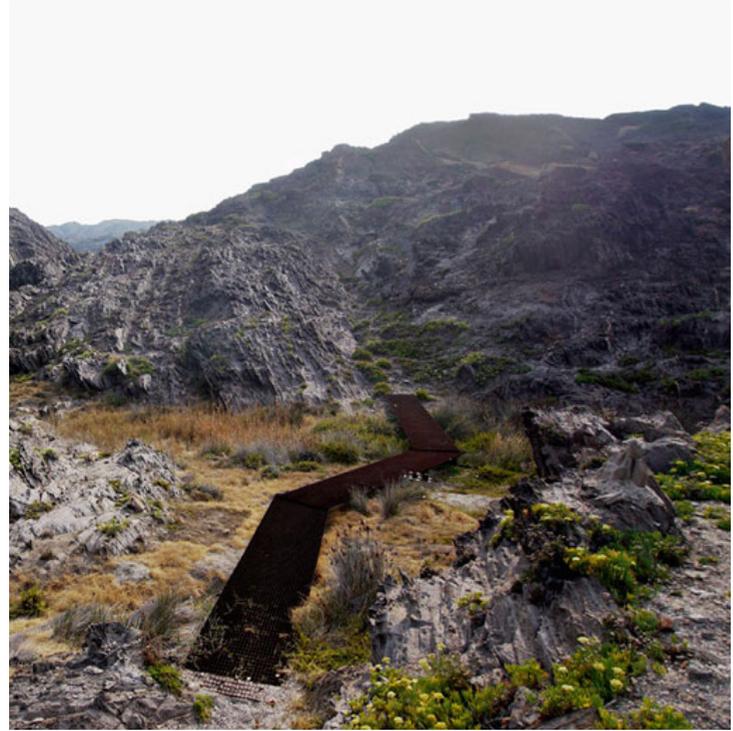


Fig. 12.EMF, *Tudela-Culip restoration project*



Fig.13. Rintala Eggertsson Architects, *Into the Landscape*



Fig.14. Rintala Eggertsson Architects, *Into the Landscape*





Endnotes

- ¹ Smout Allen, *Augmented Landscapes*, ed. Mark Smout and Laura Allen, 1st ed, Pamphlet Architecture 28 (New York: Princeton Architectural Press, 2007), 6.
- ² Rebecca Solnit, *Wanderlust: A History of Walking* (New York: Penguin Books, 2001), 5.
- ³ Ibid, 4.
- ⁴ Ibid, 5.
- ⁵ Matthew Potteiger, *Landscape Narratives: Design Practices for Telling Stories* (New York: J. Wiley, 1998), 5.
- ⁶ "Into The Landscape / Rintala Eggertsson Architects," *ArchDaily*, accessed February 12, 2014, <http://www.archdaily.com/213565/into-the-landscape-rintala-eggertsson-architects/>.
- ⁷ "Tudela-Culip Restoration Project / EMF," *ArchDaily*, accessed November 27, 2013, <http://www.archdaily.com/375876/tudela-culip-restoration-project-emf/>.

Walking the Edge

-41.40193, 174.02425

Autumn

Harvest

11°C

2:30 p.m.

25 Min

Boundary (*noun*)

Something (such as a river, a fence, or an imaginary line) that shows where an area ends and another area begins.

A point or limit that indicates where two things become different.¹

Branches of broom lick and scratch my arms as I venture deeper into the wetland forest. Autumn is squeezing the last drops of green from the tips of tall flaxes. I meander down a ridge; the ground becomes harder and darker. I can hear the hum of bees in the vineyard as they seek out the last sweet drops of nectar where the grapes have been plucked in the harvest. I watch birds chasing each other through the trees. Water begins to seep up from the ground as I approach the edge.

Concrete pavers snake through the land and accompany an expansive steel ridge undulating with the roll of the landscape. Floods of the past have stained the concrete. I traverse the division between wet and land as nature spills over, under and through, defying the hard edges of the track. My arms are swinging at my sides.

Architectural theorist Iain Borden reflects on the presence of “thick edges” within architecture.² He defines an edge as “spatial and temporal, the limit between here and there, in and out, present and future”; they are not always physical, definable or measurable because they occupy the negotiation of flows between two limits.³ In the text *Landscape ecology principles in landscape architecture and land use planning*, Wenche Dramstad, James D. Olsen and Richard T.T. Forman investigate the provocative condition of an edge within the realm of landscape architecture.⁴ In the landscape, edges are defined as an opposite to a boundary as boundaries are hard and restrictive where as edges are infinite, complex and soft. Edges are seen as filters within the landscape and are largely discussed in relation to a vegetative edge and buffer zones between land use and plant ecologies.⁵ The (walking the edge) folly marks a vegetative edge within the Rarangi wetlands through a ribbon of Cor-ten steel snaking through along the edge between wetland and wetland forest. Helping to highlight what cannot be seen as evidently within the walkway as it is in the bird’s eye view of the site.

Edges are visibly found in the Wither Hills Vineyard through the land use and ecology. There is a clear distinction between plant habitats of tree forests on ridges and the more lush green plants commonly associated with

wetlands in the swales of the landforms. Furthermore, there is also a dramatic edge between the rows of manicured vines and the wild wetlands stretching into the vineyard. Geographically there are many historical edges dating back to the formation of New Zealand as each of the five wetlands in Rarangi mark a historical coastline where there was once an edge between land and sea.⁶ The coastline in Blenheim is growing gradually each year within continuous land building process.⁷ The solid edge I have implemented through the walkway folly acts as a protector of young native plants re-establishing themselves in the wetlands, keeping them safe from trampling feet.

The day is overcast, the steel is dark and cool to touch, drawing heat from my body. A Carabid beetle is stalking its prey. Occasionally I peek over the steel toward the wet zones where an intense aroma of lush grasses and flaxes seep out. I see the extent of the eradication of weeds here. The fantail still follows me as I explore its home. The low grunts of harvesting vehicles trickle through to the forest. The steel moves fluxing in scale as its course flows between forest and wetland.

Steel has a curious relationship with water, weather and skin. Richard Serra is one of the preeminent artists of this era whose defining characteristic is his use of

weathered steel as a medium. He is a pioneer of giant site-specific sculptures that dwarf the observer altering their experience of space.⁸ They are magnificent in the way he has caused steel to perform as a curved and spiral form. Serra's steel sculptures are engaged in a constant conversation with their surroundings and become an integral part of the environments they are constructed in.⁹ I was introduced to Serra's work through a sculpture he developed on vast open grasslands on a farm north of Auckland, New Zealand. The Te Tuhirangi Contour in Kiapara Harbor reinforced to me the appropriateness of working with Cor-ten steel in the landscape.¹⁰ (Fig.15) Steel is conventionally perceived as a purely industrial material and not in terms of its aesthetic value.¹¹ The patina of rust that it acquires over time not only adds an element of beauty and elegance, the oxidation process also transforms it into a permanent resident within any site. Weathering steel has become a fundamental element within my limited material pallet, because of its striking ability to become part of any environment it occupies. The steel weathers and marks the passing of time. When follies are constructed in the landscape and the builders have gone home it does not mean that the follies are complete; this is only the beginning of their long process of becoming. The follies are continually evolving and becoming more connected to the site as relationships developed between material

and landscape, or the man made and the natural. The steel is a complicated material with both a hard and soft edges. It consists of a copper chromium alloy steel with a chemical composition to promote an adhering protective layer or rust when exposed to the elements.¹² It bleeds and seeps back into the earth in a constant state of deterioration. But the decay only makes it stronger by protecting its core and allowing it to withstand harsh environments. Mimicking the current process of restoration of the land, it lingers between two states.



Fig. 15. Serra, *Te Tuhirangi Contour*





Endnotes

- ¹ "Boundary." Merriam-Webster.com. Accessed December 6, 2013, <http://www.merriam-webster.com/dictionary/boundary>.
- ² Iain Borden, "Thick Edge: Architectural Boundaries in the Postmodern Metropolis," in *Intersections: Architectural History and Critical Theory*, 2001, 221–46.
- ³ Ibid, 221.
- ⁴ Wenche E Dramstad, James D Olson, and Richard T. T Forman, *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning* (Washington, DC: Harvard University Graduate School of Design; Island Press; American Society of Landscape Architects, 1996), 27.
- ⁵ Ibid, 28-32.
- ⁶ John Preece, *The Rarangi Wetland Complex, Conservation Values, Hydrology, Impacts of Groundwater Extraction* (Wetlands NZ, March 2007), 5.
- ⁷ Department of Conservation, *Wairau Ecological Region-Survey Report for the Protected Natural Areas Program*, (2004), 96.
- ⁸ Museum of Modern Art (New York, N.Y.), *Richard Serra Sculpture: Forty Years*, ed. Kynaston McShine and Lynne Cooke (New York: London: Museum of Modern Art; Thames & Hudson [distributor], 2007), 93.
- ⁹ Ibid, 87.
- ¹⁰ Richard Serra, *Te Tuhirangi Contour* (Göttingen: Steidl, 2005), 9.
- ¹¹ Museum of Modern Art (New York, N.Y.), *Richard Serra Sculpture*, 63.

- ¹² "Weathering Steels," Masteel, accessed July 19, 2013, <http://www.masteel.co.uk/weather-resistant-steel.html>.

Shadow Platform

-41.40185, 174.02443

Winter

Pruning

8°C

3:10 p.m.

7.00 Min

"The closer things get to nonexistence, the more exquisite and evocative they become."¹



Wabi (*noun*)

As beauty is humility, asymmetry and imperfection,
a beauty of disintegration.

Connection to the world in its imperfection, a way of
seeing imperfection as itself.

Embodying beauty.

Sabi (*noun*)

Loneliness desolation solitude quality

Of stillness and solitude.

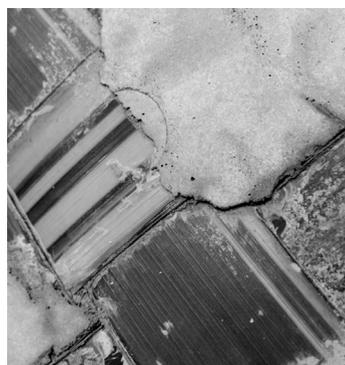
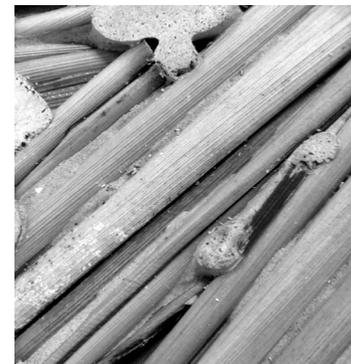
Wabi sabi (*noun*)

The beauty of the withered, weathered, tarnished,
scared, intimate, coarse, earthy, evanescing, tentative,
and ephemeral.²



It is so cold; I draw my jacket up and fold my arms as I shiver with the trees in the light wind. In the depths of the wetland, trees embrace me. I can hear a Tui singing in the distance, a rare sound once prevalent here. Irregularly placed concrete pavers draw me towards a heavy platform sitting solemnly in the landscape.

A staircase sliced out of the concrete lifts me up amongst the lowest branches of the trees. The colour has sunk out of the forest leaving me in crystalline dryness. The concrete is reticent as exposed aggregate creates a route between the two staircases. The sound of birds is intensified up here. I sit down to dangle my legs over the edge. So serene, the bone white sky can be seen through layers of dark leaves. Shadows engulf me.



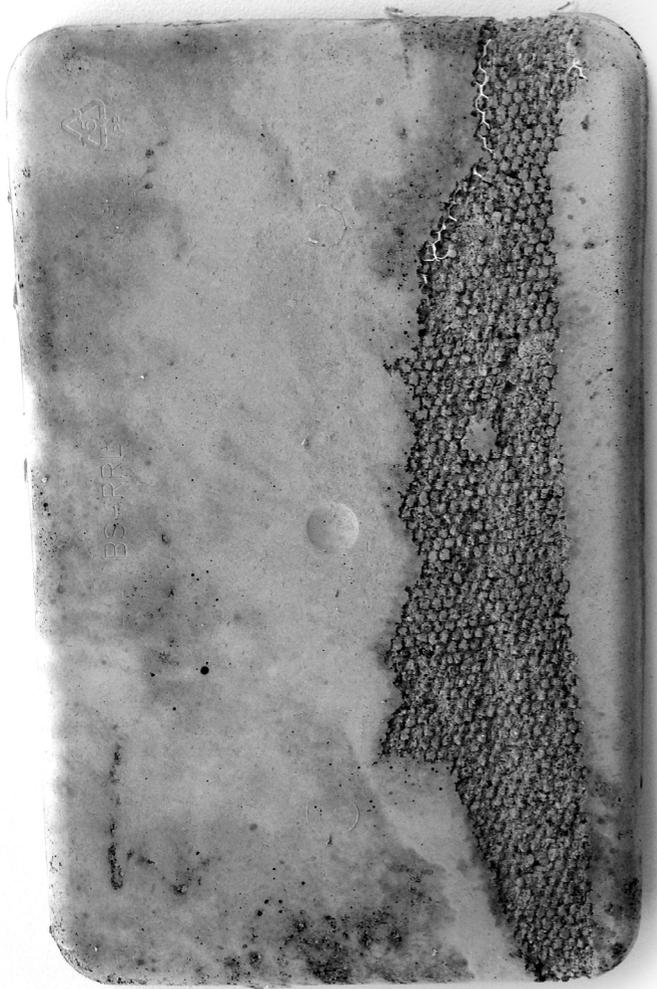
Beauty cannot be found without imperfection. Design philosopher Leonard Koren has delightfully enlightened me about the humble Japanese worldview or aesthetic called *wabi-sabi*.³ As a term that now infects my thought around design and the life cycle of the things I produce, it has taught me to slow down and be patient and to look very closely at my surroundings. *Wabi-sabi* is the appreciation of the discarded, the imperfect and the incomplete. It implies a rough edge not found in the moments of bloom but the moments of inception or collapse as a celebration of the evanescence of life.⁴ *Wabi-sabi* within architecture is often small and secluded allowing for meditation and musing.⁵

The platform holds the iced winter air deep within its bones. Like a relic its surface has been aged by the seasons. It is slowly being reclaimed by nature as plant life claws up its sides. I observe how water collects in fallen leaves embed in the concrete like scars, not one of them alike. I can see the detail of veins and feel the crumpled edge of a leaf.

American Philosophy Professor Crispin Sartwell also pulls apart the term *wabi-sabi* through his book *Six Names of Beauty*.⁶ Originally associated with the ancient tearooms and ceremonies in Japan, *wabi-sabi* is discussed in this book in relation to the patina or weath-

ering of an object or building. A patina is a material's response to the world, the environment it is within, and the way it has been used.⁷ This means that every object is taking part in a slow unfolding, becoming a product of their own environment collecting traces from those who touch it.⁸ As a designer I cannot create something to be *wabi-sabi*; I can only enable a canvas for those qualities to evolve from. To force imperfection would be to defeat the purpose of *wabi-sabi*. The follies are designed to age, rust and deteriorate gracefully. The materials they are built from are visibly vulnerable to the effects of weathering and human treatment. Rain will expand the timber and sun will beat down and silver the macrocarpa. The Corten steel will bleed, crumble and seep into the wetland. Concrete will wear, collect stains and be inhabited by growth of small plants. Designers often try their hardest to combat these processes, but it is important for this design to slowly sink back into the landscape, forming close bonds with the land it occupies.

The Wither Hills wetland and the proposed walkway design embody the *wabi-sabi* aesthetic as they disappear into nothingness; it is beautiful in its decline but also beauty in a new state of becoming.⁹ Such experience asks us to contemplate our own mortality because we will share its same fate if we don't start taking care



of wetlands that are so important to our survival.

The fantail darts from tree to tree, knocking dew off leaves. I spend a few moments longer on the shadow platform embedded with the history of the site. In the distance, the remains of an old willow that once sucked the life from the native trees lies quite slowly rotting. I travel back down through the parting of the concrete to steps that fade away to continue my voyage through the landscape.

Concrete is an enchanting material with very few boundaries. It can be lively and mutable. It has range and ubiquity. It is tactile, it can be powder then fluid, malleable then solid as rock, it can be broken down and wear but retain its quality of character and last hundreds of years.¹⁰ Concrete is often underrated, but to me it is a magical material. This project was designed with the concept of time in mind as I had hoped to design an architecture that eventually becomes environment. I propose to do this through selecting materials that emit or hold a patina and hence add an enriching experience of time, qualities that can only be produced from their direct contact with the temperamental environment.¹¹ There are a lot of creatives that explore surface textures and the treatment of concrete. Architect Steven Holl plays with the soft and hard edges of concrete through

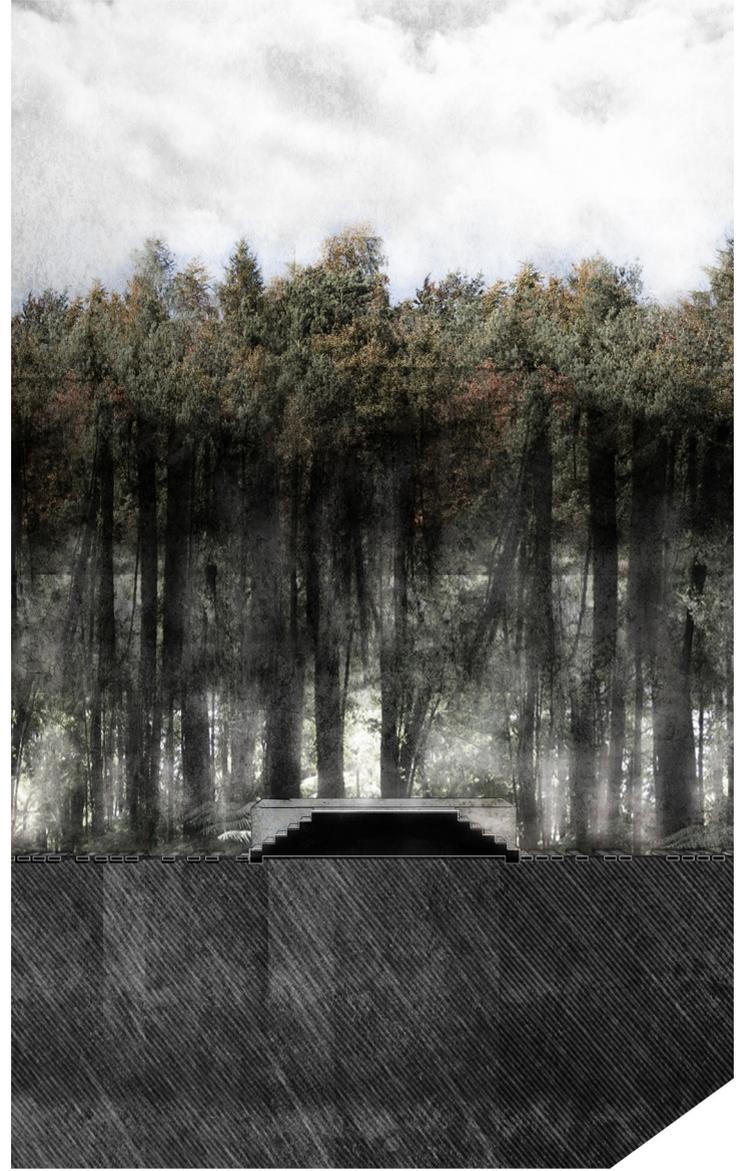
the Hering Museum of Contemporary Art.¹² (Fig.16) His use of materials is a great demonstration of how tactile concrete is as a material and how it has the ability to enhance architecture.¹³ Through a series of small studies I have explored the beauty and efficacy of concrete as a material. I experimented with imprinting textures on the surface of concrete, imbedding several types of organic site materials, weaving in flax and casting plants whilst playing with form and scale. It was an enjoyable process getting my hands dirty and testing how it felt or what it evoked if I did this or that to it. This process is important when designing for the senses as you are in direct contact with the material; your senses are engaged through modelling and testing. Concrete is an essential participant in the wetlands walkway, helping to induce a sensory experience through touch and material tactility. One of my most useful explorations into concrete was to strengthen it through the use of pea gravel from Rarangi Beach. This produced a visually enhanced material and added grip, ultimately creating a profound connection back to the site.

Shadow Platform



Fig.16. Holl, *Herning Museum of Contemporary Art*





Endnotes

- ¹ Leonard Koren, *Wabi-Sabi for Artists, Designers, Poets & Philosophers* (Berkeley, Calif: Stone Bridge Press, 1994), 50.
- ² Crispin Sartwell, *Six Names of Beauty* (New York: Routledge, 2006), 114.
- ³ Ibid, 7.
- ⁴ Ibid, 50.
- ⁵ Ibid, 35.
- ⁶ Ibid, 109-131.
- ⁷ Ibid, 126.
- ⁸ Ibid, 128.
- ⁹ Koren, *Wabi-Sabi for Artists, Designers, Poets & Philosophers*, 7.
- ¹⁰ William Hall and Leonard Koren, eds., *Concrete* (London: Phaidon, 2012),7.
- ¹¹ Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses*, 3rd ed (Chichester: Wiley, 2012), 31.
- ¹² "Herning Museum of Contemporary Art," Steven Holl, accessed October 20, 2013, <http://www.stevenholl.com/project-detail.php?id=64>.
- ¹³ *Materials in Architecture: Concrete, Glass, Steel, Stone, wood* (Berkeley, CA: Gingko Press, 2012), 10.

Void

-41.40024, 174.02485

Winter

Maintenance

6 °C

3:30 p.m.

14.00 Min

"It's in what I see, what I feel, what I touch, even with my feet."¹

Atmosphere (*noun*)

The pervading tone or mood of a place, situation, or creative work.²

Mood (*noun*)

A temporary state of mind or feeling.

The atmosphere or pervading tone of something.³

My path is diverted from the main route. Goosebumps emerging on my arms warn of the cold of the winter's day seeping further into the forest. I edge along a well-worn path uncovering a crop of venerable Mazus, a small herb that can only be found in this geographic site. I walk down a slight slope to find a small tunnel sitting quietly in the landscape.

I enter a small dark void that disappears into the thick forest edge. The path is curved; I cannot tell where this narrow corridor will take me. The folly is raised by mostly silvered timber with one wall of deep red rust.

Exploring the portfolio of Swiss architect Peter Zumthor I have been inspired by both his style and approach to design. I consider him as both an architect and a profound theorist of spatial conditions. He has extensively explored materiality, temperature and light through his architecture in an attempt to trigger memory and form several levels of intimacy within his interiors.¹ Zumthor's works always forms unique relationships with the land that they occupy.⁴

He has clearly been influenced by the philosophy of Maurice Merleau-Ponty as he talks of environmental embodiment when discussing his own work, stating that a lived dynamic between the body and world is crucial to his evocative buildings.⁵ The reclusive void folly creates intimacy through its narrow corridor space and high ceiling, intensified through the play with light keeping the space dark and ephemeral.

I glide my hand along a rail; it has a familiar sensation and form, it keeps me from rubbing against the rust on the wall in this tight space. The handrail is illuminated by the only source of light piercing through a thin cut in the steel millimeters above it. Waves are crashing on the beach kilometers from here but in the dim space my hearing is heightened. As I travel deeper into the void, an

opening appears. Daylight streams in and invades my sight. As I adjust I am pleasantly surprised by a plethora of green Carex grasses and a secret garden within the wetland.

Zumthor's work is extremely relevant to everything I have discussed in my journey thus far. His ability to summon atmosphere within everything he designs is remarkable. The Therme Vals is one of Zumthor's most successful atmospheric spaces. (Fig.19,20) Constructed over thermal springs in the Graubunden Canton, Switzerland, it is built from layer upon layer of locally quarried stone that was the driver of this project.⁶ It is a place for bathing and meandering as Zumthor encourages wanderlust within this building. He carefully controls and frames views, creating a multitude of intimate and open spaces by exploring the tension between interior and exterior environments.⁷ When he designs he asks himself how it would feel to do this? What would it be like to do that? He immerses himself completely in the spaces he is creating.⁸

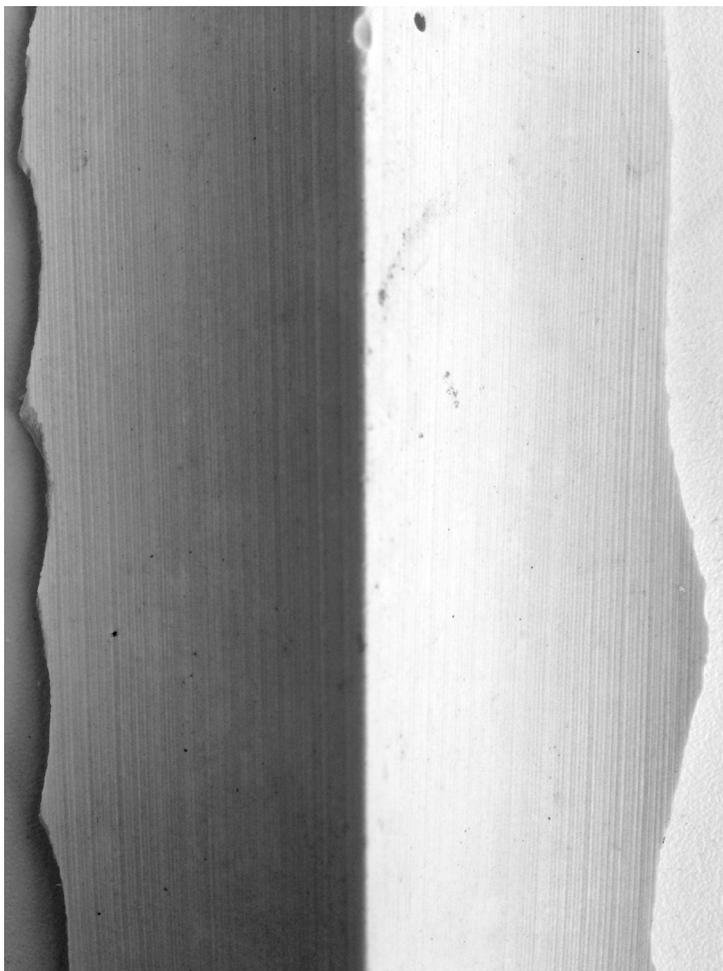
Zumthor's Therme Vals influenced this walkway design in the way that the baths draw people through the building via small details like light, touch and sight lines as well as the presence and weight of materials.⁹ The folly's curved pathway is an integral part of the design to control the view and the journey of the walker.

This folly has a touch of mystery as it is a dark space with limited natural light and appears to be a dead end in the walkway culminating in an atmosphere of the interior void.

It is a refreshing change from the jaunt through the tree cover to the expansive field of Carex that spill back over the edge of the structure. The long billowing grasses dig their roots deep to get sustenance from the Rarangi aquifer. I bury my hands in my pockets. Spiders make nests in the long grasses and I watch small bugs peek up every so often, weary of the looming fantail. I inspect the handrail that guided me along the curve; it is organic, like flax that has eaten its way into the timber. The shelter holds its own heat and protects me from the winter bite. I want to stay here awhile; it is a comfortable place to rest and meditate.

Zumthor's work is inspiring in the way he creates spaces that we can withdraw into. He always leaves room for emotions and memories.¹⁰ One of his most influential earth-bound designs is the elemental Bruder Klaus Field Chapel.(Fig.17,18) Made from a unique process of rammed concrete, a central void opens to the sky and the night stars. Rain and sunlight can both penetrate this hollow cavity made by burnt out timber remembered through the ghosts of wood grain on the charred walls. It is a mystical interior abundant with ambience and mood.¹¹ I find the mood of Zumthor's buildings





tremendously appealing as they are so sensuous and organic. Each of the eight follies in the Rarangi walkway has their own mood and temperament. Mood is created through a physical relationship to the natural environment, the follies utilise light, temperature and materiality to create mood throughout this journey.



Fig.17. Zumthor, *Bruder Klaus Field Chapel*



Fig.18. Zumthor, *Bruder Klaus Field Chapel*



Fig.19. Zumthor, *The Therme Vals*



Fig.20. Zumthor, *The Therme Vals*





Endnotes

- ¹ Peter Zumthor, *Atmospheres: Architectural Environments; Surrounding Objects* (Basel: Birkhäuser, 2006), 17.
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- ³ "mood". Oxford Dictionaries. Oxford University Press, accessed July 6, 2013, <http://www.oxforddictionaries.com/definition/english/mood>.
- ⁴ Zumthor, *Atmospheres*, 35.
- ⁵ *Shifting Ground: Peter Zumthor and the Urbanization of the Alps*, accessed October 20, 2010, http://www.youtube.com/watch?v=TNhKCBPdA&feature=youtube_gdata_player.
- ⁶ Zumthor, *Atmospheres*, 23.
- ⁷ "The Therme Vals / Peter Zumthor," *ArchDaily*, accessed January 7, 2014, <http://www.archdaily.com/13358/the-therme-vals/>.
- ⁸ Zumthor, *Atmospheres*, 45-48.
- ⁹ *Shifting Ground*.
- ¹⁰ Zumthor, *Atmospheres*, 24.
- ¹¹ "Bruder Klaus Field Chapel / Peter Zumthor," *ArchDaily*, accessed December 2, 2013, <http://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor/>.

Watchtower

-41.39877, 174.02758

Spring

Budbreak

9°C

4:15 p.m.

19 Min

“Natural materials – stone, brick and wood - allow our vision to penetrate their surfaces and enable us to become convinced of the veracity of matter. Natural materials express their age, as well as the story of the origins and their history of human use.”¹

Tūrangawaewae (*noun*)

Tūrangawaewae is one of the most well-known and powerful Māori concepts. Literally tūranga (standing place), waewae (feet), it is often translated as 'a place to stand'. Tūrangawaewae are places where we feel especially empowered and connected. They are our foundation, our place in the world, our home.²

I have a rhythm to my walk; my legs warm as I hike through the wetland towards the north bank hills, a wild overgrown hill ravaged in old man's beard and blackberry. I reach the outer edge where wetlands seep out like fingers. I see a tower. I am a foot away from fresh crisp vines and a lunge away from wild kanuka tree forest.

The front of the tower has a façade of five large warm timber panels of varying width reflecting the five separate wetlands within the landscape. Its architectural language is almost colonial with a pitched roof. Cor-ten steel cladding traces the basic outline of the structure adding strength to the timber frame.

When approaching the design of this wetland walkway for Wither Hills I knew I wanted to link it back somehow to the architectural language of the winery. Wither Hills Winery sits on the other side of the Wairou planes to the Rarangi Vineyard with the Wither Hills mountain range as a striking backdrop (see Master Plan map). The tower I designed mirrors the tower of the winery, utilizing the same basic form but developed to fit into its own site whilst staying true to my minimalist design aesthetic. The New Zealand architectural firm Jasmax was responsible for sculpting the winery's place within the landscape.³ (Fig.21) Their design used local stone and timber to echo the dramatic layering of these materials in the Marlborough background. Their formal and conceptual basis was from the winemaking process and their goal was to support Wither Hills' brand connection to the landscape.⁴ The Winery has a strong stance on sustainability and in 2012 produced their first fully organic wine.⁵ Their workers have a passion for the landscape they are working on and they are constantly evolving and improving their practice to have a more positive impact on the environment. Currently a percentage of every wine bottle sold is put towards the restoration of their wetlands.⁶

The entrance is hidden around the back where a staircase protrudes out of the solid form. The base is heavy polished

concrete. The sidewalls are slated and allow slices of light to permeate the interior. My knees start to ache and my body heats up as I ascend four stories. There are three platforms instigating a slow reveal of the view and building my curiosity for what I will find.

The timber used within the tower and the *Wetlandscape* project is non-treated and locally sourced. This choice was a decision I made after researching the harmful effects of treated timber in wetlands and in further consultation with Wither Hills' ecologist Dave Barker.⁷ The timber is rough sewn to add grip and extra character to the surface. Eucalyptus is used in close contact with water or underground as it is a New Zealand hardwood known to cope well with wetland environments. Macrocarpa is my star timber; it is unique like Cor-ten steel as it is reactive to the environment it occupies. It ages like a fine wine, silvering over time blending into the colours of the landscape. I chose to design with raw materials with rougher edges because the wear and temporality of the material surface enriches the walkers experience through time. Macrocarpa has a fantastic ability to appear soft and hard shifting between states and acquiring different moods.

Stepping up the tower results in a panoramic view of the site. It is breathtaking. The expanse of sky spreads out to

the Wither Hills as the mountain range's golden curves span across the horizon. I can see Rarangi beach, the many vineyards and grasslands in the Marlborough plains. There is a complex array of microclimates at work. Everything is in bloom and the wetland is resplendent. The annual buds break after the bleeding of the vine. I lean against the tasting table. A glass and a bottle of wine are ready for me; I try some Rarangi single vineyard Sauvignon Blanc. Aromas of lemon grass, kaffir lime, cardamom and rock melon float in the glass. My palate is shocked with minerality, umami, old foreshore, sea salt and lime. I observe the land of its origin, behold and savor.

An important term that incorporates my project and the vineyard is "terroir," a term that refers to when geographical and geological characteristics become imparted in wine.⁸ The land where grapes are grown is so important to the taste and sensory evaluation of wine.⁹ The Rarangi wetland gives the wine a distinct flavor affected by the climate and orientation to the sun. The grapes respond so uniquely to the landscape they occupy much like the walkways material pallet.¹⁰ Wine tasting is like a journey and a sensory examination demonstration a synergy between the two. The design of the wetlands and vineyard walkway in a way mirrors this. Its *tūrangawaewae* (sense of place) is integral to the wine and is integral to this master's project.¹¹

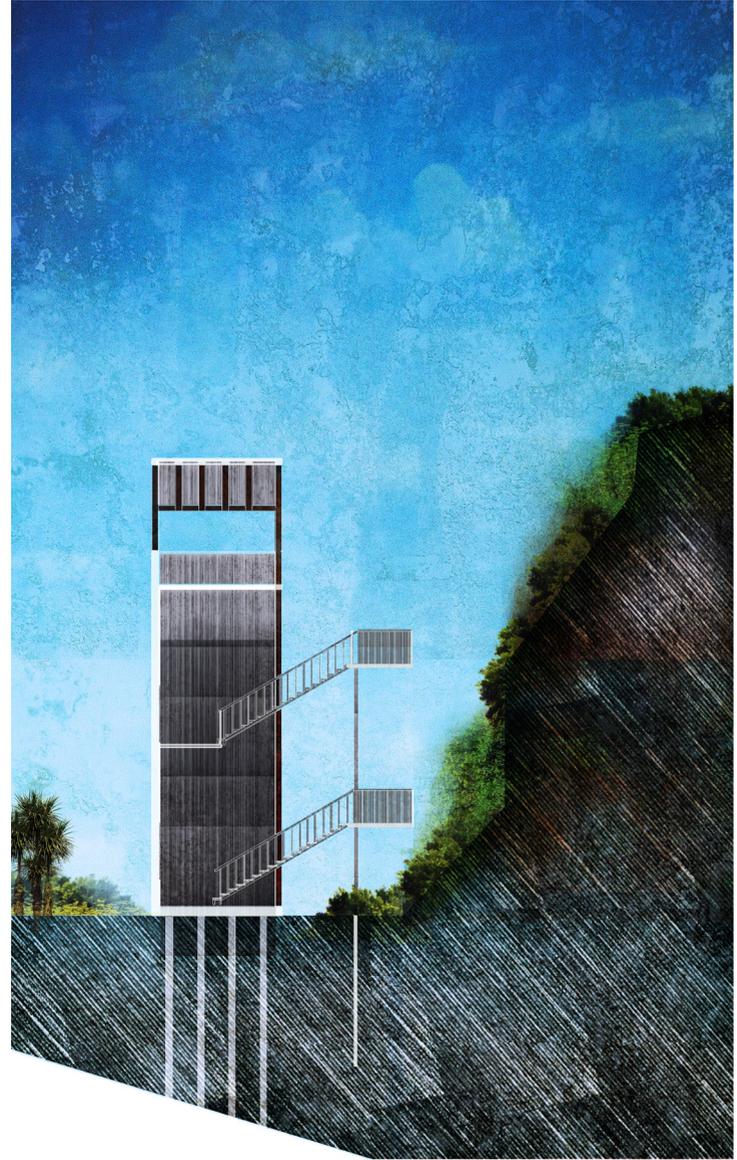
This term is reflected in the decision by Wither Hills to restore and care for these wetlands. The wetlands occupy their workplace, they live in close contact with this landscape and understand how integral it is to their livelihood and the qualities of the product they produce. It is their place and they want to share it with the world. They look after it because they have seen it in such strife and decay. The development of the walkway will help them have easier access to further restore the wetlands.

A sadness falls over me as I turn to leave. The extent of wetland deterioration in Blenheim is made so evident from this viewpoint. The wetland ridges follow the curve of the sea edge and should span the whole length of the coast to reach the dry golden Wither Hills. The hills are a stunning backdrop to the majority of the vineyards and winery of Wither Hills the brand. They enjoy long sunlight hours and cool nights here. Through the development of the town and other agricultural land use only patches remain, defiant to leave. My appreciation of the wetlands is intensified. They are the last remnants of the past, a valuable ecological zone almost lost to us. It is a sobering view.



Fig.21. Jasmax, *Wither Hills Winery*





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Boardwalk

-41.40049, 174.02444

Spring

Flowering

15°C

4:45 p.m.

35 Min

“The enormous impact humans are making on the planet's biology and geology, and the mark we are leaving in planetary history through shifts in land use and the effects of anthropogenic climate change.”¹

Ecology (*noun*)

A science that deals with the relationships between groups of living things and their environments

The relationships between a group of living things and their environment.²

I head back towards another area of the wetland, different to the last. There is a long boardwalk cutting into a new large wetland and slicing a path through it for me to explore. I take off my jacket and bundle it in my arms to peruse the final stretch of my expedition.

Boardwalk

WetLandscape is a project that weaves between approximately fifty hectares of high value semi-dry wetlands and a working vineyard.³ Over time the shoreline in Blenheim has retreated in excess of five kilometres to form a complex system of dry gravel ridges and wetland hollows.⁴ They are an important landform busy supporting vast ecosystems of plants, animals and insects.⁵ The five-wetland finger landforms are extremely rare even on a world scale and are the largest remaining freshwater wetlands in the ecological region.⁶ Wetlands are the sponge of the world, absorbing heavy rain, reducing flooding, stabilising shorelines and filtering and cleansing water.⁷ The Rarangi wetlands are semi-dry areas that counter the misconception that wetlands have to be wet. It is heartbreaking to say that at a national scale, New Zealand has lost 90% of its native wetlands.⁸ This is a common trend as historical treatment of wetlands within New Zealand has left this type of ecology almost extinct within New Zealand.⁹ Wetlands support the greatest concentrations of bird life in any habitat in New Zealand.¹⁰

The walkway allows my feet to do the thinking. My mind can drift, observe and sink deep into the wetland. The wetland is flourishing, packed with cabbage trees sitting capriciously, establishing themselves at different heights. Cigar-shaped seedpods amongst the bulrush are exploding

fluff that is tossed up by the wind, some snatching onto me as I pass by. With the approaching summer, the surface water slowly sinks into the earth. The flaxes are flowering as the wetland spills up over the edges of the boardwalk. The land is regenerating.

I believe that design is a medium to induce change. Wetlands became my muse stemming from a previous project that reintroduced native wetlands into Christchurch as part of the post-earthquake rebuild. I understand the importance of wetlands and I have in common a goal with Wither Hills to share that knowledge and promote their value to the public. Wetlands are forgotten landscapes and require a deep understanding. I am interested in the cultural interaction with landscape and the perceptions that public have on native ecologies and water. "Thinking like a wetland" is an essay from the Wetlands Collective Journal that strikes the heart of my own research as it discusses the significance of wetlands to every individual.¹¹ The essay talks about man's relationship to the environment and the mistreatment of wetland environments on a world scale. They are commonly seen as resources to be managed, not places of dwelling that have agency in their own right.¹² No substance is more central to human's individual and social survival than water. As a species that is 60-70% wetness in ourselves, it is ironic that we focus a lot

of our energy into draining and ridding landscapes of water.¹³ There are many walkway projects within New Zealand aiming to restore our native wetlands and I have ventured through many of them within the North Island. (Fig.1,2,3,4) They are beautiful spaces but lack a sensitivity of experience and tactility that design has to offer. The Department of Conservation and City Councils are usually in charge of implementing these walkways around the country. While I respect and appreciate their devotion and care for these natural environments, I think some of them are not well planned as they are designed purely for access, and access isn't enough to showcase these beautiful landscapes and create an experience. The selection of materials they use, such as treated timber, also do not represent positive sustainable choice. In Wetlandscape I am asserting that an ecological designer is integral when constructing within these spaces.

Weathered steel follows the edge of some sections of the walk, folding over at the perfect height for leaning and reading. I rest my foot on a shorter fold of steel skirting the edge keeping me from falling the short drop into the wetland below. I approach an offshoot from the main route, a rest area, a platform. There is a wine tasting table, the top is a thick slab of polished concrete exposing different colour stones and pebbles within. Its edge is

rough and I graze some skin off my arm as I brush by. A solid timber cabinet filled with wine and glasses supports the slab. I pour myself a glass feeling at peace within the wetland.

The boardwalk is a place where information about the wetlands can be found as well as a place to communicate what Wither Hills has been doing to protect them. It is low impact architecture that has a small footprint on the landscape by sitting above the earth on piles. It allows an intimate relationship with nature without people trampling the regenerating plant life below. A project that resonates with the ecological foundation to design is Qunli Stormwater Wetland Park by Turenscape Institute.¹⁴ (Fig.22,23) This project deals with an under threat and protected wetland in the middle of a bustling metropolis in China. Turenscape's strategy was to acknowledge the value of a green sponge within the city to collect, filtrate and store storm water.¹⁵ Turenscape applies a deep base of science knowledge of wetland systems and the site to be able to make a fully functioning constructed wetland. An interesting part of the design is that they left the original damaged wetlands to regenerate in the center of the site.¹⁶

The walkway is wide and never changing. There are seats along its path that give me perfect places to lie in

the sun. A dragonfly flies too close and makes me flinch. At times I get glimpses through the thick flora at yellowing vines on the verge of flowering. The wetland is beautiful and full with life. I use my jacket as a pillow beneath my head. This is a place we need to take care of; these spaces are special.

Boardwalk



Fig.22.Haerbin, *Turenscape*

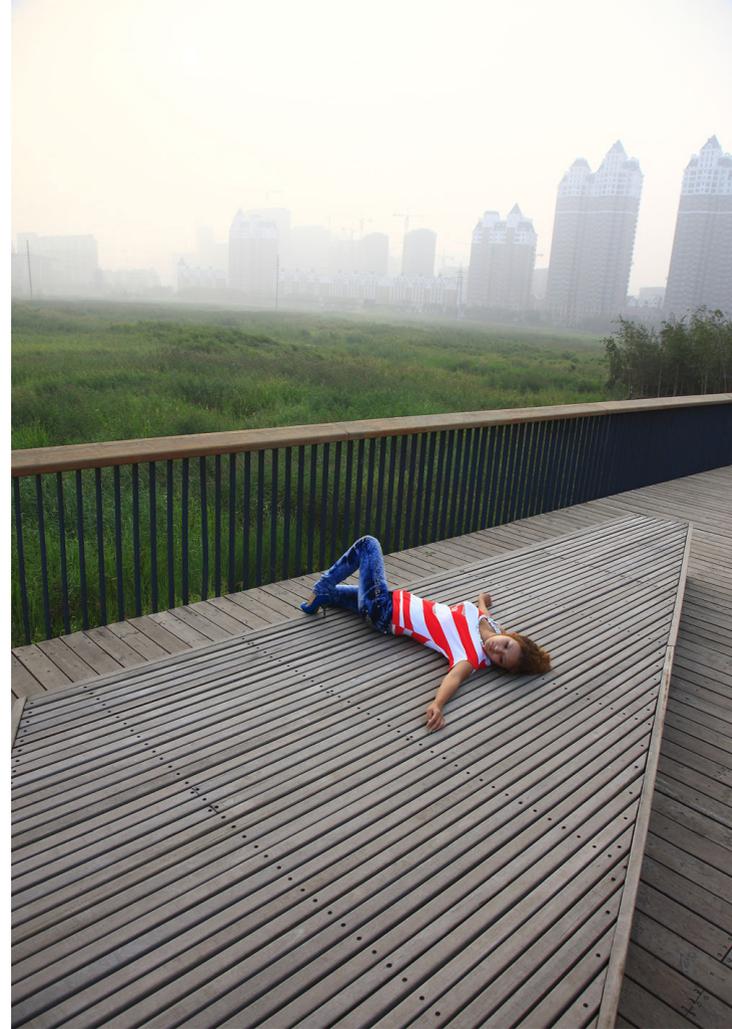
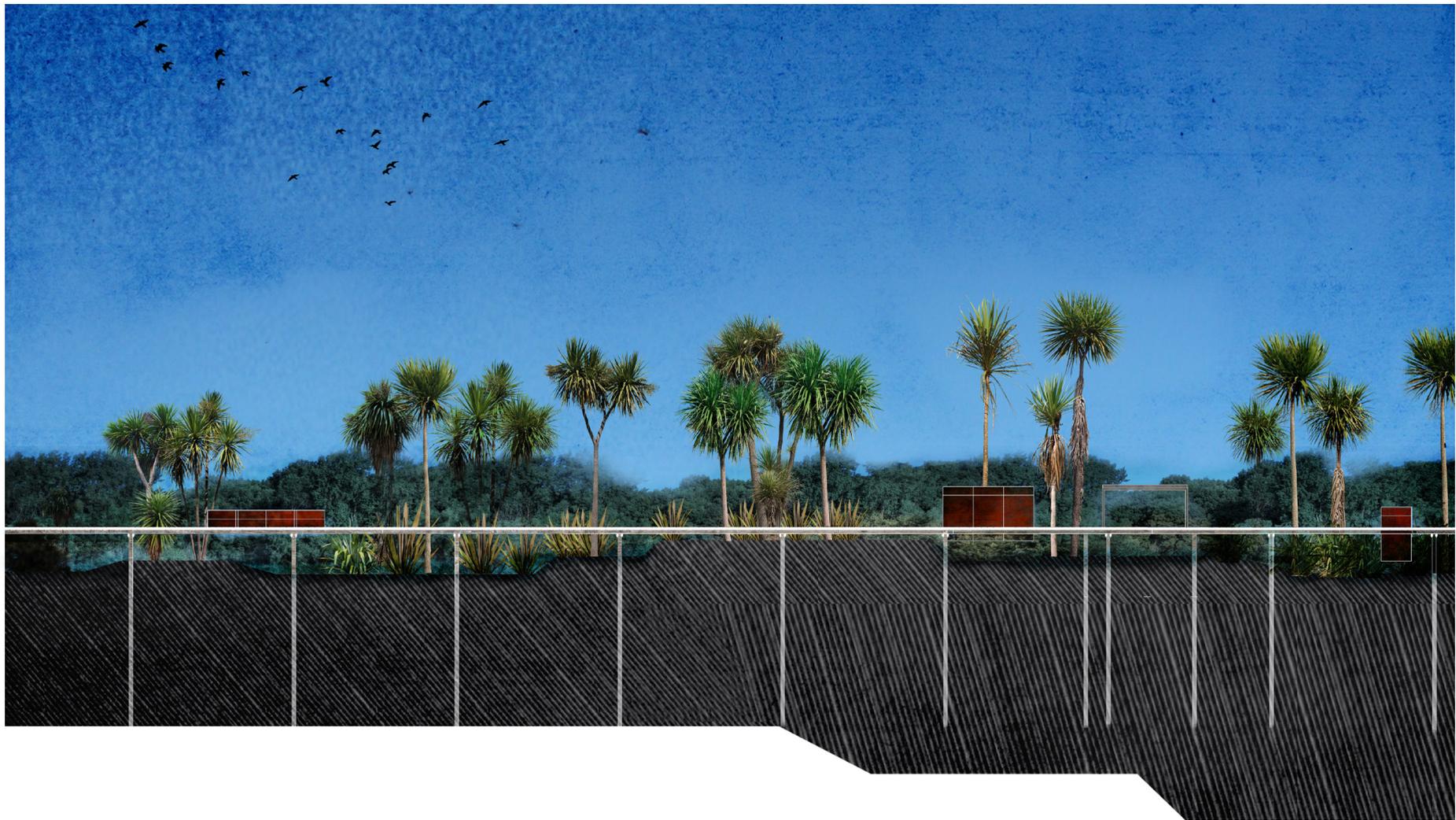


Fig.23. Haerbin, *Turenscape*





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¹⁰ (DOC), "Why Wetlands Are Important."

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¹⁴ "The Transformed Stormwater Park: Qunli National Urban Wetland," Turenscape, accessed 4 october, 2013, <http://www.turenscape.com/english/projects/project.php?id=435>

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Epilogue

“Architecture is essentially an extension of nature into the man made realm, providing the ground for perception and horizon of experiencing and understanding the world.”¹



The deep interest I have in restoration and ecological design is not revolutionary, in fact it is progressively becoming the norm. Megan Born is a landscape and architectural designer within James Corner's Field Operations Practice. She discusses the evolution of planning and design through ecology in her paper "Root Words"² She discusses how landscape design has started to connect increasingly with the natural sciences specifically the practice of ecological design. It has become a progressive and critical design concept engrained in contemporary design thinking and practice today.³ Born positions her writing around the work of renowned Scottish Landscape Architect Ian McHarg who was a pioneer of inter-disciplinary collaboration. His writing enticed the first wave of young designers to adopt nature in place of the ubiquitous force of economics and social science. He taught them his own ecological method.⁴ McHarg's method involved constancy and rigor that many designers struggled to fully realize. It involved gathering site histories, ecology and climate information followed by a process of layering and combining these site conditions to find the design.⁵ Born discusses how McHarg's work reigned in a new relevance for the practice of landscape architecture and many prominent designers work is heavily rooted in these concepts today.⁶

We never walk the same trail twice. Wetlands are the edge between wet and dry in the landscape. They are stasis and change, wet and land, taking in and giving out. They are dynamic resource that is a constant fixture but are always moving accommodating a myriad of physical and biological changes daily.⁷ Wetlands are a dynamic resource that I associate with change. Wetlands invite us to see the reflections of ourselves in the water. They are central to our survival but our connection to them often goes unnoticed and unseen.⁸ They are often eradicated and drained, destroyed for green fields and solid ground to build on.⁹ I believe wetlands have the ability to change the world through their ability to cleanse water and sustain a multitude of vibrant habitats and ecosystems, they can help solve issues relating to climate change that we are facing today. Ecological design has therefore become a game changer. We can now hope to better the world through design rather than destroy it slowly. Ecology is a model for working between fields, helping me to bridge the gap between Spatial Design practice and landscape architecture to peruse working within wetlands. This interest in ecology has led me to cross disciplinary boundaries and strengthen my own practice.

This intrepid journey through a mosaic of wetlands and vineyard environments allowed me to reflect on my design practice and the decisions I made along the way. My voice was found within the wetlands walking, thinking and sometimes doubling back to critique or admire my findings. I hoped through this journey that the reader would acquire a sense of place that can only be gained on foot. It was important for me to write this document as I did because my designs have a need to be experienced. My vision for this project could only be realised through encounters of growth and movement, water seeping, materials breaking down, insects bouncing on grasses, bird sound, the heat of the sun or bite of the winters winds, the effects of the seasons, the fall of light at different times of day and the different temperatures within each folly. The journey is about what you are left with as much as the experience within it. Each of the eight follies are characters within the same story I achieved through my exploration into the tactility and selection of materials, with the intention of conjuring atmosphere and mood encouraged by the underlying aesthetic of *wabi-sabi*. This project involved a convoluted process and despite my efforts, it never followed in a straight line. Boundaries were often blurred between theory and precedents that wove throughout my voyage.

Edges as real, concrete entities and conceptual triggers evolved out of this project without my knowing at first. As I got deeper into the walkway design edges exposed themselves willingly within disciplines, materiality, ecology and the sensate body allowing me to expand on their definition within the landscape and my own practice of designing within temporal spaces.

This project and the process of design mimicked the slow thoughtful movement of walking, by producing one folly after another and going backwards and forth in a steady momentum throughout the year. This journey led to a developed conceptual idea but not yet to the final built design. The scope of this project is so large I had to come to terms that it was far too ambitious to complete alone, which has meant some aspects of the design are more developed than others. However what myself and industry partner Wither Hills set out to do was accomplished: to determine a master plan for a walkway throughout both the vineyard and wetlands on the Rarangi site whilst providing a wide range of design interventions along the way. One of the most important aspects discussed was creating a unique experience for the walkers. This plan fulfills our common goal to inspire excitement and gain exposure for all of the restoration work that they have been doing within the wetlands. I believe this project

has the ability to entice tourists to visit and serve as an affirmative demonstration of ecological design. The walkway is diverse and has a sensorial weaving throughout a special site offering an experience not offered anywhere else in New Zealand. Hopefully my project can act as an exemplar for DOC and city or regional councils for the significance of design to formulate experiences within the landscape. The next phase of the project is beyond the scope of Wetlandscape, and will involve the development of built design. Wither hills can take the next phase to a landscape architect or an architectural firm.

Throughout this excursion within the wetland I have learned a great deal about myself and look forward to my next travels as a designer. My work is about nature and a desire for creating simple and beautiful spaces. I feel more confident now as a spatial designer to jump into the realm of landscape because I have learnt that I can engage my intrinsic sensibilities in order to question interiority and exteriority. I have explored the sensate body that moves through the wetland with an intense focus on the bodies' response to each folly. Also I enhanced my practice through exploring materials and their tactile surfaces that have the ability to augment different moods and atmospheres within each space. This is something that I am really proud of. The

backbone to this Master of Design research project is the restoration of valuable natural environments helping me to identify myself as an ecological designer.

I am now at the end of the Wetlandscape journey and I am excited for what is to come. I always hope to be deeply engaged with the landscape in some way and continue to enrich my knowledge on natural ecologies in relation to each site I approach. At twenty-two years old I feel as though I am only scratching the surface of my personal practice potential and I very much look forward to where this path will take me.

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- ⁴ *Ibid*, 232-233.
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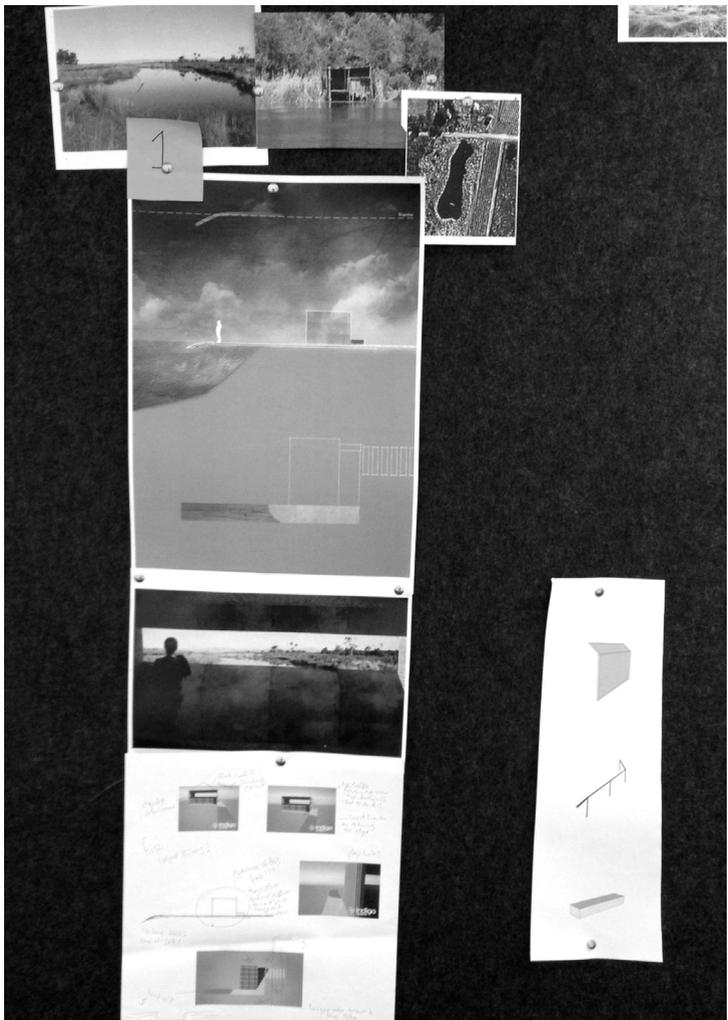
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Appendix

Wall Development





Finals



