Sense of Place

A Multisensory Approach to Design

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Abstract

Our experience of place is intimately bound to our senses, through direct, physical encounter and more elusive, immaterial ways of understanding.

This practice-led research locates itself across three distinct sites or conditions within the wider Whanganui Basin, from South Beach (at the southern spit) to the Heads Road industrial hub and onto the expanse of Castlecliff Beach. Each location is engaged through a series of exploratory and multisensory walks that provide an account of various aural, tactile and visual sensations.

Aspects of sensory design have been incorporated as a method to craft digitally printed textiles and mixed-media artefacts, recalling an archival registry of sounds, surfaces and atmospheres encountered across these three unique conditions of site. Through a multidisciplinary approach to designing and making, this research has sought to capture the sensual, tactile and emotive qualities of place evidenced through analogue and digital modes of production. *Sense of Place,* is therefore apprehended within this masters of design project via an experiential and multi-sensory analysis of site.

The designed artefacts created during the project act as registrations or testimonies of place relayed through sensory data.

Can a multisensory design approach imbue objects with a sense of place?

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other higher learning.

Kate Sellar

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1

Introduction

“One of the most powerful definers of people’s identities is the category of place, whether the locality, the nation or the global context..., designed artefacts and images play a key part in forming, representing and communicating location-linked identities” (Sparke, 2002, p.250).

Formed as a convergence of multiple tributaries, *Coa Te Awa o Whanganui* is the longest navigable river in Aotearoa (New Zealand). Originating at the north-western base of Mt Tongariro, it runs south-west through the township of Taumarunui, before turning south-east to snake and twist its way through the rugged, bush-clad hills of the King Country. Continuing past the settlements of Pipiriki and Jerusalem, the river runs through the city of Whanganui before passing into the Tasman Sea.

This project locates itself at the mouth of the Whanganui River and surrounding coastline, as it extends from the southern spit and river egress (gated by twin harbour moles) to the open expanse of Castlecliff Beach. Within this catchment, (approximately 5.2 kilometres) the proposal focuses on three distinct sites or *conditions.* Specifically, these conditions are encountered at South Beach, Heads Rd industrial park, and the seaside suburb of Castlecliff (Kokohuia).

Sense of place, is apprehended within this masters of design project via an experiential and multi-sensory analysis of distinct intertidal, industrial and coastal locations. To experience these conditions of place, the research engages in a series of ambient, drifting passages[1] or *sensory walks* which aim to record and collate a variety of datasets from four senses: *touch, smell, hearing and vision.* This data is then analysed, manipulated and interpreted as a collection of domestically scaled interior objects: benches, textile hangings and maquettes. Created as evocations of place and *place-data,* these artefacts attempt to recall an archival registry of patterns, sounds, reliefs, sensations, and excursions onto surface.

Traditionally, designers focused on creating “static artefacts, the monument, the vessel, the elegant monogram, or the essential logotype” (Lupton & Lipps, 2018, p.10). Today, designers are moved to think more about how people interact over time with a surface, a texture, or a place.

The transfer of place-data into objects and textures aims to recall place sensibility through sensory design. Grounded in phenomenology, this design method situates knowledge as part of corporeal, bodily experience, whereby human perception is an open, breathing envelope in constant contact with its surroundings. “Sensory design considers materiality across multiple dimensions, from the visible to beyond” (Lupton & Lipps, 2018, p.85).

[1] This project utilises certain methodological approaches espoused by Guy Debord to better reread the landscape on foot as a *dérive* or drift, with the aim of experiencing terrain at a psychological level— a neologism Debord referred to as *psychogeography.*

Bricolage was taken up as an interdisciplinary methodology (Kincheloe, 2005, p.323), to compile the broad range of methods and approaches undertaken within the project, while visual research and reflective practice were incorporated to better perceive and respond to each site. Bricolage is often considered a curatorial endeavour, taking whatever is at hand, to construct work from 'poor materials' — typically, as assemblages of mixed media. However, it was also used to bring together approaches from other disciplines: architecture, ethnography, sensory and digital textile design.

It is here that the resulting multi-sensory exploration of place uncovered a uniquely gothic sensibility manifesting from the socially permeable spaces encountered en route: the riverbank, beachfront, abattoir and factory. Emanating from these sites, the habitual and commonplace is encountered and conceived as a 'living Gothic'[2] stripped of its traditional tropes and supernatural associations. Although difficult to quantify directly, the project brought to light a vague sense of disquiet or unease, characterised as 'regional Gothic'[3].

Exhibited as a shallow field of installed objects, these evocations of living, gothic, place-setting recall an archival registry of approaches to surface, textural/patterned relief and tactility. The strategies of design utilised here, assume that innate characteristics of place can inform a multi-sensory design platform, capable of capturing the sensual yet uneasy qualities of site. In this way, the researcher asks whether a multisensory design approach can imbue objects with a sense of place.

Visual memory alone cannot capture sounds, smells, touch or ambience of site and provides only a partial account of any walk of inquiry. To better enfold place and encounter, sensory and spatial awareness are channelled within the project to locate phenomena, atmosphere and landscape, beyond the scope of vision.

Sense of place is here inscribed into artefactual memory.

[2] Lorna Piatti-Farnell and Maria Beville offer the term 'living Gothic' which envisions gothic as part of a functioning living culture in its own right, that exists through the intersections of everyday, shared experience (Farnell, & Beville, 2014, p.1).

[3] The researcher uses the term 'Gothic regionalism' to identify the gothic as it relates to the unique qualities and characteristics of place.

AIM 1.

To generate design ideas (sensibilities) through an analysis of place using a multidisciplinary approach

- Document the local landscape using a multisensory approach
- Explore data mapping, science, architecture, product and textile design
- Use approaches from other design disciplines to produce maquettes and multiple iterations

AIM 2.

To develop materials and materiality through analogue and digital modes of production

- Identify digital and analogue modes of production that will achieve design outcomes
- Adopt a method of working with digital tools, allowing for analogue interventions
- Explore suitable/available materials and test out ideas
- Create interior artefacts imbued with a unique sensorial response to place

AIM 3.

To develop a practical and theoretical methodology for the project

- Utilise qualitative research and methodological bricolage
- Analyse and interpret through phenomenological analysis
- Develop insight into designers working with sensory design in a digital/analogue context
- Evaluate the outcomes of research methodology

Fig. 1. Table of Aims.

1.2 Positioning Statement

The precursor to this master's project was the researcher's honours submission, Scar *& Fold*: *Sculptural Textile Forms through Material, Technology & Myth* (Sellar, 2013). Contextually, the work focused on artists and designers who produced sculptural fibre-based work that referenced landscape and its relationship to personalised mythologies. This practice-led research investigated contemporary materials and technologies merged within artisan methods of production, resulting in an extensive amount of experimentation through both conventional and non-conventional material selection and technology.

Initially, it was anticipated that the project would continue to engage digital and traditional methods of textile production, while incorporating aspects of sensory or sense-based-design to augment surface. The conjunction of place and surface, within this project undertook a spatio-poetic approach[4] that sought to mine collections of data, atmosphere and surface conditions implicate to both landscape and locale[5].

Fig. 2. Rhizomes, K. Sellar, Machine Embroidery, 2013. http://www.artsdiary.co.nz/85/2215.html.

[4] The researcher is positioned within the project as a *psychogeographic* wayfarer, transcribing, collating and articulating place-data.

[5] The researcher acknowledges the historical and cultural terrain of the region, however the focal point of the work, is directed toward local sites undergoing transformation (relayed through contemporary, current tensions as part of urban, intertidal and regenerative processes).

1.3 Designing under Duress

Embarking on a master of design during a global pandemic, where productivity and human contact essentially ground to a halt, called for a flexible design approach. Access to resources diminished significantly as a majority of people began working from home. Suddenly, the focus shifted from the global to the local.

Initially, it was anticipated that textiles would continue to develop as an extension of the Scar & Fold honours research. However, as the scale of disruption became apparent, working exclusively in printed textiles was no longer feasible. To maintain momentum, another material was sought, not as a replacement, but to work in tandem with fabric. As the researcher had some, albeit limited experience working with wood, it made sense to explore the potential of this material process.

It was important to find a methodological approach that fitted with the somewhat chaotic nature of the situation. Employing bricolage as an overarching methodology allowed the research to embrace an improvisatory approach to materials and techniques. What began as *designing under duress*, evolved into an exciting method of working, whereby the early constraints of Covid became an opportunity to further innovate the researcher's practice.

Fig. 3. Covid Hut, Heads Road.

2

Contextual Review

Sensory Design and Neuroaesthetics

Our senses are bound to perception, memory and place. As we come into contact with the material conditions of life, our bodies constantly collect and interpret data. This unconscious and interactive stream of sensual engagement, informs our understanding of locative experience amongst wider earth-body relations. This project centres itself around the collection of such place-data to better *sense place.* As an art and design proposal, it attempts to relocate the conditions and registrations of place within a series of objects and artefacts that map the surfaces, terrains, locations and sensations of three sites across Whanganui. Each site is considered, by the researcher, a *condition*; as unique collections of textures, colours, sounds and materialities. Imbued within the interior objects that comprise this project are the sensory qualities of place, applied to material surface.

This contextual analysis covers three aspects of the research output: sensory design (including neuroaesthetics), materiality of surface and a regional sensibility interpreted within the project as a contemporary or living Gothic. The collection, processing and representation of locale here provide a living document, or testimony to the researcher's excursions into the physical, tactile and psychological expanse of place and its setting.

Sensory design, as the term suggests, has a rich and somewhat amorphous history, through associations with art, design, architecture, fashion and direct corporeal experience (Bucknell, 2018). Accordingly, sensory design is appended within earlier avant-garde movements such as the Japanese art collective *Gutai* and its European counterpart *Zero.* Both recognised the limitations of sight alone, and set about engaging audiences through physical, kinetic and multi-sensory explorations of art making and representation. The ad-hoc and mixed-media approach of these groups offered a material and sensualistic critique of the post-war consumer paradigm (Bucknell, 2018, para. 3).

In the seventies, ocular hegemony[6] was further disrupted, as the senses became activated within political discourse. Influenced by discotheques, rock concerts and activist culture, light artists Anthony McCall and Doug Wheeler manipulated light, sound, and space, while performance artists like Joseph Beuys, and Yoko Ono, engaged the public through “happenings” (Bucknell, 2018, para.6). Conceptual artists such as John Cage and Gordon Matta-Clark, “recorded silence and cut open buildings” (Bucknell, 2011, par.5) to rethink our innate biases around what constitutes architecture and music. From the postmodern flourishes of the eighties and nineties, up until more recent advances in digital augmentation and communication, sensory design is becoming prominent within our tactile engagements with private and public space.

The senses are imbued with memory; from our first tentative contact with surface and home as infants, we engage in countless acts of “lifting, licking, touching, sniffing, throwing, dropping, hearing, and balancing” (Lupton & Lipps, 2018, p.10). As we age our interactions are constantly testing the limits of space, terrain and the boundaries of sensory experience. Some of these encounters are physical, solid or material, while others are temporal, fleeting and ephemeral.

“Sensory design rubs up against the *living-thingness* of the world. A room is not just a cube punctured with windows and doors” (Lupton & Lipps, 2018, p.19), it is a living environment, full of atmosphere, light and shadow. Soft furnishings and carpets absorb sound, surfaces and handles collect marks and fingerprints, as an archive of movements and gestures; sensory design “tweaks our skin… it tickles, pinches and pops” (Lupton & Lipps, 2018, p.19). It is the material and exoteric embrace of the world; it invites us to touch and we touch back.

[6] “Ocularcentrism, or hegemony of the eye, has dominated the world since the Renaissance.” (Bowing, 2007)

2.1 Awakening the Senses

Following on from their 2018 debut installation, '*Softwear*'[7], *A Space for Being* was Google's 2019 contribution at Milan Design Week. The show, a collaboration between Google and Danish design brand Muuto, explored the potential of neuroaesthetics[8] within a display of rooms that conveyed ambient moods through elements of colour, light, sound and texture. Designed to capture an audience's aesthetic preferences, a Google wristband worn by participants, measured physiological responses such as heart rate and temperature. (Dezeen, 2017,1:04:34)

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Fig. 4. Google's, *A Space for Being,* featured three rooms with subtly contrasting interiors.
https://www.dezeen.com/2019/04/10/google-milan-design-week-a-space-for-being-installation-neuroaesthetic-design/

[7] 'Softwear' was an installation exploring the interactions between the digital and physical. As a showcase for sensory design, it took inspiration from a 1998 prediction by trend forecaster Lidewij Edelkoort, who stated that technology and nesting would seamlessly blend together. Rubin, J. (2018).https://coolhunting.com/design/milan-design-week-google-softwear/

[8] Neuroaesthetics studies how the human brain responds to the arts. The term was first coined in 1999 by neurobiologist, Semir Zeki (Dickinson, 2019, para. 2).

The term neuro-aesthetics is referenced here to “broadly encompass the perception, production, and response to art”, as well as interactions with “objects and scenes that evoke an intense feeling, often of pleasure" (Chatterjee, 2011, p.3).

Vice president of hardware design at Google, Ivy Ross, believes that neuroaesthetics has the potential to influence how we design space.[9] Ross worked with architects to design their Google office/lab. “Your surroundings change the way you feel, therefore, we wanted to create a selection of areas with different feelings so individuals could choose to work where they felt most comfortable" (Cogley, 2019, para. 7). Echoing Google’s search for a designed *calmative space,* Finnish research group CID (Changing Identities/Design) was tasked with creating a new design paradigm, *The Ambience Design Project*, where the designer's personal aesthetics would be replaced through the combined efforts of a transdisciplinary group. Data gathered by observing participants emotional responses in a relaxing and stimulating (laboratory) environment, has the potential to create ambient spaces that adjust to the mood of the individual (aided by their mobile phone) (Koskinen, n.d, p.7).

These approaches to design are regulated through feedback loops of user sensation and data, whereas this project takes Google's assumptions of user experience to ask wider questions around the role of location, and (by extension) more intimate associations with place. Can a technologically augmented Google design sensibility enhance our understanding and connection to locale? Or, is it offering a continuation of the modernist project — an impulse that seeks to manage (or bring to heel) the anarchic, uncontrolled dimension of sensual experience? (Colomina & Wigley, 2018, p.17).

Distancing the body from its senses, and segregating the sensual from lived experience, is part of a Western design doctrine whereby vision provides us an objective worldview, a concept which emerged as part of Enlightenment thinking.[10] Similarly, “early modernism favoured rational, practical evaluations and judgments of form that were heavily weighted toward aesthetic appeal” (Heywood & David, 2017, p.11).

Here, this research has uncovered the dark, uncomfortable, neglected and carnal aspects of place, offering an antidote to the optical and sensory opiate of smooth, highly ordered design outcomes.

[9] Ross believes that neuroaesthetics has the potential to “awaken the senses.” (Hitti, N. 2019)
[10] The Enlightenment is said to have revealed, through the natural sciences, that which was traditionally hidden by layers of mysticism (O’Keeffe et al, 2017, p.91).

2.2 Apprehensions of Place

American Neurologist Richard Cytowic states, “Reality takes shape in the dark theatre of the brain” (Lupton & Lipps, p.13).

Dating from the late-eighteenth century, and the novels of Horace Walpole, Gothic literature spawned a genre of horror, romance, castles and cursed aristocrats. Today these fictional creations appear distinctly anti-modernist, “gleefully buying into superstition and irrationalism” (Leonard, 2008, para. 2).

Jenifer Lawn attempts to position a gothic sensibility within New Zealand’s wider national identity in Gothic NZ: The Darker Side of Kiwi Culture. In her introductory essay *Warping the Familiar*, Lawn posits that “no critical consensus has yet emerged around what New Zealand gothic is...”, or how it “relates to our cultural mythologies”, or whether “it even exists at all” (Lawn, 2006, p.11).

The question of “where is the gothic” is elusive in any location — the Gothic “slides, it insinuates; its split time-space and structures of displacement leave us with the sense that the given sense is not the whole picture” (Lawn, 2006, p.11). Within this project the apprehension of a gothic relation to place was not actively pursued; instead, a position or sensibility emerged, something the researcher determines G*othic regionalism*. A broad definition might include depression era American scene painting, an umbrella term for naturalistic, rural depictions of everyday life, painted in a flat, descriptive style. New Zealand witnessed similar stylistic tendencies emerging in the thirties and early forties, although there was no formal doctrine, artists approached landscape through themes of isolation and loneliness, while “celebrating rural life and the virtues of hard work” (Fell, n.d, p.4, para. 3).

Gothic regionalism[11] will be appraised within this chapter, through the conditions of site unique to the project and wider Manawatu, Whanganui region. All regions contain particular features, geographies and stories, and to these ends the researcher asks, *can unique qualities and characteristics of place be relayed through a design sensibility?* The second part of this chapter will attend to a description of the gothic as it relates to our sense of province or of place.

[11] Painted renditions of small-town or provincial idylls might describe a nostalgic scenography, however it is the prefix ‘gothic’ that here repositions our understanding of ‘regionalism’ beyond its accepted meaning.

2.3 Locating a Gothic Regionalism

Lorna Piatti-Farnell and Maria Beville find the gothic in the habitual: houses, domestic objects, food, landscapes and children's toys. To locate a gothic agency or sensibility as part of everyday experience they offer the term 'living Gothic', recalling Horace Walpole's long-standing injunction that the "Gothic mode blends imagination with the realism of common life" (Piattai-Farnell and Beville, 2014, p.11). Within this project the gothic thus becomes animated through the usual routines, contours and observances of the everyday.

As such, the gothic phenomenology this project attempts to locate, takes place through a series of observations: rusted corrugated fence lines, weedy, overgrown lawns, cattle trucks, closures, and *baches* awaiting renovation (or removal). A living Gothic opens up within this research in surprisingly humorous and unexpected ways, while manifesting (in a regional sense) outside typical regulatory forms of governance.

Castlecliff Beach, Whanganui is witnessing a sustained period of gentrification. Many old state/beach houses are being dismantled as developers, land bankers and home buyers, change the status of this outlying coastal suburb. An urban regeneration initiative *Project Castlecliff* has put in place a range of social infrastructures (library, street planting, and mixed-use retail space), to help invigorate this once-deprived and at a certain level, forgotten seaside suburb (Martin, 2017).

Nestled within this area of redevelopment, Castlecliff's *driftwood house* is as an eccentric outlier; a testament to modes of habitation and dwelling that reside outside the dictates and conformity of legislative control. Moreover, this local landmark and curio provides a vernacular style, borne from, or emerging out of the landscape itself. There are similarities here to *The Heidelberg Project*; a series of public interventions and recuperative strategies which aimed to bring old, abandoned homes 'back to life' as a carnivalesque fantasyland of painting, sculpture and imaginative installation, within a disadvantaged suburb of Detroit's East Side (Perry, 2014, p146).

Gill Perry calls the houses that make-up the project "mischievous hauntings" (Perry, 2014, p.147), that offer a critique of consumerism and commodity fetishism. With the driftwood house, we see a similar unending project, where exteriority mimics the material conditions of locale, as a manifestation of environmental forces. In other ways it occurs as a contemporary 'haunted house', out of place, defiant, exhibiting a vernacular which operates outside familiar and accepted notions of ornamentation.

Fig. 5. Driftwood House.

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Fig. 6. Party Animal House, Tyree Guyton, artist and founder of the Heidelberg Project.
https://www.mutualart.com/Article/25-years-of-The-Heidelberg-Project/B669303A789D8E8B

To walk the beaches of Whanganui is a visceral experience. Castlecliff beach and the Southern Spit are continually littered with deposits and accumulations of driftwood and hapless livestock caught in powerful tidal flows as the river discharges into the sea. Recalling the jarring shapes and strange associations of British artist, Paul Nash, who “searched for inner meanings in the landscape... the things behind*”* (Laity, 2016, p.3). The coastal conditions of Whanganui contain these combinations of “beauty, ugliness and the power to disquiet” transfigured through a form of “natural surrealism” that Nash encountered at the Victorian Seaside town of Swanage (Tate Gallery label, 2004).

During one exploratory walk from the southern spit to South Beach, a collection of photographs gave a sense of movement or journey narrative. Arriving at South Beach on a dull windswept day a large number of animal carcasses in various stages of decomposition lay strewn amongst the concentrations of driftwood.

Fig. 7. Dead Cow on South Beach.

New Zealand photographer, Peter Preyer's seminal image of a dead steer, is included here as an invocation of living Gothic, a visceral memento mori emerging from the commonplace.[12]

Fig. 8. Dead Steer, Peter Peryer, 1987, gelatin silver print.
https://www.aucklandartgallery.com/explore-art-and-ideas/artwork/8575/dead-steer

[12] This image by New Zealand photographer Peter Peryer, of a dead cow lying by the roadside, ears chewed, flies buzzing around, was used to promote his 1996 exhibition in Frankfurt. Many of those who saw it thought it a political metaphor—a reference to mad cow disease which had spread to people who had eaten infected animals. New Zealand minister for Agriculture John Falloon was greatly concerned, attempting to have the exhibition closed or the photograph removed, and instructing the New Zealand High Commissioner, who was to have opened a second showing of the exhibition in another German city, to withdraw from the event. https://i.stuff.co.nz/taranaki-daily-news/news/108708872/new-zealand-photographer-peter-preyer-has-died-aged-77

The collection of data via multiple recording formats, describes the conditions of place, unique to this project. To document the gothic through a habitual or lived ordinariness, contemporary ways of seeing were engaged, as attempts to uncover broader and perhaps hidden qualities of locale.

The photo-composite technique of New Zealand artist Gavin Hipkins, sees deeply, and senses the uncanny as part of the everyday. His multiple snapshot technique is so candid it appears almost laconic or off-hand.

Subtitled, *a postcolonial Gothic novel,* his photo-essay, *The Homely*, features 80 images of subjects which according to Hipkins "were used to define nationhood and historic folklore" (Leonard, 2008, para.13). The resulting scrapbook or mind map, juxtaposes "artless snaps and immaculately pictorial images, the iconic, the banal, to suggest a cinematic odyssey" (Leonard, 2008, para.13). Here, Hipkins exploits a device often employed by film-maker David Lynch. Alongside overtly relevant images (a model ship's rigging, a mock-Maori gateway, a model lighthouse, mud pools), he includes "seemingly unconnected or irrelevant images (a tyre swing, a takeaways menu, and a hooded jacket), their very out-of-placeness making them uncanny, spooky" (Leonard, 2008, para.13).

Fig. 9. The Homely, Gavin Hipkins, Photography, City Gallery, Wellington, 1999. https://citygallery.org.nz/exhibitions/gavin-hipkins-the-homely/

If Gavin Hipkins' overwhelms us with a minutiae of everyday strangeness, then Laurence Aberhart draws our attention to the slow almost imperceptible diminishment of local history. Aberhart's photography is something of an anachronism, produced using an antiquated 8x10 view camera, his black-and-white contact prints look like something from another era. Recalling colonial history, memorialisation and death, he photographs New Zealand as if recording the scene of a crime, where certain regional archetypes insistently resurface: churches, Masonic lodges, Maori meeting houses, musty museums, deserted war memorials, graveyards, cells, bunkers and courthouses. There is a sense in his imagery of time running down, or, of the end of an era. Aberhart sees this condition of the removal of history within his practice:

> I'm finding it difficult to photograph in New Zealand. Thirty years ago, there was so much more of what I'm interested in than there is now. In terms of my value system, it's diminishing … I (counter) it by photographing the humble bach before it's gone without making any overt statement about it. I choose not to go out and make the cynical vision of how awful and bland and empty the modern world is becoming. (O'Brien, 2007, para.4)

Aberhart's Anzac series was the artist's contribution to an international commemorative project, on the centennial anniversary of the Great War. Shaune Lakin sees the war memorials documented by Aberhart as part of a unique provincial typology. Memorials were incorporated into the experience of landscape or place by those who built them: "Monuments look out over settlements from high; form part of public parks, botanical gardens and roadside environments; sit alongside graves and headstones in public cemeteries; and were placed on the main streets of towns and settlements" (Lakin, 2005, para.2).

In Aberhart's photographs, we are left with an absence, not just of people, but also the registration of communities that actively preserve historical memory. The slow disappearance of historical meaning is mirrored by the lack of human activity. Within Aberhart's discourse the "disappearance of networks of collective memory, engenders in us a "responsibility of remembering" (Lakin, 2005, para.5).

April 25th 2020

Anzac day 2020 in New Zealand will be remembered for the ritual silence at dawn during lockdown. Individual acts of commemoration and families in their bubbles, ventured out of homes to participate in remembrance on driveways and verges across the country. (Extract from researcher's journal)

Haunted by an unknowable future, the gothic occurs in the everyday as an implicit tension, inherent to any area undergoing change. Although this sense of unease is hidden, or spectral, it occurs visually as a by-product of growth, or capital investment. Here the research grants agency to the Gothic, by heeding its influence not just on cultural production, but as it pertains to the everyday outside of formal literary structures. In this way the designed objects that have emerged from these sensory readings of place, are imbued with the psychical memory of sensual and uncanny encounter. Surface, recalls the indexical quality of memories, as a series of marks, scars, ruts and engravings. The qualities of surface, therefore memorialise place.

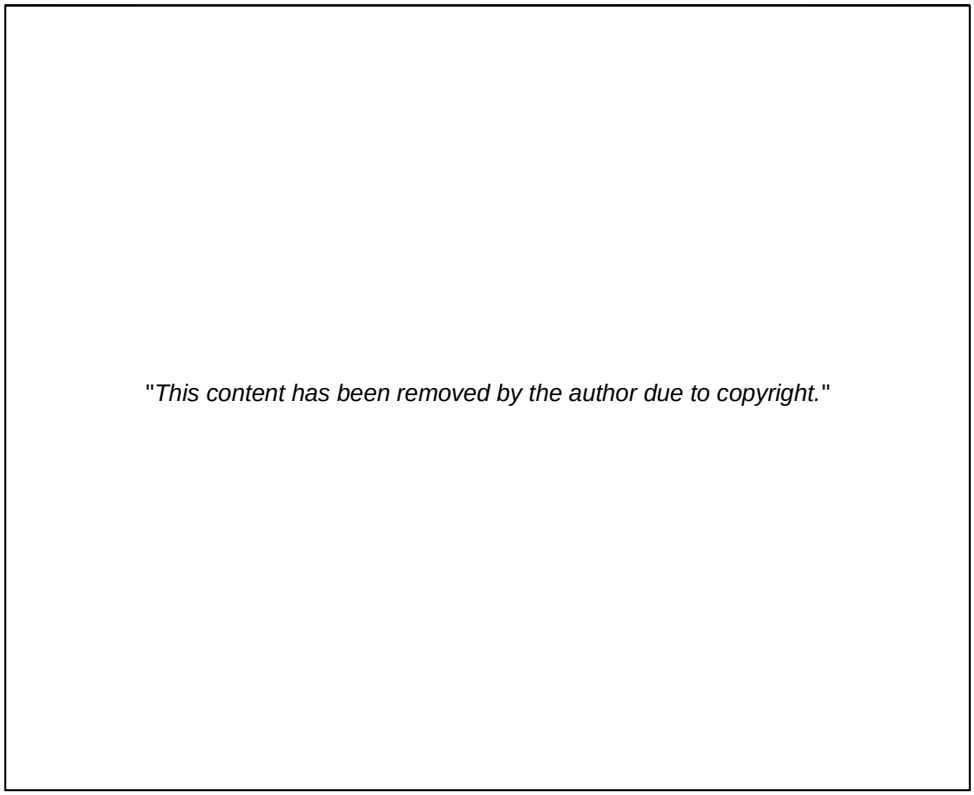

Fig. 10. Taranaki, Whanganui, Laurence Aberhart, 2009, [silver gelatine, gold & selenium toned]. https://www.gowlangsfordgallery.co.nz/artists/laurence-aberhart/available-works

3

Methodology

The scope of practice-led research and provisional restrictions of Covid, would prompt a more flexible design methodology. Early discussions between researcher and supervisor, highlighted bricolage[13] as one possible approach and this was further validated as the conditions of lock-down progressed, substantiating the need for increased flexibility and self-reliance. This chapter addresses how bricolage and the visual research method were selected as relevant and appropriate methodologies to better perceive more intimate, perceptual readings of place. Both methods utilise qualitative data, allowing for a phenomenological approach, essentially placing the researcher as a 'reflective' bricoleur.

"The qualitative researcher as bricoleur… uses the aesthetic and material tools of his or her craft, deploying whatever strategies, methods, and empirical materials are at hand" (Becker, 1998, as cited in Denzin & Lincoln, 2008, p. 5).

Levis Strauss defined bricolage as "a spontaneous creative act that uses whatever is available to reach a desired outcome" (Yee & Bremner, 2011, p.4). American academic Joe Kincheloe broadens Strauss's claim by placing *whatever is to hand*, as a means to explore research methods from multiple perspectives… "bricoleurs pick up the pieces of what's left and paste them together as best they can" (Kincheloe, 2001, p.681).

Kincheloe describes bricolage as being interdisciplinary in nature, crossing boundaries and employing more than one discipline to inform research (Kincheloe, 2001). Although this notion of being able to form temporary relations with other disciplines could be considered superficial, it is precisely the diffuse, informality of digital media that has increased the availability of knowledge to other disciplines, opening up new work-flows for the designer/maker. Now it is possible for a textile designer to use coding, or electronics within their work, or for a sculptor to embrace rapid prototyping.

[13] Taken from the French word, meaning "do it yourself", the researcher was familiar with bricolage in an art context. Used to describe a range of non-traditional art materials collaged together, becoming popular during the early twentieth century when accessibility to resources was typically limited and a make-do attitude prevailed. Tate London, 2020. https://www.tate.org.uk/art/art-terms/b/bricolage Although for the purpose of this research, bricolage was utilised primarily as a tool of inquiry, its past associations could not be discounted, particularly in view of supply-chain restrictions and more general delays imposed during the Covid 19 lock-down period.

With the rise of online shared platforms, makerspaces (that enable users to access free technology) and innovative internet retailers providing a range of services, bricolage could be seen as integral to a contemporary interdisciplinary design stratagem.

Utilising bricolage as a formal method of design inquiry also initiated the introduction of new/unfamiliar tools and techniques within the practice, and became particularly useful when established material selection and associated modes of production became unavailable as a result of the lock-down.

Novel inscription and surface detailing on untried materials (wood), allowed space for other ancillary techniques to emerge (burning, carving, mark making), where the variable and adaptive nature of bricolage allowed for sudden, eruptive, and unplanned changes to occur as part of the overall design mandate. In this sense, the constraints of lock-down were mitigated by the free corporeality and improvisatory nature of bricolage.

There is an argument to make here, that embracing a multitude of techniques and processes could spread the researcher too thin, resulting in discontinuous, underdeveloped outcomes. Kincheloe, confirms this, by declaring that some theorists have referred to the efforts of the bricoleur as misguided, verging on madness: “attempting to know so much, the bricoleur not only knows nothing well, but also goes crazy in the misguided process” (Friedman, 1998; McLeod, 2000; Palmer, 1996, as cited in Kincheloe, 2001, p.3). Perhaps, the project in some way embraced this assertion, as futile attempts to record the fragmentary, fleeting qualities of place and setting.

3.1 Visual Research

In *Visual Research Methods in Design*, architectural educator and theorist Henry Sanoff discusses the idea that the visual world is, “perceived and responded to, through sensory mechanisms that have been triggered by some environmental stimulation” (Sanoff, 1991, p.25). Sanoff’s conception of environmental research denotes a range of visual media and recording strategies to formulate a visual information base, to cognitively acknowledge our habitual encounter with place. Diagramming, photo-essays, mapping, simulations and field recordings (both audio and visual) allow researchers and designers an expanded dialogue relative to public space.

This project employs the visual data collected from site to inform the designer/bricoleur directly and it is the outcome of this research and final installation that becomes public (reaffirming place and its setting). Stitching together bricolage with Sanoff’s qualitative methodology or visual research method prompted a multisensory engagement with the conditions of site, enabling the transfer of data (as place sensibility) into final design outcomes.

The table below details how the methodologies of Bricolage and Visual Research work in tandem, and where the methods employed during the research are situated. The table was adapted from Yee’s summary table of PhD examples: *Philosophical and Methodological Influence* (Yee, 2010, p.14).

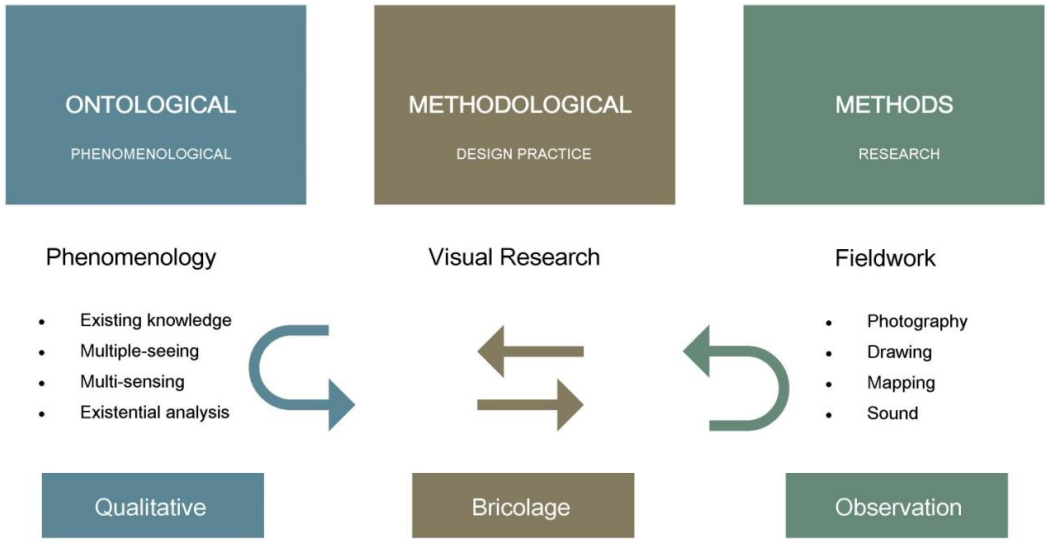

Fig. 11. Table of Methods

3.2 The Reflective Bricoleur

The term reflective practice was described by philosopher Donald Schön in his 1983 book, *The Reflective Practitioner.* Here Schön examines tacit knowledge as a form of intuition that cannot be fully articulated, but is often revealed through a reflexive act, disclosed only through a process of researching and making. Reflecting after the fact thus becomes an integral part of any research/design/fabrication nexus. It is through this immanent line of inquiry that other possibilities begin to emerge; divergent branches of exploration that embrace success or failure in equal measure. Schön further likens the reflective act as a "conversation with the materials of a situation" (Schön, 1983, as cited in Gray & Malins 2004, p. 22). Accordingly, the collection of data and archival site records were here translated as surface effect, transcribing an environmental experience or condition directly onto the artefact.

Philosopher Michael Polanyi, describes tacit knowledge as a phenomenon *that "we can know more than we can tell"* (Polanyi, 2009, as cited in Crouch & Pearce, 2012, p. 38), affirming Schön's assertion that intuitive knowledge is accessed during the practice, but cannot always be made known. Prior knowledge of tools and materials informed aspects of design research and fabrication within this research project, while tacit knowledge allowed the designer to make intuitive decisions, emboldening areas of production that although unfamiliar, were nonetheless worthy of further investigation.

4

Analysis of Practice

The following section will discuss in detail the methods, processes, and material development of work undertaken, and where relevant, will reference contextual and theoretical approaches. The direction of this practice-led research has followed three overarching avenues of inquiry:

- Analysis and documentation of place through a series of multisensory walks
- Directory of technologies, methods and processes of production
- Archiving and presentation of work through online forums and public display

The chapter begins with an analysis of the various multisensory walks. Here, the simple act of walking embraced intimate registers of encounter: observation, physical sensation, and everyday activities as a series of biographical encounters. As such, selected sites within the Whanganui Basin are apprehended through informal *dérives*, which aimed to record and capture environmental conditions through anecdotal evidence and digital archiving.

The second analytical strand employed contemporary digital technology via Adobe software to enhance and nuance resource photography. Repetition, abstraction, and gestural distortion articulated a series of cognitive maps, negating cartography as a central guide or reference point. This corruption of recognisable place, sought to describe a particular gothic sensibility, albeit removed from the pulp-wing of horror and fantasy. Concluding with aural recordings, conditions of site are further understood and replayed as non-visual locative experience.

A survey of visual research facilitates the third facet of practice-based analysis, focussing on methods of record keeping, particularly drawing. Mixed-media journaling has also been integral to the researchers practice, and here, this extends into assemblages of online visual content such as Pinterest. The chapter concludes with an artefact installed in a gallery setting, as a preliminary test of layout, composition and potential requirements around placement, interactivity and display.

4.1 Sensory Walks

“Knowledge is gained about perceptual characteristics of places by walking from one place to another” (Gärling & Gollsdge, 1989, cited in Sanoff, 1991, p.2).

The observational walks that centre this project sought to describe and record unique phenomenological encounters across three locations or *conditions* of site. Although each condition embodied unique characteristics, certain themes seemed to repeat, forming a broader unifying sensibility within the research.

- South Beach on the southern spit is redolent with animal carcases, consumer waste and associated sounds[14] due to the proximity of Whanganui airport, military barracks and Oceanview Speedway Park.
- The industrial strip along Heads Road and Gilberd Street promontory runs parallel to the river as it leads out toward the North Mole breakwater. Typical of outlying industrial suburbs it contains assortments of light industry, various manufacturing and commercial production (punctuated by open tracts of unused or redundant land).
- Castlecliff Beach acts as a destination or marker within the project and is perhaps the most unspoilt coastal setting, containing natural dune formations and coastal regeneration initiatives.

Walking has always been foundational within the researcher's practice, whereby the space of travel leads to a casual interpretation of natural surroundings (the body as 'human instrument'). Photography and beachcombing often occur as part of a walk and it is not uncommon to drag a large piece of driftwood back to the car, to later furnish the garden. Similarly, a patchwork of digital photography can be recalled later, as visual records that might prompt a drawing, digitally augmented image or fibre-based work.

[14] Environmental noise (sound pollution) is prevalent in the area.

Typically, the pacing of a walk is leisurely (it is generally a family activity), meandering and wandering without explicit aim, until an interesting artefact or vista asserts itself. In this way, walking takes influence from the dérive, to reread the environment as a series of psychological and phenomenological encounters; however, unlike the *Situationist International,* it does not attempt to offer any political critique of existing urban or social conditions.[15] Instead, the researcher is interested in cataloguing and uncovering the unique sensory data contained within a site (as part of a drifting or ambient walk). The Situationists provide descriptions of how to interpret *psychogeographic relief* during a dérive:

> The sudden change of ambiance in a street within the space of a few meters; the evident division of a city into zones of distinct psychic atmospheres; the path of least resistance automatically followed in aimless strolls (and which has no relation to the physical contour of the terrain); the appealing or repelling character of certain places — these phenomena all seem to be neglected. In any case they are never envisaged as depending on causes that can be uncovered by careful analysis and turned to account. (Debord, 1955, as cited in Knabb, n.d, para.11)

[15] The Situationist International developed a critique of capitalism based on a mixture of Marxism and Surrealism. 'Resources', *Situationist International*, Tate London, 2020. https://www.tate.org.uk/art/art-terms/s/situationist-international

The following map is an example of the notations describing the variety of sensory experiences uncovered at each site, detailing four distinct senses: touch, smell[16], sound and sight as a personal and immediate response to conditions encountered. Working this way also prompted more tactile and direct engagements on subsequent walks in the form of rubbings and solar prints, many of which later became incorporated within digital modes of drawing.

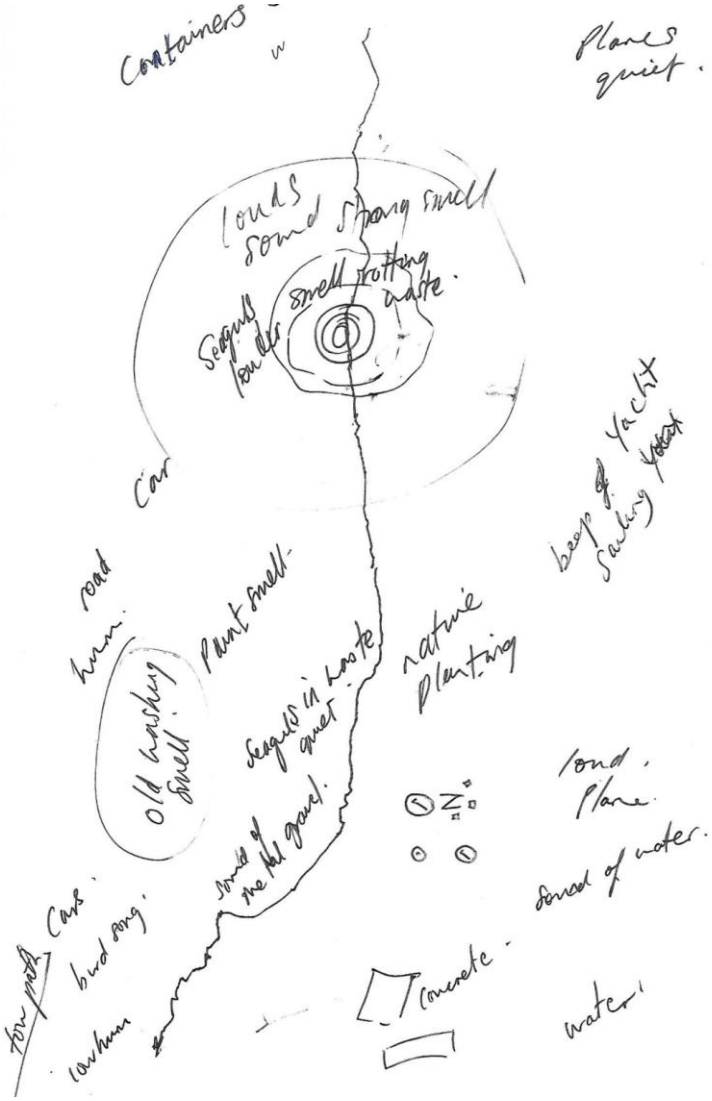

Fig. 12. Mapping on the Walk.

[16] Sensory researcher and graphic designer, Kate Mclean, maps urban environments through smell. Aptly named, *Scentscapes*, Mclean documents her smell walks with a colour coded map. Each smell experienced during the walk is registered via a colour and concentric circle depicting the intensity of smell. Here McClean is "interested in communicating links between sensory perception and urban environments in the form of sensory maps" (McClean, 2014, p.111), stimulating and provoking emotional connections with place, inspired by the more playful approaches of pyschogeography.

4.2 Photography

Of all the visual research methods undertaken, photography was credited as the most adaptable, not just to document location but as a responsive medium that could become enmeshed within other disciplines and methods of making. To restate Sanoff's earlier assertion around environmental research as a visual information base, the conditions of place are perceived (and activated by) environmental and sensory stimulation. Photo-essaying or journaling thus created a palette of textures, colour swatches and atmospheric backgrounds that would later replay across a range of surfaces and media within the project.

Fig. 13. Beach Textures.

To better record texture at more intimate scales a camera reversing ring was used. Early experiments with a macro adapter ring became a way to capture detail, with a view to eventually printing the macro images on fabric.[17] The physical act of kneeling and lying on the sand to capture a texture or a landscape within a landscape, invoked Jean Debuffet's appeal to, "kindly think seriously about the inanity of dimension" (Bogle, 1990, p.14). In 1957 he bemoaned our obsession with the grand and sublime landscape, overpowering our field of vision:

> ...It is a mad prejudice, a vulgar trap, which makes you marvel at your snow-capped peaks, high cliffs, your gardens of rare species, or your elegant islands... A crack in the ground, sparkling gravel, a tuft of grass, some crushed debris, offer equally worthy subjects of your applause and admiration. Better! For what is more important is not reaching objects of reputed beauty after long days of travel, but learning that, without having to move an inch, no matter where you are, all that first seemed most sterile and mute is swarming with facts which can entrance you even more... The world is made in layers, it is a layered cake. Probe its depths without going any further than where you stand, you will see! (Bogle, 1990, p.14)

Although the macro photography successfully captured an inherent strangeness of scale, it was difficult to maintain a satisfactory depth of field. Due to these issues around sharpness and focal distance, scaling up the image to print on fabric was abandoned. Nonetheless it did provide a reflective pause, to reactivate a "conversation with the materials of a situation within the practice" (Schön, 1983, as cited in Gray & Malins 2004, p. 22).

[17] Using the ring enabled a Canon lens to be flipped around, essentially turning it into a tool for macro photography.

Fig. 14. Macro Photography.

Fig. 15. Detail of Maquette.

4.3 Early Maquettes

When the nationwide lockdown was announced, there wasn't time to plan how to continue the project at home. Fabric ordering was put on hold due to the protracted wait time and there were limited data-sets to proceed digitally. Taking the bricoleur approach of salvaging what was at hand, the shed at home provided a range of wood scraps suitable for mark making. Some off-cuts of doweling and a discarded shelf gridded and cut into squares became materials for exploration. Experiments began with a hastily bought rotary tool[18] while mark making and burning the wood[19] on a camp stove[20] proved successful. After the timber had been seared, an application of Indian ink and some buffing resulted in a beautiful surface sheen. Acrylic paint, marking, more burning and ink ensued, and the idea of creating a piece of furniture began to crystallise.

The initial mark making on the wooden dowel took inspiration from the damage created by the Borer beetle; there are many examples of insect micro-patterning in evidence on the innumerable pieces of driftwood scattered across the three sites. The rotary tool was able to replicate these marks easily, while burning and then staining with dye and ink achieved more favourable results. Some of the printed fabric that had not been as successful, was added to the dowel and the '*Sticks*' as they became known, became imbued with (multiple) dimensions of possibility.

Making test models was an important part of the research at this stage. Small scale, quick and affordable, the maquette answered questions around detailing and abrading surface. Despite the progress around working at such a small scale it still did not resolve questions around scaling up the mark making.

[18] Non essential businesses eventually opened, albeit with social distancing. Purchasing more doweling from Mitre 10 became a surreal experience. Ordering online for click and collect saw timed slots for drive-in collection.
[19] *shou sugi ban* is a centuries-old Japanese technique for preserving and finishing wood by charring it with fire.
[20] The camp stove was not ideal for burning wood and so a gas burner was acquired for the remainder of the project.

Fig. 16. The Sticks.

30th March 2020

“After discussions around making interior objects that would be experienced through touch, it became apparent that the very act of touching was becoming taboo in our Covid world. Maybe people would now be resistant to touch. Suddenly what was a normal response, (sitting on a bench), became something to fear.” (Extract from researcher’s journal)

4.4 The Bench

After successfully mark-making on wood, the idea to scale-up seemed like a logical next step, although, a method of presentation (and engagement with textured surface) still needed to be resolved. The integration of a bench seat as part of the design was twofold: firstly, it became an interior object that represented the beginning and end of a walk. Sitting on a bench to put on shoes, getting ready for a walk, recovering at a journey's end, are all emblematic of the rituals we perform before and after (and sometimes as part of) a walk. The bench would become a transitional narrative device characteristic of interiority and exteriority. The second line of reasoning addressed the need for a structural armature to support the textured wooden surface, (more conducive to touch as a bench, than something affixed to the wall).

Taking inspiration from the scale and simplicity of George Nelson's, 1946, *Platform Bench,* local manufacturers were approached to fabricate and weld metal legs. Wood was sourced from a New Zealand supplier, but had to be ripped and laminated. This was when the limitations of the maquettes became evident. Smaller scaled pieces burnt well, but what would happen when laminated wood became hot? Would the integrity of the laminate be affected?

Three laminated wooden tops were completed and then taken to the Palmerston North UCOL carpentry workshop for finishing. Laminates were put through a range of machines that planed, cut, sanded and straightened. The process to finish the three timber bench seats took over two hours; suddenly, the thought of burning and carving into such immaculately dressed timber seemed daunting.

Mark making on larger pieces of wood required a slightly different approach. The sanding drum on the rotary tool worked well, and with the wood situated on an easel, the tool could be worked like a pen, moving across the surface, carving and subtracting layers. Careful burning with a gas torch to scorch through the top layer, removed any need for fine sanding, while buffing with a rag and applying ink, created a look reminiscent of black jet.[21] The texture was smooth to the touch and the finish became more uniform as it contacted residual sweat and grease from the maker's hand.

The local beaches offer a plentiful supply of driftwood and it is not uncommon to see large make-shift structures dotted along the coast, encircling the charred remains of an evening bonfire. It was this relationship between the carbonised/bleached wood, and colour/texture palettes of the beachfront that formally inspired the bench. Achieving a natural looking gradation on the surface

[21] Jet is a black mineraloid derived from wood that has been fossilised over millions of years.

was difficult to achieve, and early feedback highlighted that a less pronounced transition between burnt and untouched surfaces would read better.

Sanding back areas required more burnishing, resulting in new cracks and there was a concern that the glued joints could pull apart. As a result, not all of the freshly sanded area was seared and the outcome was slightly disappointing. The smooth, sleek, black ebonized surface was only possible when waterproof Indian ink was applied directly over the slightly charred wood and buffed with a soft cloth. Without burning the ink soaked into the timber, tearing the wood fibres as moisture rendered the surface '*fuzzy*'.

An application of furniture wax didn't solve the problem, nor did sanding with the grain (wood sealers were not considered) and the question remained: how much burnishing could the timber surface absorb before it failed? Would a solid slab of wood retain its integrity, or should a surface be pushed to breaking point and then reconsidered?

For the bench seat cushion, memory foam was trialled for its ability to regain its shape after use; however, an early attempt with the foam found it was sitting too high and dominated visually. Placing the sheep fur print on the bench without any foam looked more interesting than the cushion, so it was decided that the thinnest piece of foam available would be the better option. A memory foam bath mat resolved the problem and produced a more desirable height. Leather straps were added to keep the cushion from sliding and a little piece of fake fur was added to one of the recessed corners to caress. The bench, although not fully finished, was beginning to realise a sense of place.

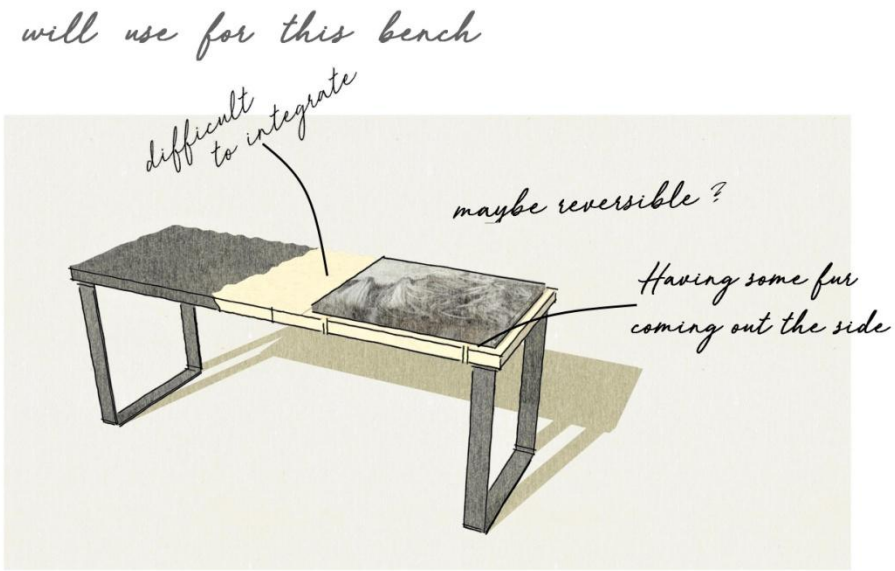

Fig. 17. Drawing Over SketchUp.

4.5 Visual Diary

The visual diary was an accessible medium to store images, roughs and annotated sketches. It could be carried out in the field, used in the workshop, or accessed at times when computers were not available. Working on paper is familiar and well established in the researchers practice and continues to have merit (even when countenanced with digital workflows). Three books were used: a diary journal (exclusively devoted to written observations and note taking), a design sketch book (detailing measurements and technical drawings for contractors/fabrication) and a more traditional image based book or *field journal* containing drawings[22], photographs and annotated notes/reflections. Although the diary included photographs, in this digital age the amount of digital images captured is vast and so a method for storing and sorting imagery became important. Although Google Docs was used as one possible receptacle, the idea to utilise Pinterest came from the need to collate and share work for feedback.

Fig. 18. Visual Diary Pages.

[22] Drawing and painting has always been an important tool for the researcher to explore ideas in the work. Through mixed media, collage, printing and digital drawings, new ideas surface, problems can be solved and sketches enable the communication of ideas to others.

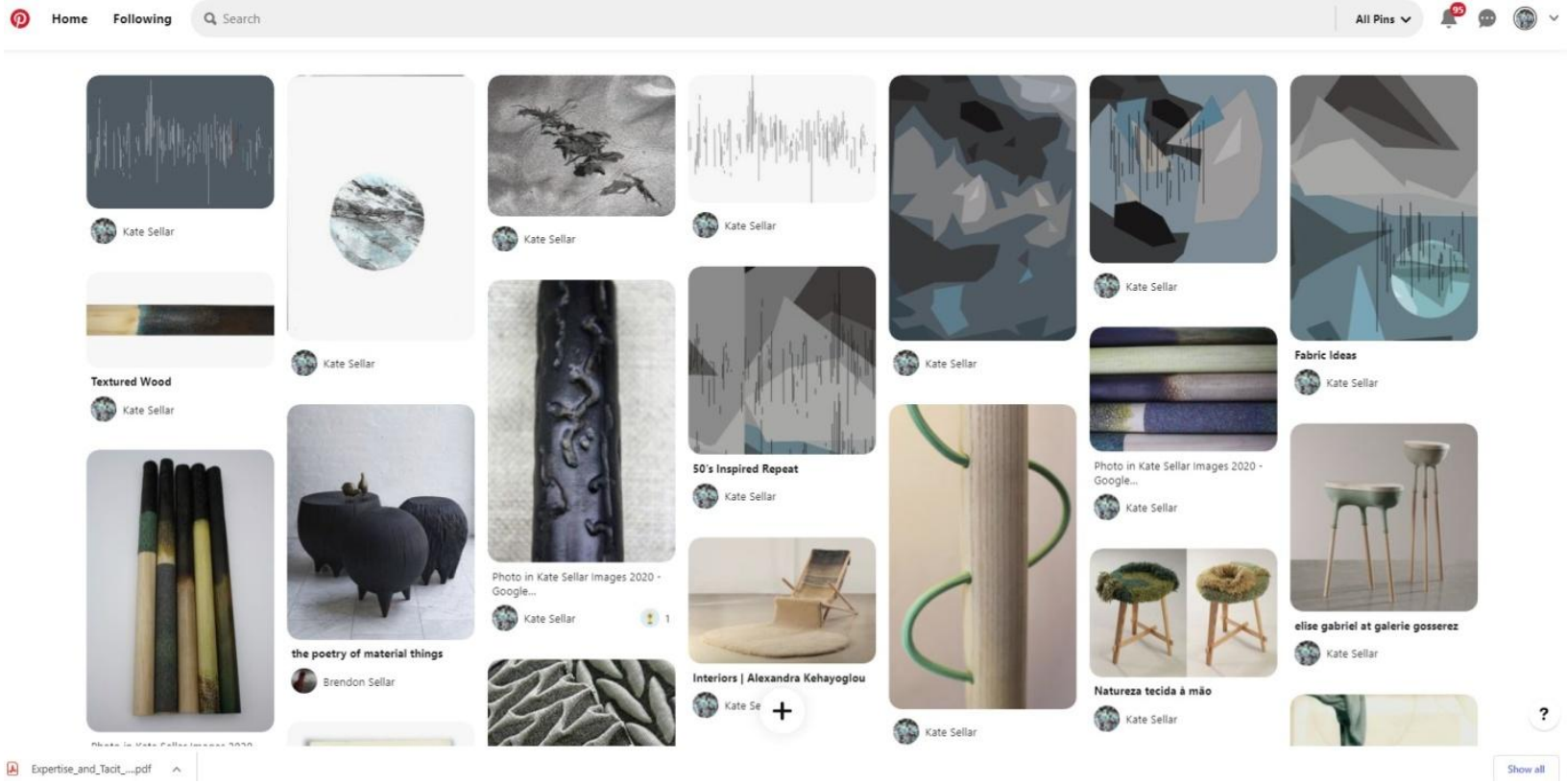

Fig. 19. Pinterest Board.

4.6 Pinterest as Visual Research Method

Pinterest was incorporated into the visual research method at all stages of the project. Pinterest allowed the researcher to quickly save images that resonated and related to the research inquiry. A digital collage of ideas, removed the need for magazine cuttings and photocopying books. As the images grew, key ideas began to surface and through further categorisation and curation, new boards/subcategories emerged. These additional boards contained important information, as visual design elements became apparent for the researcher. Further analysis and reflection highlighted design changes; what at first seemed important was discarded, leading to new ideas and a change of perspective. A designer can create their own visual language through their boards and this can become a critical tool for refining design ideas. Using a combination of found pins, coupled with the researcher's own work, Pinterest offered an online, real-time digital critique. Comparing ideas/work against others, lead to a series of reflexive questions: is the work of a high standard? Do the visual elements make sense? Are they cohesive? Is a visual aesthetic developing? Is the work original? What new insight about the practice can be gleaned from this? As the researcher created and refined the work, it was uploaded to a final collated board. As further images were added, found pins were removed.

4.7 Test Space

It is anticipated that the project will show at the Edith Gallery (a small community gallery attached to the UCOL Whanganui campus) in early 2021. As the space became available in mid-October 2020, it presented an opportunity to photograph and critique the work in situ.

Although the possibility of another lockdown loomed over the remaining timetable, locating and appraising design outcomes in a host-setting was still necessary (particularly in the event that the work might be experienced as a *virtual exhibition*).Taking completed pieces from the digital sphere/workshop into a gallery space, allowed considerations around staging to emerge while resolving issues of scale/weighting, hanging methods and general positioning. It also gave the researcher a chance to reflect on how surface textures would read under controlled lighting conditions and whether these treatments should be further scored, deepened or rearticulated for heightened effect.

Fig. 20. Bench in Test Space.

4.8 Cognitive Mapping

> "Our bodies easily conform to the familiar places of routine, and exploring the urban landscape outside of our regular patterns of movement means we can experience revelatory discoveries and create *spatial stories*" (de Certeau, 1984, as cited in Heywood & Howes, 2017, p.31).

Until this point the research had focussed on recognising unique place characteristics through simple analogue interventions and photographic record. Now, the conceptualisation of experience began to shift, to record and mediate a sense of place through digital technologies, as the project began to look toward more graphic and abstracted representations of place.

Urban planner Kevin Lynch put forward the idea that people orient themselves when walking through 'mental maps', where the street and the landscape have a legibility that we can recognise and read. In this way, we all engage in a type of intuitive map-making (as our memory organises elements of our location into coherent patterns that we recall later). Lynch believed these mind-maps created a generalised picture of the exterior physical world retained in memory by the individual. Such an image, was the product of both immediate sensation and memory, and was therefore used to interpret information and to guide action (Lange, 2009).

Route-finding, that is, locating and orientating oneself in the built environment is an essential part of place-making. However, our understanding of urban or exurban space does not necessarily easily correlate to the formal descriptions offered by plans and cartography (Heywood & Howes, 2017).

To further understand some of the conditions encountered across the three sites, the researcher created a selection of cognitive maps as abstracted representations of space. The maps attempted to graphically represent moving through twisted debris fields of driftwood, rising in varying densities and concentrations across the three conditions.

To schematise this encounter, the maps chart a course of flows, rhythms, deposits, accumulations and patterns. The driftwood maps were an attempt to invent a system of textures, densities and grades that retraced a route through drawn gesture. Formally, the drawings were created as a series of lines inscribed over Google Earth maps showing concentrations of driftwood; multiple layers and the blend tool in Illustrator, bent, curved and distorted these original marks rendering them diffuse and unrecognisable.[23]

[23] The researcher uses a Wacom Cintiq to mark out these lines over the original map.

Spectrographic lines and sound waves were subtly added to further augment the image. In one sense the drawing was a mapped recollection (in the spirit of Lynch's 'mind-map') of the meandering routes taken through piles of organic and inorganic material. It was also the product of both immediate sensation and memory, whereby the digital algorithm interpreted information providing a sensation of active feedback that guided action inside the drawing.

The resulting triptych conveyed a curved spine, with a series of spiky appendages protruding outward. Starting with simple gestural mark-making, the stroke, image trace, live paint and warp tools in Illustrator, had become crystallised into an affective cartography that traced a physical and psychical journey through space.

Fig. 21. Cognitive Maps.

For Daniel Widrig, digital augmentation allows a designer the “possibility to generate and materialise form that could not, or hardly be achieved in any other way” (Shillito, 2013, p.23).

In this case the researcher’s digital drawing became a way of cognitively representing an experience via mapping. The atmospheric and almost synaesthetic effects would not have occurred, had the mapping been attempted manually.

“The use of these technologies changes the way you think about making as well as your physical practice, it is not just a case of using a technology to functionally provide a new means of doing something” (Shillito, 2013, p.24).

While some practitioners are concerned that “expression and spontaneity can be reduced through protracted designing in this way” (Clarke, 2011, p.138), here the researcher sees advances in drawing tablets and digital technologies as a negotiation between the hand-made and the digital, where one is not privileged above the other. Blending traditional design practice with the digital offers the maker a reappraisal of established methods of working, while embracing innovative digital invention.

Fig. 22. Digital Drawing: Phenomenological walk through driftwood.

4.9 Fabric Becoming Drawing

Concerned with sensory perception and creating surfaces that invite touch, the haptic qualities of fabric were intended to be further embellished by the maker's hand. This could be rendered through the addition of heated foils or flock, screen printed/puff paste and/or embroidery. The final iterations of the 'drift-wood' maps are intended to contain this additional delicate ornamental surface detailing, softening and further abstracting the images. The researcher has considered digitally printing on canvas, although sheer fabrics are also open for consideration.[24]

28th March 2020

"Received the fabric swatches from Spoonflower, they're okay, but improvements need to be made. The test prints also came from AUT's TDL, the colours are more subtle than Spoonflower, but the linen is too lightweight". (Extract from the researcher's journal)

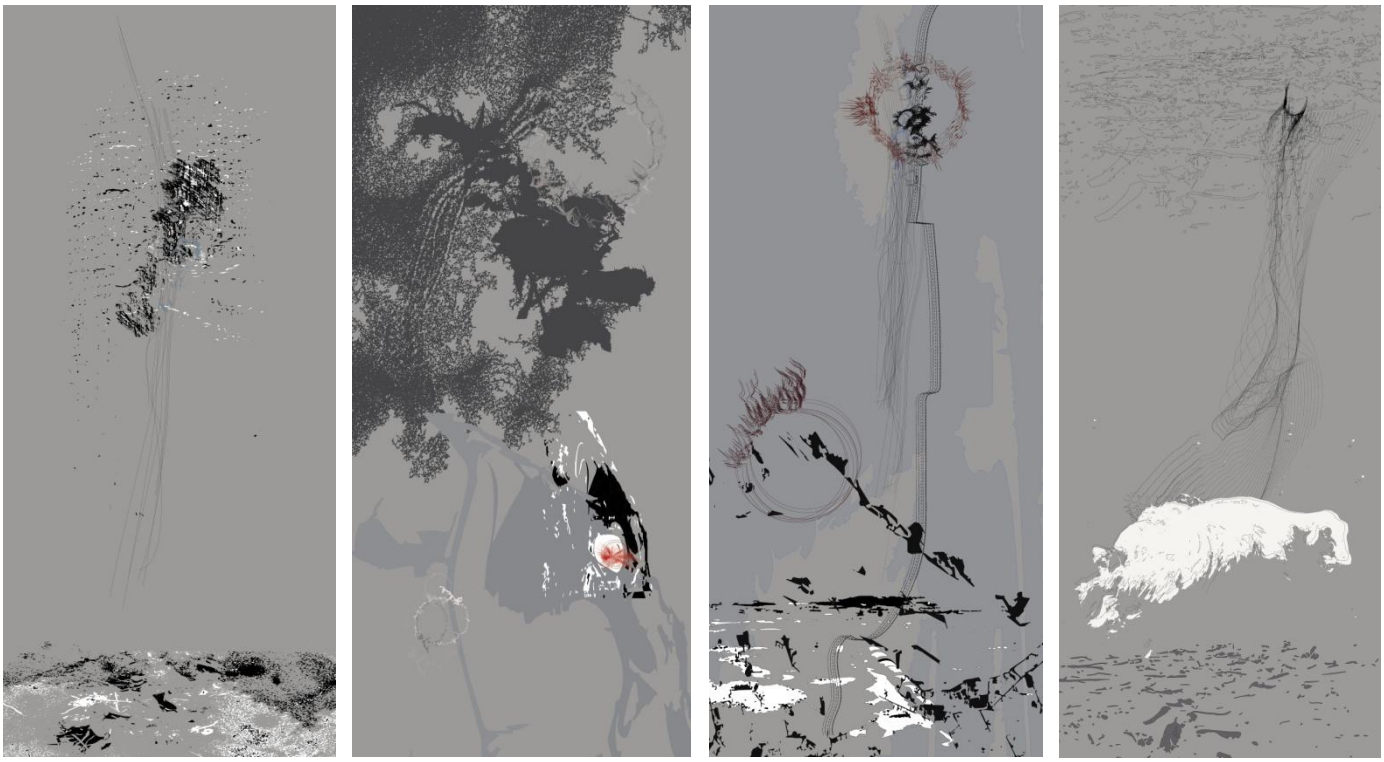

Fig. 23. Mapping the Sites.

[24] It is anticipated that the quality of the image and embellishment will add a rich substrate to the digital print if reproduced on canvas.

The photograph of the decomposing sheep, discovered on South Beach was a pivotal moment inside the research, as the inherent rawness of the photograph attached itself to the project through a gothic sensibility. The raw quality of the image was played out on initial test-prints (no filters were added in Photoshop) and the 'aliveness' of the printed fabric led to its inclusion on the first bench. For the bench cushion, the image was cropped to focus on incidental details within the frame which included tiny pieces of debris (leaves, twigs) being trapped in the animal's coat. This prompted a decision to explore a combination of both abstracted digital/drawings and photorealistic trompe l'oeil prints on fabric. Interestingly, when people first engaged with the bench seat they felt the fabric looked real,[25] although only printed on fake suede it emphasised that physical engagement with surface wasn't just tactile, but also contained a visual element, an inherent quality in trompe l'oeil.

Fig. 24. Dead Sheep on South Beach.

[25] Some people thought a leaf was 'stuck' to the fabric while others wondered why it hadn't been photoshopped out. In the researcher's honour's project, photography work was altered through software filters; this was largely due to issues around the lack of clarity when printing on natural fabrics. By applying filters it was possible to mask imperfections while also embracing elements of chance. Over time the quality and accessibility of digital printing on fabric has improved greatly. No longer relying on sublimation printing on harsh polyesters, the textile designer can achieve greater accuracy through colour matching while a large range of quality natural and synthetic fabrics are available as printing substrates.

4.10 Aural Recordings

After Whanganui returned to Level 1, recording soundscapes across the three conditions became the focus of inquiry. Adobe Audition[26] was used to open recorded audio files, where waveform and spectrographs[27] displayed sounds as a series of visual disturbances: energy, frequency, amplitude and time. These images were captured using the Microsoft snip tool and although the resolution was low, further manipulation in Illustrator or Photoshop lifted the quality, enabling the images to be scaled-up without loss of detail.

The experiments with spectrographic images appeared dramatic, and the waveform patterns could be extracted using Illustrator's live trace (this was developed further as part of the driftwood maps series). Recordings were intended to integrate sound as visual data/symbols in visual outputs while sound in its raw form was to be accessed via scanning QR codes situated on the wall[28] of the final show.

Importing the field recordings into Adobe Audition, enabled sounds to become graphic representations; these could be transferred into other Adobe applications for post production. A useful precedent originating in the UK, *Aural textiles: Hybrid practices for data driven design* (Jaramillo & Mennie, 2019), captured sounds in the landscape to create contemporary textile patterns. In order to generate imagery, the UK researchers broke processes down into three steps: capturing, transforming, and visualising. Any device able to capture sound was used to generate recordings, and these were then transferred to audio software for further experimentation. Screen captures of generated sound waves and spectrograms were registered, translated and manipulated further to create digital textiles.

The findings from the UK project noted that it challenged many traditional ways of collecting data, allowing for greater experimentation. The researchers felt that the project “promoted a new awareness of sound in the landscape” (Jaramillo & Mennie, 2019). Many of the designers began to see their environment aurally, turning their ‘seen’ reality into a kind of spectrographic representation, while others started to develop a heightened sensory awareness of their environment.

[26] Adobe Audition is a comprehensive programme for editing, creating and mixing audio.
[27] A spectrogram is a type of audio visualisation of intensity – where the spectrum of frequencies is played across time, rather than pure amplitude (typical in waveform visualisations). Applications can include: recognising phonetic speech, bioacoustics, and even seismological vibrations (something the researcher investigated). The data sets nestled inside the project, have lead the researcher to understand place, siting and situating through *sound-sensing*.

[28] QR codes have been used since 1994 as machine-readable optical labels that usually transfer the user to a website for further information. Although long established, the QR code technology made a comeback during the Covid Pandemic as a means to track a person's movements. All businesses in New Zealand were required to display a QR code.

Fig. 25. Seagulls at the Transfer Station.

EnviroWaste Whanganui Transfer Station and Recycling Centre

Gilberd Street runs parallel to the river as it leads out toward the North Mole. Following the raised embankment and looking southwest affords a view directly across to the southern spit, while turning east glimpses of Mount Ruapehu can be made out (on a clear day) between the industrial sheds and outbuildings. The coastline here is muddy and partially stopbanked by concrete hard-fill and varying amounts of waste: tyres, oil drums, discarded television housings that appear between the layers of brick, rock and aggregate.

Sound recordings at the EnviroWaste Transfer Station on Gilberd Road, caught a colony of gulls bickering over piles of refuse. It is intended that this cacophonous soundtrack will be accessed via QR codes as part of the final installation.

Fig. 26. Sound Waves.

This multisensory approach to pattern making captured fragmentary moments in time, documented as visual representations of sound; an active and temporal presence in the landscape.

Following the same methods of capturing sound and developing an associative visual representation opened up possibilities, not only for textile printing and design, but for integration within other media. As the sound data became ever more abstracted, symbols were integrated into fabric designs, drawings and sensory maps.

Creating aural landscapes relayed an awareness and attunement to peripheral or incidental sound; such *sound-to-pattern-making* allowed the researcher to see digital patterning as an embedded-landscape within the work.

During the lockdown *sense of place* became highly attenuated due to a-lack of, or changes in typical human activity, (less traffic, aircraft, increased foot-traffic) while more naturalistic impressions became amplified (waves, birdlife, meteorological conditions). The researcher became acutely aware of this new heightened receptivity to place, and this (in part) ambitioned certain sensorial aspects of the project; sea birds squabbling and congregating at a transfer station, the low hum of a Fonterra Plant all became psycho-acoustical memories reinforcing the characteristics of place.

4.11 Printed Topologies

Appended here are some innovations that appeared later in the project, and could be further developed within the researchers practice. As photography had captured a certain raw, viscerality, more playful strategies began to reinterpret scale and recorded surface. The walks had documented an array of surface conditions unique to each place condition, while digital photography in particular had catalogued a large number of exterior conditions: sand, wood, earth, concrete and exposed surface envelopes.

A late development within the project occurred when photographs were quickly extruded in the 3D view setting inside Photoshop. This allowed multiple ‘snap-shots’ or candid images to be realised as 3D models. Although the print quality was uneven, with some evidence of surface ‘ringing’ (vibration causing oscillations on the printed surface) it was decided to add a textured layer rather than sanding. The 3D prints then became an account of the many excursions that took place over the three site conditions.[29]

Fig. 27. 3D Extrusion in Photoshop.

[29] 3D printer files typically originate from computer generated modelling, in this way CAD files provide a document of generative design process. From figurines to complex parametric shapes, CAD provides evidence of a considered output (even if the quality of modelling varies). The researcher spent time exploring programs such as Fusion 360 and Sketchup. One plug-in for Sketchup (bitmap-to mesh) proved particularly useful, as a data transfer to create meshes of varying quality and complexity.

Fig. 28. Photo of Sand.

Fig. 29. Extruded Sand in Photoshop.

Fig. 30. 3D Printed Sand, Textured.

Fig. 31. Sign on Heads Road.

5

Conclusion

Our lives and experiences of place are now truncated into ‘bytes’ that bypass deeper meaning, while contemporary narratives of landscape and locale are pushed through global networks that render location almost unrecognisable within the context of everyday experience.

Cataloguing the three site conditions that make up this project, has been an attempt to integrate digital modes of representation within the elemental practice of walking and looking. Photography, digital production, and sound recordings have combined as part of simple analogue interventions, to capture the raw, visceral, and at times playful visual and sensory anecdotes of place. For the researcher, this integration or co-option of technology alongside more analogue ways of making has opened up new design possibilities within the practice.

Such active strategies have reinterpreted scale, meaning and sensation, apprehending place and setting through a *regional living Gothic*. Here, the project could have embraced historical narratives, or unearthed an archaeological or geologic understanding of environment through natural systems. So too, the political overtones of Situationist tactics and strategies, may have brought up regional anxieties as some form of overt crisis of the political. Instead, the researcher has engaged a more spatio-poetic dimension as the psycho-geological/historical/archaeological coalesce from inside the pyschogeographical landscape, as a terrain of lived, walked experience. Ordinary observation as part of a series of coastal walks, ground this project within the everyday.

To represent place-data through a series of investigative or cognitive maps moved the research into strange and uncanny territory. The graphic and abstracted representations of landscape, appear as affective cartographies that seek to undermine the “master narratives” (Bird, 2016, p.17) sold by Google as part of largely commodified, visual frameworks.

The omnipotent views of terrain and landscape that Google Earth offers us are fantasies of global knowledge when perhaps the real truth of such representations are more intimate, eccentric and surprising. The totalising narratives of satellite imagery, (paradoxically) offer a potentially “darker phantasm” (Bird, 2016, p.19), revealed through the personal and speculative reimagining of place-data.

Digital augmentation can reorder our approach to representing landscape and topography, while provoking an awareness of other, stranger aspects of lived-reality. In this way the project approaches design as a departure from scripts and agendas that suggest how to view and engage with a site or location.

The approach of itinerant bricoleur has helped to order and archive the multiple methods utilised by the researcher. To record sound, surface, texture and ambient effects of landscape has required a flexible and (at times) improvisatory approach. The range of data accumulated through the research has only been matched by the variety of outputs that attempt to rearticulate three unique sites or conditions.

Sensory design was originally part of an avant-garde approach to surface where from the middle of last century to the present, designing for, and to, the senses, has been incorporated into a range of design disciplines (Bucknell, 2018). Interior and product design, architecture, medical devices, fashionware and even mobile apps now react, conform or engage with bodily senses. Similarly, neuroaesthetics is becoming more prevalent within functional, human/body scaled designware. Monitoring bracelets are providing direct feedback sensations that influence and regulate ambient interior space. Such environmental controls linked to sensory outputs are sure to feature more prominently as part of new design pathways.

While the practitioner finds many of these initiatives exciting and filled with much potential, the research sensibility this project has engaged seeks to ask wider questions around the reality of everyday lived experience. Technology can help mediate our sense of place, but it cannot replace it. Similarly, a technologically commodified gaze does not see as deeply as our personal interactions with landscape as part of locative experience.

Using data collected both physically and through more technically mediated means opens up a hybrid design methodology, by taking streams of inert data and animating it into something atmospheric, vibrant and strange.

In this sense the gothic is spectral, it appears, flickers, and then leaves us. It is woven into material surface, modes of production, and networked ecologies. The corporeal and digital data that informed approaches to making, occur across the objects and artefacts that comprise this project. Recorded imagery and place-data provided an account of slow progressions across terrain — a projected “liquid patina” (Bird, 2016, p.14) mapped onto the memory of surface.

The stories presented here are narratives of data and place, not of a verbal, spoken lineage. In this way technology has an impressionistic response coaxed out of it; a mediation between digital and analogue ways of making.

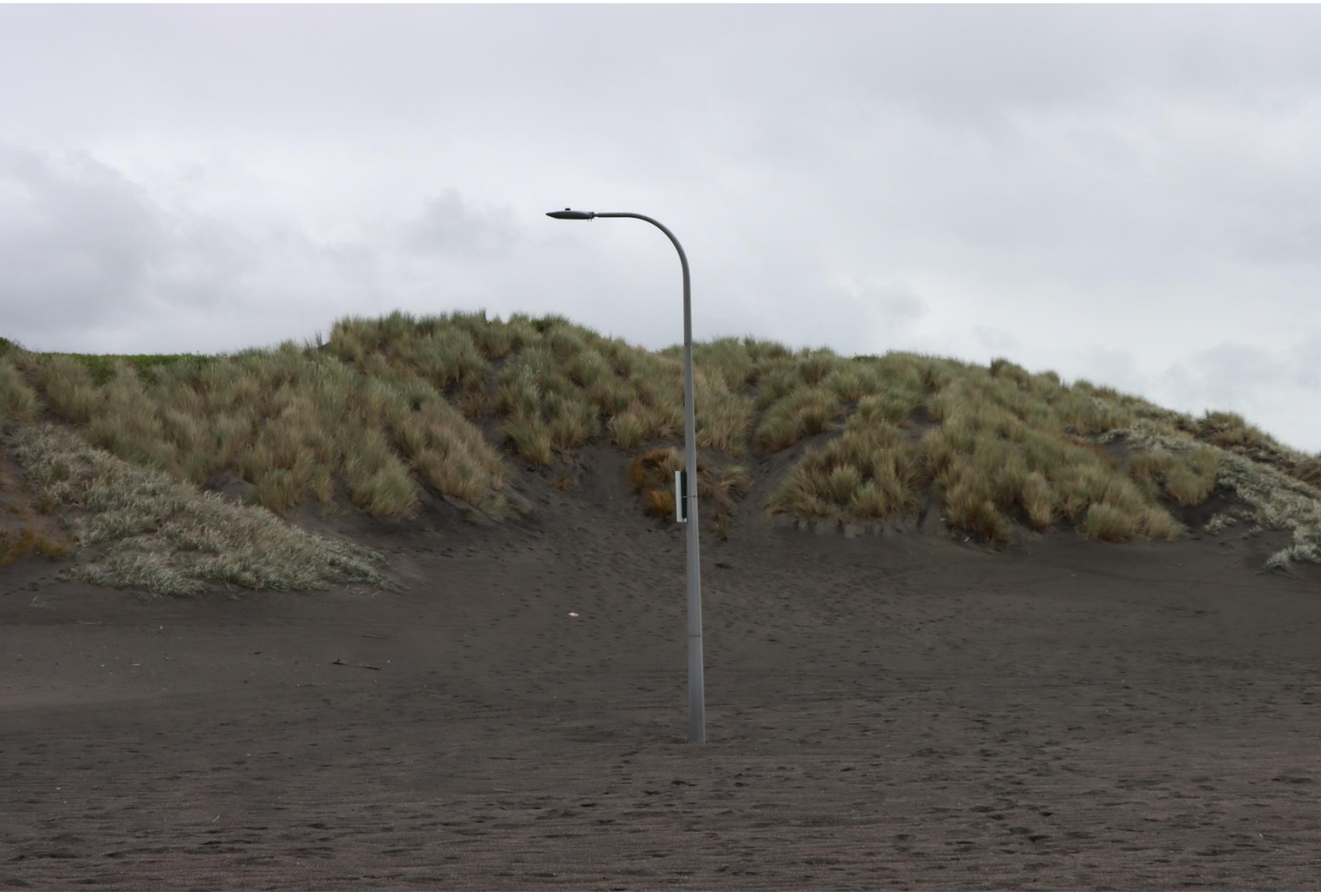

Fig. 32. Street Light Caught in the Shifting Sands, Castlecliff Beach.

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Appendices

1. Heads Road

Fig. 33. Bach on Heads Road Awaiting Demolition.

Fig. 34. Mars Pet Food Factory (due to cease production, Christmas 2020).

Fig. 35. The Victory Shed, (due for demolition to make way for the new port redevelopment).

2. Gilberd Street

Fig. 36. Low Tide, Whanganui River.

3. North Mole

Fig. 37. 1080 (manufactured on Heads Road).

4. Making the bench

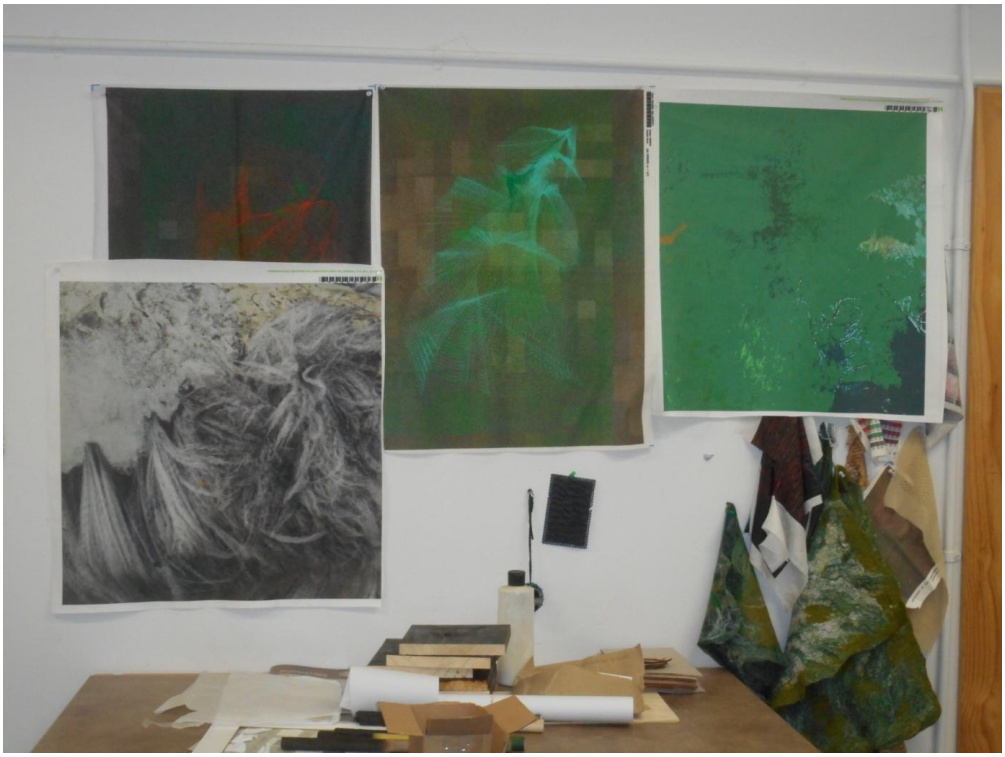

Fig. 38. Work Space.

Fig. 39. Testing the Cushion.

Fig. 40. Gluing the Wood.

Fig. 41. Clamping (ready for finishing).

Fig. 42. Beginning the Bench.

Fig. 43. Bench Detail.

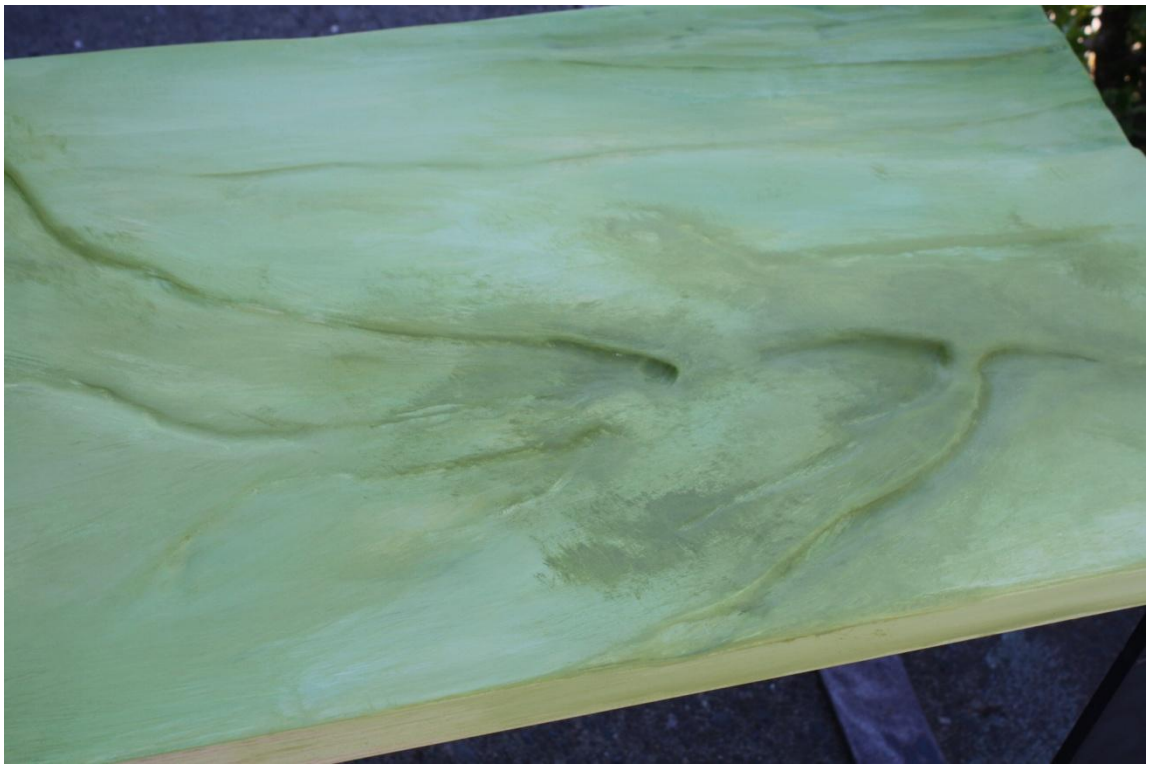

Fig. 44. Beginning the Second Bench.

Fig. 45. Detail, (completed second bench).

Fig. 46. After CNC Milling, (the third bench iteration was hand sanded).

Fig. 47. Final Detail, (burning, inking and wax on the third bench).

5. Digital Aural Experiments

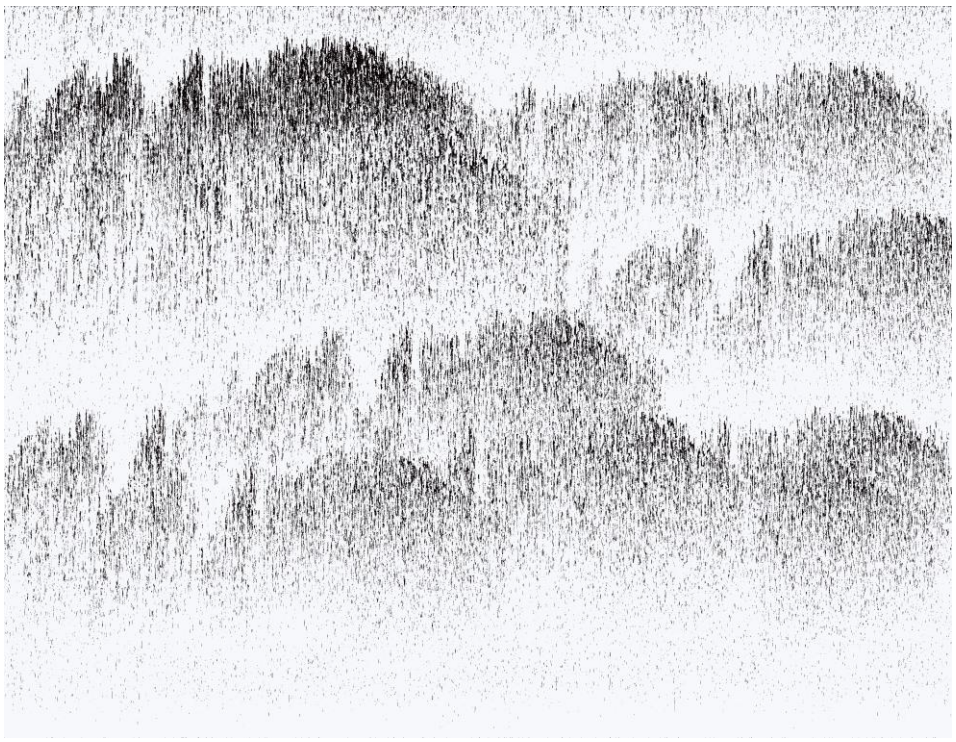

Fig. 48. Repeating and Layering Sound Lines.

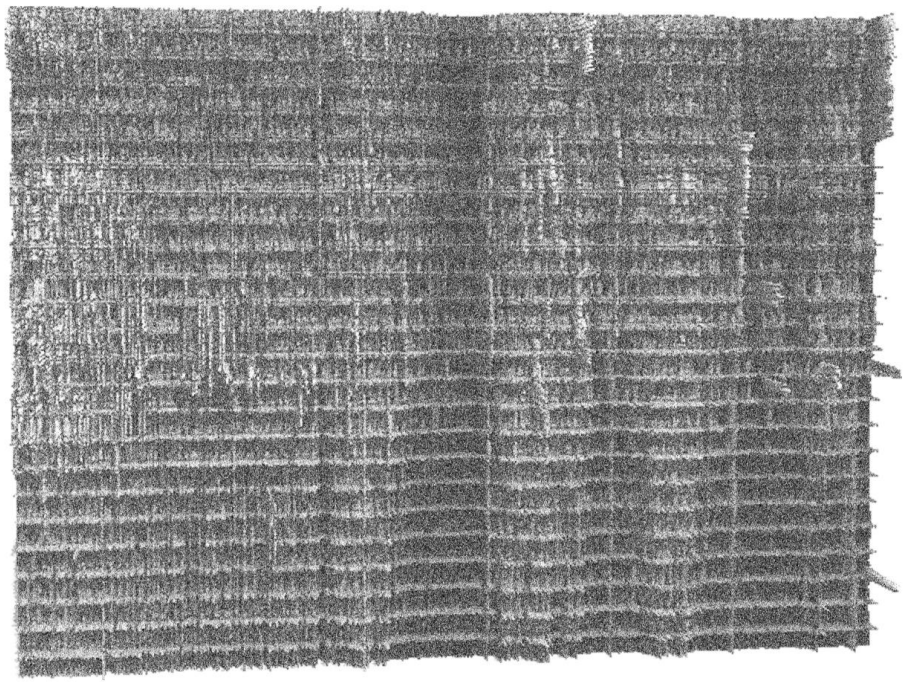

Fig. 49. Extruding a Sound File in Photoshop.

Fig. 50. Beach Detritus (study).

6. Final Exhibition 2021

Fig. 51. Exhibition Poster.

Sense of Place: Addendum

Sense of Place: A Multisensory Approach to Design formally opened at the Edith Gallery on the 2nd of February 2021. As an art and design installation it sought an immersive experience beyond the typical exhibition or survey format. Visitors were encouraged to take an active part in the work, through three wall mounted QR codes (Quick Response codes), which could be accessed via mobile phone.

The placement of these readable optical labels invited people to move around the space, while experiencing a selection of soundscapes taken across the three sites or conditions analysed within the project. Correspondingly, three completed benches were positioned to frame a view of the various shear hangings and wall mounted triptych of cognitive mappings.

Visitors could sit on the benches and engage the various surface treatments through touch — an appeal to actively engage the work as part of performative and sensory action. Similarly, the interaction between viewers and matrix barcodes generated an atmospheric experience; a complimentary relationship between the QR codes (as emitting-receiving-media) and hangings/artefacts.

Fig. 52. Triptych.

Fig. 53. Final Exhibition (view).

Fig. 54. Final Exhibition (view).

Fig. 55. Final Exhibition (view).

Fig. 56. Detail of Bench Seat.

Fig. 57. Wall Text with Hanging.

Fig. 58. QR codes, (exhibited in the exhibition).