



WAIKARE The
Dying
Lake &
the Embodied
Artist

Designed by David van Vliet

Proofread by Elwyn Sheehan

Type set in:

Bembo MT Pro Semibold 25pt (headings)

Bembo MT Pro Regular 10.5pt (body)

Bembo MT Pro Regular 8.5pt (footnotes and figure captions)

WAIKARE The
Dying
Lake &
the Embodied
Artist



DEDICATION

I dedicate this thesis to my parents, Albert and Joanne van Vliet, who nurtured my curiosity for the world and equipped me to explore it.

I love you dearly.

A research component submitted to Auckland
University of Technology in fulfilment of the
requirements for the degree of Doctor of Philosophy.

DAVID-JOEL WILLEM VAN VLIET

Master of Design (First Class Honours)
Auckland University of Technology (2020)

Bachelor of Design
Auckland University of Technology (2018)

Abstract

This practice-led doctoral thesis considers the nature of embodied engagement with a polluted, localised environment (Lake Waikare). Accordingly, the research asks:

How might lens-based recording serve in expressing an embodied connection to land?

Situated in the context of the Anthropocene, the study frames cognition as situated, embodied, and inseparable from the environment. As such, it offers a shift in focus from global, political mobilisation to embodied relationality (Ingold, 2021). Through repeated site visits to the lake, lens-based recording, and synthesis of moving image sequences, the research considers the nature of duration (Bergson, 1957) and the agency of stillness in fostering an intimate connection with a specific geographical site. Methodologically, the thesis adopts a heuristic, reflective mode of inquiry that foregrounds subjective iterative experimentation. The significance of the project lies in its contribution to ways in which embodied experiences of land, mediated through multi-modal image practice, can integrate considerations of closeness, viscosity, spirituality, and poetic resonance.

Acknowledgements

This study could not have been completed without the support of a number of people, to whom I am sincerely indebted.

I would like to express my deepest thanks to my primary supervisor, Dr Marcos Mortensen Steagall, who has guided me through this study with care, passion, and encouragement. He has set the example of academic excellence to which I aspire. I am grateful for our conversations over meals where we discussed ideas and life. Marcos is not only an outstanding mentor and colleague, but a friend of the highest calibre.

I would like to express my sincere gratitude for my second supervisor, Professor Welby Ings, whose sensitivity and rigour shaped my understanding of excellence at doctoral level. Welby, through his careful critique and masterful questioning, navigated me toward new discoveries. I am thankful to have had an opportunity to learn from such a skilled, generous, and creative thinker.

I would also like to acknowledge Matua Glen Tupuhi (Ngāti Hine, Ngāti Naho, Ngāti Paoa) who generously shared his time and knowledge about Lake Waikare and Te Kauwhata, and included me in community events. He has been instrumental in shaping my understanding of the land I have grown up on.

I would like to thank Liz Tupuhi, who shared valuable ecological insights about Lake Waikare, and continues to include me in new projects.

I would also like to express my gratitude to Mrs Jenny Kelly, who guided me toward resources that increased my depth of understanding about the location.

To John Oakden and Stuart Maxwell, I extend my appreciation for their shared insights about Lake Waikare, and to Hone, who also trusted me enough to share his knowledge. I am truly grateful.

I appreciate the insightful critique at multiple stages of the research offered by Dr Natalie Robertson, Dr Tatiana Tavares, Dr Mairi Gunn, James Smith, Herbert Spencer-Gonzalez, Emil McAvoy, Joseph Michael, and Fiona Grieve.

I would like to thank the School of Art and Design and the Faculty of Design and Creative Technologies at Auckland University of Technology for the provision of the Vice Chancellor's scholarship, which has financially resourced the study. In addition, I am grateful to Linda Wong (Postgraduate Coordinator), Scott Bray (School Registrar), Suzie Gorodi (Senior Technician), Cornelius Geraets (Photographic Technician), Stephen Cleland (Curator at Te Wai Ngutu Kākā) and Elwyn Sheehan (Information Literacy Librarian) for their support through the study.

For my beloved wife, Alix, I am deeply thankful. Through this journey she has been my greatest supporter and closest friend. She has been the highest example of quiet patience and steadfast loyalty. I could not have finished such a journey without her.

Finally, I thank the Lord who continues to sustain me.

Intellectual Property Declaration

I retain copyright and intellectual property of all images
taken by myself and presented as part of this thesis.

DAVID-JOEL WILLEM VAN VLIET

October 27, 2025

Table of Contents

Dedication	v
Abstract	ix
Acknowledgements	xi
Intellectual Property Declaration	xiii
Table of Contents	xv
List of Figures	xix
Attestation of Authorship	xxiii
Ethics Approval and Consents	xxv

Introduction

Research Question	xxx
Rationale and Significance of the Research	xxx
Rationale	xxx
Significance	xxx
Key Terms Used in the Study	xxx
Anthropocene	xxx
Duration	xxx
Embodiment	xxx
Hypertrophic	xxx
Structure of the Thesis	xxxi
The Practice	xxxi
The Exegesis	xxxi

CHAPTER 1

Positioning the Researcher

The Environment of My Upbringing	3
A Culture of Care	4
Questioning Through Practice	4
Positioning the Research	6
Standing on the Threshold of the Thesis	6

CHAPTER 2

History, Community and Ecology

Lake Waikare's Location and Current Classification	11
Historical Use and Impact	12
Arrival of the Ngatihopu Tribe	12
Naming Te Kauwhata	13
Culturally Significant Areas	13
Temporary Gold Rush	13
Deaths on the Lake	13
Transport	14
The Flood Control Scheme in 1965	14
Sediment	14
Pest Fish	16
Social Use of the Lake	16
Swimming	16
Sailing	16
Duck Shooting	20
Eel Fishery	20
Restoration Initiatives	20

CHAPTER 3

Review of Contextual Knowledge

Embodiment and the Mind-Body Divide	25
Plato, Aristotle and the Medieval Church	25
Descartes	26
Spinoza	26
Husserl and Phenomenology	26
Heidegger	27
Merleau-Ponty's Perception and Embodied Mind	27

Autopoiesis, Somatic Markers, Enaction, and Groundlessness

Maturana and Varela's Autopoiesis	28
Damasio's Somatic Markers	28
Enaction and Groundlessness	28
The Role of the Environment in Cognition	29
Defining an Anthropocentric Epoch	29
<i>Historical Anthropocentric Measurements of Time</i>	29
<i>The Anthropocene</i>	29
<i>Recent Developments</i>	30
<i>A Distancing Global View</i>	30
Land and the Experiencing Body	30
<i>Bennett and Vibrant Matter</i>	30
<i>Tim Ingold</i>	30
<i>Insights from Māori epistemology</i>	30
<i>Spiritual Dimensions of Land</i>	31
Evolving Understandings of Time and Stillness	31
Time	32
Stillness	33
<i>Stillness as Physical and Metaphysical Phenomenon</i>	33
<i>Stillness in Performance Practice</i>	33
<i>Stillness in Social, Therapeutic and Environmental Contexts</i>	34
Stillness in this Study	34
Contextualising Practice	35
Embodiment and the Land	35
<i>Wendy Beatty</i>	35
<i>Marcos Mortensen Steagall</i>	36
<i>Rachael Jones</i>	37
<i>Harry Nankin</i>	38
<i>Maarit Mäkelä</i>	39
Time and Stillness	40
<i>Bill Viola</i>	40
<i>David Claerbout</i>	40
<i>Sam Taylor-Johnson</i>	41

CHAPTER 4

Research Design

Research Paradigm	45
Methodology	45
Heuristic, Practice-Led Research	45
Methods Employed in the Research	46
Phase 1: Gathering and Reviewing	47
<i>Literature Relating to Embodiment and Stillness</i>	47
<i>Historical, Social, and Ecological Review</i>	47
<i>Interviews</i>	47
<i>Community Engagement</i>	47
Phase 2: Recording Material on Location	48
<i>Site Visits</i>	48
<i>Walking and Heightened Sensory Engagement</i>	49
<i>Drawing</i>	50
<i>Camera Lucida</i>	50
<i>Still and Timelapse Photography</i>	50
<i>Video Recording</i>	52
<i>Recording Sound</i>	52
<i>The Use of the Van as an In-Situ Studio</i>	52
<i>Reflective Log</i>	53
Phase 3: Digital Studio	53
<i>Technical Processing</i>	53
<i>Creative Processing</i>	53
Phase 4: Critical Review	54
<i>Feedback on Creative Work</i>	54
Critique of Research Design	57
Advantages	57
Challenges	57

CHAPTER 5

Critical Commentary

The Screen-Based Images	61
Depths	62
Memory	64
Decay	66
Current	68
Surface	70
Exhibition Design	72
Spatial Considerations	72
Prefiguring the Experience	72
Waikare	72
The Sequencing of Images	74
Sound	74
Light	74
Image Proportion	75
Ideas That Permeate the Work	76
Sensory Experience	76
<i>Colour</i>	76
<i>Scent</i>	76
Time, Stillness, and Rhythm	78
The Nature of Closeness	80

CHAPTER 6

Conclusion

Introduction and Summary	85
Contributions to Knowledge	85
Communicative Lens-Based Practice	85
Intimacy	85
Transcending Physical Documentation	86
Further Research	86
Publishing	86
Giving Back to the Community	86
Further Creative Work	87
In Closing ...	89
References	93
Appendix	103

List of Figures

CHAPTER 1

Positioning the Researcher

Figure 1.1 The Researcher's Home (2019)	2
Figure 1.2 Reading as Part of My Home-School Study (2009)	3
Figure 1.3 Undergraduate Time-Based Experiment (2017)	4
Figure 1.4 <i>The Band (2020)</i> : A Time-Based Group Portrait	5
Figure 1.5 Overlooking the Pungarehu Stream (2017)	7

CHAPTER 2

History, Community and Ecology

Figure 2.1 Aerial View of Lake Waikare from Google Earth	11
Figure 2.2 Lake Waikare's Cloudy Water (2024)	12
Figure 2.3 Flooding at the Rangiriri Hotel (1907)	15
Figure 2.4 Aerial Photograph of Lake Waikare (1942)	15
Figure 2.5 Lake Waikare Turned Orange (2021)	17
Figure 2.6 Picnic at Pirrit's Beach, Lake Waikare (ca. 1950)	18
Figure 2.7 Yachts on Lake Waikare (ca. 1960)	19
Figure 2.8 Duck Shooters at Lake Waikare (1902)	21

CHAPTER 3

Review of Contextual Knowledge

Figure 3.1 Abramović performing <i>The Artist Is Present</i> (2010)	33
Figure 3.2 Beatty’s Hybrid Imagery (2016)	35
Figure 3.3 Mortensen Steagall’s Immersive Photography Practice (2016)	36
Figure 3.4 Jones’ Experimental Image Making (2023)	37
Figure 3.5 Nankin’s Cameraless Photography (2016)	38
Figure 3.6 Mäkelä’s <i>Pieta</i> (2019)	39
Figure 3.7 Viola’s Slow Video Practice (2000)	40
Figure 3.8 Claerbout’s <i>Backwards Growing Tree</i> (2023)	40
Figure 3.9 Taylor-Johnson’s <i>A Little Death</i> (2002)	41

CHAPTER 4

Research Design

Figure 4.1 Phases of the Research	46
Figure 4.2 Te Toto Gorge (2023)	48
Figure 4.3 Mt Te Aroha (2023)	48
Figure 4.4 Synthesised Recordings from Piha Beach (2023)	49
Figure 4.5 Sketch of Lake Waikare from Between a Stand of Trees (2023)	50
Figure 4.6 Animated Filmed Material and Drawing of Lake Waikare (2023)	51
Figure 4.7 Tracing of Lake Waikare (2024)	51
Figure 4.8 Video Recording at Lake Waikare (2025)	52
Figure 4.9 Recording Ambient Sound (2025)	52
Figure 4.10 Using the van at Lake Waikare (2025)	53
Figure 4.11 Exhibition of Work (2024)	55
Figure 4.12 Poster Exhibited at LINK South to South Crossing: BRAZIL, Sao Paulo (2024)	54

CHAPTER 5

Critical Commentary

Figure 5.1 <i>Depths</i> (2025)	63
Figure 5.2 <i>Memory</i> (2025)	65
Figure 5.3 Dead Shag (2024)	64
Figure 5.4 Carp in the Sand (2025)	67
Figure 5.5 <i>Decay</i> (2025)	66
Figure 5.6 <i>Current</i> (2025)	69
Figure 5.7 Planktonic Algal Bloom (2025)	68
Figure 5.8 Fish Die-off (2025)	68
Figure 5.9 <i>Surface</i> (2025)	71
Figure 5.10 Spatial Visualisation of the Exhibition (2025)	72
Figure 5.11 <i>Waikare</i> (2025)	73
Figure 5.12 Exhibition Floorplan (2025)	74
Figure 5.13 Changes in Image Proportion	75
Figure 5.14 Textural Approach to Recording (2024)	76
Figure 5.15 Variation of Light (2025)	76
Figure 5.16 The Weight of Smell at the Lake (2025)	77
Figure 5.17 Restlessness During Recording (2024)	79
Figure 5.18 Moonbow over Waikare (2024)	81

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 or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

DAVID-JOEL WILLEM VAN VLIET

October 27, 2025

Ethics Approval and Consents

This research received approval from the Auckland University of Technology Ethics Committee (AUTEC) on 11 June 2024, for a period of three years, until 11 June, 2027.

ETHICS APPROVAL NUMBER: 24/131

All research was conducted in keeping with the regulations and guidelines of the approval.¹

¹ Correspondence relating to ethics approval is available in the Appendix.





Introduction

Introduction

John Muir, the Scottish-born environmental philosopher, once recalled, “I went out for a walk and finally concluded to stay out till sundown, for going out, I found, was really going in”(1979, p. 439). In describing this experience, Muir was referring to a distinctive state of embodied knowing where a dialogue develops between the self and the world they inhabit. In such a state, Alfred Irving Hallowell argued, “any inner-outer dichotomy, with the human skin as boundary, is psychologically irrelevant” (1955, p. 88).

This artistic, practice-led thesis is positioned alongside such thinking. It considers a connection to land through embodied engagement with the degraded environment of a specific lake. In the study, cognition is treated as inseparable from the environment in which it occurs (Brown et al., 1989), and land is framed as vibrant, living matter (Bennett, 2010). To adopt this position, one turns inward from a global perspective toward an examination

of an intimate relationship with a localised environment. The resulting artistic work seeks to communicate this embodied relationship, where an intimate familiarity with an environment is fostered, experienced, and communicated through recorded lens-based images. In seeking embodiment in the land, this thesis proposes that knowledge arrives through bodily sensation, within which the artist comes to know the world through the continuous, interconnected experience of emotion and sensation inside time and space (Bergson, 1957; Heidegger, 1962; Merleau-Ponty, 2005; Mortensen Steagall, 2019). The study is situated at Lake Waikare, one of the most degraded lakes in New Zealand. In the thesis, I suggest that one’s relationship to such a geographical space can be developed and deepened through embodiment in the form of artistic action. This process builds an intimate connection to land, where deeper levels of connection can emerge that embrace both the physical and non-physical.

RESEARCH QUESTION

This thesis asks,

How might lens-based recording serve in expressing an embodied connection to land?

Emanating from this question is a series of images comprised from still and moving lens-based, composite recordings, which are reflections of embodied encounters with Lake Waikare.

RATIONALE AND SIGNIFICANCE OF THE RESEARCH

Rationale

The rationale for the study lies in the necessity to form bridges between globalised abstractions and intimate understandings so the localised might operate as a catalyst for relational understanding with land and empathetic action.

The thesis proposes that global insights and empathies might be found in the local and intimately experienced (Groth & Mäkelä, 2016; Ingold, 2000; Latva-Somppi & Mäkelä, 2020; Mäkelä & Atkas, 2022).

Given the impact of our continued inaction with regard to ecological environments (Fagan, 2023; Markman, 2018; MIT Climate Portal, n.d.; Walsh, 2019), the study posits an embodied way of engaging with the land as an intimate, long-duration dialogue.

Significance

This inquiry proposes three significant contributions.

Firstly, it contributes to a growing body of discourse surrounding the ways that synthesised lens-based images can be used to interpret the world as an outcome of embodied experience (Burton, 2015; Wu, 2021). In such work, cognition is embodied rather than dualistic (Heidegger, 1962; Merleau-Ponty, 2005; Shapiro, 2010; Varela et al., 2016; Werner, 2022).

Secondly, the thesis offers consideration of intimate connection to land through localised experience. As such, it contributes to broader considerations of the Anthropocene, demonstrating how a personal experience of time, constructed through lens-based recordings and composition, might contribute artistically to larger social and ecological understandings.

Finally, the study demonstrates how, through considerations of time, stillness, spirituality, and poetic resonance, the documentation of an environment can be moved beyond didactic accounting.

KEY TERMS USED IN THE STUDY

The thesis engages with thinking from diverse disciplines and, because of this, it uses terms that are specific to certain contexts. Given that words and their meaning are not constant, it is useful at the outset to provide definitions of four terms that are influential in the study.

Anthropocene

The *Anthropocene* describes the current period in history where “intensified anthropogenic impacts have caused the Earth System to depart from the comparatively stable conditions that characterized the Holocene Epoch” (Zalasiewicz et al., 2020, p. 1257). The Anthropocene is proposed as a term that reclassifies the current geological epoch as a result of the severe effects that humans have had on environments and ecosystems.

Duration

The term *duration*, as employed in this study, is drawn from Bergson’s (1911) *Matter and Memory*. In this work, Bergson conceptualises perception of time and space as grounded in the duration of lived experience. Thus, he proposes a qualitative experience of time rather than framing time as a chronological progression.

Embodiment

Embodiment, in this thesis, refers to the idea that knowledge is attained through bodily sensation, where the mind and the body are not considered separate entities but are involved in perception, emotion, and experience. This concept draws from the thinking of Spinoza (1632-1677), where he proposed that the mind and body are interconnected and emotions, thoughts, and experiences are interdependent aspects of human existence (Spinoza, 1677/1994). From an embodied state in the study, I came to know a specific environment through a continuous, interconnected experience of emotion and sensation across time and space (Heidegger, 1962; Merleau-Ponty, 2005; Mortensen Steagall, 2019).

Hypertrophic

Hypertrophic is a scientific term related to a scale that measures water quality according to its Trophic Level Index (Land, Air, Water Aotearoa [LAWA], n.d.-b). On this scale, hypertrophic refers to the most extreme nutrient levels and indicates a high degree of contamination. Hypertrophic lakes also contain excessive levels of phytoplankton (algae) because the nutrient levels enable excessive growth (Waikato Regional Council, n.d.).

STRUCTURE OF THE THESIS

This thesis is presented in two parts. The first is a creative body of photographic, moving image sequences constituted as an exhibition. The second is a written exegesis that discusses the imagery, its context and process of realisation.

The Practice

The creative artefacts emanating from the study are the outcome of a series of iterative research and exhibition practices.² These lens-based moving images are presented on five screens, and combine still and moving material recorded at Lake Waikare in the *lower Waikato catchment* of the North Island of Aotearoa/New Zealand between June 2023 and March 2025. These images are displayed as 1920 x 1080 pixel video works and are also available online.³

The exhibited sequences are accompanied by a subtle sound mix of filtered noise designed to replace the atmos of the urban gallery space.

A catalogue accompanies the exhibited work, providing information that speaks to each of the images.

The Exegesis

The thesis adopts a practice-oriented structure, where practice is understood as the site of the research. In such doctoral projects “the purpose of the exegesis is to elucidate and clarify the relationship between the central concept, key contexts, focus and methodology of the practice-oriented work, thereby setting the thesis in its relevant critical context” (Auckland University of Technology, 2025, p. 99).

The document is formatted as an interactive pdf. To access to embedded moving image files, please open your browser when you launch the document. This will allow you to click on an indicated link and the sequence will play on your screen.

The exegetical component of the study consists of five chapters, an introduction, and conclusion.⁴

The introduction defines the research question and discusses the rationale and significance of the study. It then defines key terms and unpacks the structure of the thesis.

Chapter One positions the artist in relation to the research question, providing insight into his relationship with the location.

Chapter Two provides an overview of the historical and social context of Lake Waikare. In so doing, the chapter establishes the significance of the lake as an ecosystem, including its history and relationship to neighbouring communities.

Chapter Three provides a review of contextual knowledge, drawing from literature and relevant creative practice. The chapter reviews knowledge relating to embodiment, cognition within the environment, stillness, and artistic practice in related fields.

Chapter Four discusses the research design developed for the study. It unpacks a heuristic inquiry that is positioned within an artistic research paradigm. The chapter then discusses methods employed in the project, including interviews, community engagement, site visits, walking, drawing, still and timelapse photography, video and sound recording, creative and technical processing, the strategic elicitation of feedback, and reflective writing. A critique of the methodology is provided at the conclusion of the chapter.

Chapter Five provides a critical commentary of the artistic component of the research, including a discussion of concepts and decisions that were influential in the development of the study.

Finally, the exegesis concludes with a summary of the research, an evaluation of the study’s contribution to knowledge, and a reflection on potential avenues for future inquiry arising from the thesis.

Stylistically citation in the exegesis aligns with the conventions of APA7. However, footnotes are employed throughout the document, and the captioning of figures employs a more streamlined system that affords greater clarity and more elegant design. Throughout the exegesis and accompanying collateral, Māori words are not italicised because Māori is an official language in New Zealand and therefore not foreign. When using te reo Māori, I employ the use of tohutō (macrons), to denote the pronunciation of a long vowel. This aligns with the orthographic convention recommendations of Te Taurawhiri i te reo Māori - The Māori Language Commission.

² Creative artefacts were exhibited at the following events: The Dying Lake: Waikare and the Embodied Artist: A Photographic Exhibition (October 30–November 1, 2024), Te Wai Ngutu Kākā Gallery, Auckland, New Zealand; Conference presentation, LINK2024: 6th International Conference of Practice and Research in Design and Global South, (December 4–6, 2024), Universidade Anhembi Morumbi, Sao Paulo, Brazil; Poster, LINK 2024 – South to South Crossing: Brazil Exhibition (December 4–20, 2024), Universidade Anhembi Morumbi, Sao Paulo, Brazil; Waikare: The Dying Lake and the Embodied Artist (November 27–December 12, 2025), Te Wai Ngutu Kākā Gallery, Auckland, New Zealand

³ Available from www.davidvanvliet.com [website under construction].

⁴ Within the text of this exegesis, certain images contain corresponding links. When reading the document, if your browser is open, you can click on these links and the moving image sequence will play.



CHAPTER 1

Positioning the Researcher



Positioning the Researcher

This chapter positions the researcher in relation to the project and describes the origins of the study.

THE ENVIRONMENT OF MY UPBRINGING

I was raised in a home with five siblings and my parents. During my early childhood we lived in Pukekohe, a small town in South Auckland. When I was ten my family moved to a rural lifestyle block in Te Kauwhata (Figure 1.1). We lived in a house that my father designed and built.

This became home.

I was home-schooled until the age of 14 and much of my education blended with the outdoor spaces of our home (Figure 1.2). My parents believed we should learn in environments that stimulate curiosity. Here, the classroom extended to the acres of farmland that surrounded our house. Being schooled at home, my learning hours were flexible, and I spent a lot of time outside during the day, often in the bush, building huts from branches or making gardens by the pond. In such spaces, imaginative worlds were brought into existence, enveloped by the vibrant sound of insects and birds and the earthy smell of leaf mould.

These places constituted my world.

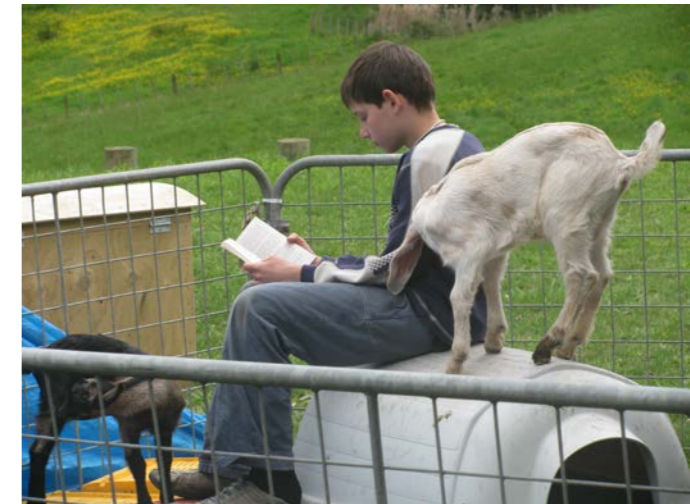


Figure 1.2
Reading as Part of My Home-School Study (2009)
Photograph of myself reading outdoors in 2009. Copyright 2009 by the author and the author's family.

Figure 1.1
[p. 2] *The Researcher's Home (2019)*
View of the boundary tree line from our family home in Te Kauwhata (March 2019). Copyright 2019 by the author.

A CULTURE OF CARE

I cannot remember a time when animals were not a part of my life. Some, like goats and pigs, were kept, not because of what they could produce, but as an integrated part of the family. From a young age, I was taught to be responsible for more than just myself. I cared for animals: bottle feeding goats, moving them to fresh pasture, and occasionally drenching them.⁵ My mother would often draw our attention to intricacies of nature, such as the way that bees interacted with flowers, or how a turkey would change her yelp when pointing out food for her chicks. Occasionally, day to day living would shift to accommodate the wildlife near our house, like the sparrow who chose to make its roosting place in our toilet window. We were encouraged not to disturb the bird, being careful when using that room not to wake it.

I learned that I lived in nature's space
as much as it lived in mine.

I grew up in a Christian home, where prayer and meditation on the spiritual were an integrated part of my childhood. For me, the world, with its intricate systems, beauty and awe-striking wildness, points toward the divine.

QUESTIONING THROUGH PRACTICE

My father is practically minded, and he provided a workshop where we experimented with ideas. After we moved to Te Kauwhata, he continued to finish the house on weekends. I would help him, and from this experience I learned that, with time, I could develop the ability to learn skills for myself. I spent much of my free time in his workshop developing projects. While I envied my brothers' abilities to visualise and create projects from scratch, my undertakings often involved repurposing existing things, seeing potential in objects that had been discarded. I was attracted to the potential of repair and reimagining.

When I eventually attended high school, I was torn between a desire to work in conservation or further developing my creativity. It was at this point that I discovered film and photography. I came to understand the camera as something more than an artefact for recording moments in time. I experienced it as an agent for synthesis, where light, duration, and composition could be used to reapproach the worlds I encountered. The process of photography was an integration for me. Through it, as someone who lived with the land, I gradually acquired a voice to speak for intimate experience.

As I progressed onto university and through an undergraduate degree in Visual Communication Design, I began to explore the potentials of time and motion through the manipulation of lens-based recording (Figure 1.3).

In a subsequent master's degree, I began exploring how Bergson's (1911) concept of duration (experienced or lived time) might be perceived in manipulated photographic imagery. In these studies, I created digital portraits whose content moved subtly over time while the subjects in the photograph remained compositionally static within the frame (Figure 1.4. See p. 5).

This doctoral thesis surfaced from inquiries into the production of five duregraphic portraits⁶ during my master's degree (van Vliet, 2020). Conceptually, my experiments caused me to consider how we read and experience time in environments of heightened attention. I became attracted to Bergson's (1911) concept of *durée*, Sonesson's (1999) and Mitchell's (1992) discussions of post-photography, David Claerbout's treatment of time in digital composited photography (Claerbout, 2016, 2023), and Marcos Mortensen Steagall (2019) and John Muir's (1979, 1995) writing on how we experience embodiment within the land.



Figure 1.3

Undergraduate Time-Based Experiment (2017).

An artwork created in 2017 during my undergraduate degree, which explored the polluted environment of Lake Waikare. I used motion to draw attention to details within the image. The looped, time-based sequence can be viewed at <https://davidsplaceblog.wordpress.com/wp-content/uploads/2017/04/lake-pipe-cinemagraph.gif>. Copyright 2017 by the author.

⁵ Drenching is the preventative process of administering chemical solutions (anthelmintics) to livestock.

⁶ Duregraphic is a neologism I coined during my master's degree to describe a digitally presented photograph in which time is encapsulated, playing as subtle or unexpected motion. The word is derived from *durée* (duration), as used by Bergson (1911), and the Greek word *graphé* (representation).



Figure 1.4

The Band (2020): A Time-Based Group Portrait

The Band (2020) is a group portrait which explores how manipulations in time might intensify a state of anticipation in the viewer, while simultaneously revealing shifts in the power dynamic between a spectator and an image. The sequence can be viewed at <https://www.youtube.com/watch?v=wXpFq8UC064>. Copyright 2020 by the author.

POSITIONING THE RESEARCH

When our family first moved to Te Kauwhata, I grew up knowing that Lake Waikare was dangerous. Standing at the boundary line of our property you would see the open farmland sloping down to the lake, sometimes a glistening blue under a clear sky, sometimes orange, sometimes turbid brown. The fact that you could not swim in its waters was made apparent by the numerous health warning signs that punctuated its shoreline. Along the lake's sodden edges, you would frequently encounter dead animals, including bloated sheep disintegrating in the shallow water.

As a boy I would often visit the lake with my neighbour. We fished using makeshift spears and nets that we created in our workshop at home. The koi carp population in the lake had, by this time, become so extensive that we would catch numerous specimens from the shore at the base of the floodgate. We never ate these fish. We knew they were contaminated, but in our small way we thought that we were helping to cull them from the lake⁷ (Figure 1.5).

When not fishing we ventured through the thick reeds, undergrowth, and surrounding farmland. Cornfields and kahikatea forests became a childhood world of discovery. As I grew older, I began to understand that Lake Waikare had, years before my birth, been a haven for local people, when its waters were clean and its environment undamaged.

In our small rural community, I would hear many older residents recall their childhoods, fishing and swimming at the lake, observing with regret that Lake Waikare was now dangerous. Although I was not born in this community, I feel a responsibility to the lake, having lived next to it for most of my life.

STANDING ON THE THRESHOLD OF THE THESIS

As a man, my encounters with the lake have been tinged with grief. This world no longer comprises a childhood playground. It is something deeper. I am drawn more closely to it through intentionality and observation. I can feel its tired and damaged state, but also the ghost of what it once was. I have begun to ask myself what I can do. The boyhood culling of carp was well meant, but ineffective. When I walk to the waters today, sometimes at dawn, sometimes at the closing of the day, I am accompanied by memory and knowledge. On restless days when the air seems to vibrate just above the water, and sometimes in the contemplative stillness of the evening, I encounter a lake I have not met before—something that lies beyond the sensations of the physical.

I ask myself how I might interpret such a thing and how my ability to research artistically might offer something useful to growing efforts to repair damage to this environment. My development as a lens-based image maker with a close relationship to this lake has led me to ask about the potentials of intimate, communicable connection.

Thus, this thesis study is an exercise in a 'duty of care,' an expression of grief and hope. It is a plaintive reflection that aims to voice the inexpressible through the agency of a creative inquiry.

⁷ Koi are a strain of carp native to Asia and Europe, thought to have been accidentally introduced to New Zealand in the 1960s. Evidence of the species was discovered in the Waikato River in 1983, and from there they spread into adjacent waterways (Department of Conservation, n.d.). Koi feed on the bottom of lakes and rivers, stirring up sediment and consuming native plants, insects, and fish eggs. This behaviour, along with their high tolerance of poor water quality, has exacerbated the already declining state of the Lake Waikare.

Figure 1.5

[p. 7] *Overlooking the Pungarehu Stream (2017)*
View from the main floodgate where Lake Waikare drains (May 2017). Copyright 2017 by the author.







CHAPTER 2

History, Community and Ecology

History, Community and Ecology



Figure 2.1

Aerial View of Lake Waikare from Google Earth

A view of Lake Waikare and surrounding area, showing the major sources of inflow (Te Onetea and Matahuru Streams) and the location of Pungarehu Stream. From Google Maps, by Google, n.d., (<https://www.google.co.nz/maps/@37.5674451,175.1579833,11578a,35y,11.53h,50.78t/data=!3m1!1e3?entry=ttu>).

This chapter details the context of Lake Waikare, where the inquiry is positioned. It comprises a collection of knowledge relating to the location's history, ecology, and its surrounding community.

LAKE WAIKARE'S LOCATION AND CURRENT CLASSIFICATION

Lake Waikare is a shallow lake in the Waikato region of New Zealand.⁸ It forms part of the lower Waikato catchment, an area of land spanning between Ngāruawāhia and the Tasman sea.

Positioned to the south-east of the Te Kauwhata township, it is the largest lake in this catchment. It has an open water area of 3442 hectares and a maximum depth of 1.8 metres. The Waikato River feeds the lake on the west side via Te Onetea Stream, near Rangiriri. Additional inflow from the Matahuru stream at the south end of the lake brings in sediment-heavy water from surrounding land in the catchment. This is primarily farmland (Lehmann et al., 2017). The lake discharges through the Pungarehu Stream (Figure 2.1) into the Whangamarino River, and this discharge is regulated by a floodgate. Lake Waikare is a riverine lake,⁹ situated within the Waikato River floodplain, that now acts as a holding area for floodwaters from the river (Dean-Speirs et al., 2014a).

Lake Waikare is directly connected to the Whangamarino Wetland, which is recognised as an internationally significant wetland under the Ramsar Convention (Department of Conservation, 2010). The lake and the wetland together fulfil a vital role in the ecosystem and are described by hapū (Māori sub tribes) as the “lungs and kidneys” of the lower Waikato (Waikato Regional Council, 2016, p. 1).

Lake Waikare has poor water quality and high sediment levels, inorganic suspended solids, nutrients, and exhibits the perpetual presence of toxic algae. Because of this, it is currently classed as hypertrophic (Cooke & Cox, 2015; Lehmann et al., 2017; Wickham & Puddick, 2025).¹⁰ Lake Waikare is considered to be among the most polluted lakes in New Zealand, and is the second most degraded large lake in the county, after Lake Te Waihora (Ellesmere) (Verburg et al., 2010).

⁸ Shallow lakes are identified by as being less than 10 metres deep. They are more vulnerable than deep lakes to shifts in water quality due to use of land in the catchment. They also suffer more negative effects from invasive species (Dean-Speirs et al., 2014a).

⁹ Riverine lakes are formed in depressions in river floodplains where water collects as rivers move. Remnant lakes can be formed when rivers change course (Dean-Speirs et al., 2014a). These kinds of lakes are typically shallow, and are susceptible to increased sediment suspension from high wind movement.

¹⁰ The Waikato Regional Council defines a hypertrophic lake as one that is highly saturated with phosphorus and nitrogen and contains excessive levels of phytoplankton (algae) (Waikato Regional Council, n.d.).

The high sediment levels are preventing light from penetrating the water, and no aquatic plants are currently present in the lake (Figure 2.2). Lake Waikare's condition is further exacerbated by runoff from farmland in the catchment; sediment heavy water from the surrounding hills and Matahuru Stream; wastewater discharge from the Te Kauwhata wastewater treatment plant; and the inability for the nearby Waikato River to flood the lake. Due to the combination of these factors, there are concerns that Lake Waikare will not be able to return to its former healthy state (The Waikato River Authority, 2020).

HISTORICAL USE AND IMPACT

Arrival of the Ngatihopu Tribe

The earliest known Māori occupants of the area around Lake Waikare are the Ngatihopu tribe (descendants of the Tainui canoe) (Te Kauwhata Districts Historical Society [TKDHS], 2003). After landing in Kawhia, the tribes migrated along Aotearoa's west coast, and their sub-tribes moved further inland to the Waikato River, eventually to the southern and eastern shores of Lake Waikare.

Tōtara, kahikatea, and mataī trees provided timber for canoes, and the lake yielded a plentiful source of fish, like mullet, catfish, tuna (eels), shrimps, goldfish, and bullies, while the surrounding wetlands were home to many species of native birds (TKDHS, 2003). These are likely to have included currently threatened bird species, such as the grey teal, the Australasian bittern, the brown and spotless crake, and the now regionally extinct brown teal (Waikato Regional Council, 2016).

Glen Tupuhi, a kaumatua (Māori elder) of Te Kauwhata, noted that prior to the installation of the floodgate in 1965, the Waikato River would flood annually through Lake Waikare and cause a mass migration of tuna from the north-eastern end of the lake, where the flood gate is currently situated).¹¹ These eels migrated across the low-lying land toward the Whangamarino Wetlands and their connected system of waterways. During these times, locals would fish for tuna, thousands of which flooded across Waerenga road, the main road in the area.



Figure 2.2

Lake Waikare's Cloudy Water (2024)

An aerial photograph taken near the Pungarehu Stream, showing bands from a cyanobacteria bloom. Copyright 2024 by the author.

Later, when the area that is now Te Kauwhata was populated by European settlers, the lake played an important role in the community because it continued to provide an abundance of food. During this period, sandy beaches on the eastern side of the lake bordered the land.

Waikare translates as glistening waters, or shining, silvery sands. Before the presence of roads in this area, the lake was the main form of transportation between locations around its perimeter, including Rangiriri and smaller settlements (Fyers, 1994; TKDHS, 2003; Kelly, 2015).

¹¹ G. Tupuhi, personal communication, January 23, 2025.

Naming Te Kauwhata

The name of the Te Kauwhata township positioned on the north-west side of the lake is disputed. Local kaumatua Glen Tupuhi suggests that Te Kauwhata derives its name from Taa Kauwhata, which was a waahi tapu (sacred historical site) located on the northern shore of Lake Waikare. The name *kauwhata* was a Māori word for the food storehouses that stood on stilts above the water.¹² Another variation of Te Kauwhata's meaning is "the empty storehouse" (Ngatai, 2018; *1000 Māori Place Names*, 2024).

Newspaper articles from 1921 indicate that an early name for Te Kauwhata was Takauwhata. This name was used by the Lands and Survey Department (Johnson, 1921). These articles suggest that Takauwhata was also the name of a burial ground on a pā site where a Māori chief of the same name was buried. In 1929, a motion was made to the council to have the name changed from Te Kauwhata back to Takauwhata, as "it [Te Kauwhata] resents the modern corruption of the name, and [locals desired] to honour a bygone native chief by reviving the nomenclature of other days" ("What's in a Name," 1929, p. 6). However, the motion was declined. More recently, other residents have suggested, that the name Te Kauwhata translates as "known swimming spots," in reference to the many swimming places along that shoreline (TKDHS, 2003).

Culturally Significant Areas

Running through the lake on its eastern side is a fault that contains a geothermal spring. This bubbles out of a small island now called Punikanae Rock, or Motu Kanae. Tupuhi observed that the sulphur and other minerals leaching from this vent produced a distinctive microenvironment which supported freshwater invertebrates. This subsequently attracted schools of kanae (mullet) and pātiki (flounder), as well as native birds, including kōtuku moana (white-faced grey heron), kōtuku (white heron), kōtuku ngutupapa (spoonbill), and matuku-hūrepo (bittern).¹³

Motu Kanae is the only sinter (silica) depositing spring known outside of the Taupo geothermal area. The sulphurous water near the spring was traditionally believed to have medical benefits, and bathing in the waters near the vent was thought to treat ailments of the skin and respiratory illnesses (TKDHS, 2003). Although still active, the geothermal activity is now far weaker (Balane, 2014), and, although sulphur can be observed bubbling up from beneath the surface, the water released from the spring opening is no longer as warm. Tupuhi noted that the area close to the thermal vent was named tuaepiro (stinking excrement), indicating the vent was likely more active in the past and this caused a strong sulphur smell.¹⁴ This area no longer bears a sulphurous scent. In 2013, testing at a nearby fault line in Ohinewai (on the western side of the lake) suggested that the artificial lowering of the lake's level may have affected the activity of geothermal springs in the area (Cheptum, 2013).

Located on the eastern shore of the lake were the Takapuruharuha burial caves, which have since collapsed due to erosion from the rising and falling of the lake.¹⁵ These caves, as noted by Tupuhi, offered refuge to survivors of the 1863 Battle of Rangiriri

Temporary Gold Rush

In 1886, in addition to being a source of nourishment and healing to the surrounding communities, the lake was also the location of a gold rush (Sherson, 2006). Settlers prospected gullies and streams and dug mine shafts into the hills on the south-eastern side of the lake. However, Fyers (1994) and Sherson (2006) noted that a poor yield resulted in an eventual dissipation of prospectors.

Deaths on the Lake

As well as supporting growing communities, Lake Waikare has also been the site of multiple deaths, and it was the background for the Rangiriri battle in 1863. During attempts to escape the battle, many Māori were shot or drowned as they fled across its waters ("The War at Auckland," 1863). The name of nearby Lake Kopuera is said to mean "those who were shot" (Lawrence & Ridley, 2018, p. 16). Currently, the lakebed still holds the bones of Waikato ancestors killed in the invasion of Rangiriri. As part of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, Waikato-Tainui¹⁶ sought the return of Lake Kopuera and Lake Waikare to their care, so the bones of their ancestors could rest in their protection (Lawrence & Ridley, 2018). This return, it was proposed, would also ensure that further damage to the lake could not be actioned without the consent of Waikato-Tainui.

Historically, other lives were also claimed on Lake Waikare due to sudden wind gusts across its surface (Biggs, 1866). More recently, there are accounts of drownings (often of children), as a result of high winds capsizing boats ("Holiday Accidents," 1927; Fyers, 1994; TKDHS, 2003).

¹² G. Tupuhi, personal communication, January 23, 2025.

¹³ G. Tupuhi, personal communication, January 23, 2025.

¹⁴ G. Tupuhi, personal communication, January 23, 2025.

¹⁵ G. Tupuhi, personal communication, January 23, 2025.

¹⁶ Waikato-Tainui is the Māori iwi (tribe) of the Waikato region.

Transport

Before the road on the eastern side of the lake (now Waikare Road) was developed in the late 1930s,¹⁷ the lake was the main form of transportation to houses around its perimeter, and caution had to be taken when traversing its waters. Kelly (2015) notes that local residents would travel for supplies during the day and return with a full boat late in the afternoon, when the lake was calm.

Tupuhi maintains that between the 1840s and 1860s, the Waikato Tainui tribe used the geographical advantage of the lake and its connection to the Waikato River to transport produce to Auckland, Sydney, and other areas. Produce was often transported through the Whangamarino.¹⁸ Maize, grown in the Waiterimu Valley, southeast of the lake, was transported through Lake Waikare up to the Manukau Heads, before being exported to Sydney, Australia. Kelly (2015) noted that cream was also picked up from farms along the lake's edge and taken across by boat to the Te Onetea stream. This waterway connected to the Waikato River and enabled produce to be transported northward to Tuakau. In subsequent decades, cream was taken across the lake to the Matahuru Creek, where it was picked up by truck and taken south to Taupiri (Kelly, 2015). Fyers (1994) recorded that after Waikare Road was developed, cream was transported by truck. Additionally, the lake and surrounding streams used barges to transport wood (Fyers, 1994), fertiliser (Kelly, 2015), and stock.

¹⁷ Although no exact date can be found for when the road was established, a newspaper article from 1932 indicates that a stock route was being developed in that year ("Provincial Stock Route," 1932), on land gifted by settlers. The road appears to have been mostly metalled by 1937 (Fyers, 1991).

¹⁸ G. Tupuhi, personal communication, January 23, 2025.

The Flood Control Scheme in 1965

The lake's transition from a vibrant part of the community to its degraded state has been widely attributed to the implementation of the Lower Waikato-Waipā Flood Control Scheme (LWWFCS) in 1965. Until that time, it had been common for the lake to annually flood the surrounding low-lying land, occasionally twice in a year (Kelly, 2015). Increases in the population around the lake made these floods more impactful, and it was common for residents to use their boats to cross farmland to access the river or Lake Waikare (Figure 2.3. See p. 15). In some instances, they would tie their boats to the doors of their houses during flooding (Kelly, 2015).

Following a series of major floods in the 1950s, Lake Waikare was included in a flood control scheme that sought to address the flooding of the Waikato River (Reeves et al., 2012; TKDHS, 2003). By 1923, a scheme was already in development to lower the level of the lake to reduce the area of affected land during such incidents ("To Drain Lake Waikare," 1923).

In 1963, an outlet canal was constructed on the northern side of the lake, along with a floodgate in 1965. These initiatives were designed to manage the outflow of water from the lake into the Whangamarino Wetland. Stop banks were constructed near the lake and along the canal, and, coupled with pumps, these enabled the land to be used for agriculture without the threat of flooding (Blyth, 2011). Additional control gates were then placed where the Whangamarino Wetland joins back to the Waikato River, and at Te Onetea Stream (which connects the Waikato River to Lake Waikare) (Reeves et al., 2012). As a consequence the lake's natural level was brought down by almost a metre, and the fluctuation of its depth was substantially reduced from 2.71 to 0.35 metres (Boffa Miskell, 2016). Since 1963, these initiatives have resulted in most of the lake's surrounding wetland being reduced by 67% (Boffa Miskell, 2016).

Sediment

It is estimated that sediment in the lake began increasing long before the Lower Waikato-Waipā Flood Control Scheme was implemented, and as early as the 1940s aerial photographs indicated evidence of the problem (Lehmann et al., 2017). Sediment build up is thought to have been caused by the clearance of trees and the development of the land for agriculture within the catchment (Figure 2.4. See p. 15).

Following the implementation of the Lower Waikato-Waipā Flood Control Scheme, the reduced level of the lake made it more susceptible to sediment suspension. Lehmann et al. (2017) also noted that wind action across the lake's surface has caused sediment to be constantly stirred up, and this has impeded light penetration to the lake's bed. This has resulted in the demise of aquatic plant growth. Reeves and Hancock (2012) observed that the Lower Waikato-Waipā Flood Control Scheme has interfered with the natural flooding process from Lake Waikare to the Whangamarino Wetland. Historically, the lake and the Whangamarino Wetland were not connected with the canal, as they are today, and instead the lake would naturally flood over its banks into the wetland once every one to two years. With the presence of the artificial Pungarehu Stream, the Whangamarino Wetland now continually receives sediment-heavy water from the lake, which results in excessive sediment deposition and flooding (Reeves et al., 2012).

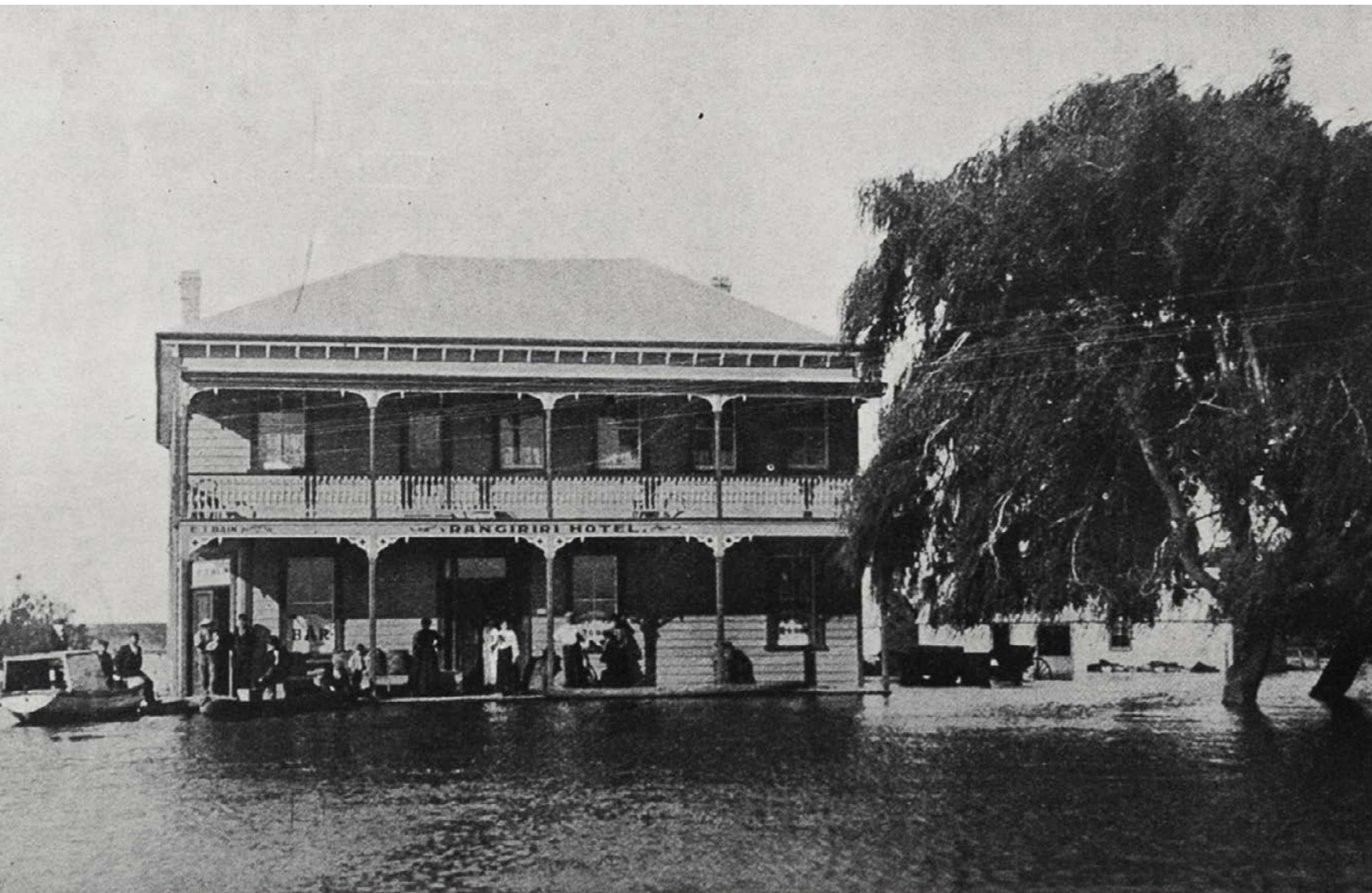


Figure 2.3

Flooding at the Rangiriri Hotel (1907)

The original caption reads "The Rangiriri Hotel, Waikato, surrounded by the flood." From Auckland Weekly News, 1907, January 24, Auckland Libraries Heritage Collections AWNS-19070124-08-04 (<https://digitalnz.org/records/29966080/the-rangiriri-hotel-waikato-surrounded-by-the-flood>). In the public domain.



Figure 2.4

Aerial Photograph of Lake Waikare (1942)

This aerial view of the Matahuru stream shows sediment flowing into the lake. From Retrolens, by Land Information New Zealand, 1942. CC-BY 3.0.

In addition to sediment, high nutrient levels have also contributed to the lake's degraded state, and this has resulted in it being categorised as hypertrophic. Cooke and Cox (2015) reported two primary contributors to the lake's increased nutrient levels.¹⁹ First is the use of the catchment land for sheep, beef, and dairy farming. The second is the treated discharge from Te Kauwhata's wastewater treatment plant. This wastewater discharge, although with council consent, has historically reached non-compliant levels, because the growing population of Te Kauwhata has increased the strain on the wastewater treatment (Waikato District Council, 2021).

Neilson et al. (2018) and Wickham and Puddick (2025) noted that increased nutrient levels have enabled toxic *Cyanobacteria* (blue green algae) blooms to persist in Lake Waikare throughout the year. Cyanobacteria and the presence of *E. coli* in the lake have made it unsafe for recreational use. In addition, the lake's high nutrient levels occasionally cause a bloom in a non-toxic alga, *Monoraphidium*, turning the lake red (Lehmann et al., 2017) (Figure 2.5. See p. 17).

Pest Fish

The presence of introduced fish has also contributed to the degradation of the lake. Currently, koi carp make up the dominant population of fish in the lake; Lehmann et al. (2017) suggested that they may contribute to up to twenty percent of the suspended sediment. Other invasive fish species, including catfish, goldfish, and rudd, also contribute to sedimentation of the lake (Rowe, 2007) and continue to prevent plants from reestablishing in the aquatic environment.

There have been measures taken in some lakes in the lower Waikato catchment to control pest fish numbers through mechanical means (Land, Air, Water Aotearoa [LAWA], n.d.-a). Lake Waikare features a koi carp trap and digester, a recent system that removes the pest fish from the lake, euthanises them, and digests them into meal for fertiliser. As well as contributing to the reduction of the pest fish, this process aids the removal of nitrogen from the lake (which is sequestered in the fish flesh) (David et al., 2018). Recent accounts from locals indicate that the carp digester is no longer operational.

SOCIAL USE OF THE LAKE

Although the lowering of the lake in 1965 resulted in the decline of the lake's health, it still supported recreational activities.

Swimming

Until the early 1970s, the shores of Lake Waikare were a popular destination for swimming and picnics (Sherson, 2006; TKDHS, 2003), and on the east side of the lake, Pirrit's Beach was a favoured location (Figure 2.6. See p. 18). In the early 1900s, community picnics were held there once a year, and the location was heavily frequented until shortly after the lowering of the lake's water level in 1965.

Sailing

Boating was a common way of travelling through the area before paved roads were established around the lake's perimeter. Recreational boating was also common, and, in 1959, the Waikare Boating Club was established on the land of the club patron, Roy Pulham (TKDHS, 2003). The yacht club continued to grow, becoming an incorporated body in 1962, and several classes of boat competed on the lake (TKDHS, 2003). Regattas were notable events, with the Provincial Fresh Water Championship, the Club Open Championship, and the Waikare Cup all being held in 1965. Following the insertion of the Waikare flood gate, and subsequent lowering of the lake late in 1965, sailing became increasingly difficult because of the presence of weeds and submerged tree stumps (TKDHS, 2003). In 1966, Pulham's Beach was used for the last time, and permission was given for the club to be moved to Pirrit's Beach (Figure 2.7. See p. 19), where improved road access and a boat storage garage were constructed. In 1973, over 150 yachts were recorded on the water during the Waikare Yacht Club's hosting of the Waikato Thames Association Regatta (TKDHS, 2003). This yacht club continued for nearly 20 years, and its last event was held in the 1992/1993 season (TKDHS, 2003). However, interest steadily declined over these years, leading to the club's dissolution in 1996 ("Dissolution of Societies," 1996).

¹⁹ Cooke and Cox (2015) noted that, although wastewater is a contributor to Lake Waikare's hypertrophic state, the larger contribution of nutrients comes from surrounding land use. They argued that the lake's high nutrient levels may also be partially affected by nutrients left after the collapse of submerged plants (macrophytes) in the 1970s.



Figure 2.5

Lake Waikare Turned Orange (2021)

Note. From “This Is How It Ends: How Producing Milk Turned a Lake Bright Orange,” by A. Vance and I. McGregor, 2021, October 31 (<https://www.stuff.co.nz/environment/300422097/this-is-how-it-ends-how-producing-milk-turned-a-lake-bright-orange>). Copyright 2021 by Ian McGregor. Used with permission.



Figure 2.6
Picnic at Pirrit's Beach, Lake Waikare (ca. 1950)
Photograph reproduced from Andrew Thurlow's personal archive.
Copyright by Andrew Thurlow. Used with permission.



Figure 2.7

Yachts on Lake Waikare (ca. 1960)

A view of the lake from the sandy shore of Pirrit's Beach on the eastern side of the lake. Photograph reproduced from Andrew Thurlow's personal archive. Copyright by Andrew Thurlow. Used with permission.

Duck Shooting

Duck shooting has remained popular on Lake Waikare since European settlers arrived (Figure 2.8. See p. 21). In the 1930s, mallard, grey, and shoveller ducks were plentiful (“With Dog and Gun,” 1932). Pheasants, swan, quail, and godwit were also popular game birds. Shooting was so prevalent that the Auckland Acclimatisation Society regulated the number of birds that could be collected on any given day (“The Shooting Season,” 1934; TKDHS, 2003). The centre of the lake was maintained as a sanctuary for birds, and hunters could shoot only within 200 yards (183 metres) from the shore (“Bags of Game,” 1935). Maimais (duck shooting huts) could only be constructed in this 200-yard area. These small constructions are still popular with shooters today, and gunshots across the lake are still commonly heard between the months of May and July. However, many of the maimais on the lake now lie derelict.

Eel Fishery

Lake Waikare was the source of one of the most important eel fisheries in New Zealand, with annual yields of 85 tonnes. This amount reduced significantly following the implementation of the Lower Waikato-Waipā Flood Control Scheme (Dean-Speirs et al., 2014b). However, the eel fishery is still operational, with much lower quantities of eel being processed currently. This reflects the lower levels of food and habitat availability.

RESTORATION INITIATIVES

Lehmann et al. (2017) observed that, even if significant action was taken in the catchment to reduce sediment and nutrient loads, there would be a lag in response time of the bottom sediment of the lake. They predicted that it could take up to 200 years for the bottom sediment to return to a pre-nutrient enrichment state.

²⁰ Henare (2001) describes *mauri* as “an energy source and a concentration of life in accordance with the conditions and limits of one’s existence” (p. 208). Moorfield (n.d.) defines it as the “life force, principle, source of emotions—the essential quality and vitality of a being or entity” (para. 1).

The recent residential development of Winton Partners Lakeside community in Te Kauwhata will add an estimated 1600 houses to the community (Winton, n.d.). Part of the development, currently under construction, involves the rehabilitation of select wetland areas around the shores of the lake. This development has been supported by the Nga Muka Development Trust, a representation body of marae in the area of Rangiriri, Te Kauwhata, and Waerenga (Nga Muka Development Trust, 2017). The wetlands, although a small contribution to the rehabilitation of the lake, have seen positive results in the short time they have been there, with locals reporting the presence of wading wetland birds, such as spoonbills and *kōtuku* (white heron), returning to the area.

Part of the developmental proposal for the area next to Lake Waikare includes the construction of a new wastewater treatment facility that could replace the old one, which has had to cope with the growing Te Kauwhata population and wastewater from the nearby Springhill Prison and Rangiriri settlement. This new wastewater facility would remove the need to discharge into Lake Waikare, thus relieving some of the nutrient load in the lake.

However, the actions being taken by the property developers, although positive, do not in themselves make a notable difference to the condition of the lake. Reeves et al. (2012) have observed in an assessment of potential options to restore health to the lake that restoring wetlands will significantly benefit the wildlife but will have minimal impact on the restoration of water quality.

In its current state, Lake Waikare fulfils dual roles, as a holding area for flooding (with its water level kept consistently lower than that of the Waikato River), and as a repository for treated wastewater. These roles have had catastrophic effects on its ecology, and it will take a long time to reverse the negative impacts of these initiatives under the current water level regime.

Reeves et al. (2012) discussed several methods that have been investigated to mitigate sediment and nutrient levels in the lake. Options such as enhancing surrounding wetlands and replanting along the lake’s margins have begun, and, although some success is likely, the impact

on the lake’s state is considered low. Other options that have been considered (but have been deemed unfeasible) have included diverting the Matahuru Stream directly to the Waikato River and bypassing Lake Waikare. Another proposal would involve flushing the lake using the water from Ohinewai or Te Onetea Streams (Reeves et al., 2012). This latter option appears to be popular amongst some Te Kauwhata locals. Cooke and Cox (2015) reviewed flushing scenarios and predicted significant improvements in water quality that could potentially move the trophic level of the lake from hypertrophic down to supertrophic. However, they indicated that a change in the lake’s quality would be most likely be imperceptible to the general public, and flushing would not solve the problem of nutrient and sediment runoff. Instead it would “simply relocate at least a portion of the problematic nutrient load from the lake to the river, which ultimately receives outflow from the lake” (Cooke & Cox, 2015, p. 16).

As part of exploring options for restoring ecology near the lake, the Waikare Learning Community has planted 40,000 native plants near a small tributary that feeds the facility, believing that water quality flowing into the lake can be improved through the establishment of areas of native planting. Results have showed that nitrogen leaching is lower under *mānuka* than from unplanted land (Gutiérrez-Ginés et al., 2022). In addition, there has been a significant increase in native invertebrates in the planted areas.

Currently, the Vision Mātauranga project has facilitated the collaboration between diverse organisations, including the Centre for Integrated Biowaste Research, Massey University, Canterbury University, Matahuru Marae, Nga Muka Development Trust, Waikato Regional Council, Waikato River Authority, and EcoQuest Education Foundation (Gutiérrez-Ginés, 2019). The project has established a multidisciplinary community working toward the restoration of the lake and the surrounding catchment. It is also engaged in revitalising *mātauranga Māori* (Māori knowledge) within the approach, and monitoring systems integral to the recovery of oral-based Indigenous knowledge that will help to direct the vision for restoring the health and *mauri*²⁰ of the lake (Gutiérrez-Ginés, 2019; Gutiérrez-Ginés et al., 2022).



Figure 2.8

Duck Shooters at Lake Waikare (1902)

The original caption reads "Duck shooting on Lake Waikare, Waikato: Messrs. Harker and Party landing the game." From Auckland Weekly News, 1902, August 8, Auckland Libraries Heritage Collections AWNS-19020508-04-04 (<https://kura.aucklandlibraries.govt.nz/digital/collection/photos/id/172542>). In the public domain.





CHAPTER 3

Review of Contextual Knowledge

Review of Contextual Knowledge

This chapter reviews knowledge related to four considerations. Firstly, it provides an overview of how embodiment has evolved within Western thought. It then discusses literature related to autopoiesis, somatic markers, enaction, and groundlessness. From there, it moves to a consideration of knowledge relating to the role of the environment in cognition, including the theory of the Anthropocene and insights from Māori epistemology and spiritual geography. Then it discusses theory related to time and stillness before reviewing the practice of artists whose work serves to contextualise the creative work in the study.

EMBODIMENT AND THE MIND-BODY DIVIDE

Plato, Aristotle and the Medieval Church

Within the Western philosophical tradition, the mind and the body were historically seen as two separate entities. Plato (428–348 B.C.E.), in *Theory of Forms*, argued that knowledge came from eternal, unchanging ideals that existed beyond the physical world (to which the soul also belonged). On the other hand, he proposed that the body and its senses were tied to the physical, impermanent world (Plato, ca. 399 B.C.E./1970). In *Phaedo* he represented the soul as trapped within the body like a prisoner in a cage, prone to bodily desires and senses, which he saw as an obstacle to true knowledge.

Aristotle (384–322 B.C.E.) influenced the medieval church and academy with his view that everything must have a reason for existence (Aristotle, ca. 340 B.C.E./1984).

He referred to entities as substances. Each independently existing object he referred to as a primary substance, and the categories to which they belong he classified as secondary.²¹ Aristotle posited that the nature and existence of each primary substance was the result of four causes. The Material Cause (from which things are made), the Efficient Cause (the act that brings an object into existence), the Formal Cause (how an object is structured) and the Final Cause (the reason for the existence of an object). In his thinking everything existed for a specific purpose and it could only exist as a result of all four causes. Accordingly, objects and their effect on the world were not merely circumstantial, but they existed to carry out their final cause.

Aristotle's conception of the world as substances with causes held prominence in 13th century Europe, where predominantly Christian scholars combined his logic of substantial causes with Christian teaching (Rickaby, 1911). In the medieval Christian worldview, humans were elevated above other forms of physical creation because of their sophisticated capacity for rational thought (Hughes, 2015).

With the development of the scientific revolution, ideas of the universe began to diverge from the thinking of the medieval institutions with developments such as Copernicus' assertion of a heliocentric system in 1543 (Copernicus, 1543/1955), Galileo's astronomical observations in 1632 (Galilei, 1632/1967), and Newton's theories relating to gravity and the interaction of celestial bodies (Newton, 1687/1846).

²¹ For instance, a particular horse would for Aristotle be a primary substance, and the secondary substance would include broader categories to which it belonged, such as its species (Aristotle, ca. 350 B.C.E./2007).

Descartes

Rene Descartes (1596-1650), faced with both the philosophies of the Aristotelian scholastic tradition and the newer Galilean-Copernican science, attempted to create a system by which a true foundation for knowledge might be formed. In his philosophy, he sought to determine what could be known for certain, and how this could prove the existence of God.

Descartes disagreed with the Aristotelian-scholastic ideas of substantial causes which appeared to imbue objects with a knowledge of their own causes, and accordingly determined how they exist and act in the world. He also disagreed with the idea of ascribing mental properties to purely physical objects, and he argued a mechanistic view of nature where the mind and body are distinct substances. In *Discourse on Method* (1637/1999), Descartes formulated a method to establish a reliable foundation for scientific and philosophical inquiry that involved doubting all knowledge, including sensory perception (which he believed could be subject to deception).

Descartes' most famous statement, "cogito ergo sum" (I think, therefore I am), encapsulated the foundation on which he built claims to knowledge. Here, he asserted that descriptions related to one's actions or physical characteristics were susceptible to self-deception, and the only thing one could be sure of was that they existed. From this philosophical perspective, rational analysis assumed a foundational role, akin to mathematical and geometrical axioms, and reason acted as proof of an individual's human existence. Descartes argued for two kinds of substances: the mind (*res cogitans*) and extended matter—which included the body (*res extensa*). From this position, he concluded that the nature of the mind as a thinking, rationalising entity was separate from the body (as a non-thinking entity). His theory raised questions about how the mind and body interact, the origin of consciousness, and the establishment of a coherent connection between inner experiences.

Descartes' dualistic perspective on the mind-body problem has subsequently faced significant criticism from various philosophers. Ryle (1949) argued against Cartesian dualism, suggesting that the mind and body

are not separate substances but unified aspects of human experience. Nagel (1974) also challenged Cartesian dualism, arguing that consciousness and mental states cannot be reduced to purely physical explanations. Putnam (1981) criticised Descartes' dualism, advocating for a form of functionalism that rejects the mind-body divide by focusing on how mental states are realised in the physical world. Additionally, Damasio (2005) argued that emotions and feelings are intrinsic to rational thinking. Following these critiques, this thesis also opposes substance dualism and views cognition as an inherently situated phenomenon, linked to its context and experience

Spinoza

Spinoza (1632-1677), like Descartes, advocated for a rationalist view of the universe, where reality persisted because of God. He attempted to reconcile the current scientific discoveries of his time with the nature of God and Aristotle's metaphysics of substance. His conceptions differed from Descartes' dualistic view of the mind and the body as separate things. In his 1677 book *Ethics*, he proposed a monist perspective, where the mind and body are two modes of a single, unified reality, with each constantly influencing the other (Spinoza, 1677/1994). He called this "substance." For Spinoza there could only be one substance, which he called God or Nature.

Spinoza argued that emotions, thoughts, and physical experiences are interdependent aspects of human existence. His rejection of substance dualism stemmed from his assertion that emotions are not just mental occurrences but also have physical manifestations or affections. In this sense, Spinoza proposed that emotions and one's experience of them directly impact the body. Conversely, he held that bodily conditions can influence our mental states and emotional experiences. Understanding affection, or how our internal and external experiences affect us, underscores his rejection of Descartes' mind-body dualism and reinforces the idea that the mind and body are interconnected expressions of the same substance.

Husserl and Phenomenology

Husserl (1859-1938) developed a method of inquiry that emphasised the embodied and contextual nature of human engagement with the world. In *Logical Investigations* (Husserl, 1900/2001), he traced the origin of logical concepts back to human intuition, and argued that all notions of formal, systematised logic were rooted in lived experiences.

Central to this phenomenological method was the concept of intentionality (inherited from his teacher Franz Brentano). This idea presented consciousness as always being about something, with every experience directed toward an object or content.

Husserl's phenomenological method involved a rigorous examination of both the experiencer and the objects of experience, and he advocated for a suspension (bracketing) of preconceived notions and the examination of phenomena without presupposition. Through this approach, he believed it was possible to locate the underlying structures of meaning and intentionality (inherent in all conscious experiences) that created a foundation for all human knowledge. This foundation, which he called the "transcendental ego" was not a pure, empirical self, but an underlying form of consciousness that preceded all perception and thought. This formed the subjective basis for all objective knowledge, proposing that the world is always experienced through interpretive acts of consciousness. In this way Husserl saw the world as being constituted through intentional acts of the transcendental ego, not as an entity with an objective meaning. Instead it was a shared, intersubjective experience (Husserl, 1905/1964).

Husserl's work laid the foundation for phenomenological philosophy and influenced subsequent philosophers, such as Heidegger.

Heidegger

The Holistic Nature of Human Existence

Martin Heidegger (1889–1976) challenged the dualistic thinking of Descartes because it severed a connection between experience and the experiencer (a stance that was also advocated by Husserl). A primary issue that Heidegger had with the Descartes' subject-object dichotomy was the idea that one acquires knowledge based on context-independent, raw sense data to which context is added. He argued that such a division was futile because it is impossible to conceive experience in isolation from the being who experiences it. For Heidegger, Descartes' idea of the mind, reason and the spirit failed to take into account the nature of one's own being (Heidegger, 1962).

In navigating this indivisible relationship between human existence and the world, Heidegger developed the term *Dasein* ('being-in-the-world') (1962). This was a reassigning of the German word for existence; Heidegger used the term to refer to human finitude. *Dasein* signifies the holistic nature of human existence, where the subject and object, knower and known, are intricately connected. *Dasein* is the entity that experiences, interprets, and engages with the world, transcending a dualistic division. Heidegger argued that it is through *Dasein* that we come to know the world, and its existence is always situated within a specific context and environment.

Calling for a breaking down of the Western philosophical positivist tradition which took theoretical knowledge to be primary knowledge, Heidegger argued that this approach presupposed being in the first place (an assumption that is intrinsic to *Dasein*). He argued that to gain knowledge about experience, one must first be in the world. In other words, he argued that one cannot objectively experience the world if one is separated from the subjective nature of the senses.

The Ordinary Nature of Being

For Heidegger, the everyday nature of *Dasein* is to be involved in the world through objects that appear 'ready-to-hand' (Heidegger, 1962). In this mode of being, objects present themselves to *Dasein* as things that can be used within a context. He argued that knowledge is acquired through equipment that is ready-to-hand, which arrives with context-based significance.

This kind of being is *Dasein*'s primary engagement with the world, and Heidegger notes that the handiness of objects is not a characteristic of our subjective interpretation of them, it is the ontological definition of it from which other modes are derived (Dotov et al., 2010).

However, Heidegger also described a way of being in the world which he called "present-at-hand," in which there might be moments where things are experienced as mere objects, separated from their context or practical use (Heidegger, 1962). However, in contrast to the dualistic thinking of Descartes, Heidegger argued that an objective way of being in a world that is present-at-hand is not the primary way that the world is experienced. In this sense, he suggested that one does not first encounter the world as present-at-hand, adding context dependent meanings to view it as ready-to-hand. Instead one experiences the world as ready-to-hand, and only by removing the already holistic framework of everyday meaning can one move to the present-at-hand.

In describing the structure of human existence, Heidegger argued that care was not an emotion that was felt occasionally, but was an essential characteristic of the nature of *Dasein* (Heidegger, 1962). To care, he argued, is to make meaning of the world and engage with it with purpose, instead of existing within it as disengaged observers. In his later thinking, Heidegger used the term *wohnen* (dwelling) to build a picture of how humans interact in the world in way that might bring peace or contentment (Heidegger, 1971). He posited that it is humans' instinct to dwell. This is characterised in actions like building, cultivating, and preserving. He proposed that it is the desire of humans, when dwelling, to be at peace, given that "the fundamental character of dwelling is this sparing and preserving" (Heidegger, 1971, p. 149).

Merleau-Ponty's Perception and Embodied Mind

Merleau-Ponty's ideas on phenomenology considered the nature of perception and the embodied mind. He called for a consideration of phenomenological thinking about lived experience alongside neuroscience and psychology (Merleau-Ponty, 1967).

His thinking centred around discussions of embodiment, perception and the situated nature of consciousness. While Heidegger established *Dasein*'s experience as 'being-in-the-world,' and Husserl positioned the experiencing-self as separate, but connected to the body, Merleau-Ponty positioned the body at the centre of experience, arguing that perception is not a detached act of observing the world, but instead, it is situated *in* our bodily existence and immediate engagement (Merleau-Ponty, 2005). He introduced the 'lived body' as a concept to explain that our bodies are not passive, but active participants in perception. Challenging mind-body dualism, Merleau-Ponty's perspective asserted that the body was both the structure of experience and the context of cognition. To him, the body is not just the locus of all experience, it is the subject.

For Merleau-Ponty, everything in the world should be described in the context of being experienced. The world, in this sense, is not the background of cognitive acts, but is instead the setting of all thoughts and perception. In his work *Phenomenology of Perception* (2005), he critiqued the attempts of science and phenomenology to understand embodied existence, because they try to grasp unreflective experience and consciously reflect on it. He argues that, as a consequence, they cannot reflect the richness of experience but only articulate the experience after the fact. Merleau-Ponty emphasised the role of context in perception and experience, arguing that perception is always situated within a particular environment, and he argued that this context influences interpretation. He proposed that perception is not static but evolves in response to changing circumstances, and perception and experience point to the embodied and contextual nature of human engagement with the world. In so doing, he challenged conventional boundaries between subject and object and highlighted the active role that our bodies play in shaping our understanding of reality.

AUTOPOIESIS, SOMATIC MARKERS, ENACTION, AND GROUNDLESSNESS

Maturana and Varela's Autopoiesis

Humberto Maturana is a Chilean biologist and philosopher who, working in collaboration with Francisco Varela, introduced the concept of autopoiesis. This concept refers to the self-organising and self-maintaining character of living organisms. Maturana and Varela (1980) argued that living systems are distinguished by their capacity to perpetually generate and maintain themselves. Thus, they emphasise the dynamic and active nature of living beings. Autopoiesis highlights the autonomy and independence of living organisms in shaping their own destinies, extending the realm of cognition as something tied to the self-regulation and self-reference inherent in autopoietic systems. Maturana and Varela (1980) claimed that “living systems are cognitive systems, and living as a process is a process of cognition” (p. 5).

According to their theory, the brain, as an autopoietic system, continuously interacts with its environment and adjusts its internal states in response to these interactions, through a dynamic process of adaptation that is the centre of cognition.

Damasio's Somatic Markers

Damasio's (1999) work focused on how our minds construct our conscious experiences. Drawing on research in neuroscience and case studies of patients with brain injuries, he illustrated how disruptions in the brain's ability to process emotions and somatic (bodily) signals can impact an individual's consciousness.

One of Damasio's key contributions to cognitive science is the concept of 'somatic markers'. With this idea he posits that emotions are not just mental states but are 'one' with our bodily responses. Emotions, he argues, are the brain's way of signalling the body about the significance of a particular situation or event. He suggests that these bodily responses, or somatic markers, guide decision-making processes by reinforcing the connection between our physical state, emotional responses, and self-awareness.

Enaction and Groundlessness

Varela et al. (2016) approached embodiment through a combination of cognitive science and a consideration of Eastern Buddhist traditions. They proposed that perception is enactive, and the living body is a self-organising system that continuously reorganises itself to maintain survival. Enaction, for these theorists, is considered embodied action that is a result of active, skilful engagement with the world. Enaction is what brings an organism's environment into being (Werner, 2020; Werner & Kielkiewicz-Werner, 2022). Varela et al. (2016) argued that perception is groundless, because the origin of cognition is not found in any singular process (or ground), but rather it is located in how one interacts with the world.

Their position contrasts with idealist views of the world as a projection of our inner selves, and realism (where cognition is seen as occurring as internal representations of an external world). They argued for a groundless view of cognition, in which there is no absolute cognitive ground, either of the exterior world or of the mind.

Their thinking draws from Buddhist philosophy, particularly the Madhyamaka idea of *śūnyatā* (emptiness), to describe a co-dependence arising of cognition and the world. In this sense, they argued that groundlessness is the condition for everyday human experience, revealed in everyday actions when grasping after absolute ground is suspended. They described this everyday experience as a common sense that is “knowing how to negotiate our way through a world that is not fixed and pregiven but that is continually shaped by the types of actions in which we engage” (Varela et al., 2016, p. 144).

THE ROLE OF THE ENVIRONMENT IN COGNITION

Defining an Anthropocentric Epoch

The thesis project is concerned with a lake and the ways that, in a brief period of time, the actions of humans have impacted on its condition as a living system. The degradation of the environment may be located within a spectrum of debate surrounding the definition and demarcation of an epoch inside which human activity has profoundly affected the earth's systems. This section reviews the evolution of these demarcations.

Historical Anthropocentric Measurements of Time

Ascribing geological units of time to human-related activity is not a new occurrence. In 1788, Buffon positioned himself inside a period he described as the 'Seventh Epoch,' where humans began to significantly alter their environments through deforestation, agriculture, and land use (Buffon, 1788/2018). In 1854, Jenkyn described the 'Human Epoch' as a period defined in relation to future fossil records that reflected humans' impact on the earth. He used the term *anthropozoic* to refer to geological evidence of human life (Jenkyn, 1854). His term was also used by Reverend Haughton in his 1865 *Manual of Geology* (Haughton, 1866), and in the writings of the Italian geologist and priest Antonio Stoppani (Stoppani, 1873). During the same period, James Dwight Dana (1863) referred to the period as 'the Age of Mind' and 'Era of Man.'

Prior to this, in 1830, Charles Lyell had described the same period as the 'Recent Epoch'. He located its beginning at the end of the previous glaciation period, which saw the rise of humans and their civilisations (Lyell, 1830/1990). Lyell's 'Recent Epoch' was reframed as the 'Holocene'²² by the geologist Paul Gervais, and the term gained international popularity (Lewis & Maslin, 2015). Later, the geochemist Valdimir Vernadsky and Jesuit priest Pierre Teilhard de Chardin introduced the concept of the 'Noösphere.' This categorisation combined the earth's biosphere²³ with human cognition and rationality, and identified human beings as a geological force (Vernadsky, 1945).²⁴

The Anthropocene

Malhi (2017) argues that previous terms which have tried to capture the impact of humans on the natural environment have not had the same impact as the Anthropocene, a more recent demarcation that not only positions human impact on a global level, but adopts the formal nomenclature of the Geologic Time Scale. The word *Anthropocene* is derived from the Greek *anthropos* (human) and *kainos* (recent). Malhi noted that the concept of an Anthropocene occurs in diverse contemporary, disciplinary contexts, including the sciences,²⁵ art, archaeology, history, philosophy, political economics, and social theory.²⁶

The Anthropocene refers to the earth's current epoch. The word, popularised by Paul Crutzen and Eugene Stoermer, describes changes to the earth system caused by human activity (Crutzen, 2016; Crutzen & Stoermer, 2000). Crutzen suggests that we have entered a time that is distinct from the Holocene epoch. The idea of the Anthropocene has gained significant traction, to the extent that it has been proposed as a formally recorded epoch on the Geological Time Scale (Lewis & Maslin, 2015; Steffen et al., 2007; Zalasiewicz et al., 2008, 2011).²⁷

There is some debate about when the Anthropocene began. Lewis and Maslin (2015) noted that while there are detectable impacts of human activity in historical events (for example the beginning of agriculture or the Industrial revolution), these do not offer a globally synchronous marker necessary for recording the beginning of the epoch on the Geologic Time Scale.²⁸ Zalasiewicz et al. (2015) proposed that a consistent marker for the beginning of the Anthropocene occurred with the first nuclear bomb explosion in 1945, because this produced identifiable records of nuclear fallout worldwide. In 2023, evidence was found in core samples taken from Lake Crawford in Canada of nuclear fallout and other environmental degradation that could be used to determine the GSSP for the Anthropocene epoch. Witze (2023) suggested that this narrowed a proposed start date to either 1950 or 1952, when there was evidence of a sharp rise in plutonium levels.

- 22 Holocene is a Greek word meaning "entirely recent."
- 23 Biosphere refers to all living things on earth and the non-decomposed matter that they leave behind.
- 24 Interestingly, in reviewing these framings of human-based geological time, Lewis and Maslin (2015) observed that many considerations of human-based time periods were discussed by religious men. They suggested that the views of these men may have been more influenced by theological positions elevating human beings above other life on earth than by stratigraphic evidence.
- 25 This noted, Autin and Holbrook (2012) discussed critique of the Anthropocene as a classification in geology due to the concept being used in an imprecise way, especially when discussing political stances taken to environmental protection, because in such instances the term describes much shorter timescales than those on a geological scale.
- 26 Barry and Maslin (2016) discussed attempts to bridge discordances between conceptions of the Anthropocene in the humanities, natural, and social sciences. They suggested that debates across a range of disciplines may either increase divisions between them, or lead to an anti-political, unifying concept.
- 27 Geological time units are based on an agreed, marked boundary (called the Global Boundary Stratotype Section and Point (GSSP) between sedimentary layers in stratigraphic records. These are recorded on the International Chronostratigraphic Chart, and maintained by the International Commission of Stratigraphy (ICS) (Zalasiewicz et al., 2021). Each time unit on this chart is defined based on a consistent surface between strata, which signals a consistent timing of geological events around the world. Zalasiewicz et al. (2008) argued that there is sufficient evidence of biotic, geochemical, and sedimentary change recorded in Earth's strata to suggest a new period on this scale.
- 28 Because discussions about the beginning of the Anthropocene are inseparable from political debates about human-caused changes to the earth (Barry & Maslin, 2016), an Anthropocene Working Group was formed in 2009 by the International Commission of Stratigraphy, to independently assess the evidence that might establish an agreed beginning of the epoch.

Recent Developments

Despite its impact as a worldview in both public and academic communities, the International Union of Geological Sciences voted against the formalisation of the Anthropocene as Earth's current geological epoch in 2024 (International Union of Geological Sciences [IUGS], 2024). IUGS ruled that there was not consistent evidence in chronostratigraphic records to support the classification of a new epoch. Other thinkers have questioned whether the Anthropocene is best classified as an epoch in the Geologic Time Scale, or simply as an informal *event* in geological history (M. J. C. Walker et al., 2024; Witze, 2024). M. J. C. Walker et al. (2024) argued for the concept of an Anthropocene Event, reasoning that the exclusion of the Anthropocene from the Geologic Time Scale does not diminish the recognition of negative impacts of human activity on the planet. This Anthropocene Event, they proposed, is not a time interval, or a recent intensification of conditions like the Great Acceleration, but might be framed as an ongoing transformation of increasing intensity that began long before the mid-twentieth century. They argued that the movement from a Holocene epoch to an Anthropocene epoch (beginning in the recent past in terms of the Geologic Time Scale) ignores the complex transformations of increasing intensity that are evidenced in material records over the long history of humanity.

Irrespective of the Anthropocene's classification as an event or an epoch, there is an increasing realisation of the significant impact that humans have had on the present time period. Crutzen and Stoermer (2000) highlighted significant examples, including species extinction, exhaustion of fossil fuels, and the release of gasses into the atmosphere (for example, increases in carbon dioxide and methane, greenhouse gasses). Such impacts, they suggested, are rooted in ethical and political considerations of humanity's role in the world and concerns about what actions should be taken (Crutzen & Schwagerl, 2011).

²⁹ Although *kaitiakitanga* brings a responsibility of care for the land, Marsden and Henare (1992) distinguished this guardianship from the concept of stewardship, because stewardship assumes a master-servant relationship where humans assume power and control over land. *Kaitiakitanga* is a culturally nuanced concept that I frame in this thesis as an inherited Māori spiritual right to environmental responsibility. My responsibility, because its spirituality is not integrated with genealogy can not be described as *kaitiakitanga*.

A Distancing Global View

Although there appears to be a growing global awareness around the Anthropocene, Fagan (2023) suggested that there has not been significant action taken in response to this understanding. Ingold (2021) and Kidwell (2024) have problematised the global view of land, arguing that it positions the world as an object to be contemplated; something to be viewed from the outside. Ingold posited that such a perspective “expels humanity from the lifeworld” (2021, p. 191). He also noted that phrases like ‘global environmental change’ are self-contradictory. This is because the globe is viewed from the outside; in contrast, an environment, he argues, is something that surrounds us and therefore must surround something (Ingold, 2021). As a counter to the global view, Ingold presented the idea of a sphere where humans are immersed with a lifeworld that is unfolding around them. In adopting his position, this thesis considers the Anthropocene as inseparable from cognition itself, shifting its focus from global, political mobilisation to embodied relationality.

Land and the Experiencing Body

The following perspectives have been useful in framing the way the thesis approaches Lake Waikare's environment as a living system.

Bennett and Vibrant Matter

In 2010 Jane Bennett published a useful discussion about the dichotomy between things (“dull matter”) and beings (“vibrant life”) (p. vii). She argued that matter is alive and has the capacity for an agency of its own. She proposed that everything in the world is connected and bears a vitality that is not exclusive to living beings, and she advocated reconfiguring the thinking of a dualistic relationship between living and non-living matter, which she described as vital materialism.

This vital matter, she suggested, has the agency to influence both human and non-human things. In defining *vitality*, she referred to the “capacity of things—edibles, commodities, storms, metals—[which] not only to impede or block the will and designs of humans, but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own” (Bennett, 2010, p. viii). Her concept of vibrant matter seeks to counter “human

hubris” and “earth-destroying fantasies of conquest and consumption” (p. viii). This paradigm shift aligns with the call for an embodied relationship with the land and offers a new way of engaging with the challenges posed by the Anthropocene. By acknowledging the agency of vibrant matter, Bennett proposed that we are compelled to rethink our role and responsibility in an interconnected narrative. Her perspective challenges the prevalent notions of human centrality and calls for a more harmonious coexistence with the land, acknowledging its intrinsic value in shaping our cognitive landscape.

Tim Ingold

Ingold (2000) proposed that humans are not detached observers of the world but are deeply embedded within it. He advanced the concept of ‘dwelling,’ asserting that our bodies are integral to the process of perceiving and making sense of the world, such that cognition is not limited to the brain; instead it extends throughout the body. He argued that “dwelling, then, is a form of activity. It involves movement and transformation, but not as transitions between different states. Rather, it is the work of transformation itself” (Ingold, 2000, p. 156). Perception, he proposed, involves a mutual attunement between the perceiver and the environment. Like Heidegger, Ingold argued that rather than passively receiving sensory input, humans actively engage with the world through their bodies.

Insights from Māori Epistemology

Also impacting on this study are concepts drawn from traditional Māori cosmological belief. Within *te ao Māori* (the Māori world view), people and the land are deeply connected, because all living things are descended from Papatūānuku (the earth mother) and Ranginui (the sky father) (Royal, 2007). Accordingly, people and nature are enveloped in a complex genealogical relationship that links them physically and spiritually. The resulting intimate relationship to the land drives *kaitiakitanga* (responsibility) and intergenerational care for the environment (Roberts et al., 1995). This spiritual and inherited responsibility guides the use of natural resources and the development of the land toward environmental sustainability in physical, spiritual, and economical dimensions (Roberts et al., 1995; Harmsworth, 1997).²⁹

Within te ao Māori, whenua is a nuanced and complex idea. Whenua means both land and birth placenta (Le Grice & Braun, 2016), and it represents a deep spiritual and physical connection between tangata (people) and land, which symbolises nourishment from the earliest stages of one's life. This association progresses into an ongoing relationship that entails care and sustenance (Simmonds, 2017). Thus, whenua's dual meaning illuminates an inseparable and interdependent connection between people and land. Therefore, the commonly used term tangata whenua (people of the land) does not describe an occupant who dwells in a place but relates to one's being born of the land. Thus, in te ao Māori, tangata whenua encapsulates the belief that one emerges from the land, and returns to the land.

In this project, I understand my relation to the site of inquiry as connected with it across time. As someone who is not of Māori descent, I do not have whakapapa (genealogy) to the land. However, sharing this land with Māori under the Treaty of Waitangi, I am Tangata Tiriti (a person of the treaty), and I have a responsibility of care for the land. My life is both sustained and resourced by it.

Spiritual Dimensions of Land

Land, as well as being the context through which embodiment occurs, has also been associated with a perceptible spiritual realm (Allsen, 1996; Cooper, 2019; Dewsbury & Cloke, 2009). This association has appeared in diverse disciplinary framings, including spiritual ecology (Sponsel, 2001, 2012), spiritual geography (Cooper, 2019; Griffith, 1992; Henderson, 1993; Higgins, 2016; Norris, 1993; Paton, 2014; S. Walker, 1991), and Indigenous studies (Green & Raygorodetsky, 2010; Grim, 2001; Kong, 1993; Lane, 2002; Sponsel, 2001; Pohatu, 2011; Rival, 2009; Valentine et al., 2017).

Warner (2006) proposed that between the land and the spiritual there are inherent relationships, where a tension is found between what is present, solid, and material. For Warner, “what inheres in the material [is] something mysterious, elusive, and ethereal” (p. 72). However, in much Indigenous epistemology, this relationship is seen as harmonious and integrated.³⁰ Thus, Valentine et al. (2017) described the spiritual as a sense of connectedness between humans, their environment,

and an unknowable realm. Ruwhiu (2001) argued that, within this view, the spiritual (wairua) is an integrated part of everything and is also a key aspect of wellbeing.

From a Christian perspective, Dewsbury and Cloke (2009) suggested that spiritual knowing is dependent on a relationship between one's bodily existence, one's performance in the world, and faith in something beyond the physically known.³¹ They proposed that a faith-based disposition transcends rational thinking and opens possibilities for otherworldly experiences. Therefore, they described spiritual relationships with land as “felt practice and faith in things that are immanent, but not yet manifest” (2009, p. 696). They argued that spiritual relationships with land matter, because such a disposition “presents the unknown to us; that excess that is of us ... the outside of knowing as opposed to direct perception” (p. 698).

In his discussion of lens-based artistic practice, Mortensen Stegall (2019) described his encounters with land as “a form of embodied experience, in an operative mode that reaches sensorial and tacit dimensions [and also] a dimension that may be considered spiritual” (p. 157). This spiritual dimension to ‘knowing’ land, he suggested, “exists beyond the material yet may impact on both the body and an artistic way of expressing experience” (2019, p. 168).

EVOLVING UNDERSTANDINGS OF TIME AND STILLNESS

This thesis positions time as an experienced phenomenon, and the artworks produced from engagements with the environment of Lake Waikare reflect a distinctive interpretation of time as a duration of embodied experience.

Historically, the concept of time has been considered from two perspectives. As an external phenomenon, it is understood as occurring independent of human consciousness, and as an internal phenomenon, it is connected to the sensing body. Accordingly, this section of the review considers time and stillness in relation to subjective perception, positioning time as a phenomenon that shapes and is shaped by lived experience.

³⁰ In a similar manner, in Cooper's (2019) case study of the Akawaio, he employed a geographical analysis that expanded beyond natural and cultural frameworks. Spiritual understandings were integrated with an Indigenous people's way of perceiving, treating, valuing, and interacting with land.

³¹ However, Dewsbury and Cloke (2009) proposed that care should be taken not to conflate spirituality and religion, noting that “spirituality has been sought and experienced in a number of non- and a-religious contexts” (p. 696).

Time

Much Western thinking traces discussions of time back to Plato (c. 427–347 B.C.E.), who distinguished between the changing world of everyday experience and the unchanging realm of ‘Forms,’ which he described as perfect, eternal concepts on which all material existence is based. For Plato, time was the “moving image of eternity” and a reflection of the perfect, eternal realm of the Forms. Time was based on the motion of celestial bodies and it existed outside of human perception, and everyday lived experience (Plato, ca. 360 B.C.E./2014).

Aristotle (384–322 B.C.E.) conceived time as a subjective phenomenon. Rejecting Plato’s idea that time was intrinsic to celestial movement, he argued that movement itself is measured by time, so it cannot be the origin of time (Aristotle, ca. 340 B.C.E./2014). Instead, Aristotle argued that time is based on a recognition of change, without which there can be no experience of time. This view of time positioned it not as an independently existing phenomenon, but as a relational one, rooted in the act of perceiving passing moments.

Like Aristotle, Saint Augustine of Hippo (354–430) also saw time as dependent on a perception of change.³² However, St Augustine rejected the notion that time existed prior to God’s creation of the universe, arguing that God exists in a timeless form. He maintained that time is constituted by the sequential ordering of physical events, beginning with the creation of the universe, and he rejected the Platonic conception of time as cyclical celestial events, because he argued that such cyclical time would repeat itself.

St Augustine did not consider time as a phenomenon that could be measured using metrics. Instead, he argued that *the human mind* is the ‘instrument’ by which time is measured. He proposed that “Events flow from future to past, through the present and leave traces on the human mind. It is these impressions, which the mind measures” (as cited in Weinert, 2013, p. 15).

Immanuel Kant (1724–1804) saw time as a continually unfolding sequence, and his evolutionary view diverged from the biblical six-day creation narrative. Kant proposed time as an objective notion, arguing that it is perceived

through the human mind (Kant, 1781/1998). His position may be likened to St Augustine’s claim that time exists only through individual comprehension. However, Kant defined time through the *collective* (rather than the human) mind, and he proposed that such temporal comprehension is dependent on objective events.

Edmund Husserl described time as the prerequisite for all acts of consciousness. In his phenomenological method, he argued that perception of space, movement, and continuity were all based on temporal awareness (Husserl, 1964). In his view, time was not external to the subject but was formed through the process of experiencing the world. He proposed that time was divided into three components: primal impression (the immediate present), retention (what has recently occurred), and protention (anticipation of what is to come). He argued that, within temporal awareness, the experience of the present is reliant on both retention and protention, without which the experience of the flow of time will collapse. Like Aristotle, Augustine, and Kant, Husserl argued that the perception of time was shaped by how one experiences it. Thus, although he did not claim that time was a purely internal phenomenon, he maintained that it can only be understood through the human mind.

Henri Bergson (1859–1941) developed the concept of time as *durée* (lived duration), positing that true understanding transcended intellectual analysis and instead relied on intuitive, immediate experiences. He saw *durée* as experiential and distinct from mathematical, measurable time. He argued that a lived experience of time cannot be captured by conceptual abstractions (Bergson, 1957). Rather, he proposed that the present moment is characterised by the interconnectedness of past, present, and future. Bergson described *durée* as a “qualitative multiplicity,” where “several conscious states are organized into a whole, permeate one another, [and] gradually gain a richer content” (Bergson, 1957, p. 122). While he acknowledged the existence of time as it is conceived in the sciences (Bergson, 1911), his focus was on the internal, affective nature of the duration of experience.

Heidegger (1889–1976) proposed that time is part of the experience of being. He argued that “the meaning of being is ... interpreted from the perspective of

time” (Heidegger, 2011, p. 140). Heidegger proposed that time, rather than being stretched out in a linear fashion, is situated in the present and is a structure of involvement—past (facticity), present (fallenness), and future (projection). He made a distinction between external time, which he called ‘clock-time,’ and *temporality*, which describes the way time is experienced in lived existence.³³ Heidegger argued that temporality is not linear but exists through the reflective nature of being.³⁴

Finally, Merleau-Ponty, in his discussion of temporality in the *Phenomenology of Perception* (2005), suggested that it is not possible to divide time from its subjective structure. Building on Heidegger’s concept of Dasein, he accentuated the role of the body in understanding time. Like Husserl and Heidegger, who posited lived experience as a way to reflect on time, Merleau-Ponty argued that time is able to make the implicit explicit. This proposal created a structure for subjectivity, that, he argued, is possible because “temporal dimensions ... bear each other out and ever confine themselves to making explicit what was implied in each, being collectively expressive of that one single explosion or thrust that is subjectivity itself” (Merleau-Ponty, 2005, p. 490).

In this thesis, time is framed as perception, through which past, present, and future intersect in experience and action. My thinking aligns with Aristotle, Augustine, Kant, and Husserl’s arguments that time is an embodied, relational phenomenon. Bergson’s theory of time as duration (*durée*) is also influential, because I consider time a perceptual reality that exists in a state of continuous change.

³² Morison (1971) observed that St Augustine advanced a subjective conception of time, while Hernandez (2016) contended that Augustine regarded time as a divine creation that pre-existed human consciousness. However, Morison argued that Augustine articulated two distinct accounts of time: one subjective and one objective, the latter emerging in his work in 389, *On Genesis*.

³³ For Heidegger, time was not a sequence of ‘nows’ that occur in a linear progression. He argued that this kind of ‘clock-time’ is a ‘present-at-hand’ phenomenon that is not a part of the involved, internal structure of Dasein.

³⁴ The care that one takes in involving oneself with one’s existence is part of Dasein’s experience of time, which Heidegger called temporality.



Figure 3.1
Abramović Performing The Artist Is Present (2010)
 During her exhibition *The Artist Is Present* at the Metropolitan Museum of Modern Art (MOMA) (March 14 to May 31, 2010), Abramović presented a 736 hour, 30 minute still, silent performance, which involved her sitting immobile in the museum's atrium. During this period, visitors were invited to take turns positioned opposite her, engaging with the artwork in states of extended stillness. CC BY-SA 3.0.

Stillness

In the thesis, stillness is understood as an experiential condition that arises through an embodied and affective relationship with land. Given the widespread use of this concept in spiritual, aesthetic, therapeutic, and philosophical thinking, stillness is a challenging term to define. This section examines how stillness has been approached across different disciplines and traditions, particularly in relation to embodied practice. In my work, stillness may be understood as a situated and unfolding process shaped by sensory awareness, interaction with environments, and reflective experience.

Stillness as Physical and Metaphysical Phenomenon

In mechanics, stillness describes the absence of movement, where objects remain at rest, in equilibrium. Stillness is understood as an observable, measurable state where the object is influenced by balanced forces (Bissell & Fuller, 2011). This scientific framing, however, does not account for stillness in lived human experience.

From a metaphysical stance, the Stoic philosophers framed stillness as an inner discipline. Here, the concept of *ataraxia* referred to a state of tranquillity that was maintained through reason and detachment from external disturbance (Hadot, 1988; Long, 2002). This form of stillness was not passive, but an active state of composure which was developed through one's ethical and philosophical engagement with the world. Stillness, for the Stoics, was founded in rational autonomy and reflection.

In Buddhist philosophy, stillness is formed through meditative practices like *śamatha*. These are based on the suspension of reactive thoughts and in a calm abiding inside the present (Rahula, 1974; Wallace, 1999). In Buddhist thinking, it is not the negation of movement but the active attention to breath, sensation, and thought that leads to stillness. Through this condition of stillness, practitioners encounter *sunyata* (emptiness), wherein one develops insight into the interdependence of phenomena.

In yogic traditions, stillness is cultivated through breath regulation, posture, and mental concentration, which facilitate states of inwardness and transcendence (Conradson, 2011). Yogic traditions view stillness as an essential component of spiritual discipline, enabling practitioners to access altered states of perception.

In Christian contemplative practice, stillness is seen as a state of receptivity and surrender that fosters openness to the presence of God (McGee, n.d.; Starke, 2020). This state is often achieved through silent prayer or meditation, inside which the mind is quieted.

Stillness in Performance Practice

Artistic research has also investigated dimensions of stillness. Moore (2012) described stillness in performance as a skilled and embodied mode of attention that is revealed through careful preparation and bodily discipline, and cultivated through presence and engagement with the body. Pinxit (2016) defined stillness as “an embodied, intimate moment of reflexivity and mental poise ... achieved through simultaneous concentration and awareness” (p. 4). In these performative practices, stillness emerges as a flow between movement and reflection.

The contemporary performative artist Marina Abramović has developed methods that help her train her mind/body for challenging durational performance in works such as *The Artist Is Present* (2010) (Figure 3.1). Using methods that focus on stillness, she has produced a substantial body of work that enables exhibition visitors to participate in exercises that place emphasis on being present in time and space. Through attention paid to breath, motion, stillness, mutual gazing, and concentration, the exercises focus attention on sensations and qualities of the moment (Marina Abramovic Institute, 2020).

Stillness in Social, Therapeutic and Environmental Contexts

Bissell and Fuller (2011) argued that stillness is often positioned as the ‘other’ in relation to cultural ideas of speed and productivity in modern life. Stillness is elevated in wellness industries and is often commodified in mindfulness retreats, digital detoxes, and slow living initiatives (Conradson, 2007; Doughty, 2023). However, stillness is not an evenly shared social experience. Martin (2011) argued that those living with the threat of conflict or natural disaster, or a lack of civil or economic rights, are likely not to experience stillness as positive, but associate it more with forced immobility and silencing. Similarly, Doughty (2023) observed that stillness can be experienced as disempowering, particularly when it results from exclusion rather than voluntary retreat. Despite these reservations, the concept of stillness has recently gained attention in geography and health research as part of a framework that considers natural environments as therapeutic.

Doughty (2023) defined stillness as “a relation between body and landscape, which unfolds through interactions with the environment” (p. 1). Her work identified two modes of stillness. Cocooning stillness is associated with practices that create sanctuary by limiting sensory input through the use of sensory deprivation. Such sanctuary, she noted, is increasingly employed in response to urban overstimulation. In contrast, she suggested that immersive stillness is achieved through attunement to the environment; it can be experienced through acts of walking, gardening, or other acts where one might cultivate embodied presence through multi-sensory engagement with the environment. Stillness, from this perspective, is not inert but restorative, emerging through embodied and affective co-presence with place.

Interestingly, polyvagal theory, proposed by Porges (1995), links stillness as a state of calm to the activation of the parasympathetic nervous system, particularly the ventral vagal complex, which fosters calm and social engagement. Porges proposed that activities such as slow breathing, gentle motion, and meditative stillness can increase emotional regulation and physiological stability (Music, 2015). This position posits that embodied stillness is not only cognitive but also biologically grounded in the nervous system.

Stillness in this Study

In this thesis, stillness is understood as a situated, relational state and process that emerges through embodied creative practice. It is encountered during moments of physical engagement in which bodily sensation, sensory awareness, and focused attention become aligned. Rather than functioning as a break in activity or a withdrawal from movement, stillness emerges as perceptual attunement, in which physical, emotional, and cognitive elements converge. These encounters open space for care, attention, and reflection, where stillness is approached not as the ceasing of activity but as a state of receptivity and embodied presence that supports creative understanding.

At Lake Waikare, stillness has been experienced during quiet and sustained periods spent in the environment. Here, bodily attention has become centred, and an awareness of time, movement, and intention has sharpened. Stillness has emerged as an expression of a contemplative relationship with place. This has sometimes been framed through a Christian understanding of land as a God-given creation, where stillness can involve a spiritual orientation to the material world. However, this orientation is not imposed nor prescriptive. It reflects an affective and embodied specificity through which place, faith, and creativity intersect inside practice.

CONTEXTUALISING PRACTICE

Having discussed the thinking relating to embodiment, time, environment, and stillness, it is useful to consider artists whose practice contextualises the project. The first group is significant because their inquiries consider relationships between embodiment and the land. The second group are artists whose studies relate to video works that explore the communicative potential of time and stillness.

Embodiment and the Land

Wendy Beatty

Wendy Beatty is an Australian photographer whose work explores her embodied engagement with land (Figure 3.2). Her practice is concerned with the subjective nature of being in the landscape, and her work extends beyond representational modes of image-making, through what she describes as a ‘dialogue’ with the landscape. Her doctoral research developed an approach to landscape photography where walking, recording photographs, and post-production were used in response to an “affective gaze” (Beatty, 2017). This gaze, Beatty noted, is “not a view of the landscape that necessarily privileges or contains a distant horizon, but a gaze that imparts the landscape’s physicality by creatively incorporating touch, body and movement techniques in the image’s production” (2017, p. iv). Thus, the land in her work is no longer an object to be photographed but an active participant in her practice.

Beatty’s dialogue with the landscape extends from recording images in the landscape to image processing in her darkroom, where she uses her body to influence how the light reaches the photographic paper. Here, her physical presence becomes entwined with the visual representation of the land. These elements are overlaid and interwoven into hybrid visual texts.



Figure 3.2

Beatty's Hybrid Imagery (2016)

Untitled photograph in Ecological landscape series by W. Beatty, 2016
(<https://wendy-beatty.com/a-g-2>). Copyright 2016 by Wendy Beatty.

Marcos Mortensen Steagall

Marcos Mortensen Steagall is a Brazilian-born, New Zealand-based photographer. His practice-led doctoral thesis (Mortensen Steagall, 2019) explored the role of embodiment through a process of immersion, where a communion occurred between the self and the earth (Figure 3.3). Mortensen Steagall suggested that embodiment might extend beyond cognitive and physical forms of knowing, entering a realm that might be considered spiritual. In his encounters with land, Mortensen Steagall draws on the Māori concept of mauri to describe a spiritual energy that pervades a deeply communicative state with the land.

In his ‘immersive photography’ method, he visits a location once, photographing intuitively in a process of ‘internalisation.’ Like Beatty, Mortensen Steagall’s immersion spans beyond location photography, extending to the studio where he reflects on the photographic data he gathers. Significant to his research is the use of a journal in which reflections on encounters with the land are recorded following an immersion. In this written format, Mortensen Steagall gives an account of his embodied experiences and discoveries, often using a poetic voice to articulate his encounters with the land. This is not dissimilar to the reflective log that I use in my research, where entries are recorded that can be questioned as work evolves.

Notably, walking is also a significant part of Mortensen Steagall’s process. Like me, he utilises walking as a form of knowing, where his body’s motion becomes a means of dialoguing with an environment.³⁵



Figure 3.3
Mortensen Steagall's Immersive Photography Practice (2016)
Note. Untitled photograph at Pukearuhe, New Zealand by M. Mortensen Steagall, 2016. Copyright 2016 by Marcos Mortensen Steagall. Used with permission.

³⁵ Mortensen Steagall described walking as a “rhythmic process” where he becomes “increasingly connected to the land” (2019, p. 32).

Rachael Jones

Rachael Jones is a London-based artist and filmmaker whose practice is concerned with alternative ways of addressing the separation between humans and land. In her doctoral thesis, she developed a 'landscape-based' practice where human and non-human participants were involved in a collaborative filmmaking process (Jones, 2023). Jones' practice involved the creation of still and moving images, collage, diagrams, and writing, in which she argued that embodied knowing might result from process-driven encounters with the land (Figure 3.4).

Jones' thesis challenged traditional dualisms between nature and culture, body and mind, and theory and practice. She explored how experimental and participatory filmmaking might offer alternative ways of knowing and being in the world. In her study, Jones invited participants to create artwork in relation to the land, following prompts to encourage embodied ways of making. Part of this process involved walking as an embodied method of attuning oneself to the environment: an observational immersion.

Jones' practice investigated how filmmaking can become a tool for participation, where the boundaries of human and non-human agency might become indiscernible. She argued that inside participatory processes, individual agency is deprioritised and emerges as "intra-action." (Jones, 2023, p. 82). This idea suggests that agency is not a characteristic inherent to an individual but rather emerges as the result of interactions and relationships.



Figure 3.4

Jones' Experimental Image Making (2023)

Phytography experiment on photographic paper by R. Jones, 2023. In this process, Jones, along with other participants, recorded assemblages by placing organic materials on a strip of photosensitive film. Copyright 2023 by Rachael Jones. Used with permission.

Harry Nankin

Harry Nankin is an Australian photomedia artist whose practice-led doctoral thesis explored threatened Australian ecologies through a ‘cameraless’ photography practice’,³⁶ manifesting what he called the ‘ecological gaze’. He described this gaze as “the symbolizing of place, the indexing of nonhuman agency and the proffering of an iconography of nonhuman tragedy” (Nankin, 2015, p. 189). Both Nankin and I deal with environments that are damaged or threatened.

Nankin’s research proposed a way of addressing the problematic view of the non-human in the Anthropocene, as ‘other.’ For Nankin, the insects he records are symptomatic of human indifference toward the non-human, and this indifference, he suggests, extends from organisms to the land itself. His photographic film images create haptic records of the shadows of insects onto photosensitive paper, in such a way that both the creature’s silhouette and traces of its wing scales are captured (Figure 3.5). Nankin (2013) argued that the monocular view of a camera is objectively distancing, so he employed photogram recording techniques to create an “indicative symbolic order constructed of ecological phenomena presented as indices of place” (p. 3). These images, Nankin explained, “embody ecological relations using an index of cameraless photographic touch and shadow” (2015, p. 190).

Like Beatty and Mortensen Steagall, Nankin’s practice extends past his field recording, because his studio digitising, recolouring, and scaling are understood as an integrated part of the creative process. Nankin’s approach to recording the non-human through cameraless methods is not dissimilar to how I record sketches and textures at the lake, through taking rubbings of surfaces and imprinting mud, clay, and peat onto paper. These elements appear as subtle textured layers in work like *Current* (2025) and in the introductory sequence of *Waikare* (2025).

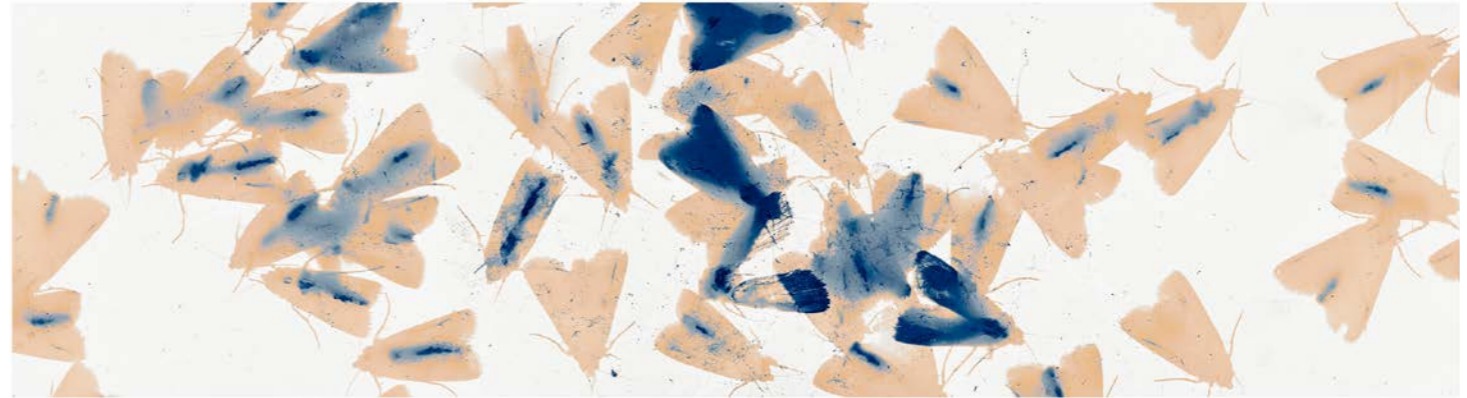


Figure 3.5

Nankin's Cameraless Photography (2016)
Moth Liturgy 2 [Pigment ink jet print, 51 x 187 cm], by H. Nankin, 2016. Copyright 2016 by Harry Nankin. Used with permission.

³⁶ By cameraless photographic practice, Nankin refers to the use of photogram techniques that record the shadows cast by objects on to a photosensitive surface

Maarit Mäkelä

Maarit Mäkelä is a Finnish designer, educator, and ceramicist who works at the junction of ceramics and fine art (Figure 3.6). She writes extensively about embodied cognition in creative inquiry, and her creative work is concerned with reconsidering human relationships to land. She has proposed that the creative act of making *is* thinking (Mäkelä & Atkaş, 2022; Mäkelä & Atkaş, 2023), where the formation of work emerges through interaction with the material, and it is therefore inseparable from the creative process.

In her practice, Mäkelä collects soil-based materials from the land, working in a manner that she describes as “following the material’s flow.” Here, matter is always “in movement, flux and variation, and thus the matter-flows can only be ‘followed’” (2022, p. 14). Her recent work *Soil Laboratory* (2024) was concerned with how a living landscape might be understood through a form of dialogic walking. Walking, for Mäkelä, is an essential part of the creative process. Aligning her claims with Ingold (2004), she understands walking to be a form of circumambulatory knowing: a process through which the environment is encountered, and the raw material of the soils is revealed to the creative process. Mäkelä (2022) argued that through her process of walking, the artist’s knowledge and the material landscape generates emotional and dialogical relationships.³⁷



Figure 3.6

Mäkelä's Pieta (2019)

Pieta, by M. Mäkelä, 2019. Finnish earthenware body painted with soil and sediment. Copyright 2019 by Maarit Mäkelä. Used with permission.

³⁷ Beatty, Jones, Mortensen Steagall, and Mäkelä all discuss their process as a dialogical, intimate, dynamic collaboration with the land.

Time and Stillness

This thesis study considers embodiment in relation to stillness and duration. In this regard, three artists and their related inquiries into movement within a fixed frame also serve to contextualise my work.

Bill Viola

Bill Viola (1951–2024) created video artworks “as an avenue to self-knowledge” (Viola, n.d., para. 2). His work is influenced by Christian mysticism, Zen Buddhism, and Islamic Sufism. Viola’s work integrates electronic, sound, and image technology to reflect on human experiences like birth, death, embodiment, and consciousness. His images explore the nature of stillness on large screens (Figure 3.7). In his compositions, time behaves as a duration inside which motion is slowed or paused. His works often contain paradoxical tensions between light and dark, life and death, movement and suspension, which elicit nuanced shifts in emotion because they evolve subtly over extended periods. His work often “invites quiet contemplation” (Trigg, 2017, para. 3) through the poignant use of extreme slow motion, used to create what Lara Goodband described as “silent meditations on time” (Goodband, 2023, para. 4). In these images, water is often featured as transformative and related to themes of birth, death, and rebirth. Like Viola, my work expresses time as a duration—a dwelling inside a state or space that is dislocated from chronological expectation.

David Claerbout

The Belgian artist David Claerbout uses a combination of photography, film, and digital compositing to explore the passage of time. His images balance tensions between stillness and movement. Claerbout has described his work as a meditative duration (Obrist, 2004), wherein “the spectator’s own biological time ... does most of the work” (Brown, 2016, para. 12). He claims that his approach to image making resists the telling of sequential narratives, so time is experienced as slow, devoid of expectation, drama and plot (Brown, 2016; Obrist, 2004). Claerbout maintains that his images challenge the photograph as a record of reality, existing instead as mental phenomena.

When his work is concerned with natural phenomena like light, water, and the life of plants, he considers them across extended passages of time. His more recent works, *Olympia* (2016) and *Backwards Growing Tree* (2023) (Figure 3.8) challenge the understanding of time: moving image pieces that feature a running length which is too long to view from beginning to end.³⁸ Although his images appear to be records of a time that has passed, they are in actuality detailed three-dimensional models designed using computer generated imagery (CGI) and animated using an algorithm. Claerbout argued that these images take place in what he calls “panoramic time” (Galerie Rudolfinum, 2020, 00:09), because they are not sped up or cut for the viewer’s convenience and occur on a large time scale.

Backwards Growing Tree illustrates the reversed process of a tree’s growth over a five-year period. Claerbout (2023) proposed that this image mirrors the unidirectional flow of time, prompting us to reflect on the past, future, and notions of loss. In extended images like these, Claerbout (2016) argued that one becomes aware of biological time, because it is impossible to view these entire sequences in real time.



Figure 3.7

Viola's Slow Video Practice (2000)

Still frame from *Ascension*, by B. Viola, 2000. This video piece, through its slowed time and accompanying soundtrack, is contemplative. The image references Christian imagery of baptism and Christ on the cross (evident in the figure’s laterally raised arms). A section of this video can be viewed at <https://www.youtube.com/watch?v=2C66IBBpWYs>.



Figure 3.8

Claerbout's Backwards Growing Tree (2023)

Still frame from *Backwards Growing Tree* by D. Claerbout, David Claerbout, 2023 (<https://davidclaerbout.com/Backwards-Growing-Tree-2023>). Artwork reproduced courtesy of David Claerbout and Galerie Greta Meert. Copyright 2023 by Galerie Greta Meert. Used with permission.

³⁸ *Olympia* depicts the gradual decay of the Berlin Olympic stadium over a period of 1000 years (during which time, plant life slowly comes to dominate the environment). Excerpts of Claerbout’s *Olympia* are viewable on his website, <https://davidclaerbout.com/Olympia-The-real-time-disintegration-into-ruins-of-the-Berlin-Olympic>.

Sam Taylor-Johnson

Sam Taylor-Johnson (formerly Taylor-Wood) is a British photographer and filmmaker whose early works *Still Life* (2001) and *A Little Death* (2002) examine themes of death and mortality. Her work, constructed as moving image sequences, draws on approaches to still-life painting evident in the work of the Dutch masters (Wendt, 2011).³⁹ Figure 3.9 features frame grabs from a filmed passage of time during which a hare slowly decays. Taylor-Johnson argues that this work presents us with a paradoxical yet ‘graceful’ relationship, where we encounter the seeming stillness of an image and the violence that emerges through extended viewing (as the animal is consumed by rot and insects) (Wendt, 2011). Taylor-Johnson creates such work using a locked-off camera and timelapse photography. Although differently situated, I use related techniques when creating recordings at Lake Waikare, where time is altered and an extended viewing of the subject is encouraged. However, within my images time is not dramatically compressed. We dwell in a state of suspended stillness and contemplate a nominated image inside slowed time.⁴⁰

This chapter has reviewed the evolution of thought relating to the idea of embodiment. This provides a context for my position as an artist that is influenced by the thinking of Husserl (1900) and Bergson (1957), both of whom consider human experience as subjective, intuitive, and contextually situated. My thinking is also resourced by Merleau-Ponty’s notion of the lived body. Also of significance is Heidegger’s (1962) advancement of Dasein, which is useful in shaping my proposition that the understanding of the world is intertwined with the world itself.

In addition, the study is shaped by Bennett’s notion of vibrant matter as a reconceptualisation of livingness and an assertion that land may hold agency. Ingold, Varela, Damasio, and Maturana have been useful in considering land as a mutual attunement that is achieved through bodily dialogue between the environment and the artist. Additionally, the Māori consideration of whenua has been influential in considering land’s importance in a relational, personal manner.

Finally, reviewing the work of Beatty, Mortensen Steagall, Jones, Nankin, Mäkelä, Viola, Claerbout, and Taylor-Johnson has enabled me to contextualise my approach as a form of artistic inquiry concerned with embodiment in relation to stillness and duration.



Figure 3.9
Taylor-Johnson's A Little Death (2002)
Still frames from *A Little Death*, by S. Taylor-Johnson, 2002. Copyright 2002 by Sam Taylor-Johnson.

³⁹ For an example of such work, see Harmen Steenwijck's *Still-Life of Fruit and Dead Fowl* (ca. 1650), https://commons.wikimedia.org/wiki/File:Harmen_Steenwijck_-_Still-Life_of_Fruit_and_Dead_Fowl_-_WGA21765.jpg

⁴⁰ Slow time in my practice is considered in two ways: the technical process of slowing down my recordings in post-production through digital manipulation, and the extended playtime of the final images where one can dwell with the image in a process of slowed, meditative viewing.





CHAPTER 4

Research Design

Research Design

This chapter unpacks the research design of the thesis. Methodologically, the research employs a heuristic inquiry, positioned within an artistic research paradigm and carried out using a methods that can be divided into four phases: gathering and reviewing, recording material on location, digital studio processing, and eliciting critical review.

RESEARCH PARADIGM

Ling and Ling described a research paradigm as

a set of assumptions and understandings about key aspects of the research: the nature of reality or truth (ontology); the intent, ethics and values of the researcher (axiology); the understanding of the nature of knowledge and how it may be known (epistemology); the way information is obtained (methodology); and the nature of the research outcomes. (2016, p. 19)

The choice of paradigm, Mackenzie and Knipe argued, “sets down the intent, motivation and expectations for the research” (2006, para. 6).

Paradigmatically, this thesis might be framed as artistic research, because it seeks to subjectively understand the research question through artistic practice. Klein (2010) proposed that artistic research is distinguishable from scientific research because it pursues “felt knowledge” (p. 6), which cannot be separated from emotional and sensory perception. An artistic research paradigm does not position knowledge as an objective truth to be discovered, rather it is understood as something co-created through interactions between the artist, materials, environments, and processes (Leavy, 2020, 2025). Such inquiries, Gray (1996) and Rust et al. (2007) argued, are dependent upon reflective, generative practice.

METHODOLOGY

Heuristic, Practice-Led Research

There is ongoing discussion within artistic research regarding the nature of *practice-led* and *practice-based* research. Much of this debate arises through the diverse approaches to research employed by practitioners across creative disciplines.

I define the thesis study as ‘practice-led,’ because in the process of making I am ‘led’ through a process where both the question and its outcomes are developed and refined. Here, iterations of the research question are responsive to what surfaces in the process of discovery.-

In the study, I sought to create meaning through subjective and reflective dialogue between a research question and practice. Inside this dynamic, I sought my way forward without a predetermined formula, iteratively testing and reflecting on the practice. In such a process, Reason (1988) proposed that “we do not suppress our primary subjective experience; nor do we allow ourselves to be overwhelmed and swept along by it; rather, we raise it to consciousness and use it as part of the inquiry process” (p. 12). Such research, where there is a deep, personal involvement in the problem solving, may constitute heuristic inquiry (Douglass & Moustakas, 1985; Ings, 2011; Ings & Tudor, 2024; Mortensen Steagall, 2019; Sela-Smith, 2002; Ventling, 2018, 2024).

Etymologically, heuristic relates to the Greek word *εὕρισκω*, meaning “to discover.” Such inquiry emphasises intuitive insight, experiential engagement, and learning through trial and error (Ings, 2011, p. 82). When engaged in such research, Moustakas (1990) argued that the

researcher engages in an “internal search for the nature and meaning of human experience” (p. 9). This form of inquiry positions the designer at the centre of the problem to be solved, and they uses subjectivity to navigate the study informed by tacit and explicit knowledge that operates without a predetermined formula (Ings, 2011).

Kleining and Witt (2000) argued that the dialogue with the research question is likely to evolve as new discoveries emerge through the study and a deeper understanding of the topic forms. In this thesis, the research question is internal and contextualised through my immersion in the land. In this process, I draw connections heuristically between myself and the land (Ingold, 2000; Mortensen Steagall, 2019).

METHODS EMPLOYED IN THE RESEARCH

Given the heuristic nature of the inquiry, the methods used may be associated with embodied immersion, gathering, and reflection. These methods may be considered across four phases of the research (Figure 4.1). Although distinct in their focus, these phases did not unfold as a sequential progression; I oscillated between them as the study gathered material, reflected on states of being and expressing, then continually returned to location of the study in the pursuit of deeper levels of understanding.

Phase one involved gathering and reviewing secondary literature and related material that contextualised both the approach to the study and the location in which it was based;

Phase two involved recording material during site visits to Lake Waikare and reflective writing;

Phase three took place in the digital studio where I engaged with image management and post-production strategies; and

Phase four involved the elicitation of critical feedback in the form of exhibitions and peer-reviewed publishing.

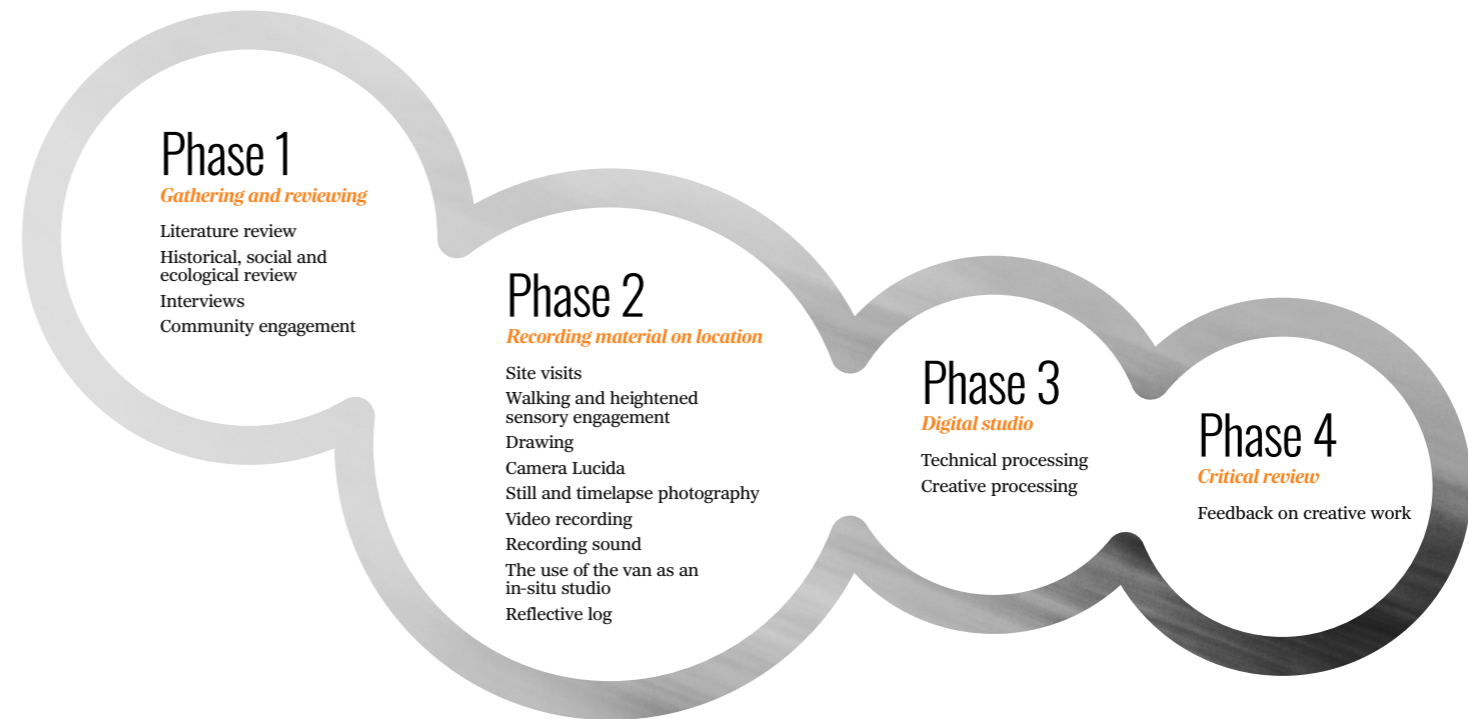


Figure 4.1
Phases of the Research

Phase 1: Gathering and Reviewing

The gathering of secondary literature and material occurred across two phases of the research. This first phase broadened my contextual understanding of Lake Waikare and enabled me to review thinking relating to embodiment, stillness, and connection to land.

Literature Relating to Embodiment and Stillness

In reflecting on knowledge that is rooted in human experience, it was useful to map out how thinking relating to embodiment had been approached. The primary purpose of this part of the inquiry was to broaden my consideration of embodiment and understand the evolution of thought surrounding it. Because this review also included the work of artistic practitioners, it prompted considerations of creative practice and reflection on how the nature of connection to land through practice might be understood.

In the process of gathering and reviewing, I read ideas from thinkers upon which I would dwell while engaging in practice. This process of reading, viewing, and reflecting meant that existing theory and practice accompanied my states of immersion as a form of contemplative, contextualising dialogue.

Historical, Social and Ecological Review

Because much of my upbringing occurred near Lake Waikare, I was already familiar with the location when this study began. By reviewing the historical, ecological, and social dimensions of the lake, I sought to extend and enrich the familiarity I had with the location, shifting its significance from a place of childhood memory to a space of social, cultural, and environmental disruption.⁴¹

In this process, I searched for information about Lake Waikare online, reviewing scientific reports and papers,⁴² historical newspaper articles, and webpages that presented information about the location.

In addition to written content, I also searched for historical images of the lake (both in painted and photographic form). This involved examining newspaper archives and aerial photographs used when surveying the lake.

These sources provided graphic insights into the social and physical nature of the lake, and the accounts they recorded also intensified my grief for its current state.

Interviews

Having gained ethics approval for the study, I undertook a number of interviews to gather personal recollections of the location from local people who remembered the lake before it became hypertrophic.⁴³ By collecting personal and anecdotal information, I sought information and insight that did not exist in published material, especially recollections regarding social and cultural dimensions of the location.

The participants I interviewed were all members of the Te Kauwhata community whom I already knew. These interviews were gathered as sound recordings, which I later transcribed.⁴⁴

Community Engagement

During this phase I engaged with community members at events.⁴⁵ This proved useful in creating networks and accessing opinions and anecdotes relating to the lake. These conversations were informal and emerged naturally as a consequence of being 'local.'⁴⁶ Another significant site of local engagement was the small church that I attended in the community, because some members of the congregation came from families who had farmed near Waikare for generations.

Sometimes encounters with people were unexpected, and I embraced and took advantage of such opportunities when they arose. Indicative of this was my practice of knocking on doors to ask permission to cross private farmland (to access parts of the lake). In such instances, farmers, having recognised who I was and understanding my purpose, would sometimes offer to take me to the lake across the farmland on their quad bikes. Another example was meeting Stuart, who was living out of his car at the lake so he could take action on the proliferation of koi carp.

⁴¹ Much of this material is included in Chapter 2: History, Community, and Ecology.

⁴² These council, housing development, and Geographic Information System (GIS) reports expanded my existing understanding of the lake and the contributors to its current degraded state, as well as documenting actions that had been taken to improve its quality.

⁴³ See Appendix 1 for documentation related to this approval.

⁴⁴ Participants formally interviewed as part of the project were John Oakden (a local farmer), Glen Tupuhi (a kaumatua), and Liz Tupuhi (an environmental scientist).

⁴⁵ These engagements included two tree planting days at the Lakeside housing development on 21st of June, 2024, and 7th of June, 2025.

⁴⁶ Ongoing encounters with local people were the substrate upon which trust and respectful relationships were built and extended.



Figure 4.2
Te Toto Gorge (2023)
 Te Toto Gorge in April, 2023.
 Copyright 2023 by the author.

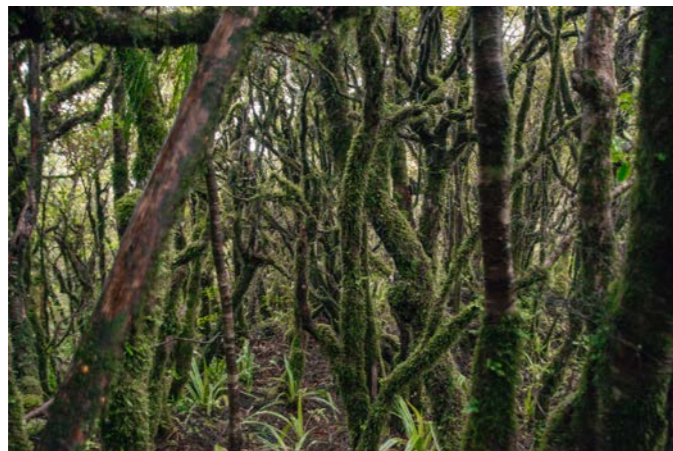


Figure 4.3
Mt Te Aroha (2023)
 Mt Te Aroha in May, 2023.
 Copyright 2023 by the author.

Phase 2: Recording Material on Location

The second phase of the inquiry involved recording material from locations.

Site Visits

In the early stages of the research, while I was still trying to understand the nature of embodiment and its relationship to lens-based recording, I visited a variety of locations. Initially I spend time recording at Piha, the West Coast beach, as well as Te Toto Gorge (Figure 4.2) and Mt Te Aroha (Figure 4.3).

I initially thought that the places I visited should be new to me (to avoid existing knowledge or memory impacting on my experience of the land). However, this proved problematic, because I found that I was often too focussed on experiencing these places in surface-level ways. In other words, I was recording form and attempting to reflect on *how* I was encountering the land, instead of suspending such thinking and entering a more intimate level of dialogue. This issue was compounded by the fact that I had planned on visiting these locations only once, so I felt the need to record as much data as I could in one day, to maximise possibilities for subsequent editing. This ‘infected’ the visits with a preoccupation towards task completion, instead of embodied connection (Figure 4.4. See p. 49).

After reflecting on these three visits and the work that was surfacing, I began asking, what would be the conditions necessary for connecting with and communicating an embodied connection to land?⁴⁷

I began to think about connection in deeper ways that extended beyond an exotic or dramatic location. I asked myself how I ‘felt’ about places with which I had an intimate connection, and my heart moved to exploring locations around Lake Waikare, specifically the Pungarehu Stream floodgate, the old yacht club, and a kahikatea forest near the lake. My choice of this location was very different to the other locations I visited. I chose the lake because of its physical and emotional proximity. I realised that to be embodied I needed to ‘live’ with an environment.

I discovered that, when visiting the locations around Lake Waikare, my familiarity intensified an existing emotional connection. I began to visit the lake frequently,

sometimes multiple times a week—often at the first breath of light, sometimes when the skies and water were turgid with rain, and sometimes at night. These repeated visits across the heat of summer, when the land bore the smell of drying mud and brittle grass, and in the depth of winter, when the water and the air was still, and you could hear the calls of geese and starlings, deepened my familiarity with multiple dimensions of the location. I experienced how time moved with the environment and my immersions became suspended within it. This deeper, longer, and more intimate method removed the need to anxiously record (capture) what I saw. The relationship changed from solution-production to indwelling (Brownhill, 1968; Moustakas, 1990; Polanyi, 1965), enabling me to move beyond what Juhani Pallasmaa called the limitations of a “retinal journey” (2012, p. 13) to a state where I was *inside* the world rather than positioned externally to it. I was able to engage multiple methods of recording (and not recording).

Sometimes I was still.

These immersions began to shift my attitude from photographing and recording to waiting and watching. Thought became subtle shifts, observant considerations of the land as an agent, and I began acting in a state of faith.

⁴⁷ This question began the evolution of subtle refinements to the thesis’ research focus.

Walking and Heightened Sensory Engagement

Upon arriving at the lake, I would often walk as a way of heightening the sensory nature of my relationship with the environment.⁴⁸ Ingold described walking as “circumambulatory knowing,” and in the process of walking, he argued, landscapes are woven into our lives and our lives are woven into landscapes (2004, pp. 331–333).

For artists such as Maarit Mäkelä,

walking is a multisensory experience during which the body perceives its surroundings through a diversity of senses. In this experience, seeing, hearing and smelling are combined with a moving body that adapts its movements to the surrounding landform. [This] stimulates the entire body, especially when walking in an environment where the landform is not stable. (2016, p. 5)

The lake and its environs were unstable, and walking became both a navigation and an act of attunement. Walking unfolded a subjective, emotional, and embodied relationship with the physical. In this process I was directed toward the presence of the land: the smell that lingered in the air and sensations on my skin that were brought to the surface through physical motion.



Figure 4.4

Synthesised Recordings from Piha Beach (2023)

This was an outcome of my visit to Piha on 2023, May 19. While the work uses timelapse to speak to duration, I was unsatisfied with the work because I was layering technical dexterity across the encounter. Giving voice to Bergson’s duration of experience became a synthesis of techniques where I was attempting to ‘capture’ my feeling of dislocation and connection with time through a cognitively interpretative piece of work. As a result there was no stillness, no sense of the ‘time-less,’ and nothing was suspended in irresolution. This final moving image sequence is viewable at <https://youtu.be/Il9phrgLBEA>. Copyright 2023 by the author.

⁴⁸ Olwig (2008) suggested that walking as an observational activity is more effective than a fixed-point encounter offered by a camera’s tripod or a painter’s easel.



Figure 4.5
Sketch of Lake Waikare from Between a Stand of Trees (2023)
 This sketch was created near the old Yacht Club on the edge of the lake in June 2023. The drawing was loose; a quiet response on paper with little attention given to technical refinement. Copyright 2023 by the author.

Drawing

Early in my encounters with the lake, I settled myself by drawing the land. This was a fluid, intuitive technique for focusing and responding creatively to what I experienced. Drawing was not just a method of recording but also a way of experiencing the land through lived sensations (Ingold, 2000; Ings, 2014). These experiences enabled me to encounter what Pallasmaa (2017, p. 104) described as an “ecstasy of the work,” where the pencil becomes a bridge between the imagination and the paper (Figure 4.5).

These drawings were less concerned with figurative documentation, and more focused on an immersive experience that enabled me to disconnect from an imposing, analytical mindset. While drawing, I would often lose conscious consideration of the creative decisions that I was making and instead focus my awareness on what I was encountering. Although these drawings were occasionally integrated with filmed material (Figure 4.6. See p. 51), their primary purpose was exploratory and immersive. Rosenberg (2008, p. 109) described this form of drawing as a process “where one thinks with, and through drawing to make discoveries, to find new possibilities that give course to ideas and to help fashion their eventual form.”

I also experimented with recording the textures of bark and leaves, using frottage.⁴⁹ In addition, I drew with clay and peat onto paper. These experiments were not undertaken to produce records to embed into my work. Instead, they were ways of intensifying the nature of my sensory engagement, because they forced me to break predetermined patterns of recording.⁵⁰

Camera Lucida

A camera lucida is an optical instrument that is used as a drawing aid, superimposing a scene or object onto an artist’s page to be traced. During the initial stages of the practice, I experimented drawing with this device as an apparatus for recording light onto paper (Figure 4.7. See p. 51)

However, I discovered across a series of visits to the lake that, although the device enabled me to record the world with technical accuracy, the approach dislocated me from an embodied connection with the environment, because the system of recording circumvented direct engagement of the self.

Still and Timelapse Photography

At the lake I also recorded photographs. Photographing ‘stills’ required a different treatment of what I saw, because considerations had to be made for a single moment rather than an unfolding movement. These photographs were taken using a Nikon D800E DSLR camera, often with the assistance of a tripod to minimise movement.

Still photography differed from video recording in two ways. Firstly, I was separated from a ‘motion-based’ way of looking at the world, and I would often take more time preparing, framing, and shooting these images.

Secondly, compositional considerations of still photography had to account for motion, so I had to decide how motion could be recorded (for example by using long shutter speeds that would produce a motion blur).

Using this same camera setup, I also recorded timelapse sequences.⁵¹ This method generated RAW, high-resolution images, and gave me the ability to record unfolding motion within the environment. Early experiments with Syrp Genie Mini II timelapse motors enabled me to move the camera using precise increments between individual shots.

However, when I reflected on these experiments, I found that both the intentional movement of the camera and the compression of time worked against a sense of stillness, because compositions often suggested rapid motion that was antithetical to my embodied experience of the environment.

Figure 4.6
 [p. 51. Top] *Animated Filmed Material and Drawing of Lake Waikare (2023)*
 In this June 2023 experiment, drawn material operates as a textural overlay. In this sense, it was not just the lake that was recorded, but also my mark making. This video can be viewed at <https://youtu.be/mr5ksZHkFOs>. Copyright 2023 by the author.

Figure 4.7
 [p. 51. Bottom] *Tracing of Lake Waikare (2024)*
 Using a camera lucida to trace Lake Waikare in February, 2024. Copyright 2024 by the author.

⁴⁹ Frottage is the process of taking a rubbing from a textured surface. I placed paper onto rocks, bark, leaves, or other organic surfaces and used pencils or charcoal to create these recordings.

⁵⁰ It is useful to note that Kleining and Witt (2000), in their discussion of ways that one might heighten chances of discovery in heuristic inquiry, recommended that data collection should be consciously expanded so the researcher gathers material “under the paradigm of maximum structural variation of perspectives” (2000, para. 13).

⁵¹ In timelapse photography shots are individually recorded at regular intervals from a stable position and later combined using video editing software.





Figure 4.8

Video Recording at Lake Waikare (2025)

The final images were recorded using a tripod to minimise camera movements. All movement that occurs in these works is a document of the motion of the land, water, or animals which enter the frame.



Figure 4.9

Recording Ambient Sound (2025)

Recording ambient sound at Lake Waikare in February, 2025.

While still and timelapse photography are established methods for recording physical environments, I experienced them as ‘non-immersive,’ because my concerns with technique positioned me on the surface of the environment rather than deeply within it. These methods were recording something that I didn’t ‘feel,’ because they either froze time or mechanically condensed it.

Video Recording

My most refined method of recording the lake involved video cameras. I used Blackmagic Pocket Cinema cameras, because they had the capacity for high frame-rate recordings (up to 120 frames per second), and they could record in RAW format, capturing a large amount of colour data.⁵² Due to their small size, I was also able to set them up quickly in a wide variety of locations. By employing an adjustable tripod I eventually realised that I could settle an attentive frame on a single space in a way that closely reflected my experienced stillness, when dwelling alongside an aspect of the lake’s environment (Figure 4.8).

Early in the study, I also experimented with other video recording devices, including a DSLR, a GoPro action camera, and a DJI Mavic Air drone. Because a large portion of my workflow occurred in a post-production workspace, it was necessary for me to use cameras that recorded high levels of visual information, and these devices could not do this (especially material in the dynamic range).

I also conducted experiments that explored how my physical presence in the land might be included in the filming process. Using handheld footage, I recorded small, involuntary movements of my hands that appeared as camera shake. I also recorded my cast shadow in sequences, similar to Wendy Beatty’s (2017) experimentation with this technique. However, I eventually encountered a distinction between being embodied and being bodily present. While these tests integrated my physicality into the recordings, they were only traces of an encounter, not immersive experiences.

Recording Sound

Intermittently I also recorded sound using a Zoom H4N Field Recorder. Often these recordings were created on still days or evenings when air movement and wave noise were minimised, and the softer sounds, like the call of a skylark or the splash of a koi carp, could be isolated (Figure 4.9). I initially thought such detail might be included with imagery to add a communicative dimension that reflected a broader sensory presence.

However, the final images in the exhibition do not contain any of these recordings. In composition experiments that explored the use of sound, I found that such material distracted from an embodied experience of stillness. Identifiable sound appeared to belong to a physical world of the surface, and I understood that without sound I was able to communicate a greater sense of immersion.

Although the exhibited images do not carry attached sound, the process of recording audio material became an effective tool for ‘deeper listening.’⁵³ In other words, I became aware of how focused attention revealed subtle dimensions of the land when peripheral elements were removed from the spectrum of my attention.⁵⁴

The Use of the Van as an In-Situ Studio

Most visits to the lake were made in a van that I equipped for travelling and camping (Figure 4.10. See p. 53). The vehicle included a benchtop, bed, storage facilities, and a solar panel, power inverter, and outlets. These features meant that the van could function as an in-situ studio where I was able to charge battery powered equipment and transfer files from memory cards to external hard drives.

The large amount of storage space allowed me to fill the van with photographic, video, drawing, and sound recording equipment, including timelapse motors. This meant that I had ready access to a range of recording devices that I could use based on what I felt during site visits. In 2023 (the first year of the project), I left my home that overlooked the lake and moved north. After this point, the van became an integral part of my working process, because I could not easily return home to change my equipment, as I had done previously. The van also became a refuge when weather became too wild for recording, or when I needed to sleep.

⁵² Recording at higher frame rates grants the creator flexibility to slow down footage in post-production, creating smooth, slow imagery that more closely records an immersive, embodied experience.

⁵³ I experimented recording sound with and without headphones.

⁵⁴ The subtle use of sound in the exhibition space is discussed in Chapter 5.



Figure 4.10

Using the Van at Lake Waikare (2025)

The van is a Mitsubishi L300 Delica with four-wheel-drive capability and low range gearbox. This extra capability gave me the flexibility to drive over uneven ground.

Reflective Log

Throughout the study, I kept a log of reflective notes that recorded ideas, reflections, and questions that responded to developments in my practice. This kind of reflection, Bolton (2010) suggested, can “lead to developmental insight” (p. xix). The log’s register often shifted in response to what I was encountering, moving through the analytical and technical to the poetically reflective and illustrative. Reflective writing enabled me to recall affective encounters with the lake. Recording my feelings meant that I had a residue of encounters that I could revisit when working in the digital studio (image composition and editing). The writing also enabled me to track the development of my thinking, so exegetical writing contained documented records that enabled me to verify the chronology of changes and insight.

Phase 3: Digital Studio

Following the gathering of recordings at Lake Waikare, I moved to my digital studio. This space was equipped with a high-performance computer that enabled me to sort, edit, and export digital files.

During this phase of the research, I was engaged in technical and creative processing. Although both processes took place in the same digital environment, they required me to shift fluidly between procedural tasks and creative, iterative experimentation.

Technical Processing

Often, the digital material produced at the lake produced very large file sizes (due to the extensive data in photographic and video recordings). Upon returning from site visits, I transferred the digital data from memory cards onto two external hard drives.⁵⁵ This generally occurred immediately after returning from the lake, because the camera equipment I used was temporarily borrowed from the university.

During this process I distributed recordings into folders that were sorted according to date, location, and format.⁵⁶ Physical recordings like drawings and textures were scanned or photographed to create digital files, which I later experimented with in composited images.⁵⁷

Creative Processing

Artistic experimentation began once files were uploaded and categorised. I began by considering each recording at its full size. Raw video format data was viewed in Davinci Resolve editing software. During a ‘first sweep,’ I selected images that I felt were compositionally or durationally close to what I experienced in the stillness of an immersion. Using this material, I began experimenting with exposure, colour, and tonal adjustment, and a ‘slowing’ of what had been recorded. By viewing these images at a slowed pace, I could dwell on each moment of the image in greater detail. The use of Davinci Resolve facilitated this process more effectively than other editing software because of its advanced frame interpolation capability.⁵⁸ This process was important, because I was trying to find a state that existed beyond mechanical time; beyond the physical limitations of the recording equipment.

After exporting the colour-adjusted and retimed images, I imported them into Adobe After Effects. This video editing and motion graphics software enabled me to experiment with blending images, using overlays and masking. At this time I experimented with how images might be cropped. In early phases of the study, I tried to reflect on embodied dwelling by compositing and layering. In these experiments, I was exploring a kind of palimpsest of subjective, sensory layers of experience. In later iterations, this layering became increasingly subtle and abstract. I also experimented with more attentive, creative, in-camera recording, so in my studio I was able to engage with substantially less editing—and my concerns became more focused on subtle adjustments to tone, texture, contrast, and timing.

Studio work increasingly became an iterative process of exporting, playback, adjustment, and re-exporting. I would sit with an image, for hours at a time, making small modifications based on a tacit recollection of an embodiment, where I had recorded a physical phenomenon but also reached beyond it.

I worked in silence, dwelling with the imagery, seeing—transcending and feeling

⁵⁵ Uploading to two hard drives acted as a safeguard against data loss. All files on these drives were also automatically uploaded to a cloud-based storage facility.

⁵⁶ For example: moving image, photograph, or sound recording.

⁵⁷ Physical copies were stored in cardboard folders.

⁵⁸ Frame interpolation is the process of adding additional frames between existing frames of video to create smoother motion when footage is slowed down.

Phase 4: Critical Review

Feedback on Creative Work

Although critical feedback on experiments was sought across all phases of the research, it became significant as outcomes emerged from phase three. While I elicited regular feedback from my supervisors,⁵⁹ I also shared developments of work with other artists, film makers, photographers, academics, and designers. Ventling (2024) argued that:

At distinct stages the researcher should turn outward and seek external exchanges, in order to discuss and analyse the surfacing meanings. Engaging with, and being stimulated by, multiple and differing opinions in the form of critical feedback or questioning, not least through supervision and peer-review, can reveal fresh perspectives. This exposure is valuable both academically and personally, because it leads to increased awareness, recognition, and elaboration of relating connections, contextual themes, overarching principles, procedural knowledge, and differing approaches. (pp. 72–73)

My approach was not to act on feedback immediately but to draw it back into the heuristic process and to test it against developing approaches (Ings, 2011; Ings & Tudor, 2024; Tudor, 2022, 2023; Ventling, 2024).⁶⁰

Indicative of this engagement was an exhibition of work I held between October 30 and November 1, 2024) (Figure 4.11. See p. 55). I invited academic experts to engage with the work, responding with an online feedback form, which asked two open-ended questions.⁶¹ Firstly, I asked how they might describe the work to a friend (because hearing how they describe the work to someone else could help me to understand how the images were seen). Secondly, I asked them to reflect on the emotional tone of the work (this was helpful in refining communicative clarity—specifically as it related to duration and stillness).

The exhibition was also an experiment in spatial design that enabled me to test approaches to sound, light, and installation.⁶² The exhibition space contained five screens positioned along the four walls of the gallery; each screen played a discrete artwork in a repeating loop.

In addition to reflecting on written responses to the two questions, I also observed how viewers interacted with the work: how long they remained with each piece, the way they negotiated space, and the nature of their conversations with others. These observations offered insights into the affective dimensions of the work that written feedback could not capture.

The exhibition also provided an opportunity to include members of the local community who were contributing to the research. This provided evidence of my engagement and enabled them to contextualise their input within the wider study.

Although presenting practice through installation provided me with insight into impact and communicative clarity, I also availed myself of opportunities to present bodies of work and contextualising theory in national and international fora. In 2024, I presented a peer reviewed paper in Brazil, at the 6th LINK International Conference in Practice-Oriented Research and Global South (van Vliet & Mortensen Steagall, 2024).⁶³ This paper was accompanied by a research poster that was exhibited in Sao Paulo.⁶⁴ Designing the poster developed my skills in refining visual communication—specifically, crystallising the essence of the study in ways that made the research accessible to international audiences (Figure 4.12. See p. 55).

In 2025, a peer-reviewed journal article that outlined the contextual and methodological foundations of the study was accepted for publication (van Vliet, 2025a), and in the same year a paper I presented at the 2024 Auckland University of Technology Postgraduate Symposium was published (van Vliet, 2025b).⁶⁵ Presentations and reviewed papers like these enabled me to position my work in environments where my thinking was exposed to critique from diverse scholarly communities. Such experiences required me to translate embodied and intuitive aspects of my practice into accessible language.

This process clarified my thinking and helped me to make assumptions that were implicit in the work more explicit. Sharing research at conferences and symposia also created opportunities to receive questions and feedback that prompted new considerations, expanded contextual review, and helped me to identify how the research was being read. Having to crystallise thinking for public presentation was also useful in that it made me give voice to ideas that were not yet formed, giving structure to previously internalised self-dialogue.

- 59 Because of the trust and familiarity that I built with my supervisors, I found it easier sharing unformed thoughts with them, because they were more 'inside' the world of my process, and thus had an existing understanding of my research.
- 60 Although Sela-Smith (2002) argued against Moustakas' opening of the internal nature of heuristic inquiry to outside voices, my decision to do so was governed by Rogers' (1961/1967) assertion that "what is most personal is also most general" (p. 26).
- 61 These artists included Fiona Grieve (graphic designer), Dr Mairi Gunn (director of photography for cinema), Emil McAvoy (photographer and curator), Dr Natalie Robertson (photographer), Dr Tatiana Tavares (illustrator and graphic designer), James Smith (interaction designer), and Herbert Spencer-Gonzalez (interaction designer).
- 62 Specifically, by installing work as a curation of related thinking I was able to consider the logistics of selection and the impact of technical issues that would help to shape the nature of my final examination exhibition.
- 63 The address was delivered in English but concurrently translated into Portuguese and Spanish and live streamed online internationally. The event gave me experience in answering translated questions from the floor and in crafting presentations for multilingual delegates.
- 64 This was held at the LINK South to South Crossing: BRAZIL, Universidade Anhembi Morumbi, Mooca Campus.
- 65 AUT Postgraduate Symposium, Auckland University of Technology, City Campus, September 9, 2024. Although the presentation occurred in 2024, the proceedings were published in 2025.



Figure 4.11
Exhibition of Work (2024)
This exhibition enabled me to gain feedback. In this image, I discuss a piece of work with a Te Kauwhata community member.



Figure 4.12
Poster Exhibited at LINK South to South
Crossing: BRAZIL, Sao Paulo (2024)
Poster mounted at LINK South to South
Crossing: BRAZIL, Universidade Anhembi
Morumbi, Mooca Campus, December 2024.

CRITIQUE OF RESEARCH DESIGN

Using a heuristic approach in this project enabled non-linear navigation of a research question. The research design validated artistic subjectivity (Ings, 2011; Ventling, 2018, 2024) while supporting flexibility toward evolving approaches, as discoveries were made (Moustakas, 1990; Ventling, 2018).

Ventling observed:

Because heuristics does not focus on a pre-determined formula or course of action, it allows continuous changes to concepts, the researcher's position, or even the research design. Particularly in experiential practice-led research, this adaptability may be useful because it heightens chances of discovery and supports the artist/researcher in finding and developing their own meaning. (2018, p. 127)

The employment of heuristic inquiry afforded the study distinct advantages but also presented significant challenges.

Advantages

There were two significant advantages to the project's immersive research design.

Firstly, because self-inquiry is a key part of heuristic research, I was able to shift my approach to the study as my understanding of the project evolved, and I developed a deeper understanding of myself in relation to my research and to Lake Waikare. Ventling (2024, p. 69) observed a similar phenomenon: "Working through orchestrated sensate experiences, heuristic principles allow questions and the work to evolve with the continuing iterations of introspective expression."

Given the flexibility to discover through questioning, I was afforded the ability to dwell with ideas for long periods of time, without the pressure of 'locking down' visualised solutions (van Vliet, 2020). Work came slowly. It emerged, constantly questioning itself and its relationship to embodied connection.

Secondly, a heuristic methodology draws on high levels of tacit knowing, which Polanyi (1967) suggested are subliminal, intuitive, and embodied. In navigating a question that combines the sensory, the self, and an external environment, the research design enabled me to engage with non-explicit, embodied forms of knowing, where subjective experience became a valued and active agent in making meaning of what I encountered.

Challenges

A heuristic inquiry maintains a level of internal, intuitive questioning (Ings & Tudor, 2024), and although this research design was advantageous in its accommodation of subjectivity and embodied knowing, it also presented several challenges.

Firstly, positioning of the self as central to the problem presented the risk of becoming too self-referential. Opening the study up to external knowledge became a useful strategy to contextualise and reframe the approach. In my research, external knowledge involved seeking critique from selected experts, researching existing literature, and listening to local people who had an association with the location.

The second challenge related to heuristic inquiry's heavy reliance on tacit knowing. This involved balancing reflective, embodied artistic approaches with logical, objective, tasks associated with scholarly research. Navigating research of such a personal and embodied nature required engaging in a study where knowledge could not always be quantified in written language. Given that practice-led doctoral studies articulate thinking in a written exegesis, trusting intuition in the practice was at times uncomfortable. Sela-Smith (2002) suggested that, when heuristic research is conducted and the primary concern is an institutional requirement, there is risk that the researcher is not fully immersed. To prevent this, a certain level of trust in my practice had to be developed which valued unspoken and non-explicit knowledge. Often this was resolved through repeated site visits to the lake, where immersion suggested the 'rightness' (Hoyle, 2024), *tōtika* (Paora, 2024) or *mafana* (Faumuina, 2022) of embodied connection and meaning making.⁶⁶

Finally, the nature of the study and the pursuit of embodiment in a toxic environment was arduous. The lake and its environs were unstable and had a long history of accidents and drownings. Because I needed to experience the location in both stable and unstable periods (including at night, during storms, and at times when there were very high levels of toxicity), I had to balance physical, emotional, and spiritual immersion with personal safety. To do this I adopted a number of strategies. Firstly, I adopted the guidelines of the New Zealand Land Safety Code.⁶⁷ This included informing a trusted party of my trip details and the expected time of my return. Secondly, I was careful not to touch the water with my hands or submerge any part of my body. I also wore gumboots during visits to prevent water contact with my feet. Thirdly, I cleaned my hands to remove potential contaminants before eating and after visiting the lake. On a non-physical level, toxication often existed emotionally after unsettling or distressing immersions. These times required subsequent care when visiting the images digitally, and I would often wait a day or two before beginning to work with them.

Having discussed the methodological approach to the thesis and positioned the inquiry as heuristic and practice-led, it is now useful to offer a critical discussion of the creative work, and reflect on what has been discovered through this inquiry.

⁶⁶ Paora (2024) and Faumuina (2022) have both discussed the idea of 'sensing rightness' in relation to heuristic inquiry in artistic research. In Paora's work, *tōtika* is a Māori term that relates to sensing rightness, and in Faumuina's research, *mafana* refers to the attractive warmth emitted by an idea when it forms an inherent resonance or harmonious connection.

⁶⁷ This code has been designed by the New Zealand Department of Conservation. It can be accessed at <https://www.doc.govt.nz/parks-and-recreation/know-before-you-go/land-safety-code/>.





CHAPTER 5

Critical Commentary

Critical Commentary

This chapter critically considers the exhibited artworks and the manner in which they address the research question.

The commentary begins with a description of the five screen-based images, then moves to a consideration of the exhibition design. This is followed by a discussion of five ideas that permeate the work: sensory experience, time, stillness, rhythm, and the nature of closeness.

THE SCREEN-BASED IMAGES

While the five screen-based images are exhibited as a series, each is discussed here as a discrete piece of work. However, collectively they express a contemplative, embodied connection to Lake Waikare. The images in the main body of the exhibition fade up from a black screen, are revealed for a period of between one and three minutes, then dissolve back to black.⁶⁸

These artworks are discussed in the order they appear in the exhibition.

⁶⁸ All of the images are presented in black and white. This feature is discussed in detail further in this chapter in the section titled Colour.

Depths

The sequence in Figure 5.1 contemplates Waikare's clay lake floor as it descends into darkened, cloudy water. The water is largely invisible except for the occasional presence of bubbles and debris that float across the surface.

Depths is composed of three layers. Two video recordings of the lakebed have been overlaid to create a textured image of the ground as it descends into deeper waters. The subtle refraction of light makes the lakebed appear to rise and fall as if it is breathing.

The clay layers were recorded while I was visiting the Ruahine boat ramp in July 2024, when there was minimal air movement. The stillness of the water was unusual because the lake is often windy during the day, so the surface is normally disturbed. The overlaid photograph of the reflected trees was recorded in May 2024, during the evening when the light was very soft.

Depth in the image is considered in two ways. Firstly, beneath the surface the clay descends into the water, eventually obscured by blackness. Secondly, the presence of an insect crossing the frame reveals airspace above the water and emphasises the three-dimensional space of the sequence. The layering of the image creates a recollection of simultaneous solid and fluid properties within the same biological mass.

These recordings were created about a metre from the shore's edge, in ankle-deep water. To do this I had to crouch on the slippery clay, aware that while immersed in each layer I was also inside an environment where the sediment was toxic—and therefore a threat to my health.

I experienced and recorded the fatigue of life;
expiring ... suspended yet dissolving. I was inside
the darkness of this dissolution ... emotionally close
to a kind of fragile fluidity ... that was also miasmatic
... my immersion was directed towards recording
and suspended in realms beyond language.

I was *on* and *in* the lakebed.

Still.

Intimately connected with the exhaustion of
disturbed clay. Breathing the silence of danger.



Figure 5.1
Depths (2025)
Still frame from *Depths*. Duration 01:15 minutes.
The sequence is viewable at <https://youtu.be/mSSyr7NVTBc>. Copyright 2025 by the author.

Memory

Memory (Figure 5.2) comprises footage taken of a wet clay bank that I blended with the motionless wing feathers of a dead bird. Movement in this image occurs as reflections off the water onto the bank, and in the subtle drifting of hanging roots.

Time here is slowed down, and the water is paradoxically motionless yet moving without visible cause. The textured details of the wing feathers form the substrate across which water and light move.

The sequence is composed of two layers that were recorded during separate visits to a bank near the Pungarehu stream floodgate, in April and July 2024. The overlay-merging of the feathers and the mottled bank are blended using transparency masking. The feathers are those of a dead shag (Kawau pāteketeke) (Figure 5.3).

Shags have been a consistent presence at Lake Waikare, however their population, along with that of other wading birds, has declined significantly since the implementation of the flood control scheme. Glen Tupuhi noted that there were reports in previous years of up to 40,000 shags on the lake, and there would have had to be an equally large fish population to sustain these numbers.⁶⁹ Large shag populations are also indicated in the naming of a nearby lake, Rotokawau, *roto* meaning lake, and *kawau* being one name for shag.

Memory is a work that was created while I was researching the lake's historical and social histories. I recall likening subtle marks in the clay bank to hidden blemishes on the skin, something intimate but rarely seen. I was also conscious of the way my body extended through the lens, drawn close to a seemingly mundane detail of the land. I sensed moments of a lake that once teemed with life, water that once covered sandy beaches and aquatic weeds, and air that carried the earthy scent of riverine water. I was suspended in a tension between what I saw, and the presence and vitality of an imagined past. The sequence attempts to create a sense of 'seeing through,' where the physically encountered land might carry knowledge of the past—and have a life and tendencies of its own (Bennett, 2010).



Figure 5.3

Dead Shag (2024)

I came across this dead shag in February, 2024, during one of my walks. I sometimes encounter dead birds at the lake (commonly swans). I was not surprised to see the bird, but I was sad that it hung like something discarded in the undergrowth—cast aside from life. Over subsequent weeks, I returned to the forgotten creature. Although, on the surface, I was interested to observe how it decayed, on a deeper level I felt I had a responsibility to remember it, because I was probably the only person who knew it was there. Copyright 2024 by the author.

As a consequence, *Memory* is a hypnotic work; attentive in focus—yet beyond breath. Here, the inner and outer surfaces of life and death are combined in a manner similar to Von Goethe's observation that "Death is a commingling of eternity with time"⁷⁰ (Potts, 1880, p. 162). In the sequence, smallness and immensity coexist, and time is suspended in a delicate concentration: a concentration that is both memory and presence.

⁶⁹ G. Tupuhi, personal communication, May 21, 2025, May 21, 2025.

⁷⁰ The quote is an essentialising of Von Goethe's sentiment that was published by his personal secretary, Johann Peter Eckermann (1792–1854), in *Conversations of Goethe with Eckermann and Soret* (Goethe, 1850). As a translated quote, his observation took definitive form in later writing, including *The Golden Dawn* (Potts, 1880).



Figure 5.2

Memory (2025)

Still frame from Memory. Duration 01:45 minutes.

The sequence is viewable at <https://youtu.be/hpvOYbl9fsQ>. Copyright 2025 by the author.

Decay

Decay dwells at a low angle on a semi-submerged carp carcass I came across on a sandy beach (Figure 5.4). A thin plane of focus is used to draw attention to a cluster of flies burrowing beneath its decaying scales (Figure 5.5. See p. 67).

Material for the sequence was recorded adjacent to Lake Waikare's floodgate. The small stretch of sand in the image is one of the few accessible beaches left on the shoreline. (Other documented beaches have been long overgrown or eroded).⁷¹ During visits, I normally begin walking down this beach, because its changeable nature and proximity to the water serve as a kind of sensory attunement. On this day, I sensed a difference. I heard the buzzing of flies before I saw the fish. They were green blowflies.⁷² There was little scent coming from the carcass, but I was breathing shallowly to avoid sharing the same air as death. I was unsettled by an association with disease.⁷³

I do not know why this fish died. In my repeated visits to the lake, encounters with death became a regular occurrence, with the tides constantly bringing in and washing away carcasses among the algae, peat, and sticks.

Across time I tried to develop a discipline of accepting what I encountered without evaluating it, dwelling *in* and *with* the land in a manner that was distanced from rational reasoning. By adopting this approach, I was able to develop a sensation where emotion and sensory response became an integrated aspect of cognition. As in Merleau-Ponty's discussion of embodied perception (2005), my experience of the land was able to evolve in relation to the unexpected and visceral presence of death, accepting it as part of the context of the environment.

This sequence, unlike *Depths* and *Memory*, is comprised of a single recording. It was created in February 2025. Movement in the image is produced by the flies, but time has been manipulated to reduce their halting, sudden movements to a slow, boiling motion. As in *Memory*, the deceased animal appears to be melding with the land, so physical boundaries are in a state of dissolution.

This is the least abstracted of the sequences, but it is not compiled as a documentary account. Time in this



Figure 5.4

Carp in the Sand (2025)

The fish in this sequence appears anchored in the sand. However, it disappeared after a few days. (It was either washed away with intense wave action or subsumed). The presence of dead fish is familiar because of the extreme koi carp biomass in the lake.⁷⁴ Copyright 2025 by the author.

sequence is disrupted in its connection with physical reality. The relationship between life and death is a coexistence in a monochromatic sequence. Inside this, an embodied experience is suspended in a liminal space that is also a paradox. Encountering such paradoxes caused me to contemplate the presence of death that sustains life, and how life may be both a separation and integration with the world (the flies can live because of the death of the carp). I contemplated the question: Does this mean that a dying lake is only a dimension of wider life—a horror and wonder suspended in a momentary process of decay and sustenance?

When dwelling with the image, I was reminded that in Plato's *Apology*, Socrates said: "The hour of departure has arrived, and we go our ways—I to die, and you to live. Which is better God only knows" (Plato, ca. 390 B.C.E./1999, p. 28).⁷⁵ While the quote may be about justice, I wondered if it could also be understood as a contemplation on value.

The carp—the flies—life and death

... and is my embodied presence—part of this?

⁷¹ For example, Pirrit's Beach (see Figure 2.7).

⁷² Rango pango (Blowfly, *Calliphora quadrimaculata*).

⁷³ In my experience, these metallic flies are always seen on feces and animal bodies around the farm.

⁷⁴ The last survey estimated the koi carp biomass at 851 tonnes (Hicks, 2007).

⁷⁵ Socrates is quoted in Plato's *Apology*. The observation is recorded in his speech to the court following the sentence of death imposed on him by the Athenians.



Figure 5.5

Decay (2025)

Still frame from Decay. Duration 02:14 minutes

This sequence is viewable at <https://youtu.be/Dh5I6HZo6tI>. Copyright 2025 by the author.

Current

Current (Figure 5.6) is a composite image that blends two video recordings and one dirt texture recording from Lake Waikare.⁷⁶ Attention in the work is drawn to algae on rocks that are disturbed by a water current. The sequence is graded darker than the others, so it creates a sense of depth and disorientation.

The lens' focus on the algae was set below the surface of the water, creating a sense of submersion similar to that of *Depths*, where the surface of the water remains mostly invisible. In this image, the subtle water surface is material from a second video recording I recorded during an algal bloom (February 2025).

Current involved a more intricate approach to compositing. Areas of the sequence have been frozen, so motion leads from the bottom left to the top right of the frame. The inconsistent presence of movement creates a sense of disorientation and heightened focus.

The two video layers record unusual amounts of cyanobacteria.⁷⁷ The barely visible overlay was recorded on the same beach as *Decay*, when the presence of pollen or algae momentarily caused the water to lose its reflective sheen (Figure 5.7).

The recording of the algae on the rocks was created in a small outlet stream adjacent to the floodgate. On the day of this recording, I encountered hundreds of dead koi carp that had suffocated from a lack of oxygen (Figure 5.8). This was the second time I had encountered such death at the lake. I remember a similar phenomenon while spear fishing as a child.

Crouching on the beach, looking at the water, I felt as if I was seeing this languid movement for the first time. I was unsettled and disoriented. The abundance of algae on this day felt unusual, the water appeared thick and foetid, and I could sense the algae growing before me, fertilised by the rotting fish.

Slow. Toxic. Fatigued. Visceral.

In reflection, I am reminded of Damasio's (1999) observation that emotions are part of bodily responses and are inseparable from rational thought.



Figure 5.7

Planktonic Algal Bloom (2025)

Note. Still frame from footage recorded in February 2025. Copyright 2025 by the author.

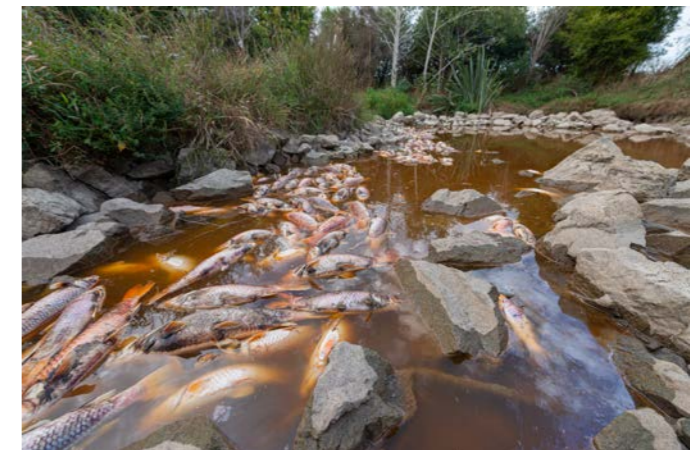


Figure 5.8

Fish Die-Off (2025)

Such a 'die-off' is likely to have resulted from the flow of water being stopped in the summer months. This creates small stagnating pools of water. This water heats, quickly depleting oxygen and suffocating the fish. Copyright 2025 by the author.

⁷⁶ This texture was created by mixing lake water and dirt together and allowing it to dry on paper. This texture was then scanned and integrated with the film footage.

⁷⁷ I discovered only after compositing this image that these images featured different kinds of cyanobacteria: benthic (as a dense mat attached to riverbeds) and planktonic (suspended in the water) (Land, Air, Water Aotearoa [LAWA], 2024).

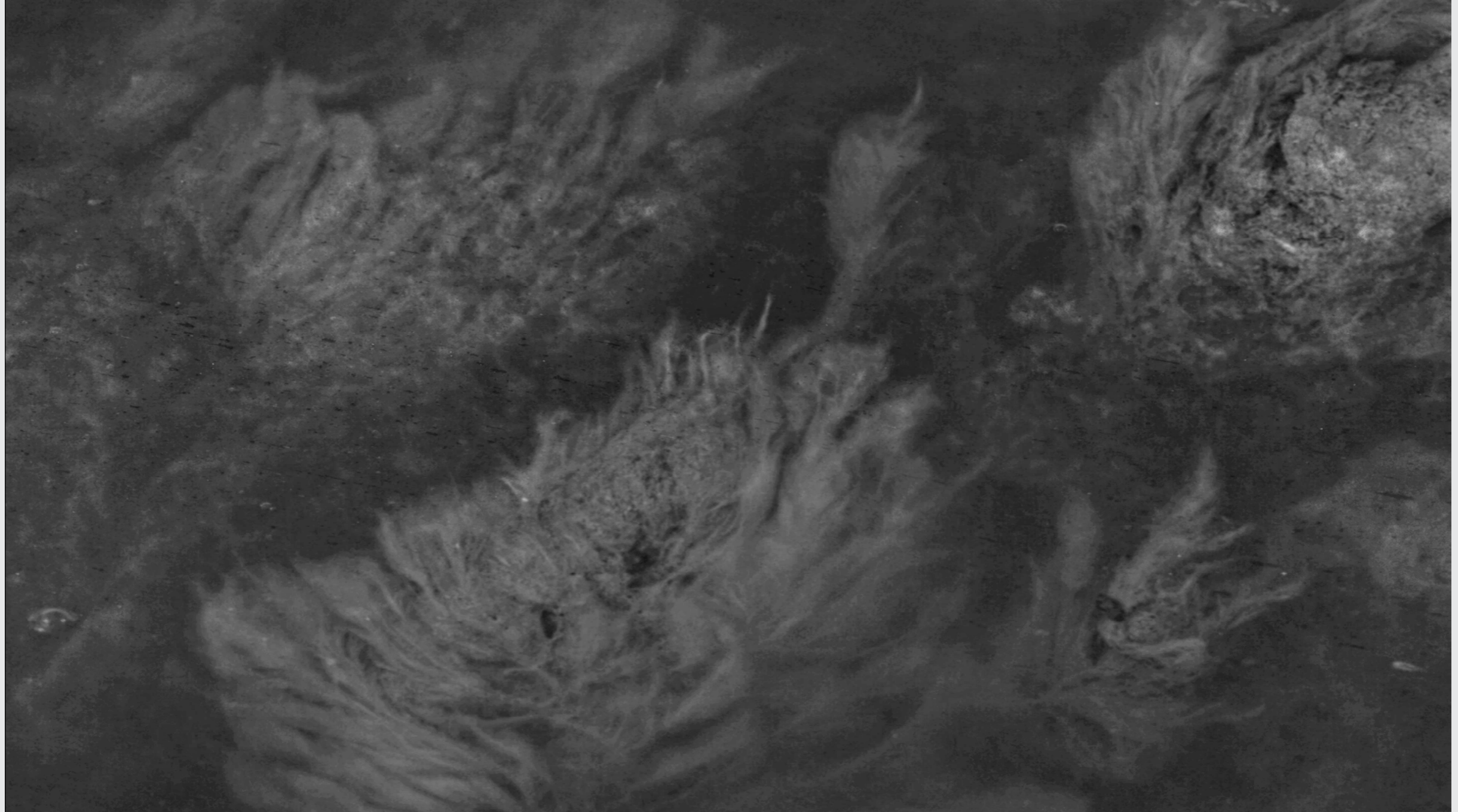


Figure 5.6

Current (2025)

Still frame from Current. Duration 01:29 minutes.

This sequence is viewable at https://youtu.be/JU_SoAeSG0I. Copyright 2025 by the author.

Surface

Surface shows an extreme closeup of the water on a sandy shore (Figure 5.9). The water, dense with suspended algae, twigs, leaves, and feathers, laps slowly against accumulations of peat. A black water beetle emerges briefly during the sequence, navigating the debris before being concealed beneath the floating soil. The soft action of the ripples interferes with submerged particles at different speeds, creating an oscillating, parallax effect.

The image is graded to elevate the soft, suspended particles in the water. A subtle lens blur has been added to the foreground of the sequence to accentuate the already shallow depth-of-field in the recording. This draws our focus beneath the water's surface in the lower-middle section of the work.

This work was recorded in February 2025 (during the same extended visit where I filmed the fish in *Decay*). During the recording, I felt attuned to the quiet morning air. I could feel the rhythm of the land that was both still and breathing. I was drawn to the delicate opacity of the water as light was caught by suspended particles. I sensed a physical pull towards its layers. I became one of the particles, drawn into ... along ... but also suspended. The camera (as an extension of my body) brought me closer to the diminutive.⁷⁸

But with this grace there was also a kind of expiration—

the laboured breathing of a dying lake.

Fragile,

tenuous

... holding on to life.

⁷⁸ Such immersed involvement, Heidegger (1962) argued, is the structure of being itself.



Figure 5.9

Surface (2025)

Still frame from Surface. Duration 02:20 minutes.

This sequence is viewable at <https://youtu.be/DkVP88msRz4>. Copyright 2025 by the author.



Figure 5.10
Spatial Visualisation of the Exhibition (2025)
 Note. This mockup (not rendered to scale) was created in March 2025 to assist with the artistic visualisation of the final exhibition. Copyright 2025 by the author.

EXHIBITION DESIGN

Spatial Considerations

Having discussed the five sequences, it is useful to consider the exhibition space designed to accommodate them. The immersions are prefigured with a skewed wall that is angled toward the door. This device obscures the screens that constitute the main body of work and creates an initial, introductory pause where the viewer is offered a preliminary context. The wall displays the title of the exhibition, an abstract, and a screen that features a composite ‘establishing sequence’ of the lake’s environment (Figure 5.10).

This opening space acts as a kind of surface that viewers will move beyond, as they enter the exhibition space.

Prefiguring the Experience

The exhibition of images is prefigured with an orienting screen-based work that is a composite image of the lake (Figure 5.11. See p. 73).

Titled Waikare, this is an artistic construction of the environment from where embodied perceptions emanated. It may be read as a form of poetic introduction, assembled from a variety of recordings. The sequence speaks to the nature of stillness that paradoxically contains movement. It suggests an environment that is felt; one that holds the weight of decades of degradation—which can be experienced across time.

Waikare

This sequence is constructed from three recordings, produced between June and July 2023. A photograph of a coastline on the right side of the frame is overlaid on a video recording on the left, and the horizons are aligned to create the sense of an integrated environment. Subtle motion on the water’s surface is the only movement in the artwork, and this continues for the duration of the sequence. Blended onto the sky is a pencil sketch I made in July 2023 of the clouds over the lake.

Waikare sits apart from the main body of work in two ways. Firstly, it is assembled as a fatigued composition of a marginalised environment, which orients us to the physical space inside which the exhibition is positioned. Secondly, the image is seamlessly looped, and therefore, unlike the embodied works, it does not propose a discrete sense of time.

This said, the composition references a somber, contemplative state, inside which stillness and subtle transitions will occur.



Figure 5.11

Waikare (2025)

Waikare, a composite image of the lake. Duration 00:30 seconds, looped. The image is viewable at <https://youtu.be/qzfBp681Vxk>. Copyright 2025 by the author.

The Sequencing of Images

The five artworks appear on screens separately, so they emerge one at a time from black to become the single focus in the darkened gallery. Although appearing as a sequence, the works stand as individual expressions of embodied encounters with the lake. As such, they express separate lived experiences.

The ordering of the images draws the viewer through the space, asking them to dwell with each artwork for a time before moving on to the next piece (see the floorplan in Figure 5.12).

The screens are mounted on three panels positioned in the middle of the gallery floor. By avoiding the gallery's peripheral walls, the space is constructed so the artworks cannot be viewed from a single standpoint; viewers engage with the space by physically moving between the artworks. In this sense, the layout of the space draws on Ingold's (2021) discussion of walking as a form of coming to know the world.

The first image in the series, *Depths*, is selected because it does not resemble recognisable objects. It orients viewers to a series of embodied immersions, asking them to look closely and to dwell with something that is not a didactic representation. This encounter sets the tone for remainder of the exhibition.

Sound

Although I experimented with sound when creating these images, my experience of embodiment was not auditory. Stillness was a kind of subtraction, a suspension of distraction. My body, through the camera, dwelt in a kind of still, silence that was deeply focused. This posed a challenge to the design of the exhibition, because the gallery space is in the middle of a city, and it has an existing sonic atmosphere. One can hear the hum of the ventilation system, the thin layering of urban traffic noise, and the movement of people through foyers. These things are subtle but present.

To address this, I experimented with the concept of sonic masking. My experimentation with white noise (the use of stable, static-like audio material to drown out disturbing atmospheric sound) was not effective, because,

although white noise can be used to enable deeper sleep, the tone is mechanically generated and this did not support an atmosphere of organic, embodied focus.⁷⁹ After considerable experimentation, I designed a sonic palette of barely discernible atmospheric material sampled from audio recordings I made at Lake Waikare. In the exhibition, this palette sonically reorients the space and creates a subtle auditory cohesion between the screen-based images.

To achieve this, speakers have been placed unobtrusively around the room, so that sound is not encountered as directional. Instead, it operates as subtle reference, a quiet pervasiveness to an overarching idea of stillness, focus, and embodiment.

Light

The exhibition environment is darkened, with natural and artificial light controlled to produce a space that limits distractions by drawing attention to each screen's image. Like the exhibition's treatment of sound, light is subtracted as a way of heightening a sense of stillness in the space. One might think of this as 'limiting visual noise.' Greater attention to the images enables the subtle textures and grey tones to communicate, without competing with light or colour in the wider exhibition space.

The room's only artificial light sources are the six screens and two small pin spotlights. One illuminates the exhibition title⁸⁰ and the other, a plinth that displays the printed exegesis.

Television screens were chosen to present the images because they have a higher level of contrast than projections. This enables viewers to access a greater dynamic range and a wider arc of subtle visible textures.

As images play in the darkened space, their region of the room is illuminated by the screen. Because images cannot all be viewed from the same viewpoint, this light bleed helps viewers navigate their way to spaces in which new sequences begin to play.

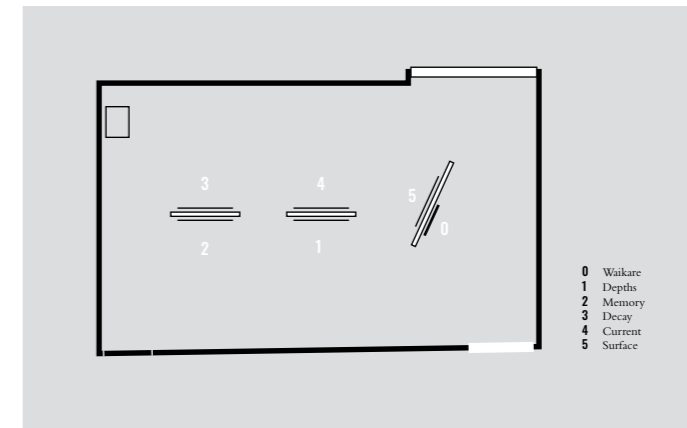


Figure 5.12

Exhibition Floorplan (2025)

The room is designed to be traversed in a clockwise manner.

⁷⁹ White noise contains all frequencies found in the spectrum of sounds in equal parts. The phenomenon is sometimes called 'broadband noise.' Its mix of sound frequencies produces a static, slightly industrial sound that can be intense and high-pitched.

⁸⁰ See Figure 5.10.

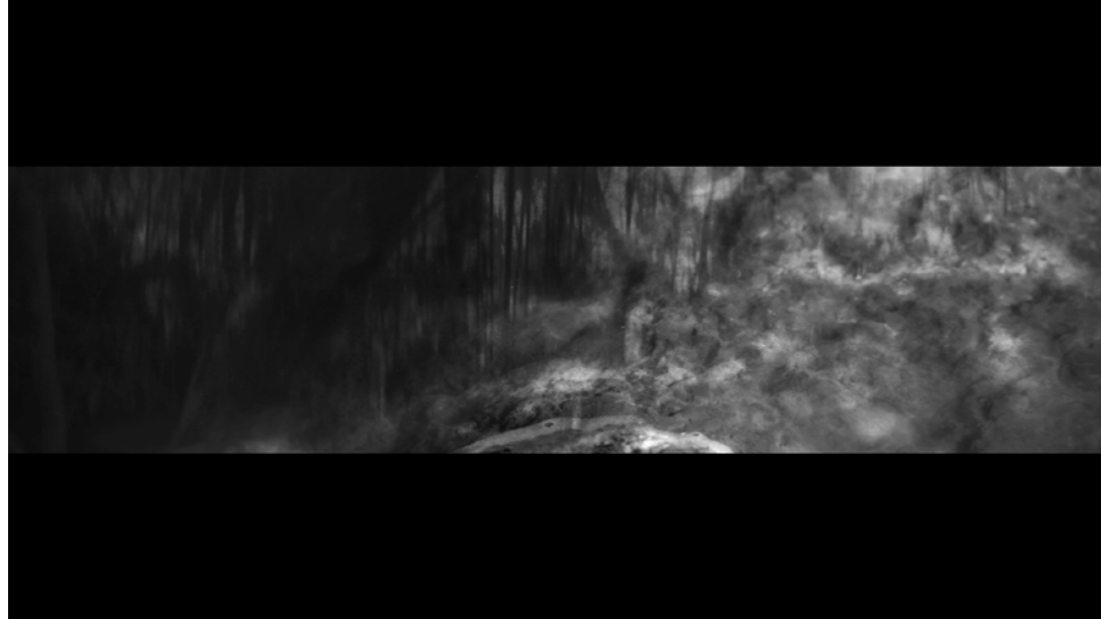


Figure 5.13

Changes in Image Proportion

Left: The sequence *Depths* was originally developed using a panoramic aspect ratio. However, when viewed on a television monitor, the letterboxing produced a ‘cinematic’ sense of distance from the image that undermined the intimacy of the embodiment.⁸¹
 Right: The ‘closer’ aspect ratio equated more effectively with the sense of immediate presence. Copyright 2025 by the author.

Image Proportion

Each work is formatted as a full HD moving image sequence (1920 x 1080) and displayed on a 65-inch television monitor. This size was selected because its presence in the space is sufficient to attract attention while preserving a sense of peripheral vision. Thus, the viewer encounters a realm of quiet demarcation rather than a dominating cinematic scale.

In initial image experiments, I composed the sequences using a wide, panoramic aspect ratio to reference dimensions associated with a human field of physical vision. However, I increasingly adopted a more standard 16x9 image ratio, because I began to understand that embodiment is something beyond the physical (it is not contained inside a ratio hemmed in by peripheral vision). Rather, embodiment is something deep and present that transcends cinematic scale and ratio; it is more effectively associated with a sense of close, attentive, contemplative immersion (Figure 5.13).

Having discussed the exhibition design, it is useful to consider three themes that permeate the work: sensory experience; time, stillness, and rhythm; and the nature of closeness.

⁸¹ Letterboxing is a cropping device used when displaying widescreen movies on a standard-width screen. The technique involves adding black bars to the top and bottom of the frame so the wider aspect ratio is preserved.



Figure 5.14

Textural Approach to Recording (2024)

While not all recordings were created in black and white, eliminating colour allowed me to 'go inside' the images. There was a level of comfort in working with sequences that I understood would be seen by others in the same way that I see them. Consequently, my work reflects a way of seeing the world that is more associated with texture and value than with colour. In the exhibited sequences, colour's subtraction might be understood as the removal of an unreliable, outer layer of information. Copyright 2024 by the author.



Figure 5.15

Variation of Light (2025)

Light, often at dawn or dusk, illuminated greater levels of detail in the environment because the sun's lower angle created a wider visible range of textures. In this screengrab from a video from March 2025, the recorded light is ephemeral and fused. I realised that this experience of light and form would only occur once across the spectrum of eternity. It was a momentary meeting of mutable things, coalesced in a single fragment of time. Such moments caused me to pause. I encountered delicate beauty amongst degradation in an unrepeatably moment. Copyright 2025 by the author.

IDEAS THAT PERMEATE THE WORK

Sensory Experience

Across the three years of this study, I engaged with the land through an attunement of sensations and learning inside an embodied state. My visits were developed through physical, emotional, and intuitive ways of being that I have come to understand as indivisible parts of my experience in the world. I found myself immersed as I moved through the land in a process of circumambulatory knowing; walking, smelling, hearing, and seeing (Ingold, 2004; Mäkelä, 2007). This process also brought awareness of things that I could not directly attribute to my senses, such as peace, danger, tension, uneasiness, spiritual presence, and awe.

This noted, the following sections discuss how my sensory experiences are embodied in the images.

Colour

At a young age, I was diagnosed with a form of colour blindness that manifested as a low sensitivity toward red and green light. Because of this, it is often difficult for me to distinguish certain colours from one another, specifically shades of red and brown, green and orange, and purple and blue. As a result, I make meaning of colours based on the context in which they appear. I do not trust that what I perceive will equate with what others see.

Because of this, I try to see below the surface of colour. At the lake I was often drawn to details like the texture of water, clay, sand, and bark (Figure 5.14), and to the tonal variations of light as it refracted through water or was diffused through a canopy (Figure 5.15). I normally edited the images as black and white compositions to avoid the uncertainty of colour. This gave me the flexibility to elevate tonal and textural aspects of images inside a limited colour spectrum that generated minimal anxiety. This way of perceiving the world, and the adaptive strategies it requires, often operates below my conscious awareness. Merleau-Ponty (2005) described this as a pre-reflective mode of engagement, in which bodily perception and action operate prior to, and often independently from, conscious cognitive analysis.

Scent

Smell was often the first thing I was conscious of when visiting the lake. Drawn through my breath, scent became the way I inhaled the environment. The tone of air and its movement became part of my living rhythm.

Olfactory stimuli consistently influenced my perception. Certain environmental scents, like stands of manuka, poplar leaf litter, and trodden wild carrot, activated memory associations with previous visits in other seasons and other environments. These created a secondary interpretive layer that operated alongside my visual observations.

On several occasions, I recalled noting the change in season based on smell; the late morning in spring, the dew-sodden grass carrying cool sweetness, became a more reliable indicator than calendar dates. Often, scent drew forth complex sensations, and I would rely on it to speak with me about certain conditions of the environment, such as the presence of decay and sickness (Figure 5.16. See p. 77). I recalled one such visit in my reflective log for March 1, 2025:

The scent of death made me more hesitant about my surroundings, even grass heads and vines appeared threatening. Near the water, it took more self-persuasion to continue walking, even if logic might have suggested that it was safe.

Smell functioned as a kind of environmental awareness that directed my decisions beyond conscious assessment. I understood that scent could not be directly recorded the same way as sound and sight, but its effect on my perception influenced the recording and artistic treatment of weight, tone, and a pervasive sense of the miasmatic.



Figure 5.16

The Weight of Smell at the Lake (2025)

During the recording of this photograph in March 2025, the smell of decaying fish and dried fecal dirt was intense. I recalled noting a connection between these smells and the oily film that collected in this puddle. The smell forced me to breathe shallowly. When I left the location, I was lightheaded (whether from my altered breathing or the encountered weight of death, I do not know). These smells stayed with me, and when reviewing the recordings, the scent resurfaced a toxic kind of miasma. Copyright 2025 by the author.

Time, Stillness, and Rhythm

Beyond the senses there are other sensations that are more abstract. These may be broadly described as time, stillness, and rhythm.

The duration of each visit to Lake Waikare was often determined by factors like weather, light, and my receptivity to the land. Sometimes, my camera, body, and sense of time faded from awareness, and I was immersed. Anticipation disappeared, and my body and the land merged into a single experience. In this flow of time, I lost consciousness of isolated sensations and became absorbed into a rhythm of being and recording. Time inside these visits was measurable only through experience. It became a felt phenomenon, durational (as argued by Bergson, 1911), and shaped through bodily perception (as noted by Merleau-Ponty, 2005). Here, 'clock time' was an unreliable metric for the experience that was measured in engagement, connection, and unity.

At other times, I struggled to find a flow in my work and felt disconnected from the land. I was restless ... focused on the tasks of walking, drawing, recording. Time felt heavy. It was not easy during these times to be still (Figure 5.17. See p. 78), and I found that I had to remain disciplined, setting aside analytical thoughts in much the same way as Husserl (1900/2001) outlined, in his process of bracketing. I tried to let go of rational filters and create space for intuitive attention.

82 After one such visit, I wrote in my reflective log entry for May 13, 2025:

I visited the lake twice recently at night. It was a side of the lake that I have not experienced before, very still. I felt like I was witnessing something I should not, and about to be discovered. I felt both intimate with the lake in the silence, yet I also had a heightened sense of alertness. I could not bring myself to venture into the trees the last visit I was there.

I could not logically explain this gut feeling. My hesitation was regulated by some level of intuition I did not understand.

83 Interestingly, it seems that over the course of this project, as my familiarity with the lake increased, the images I produced tended to be increasingly layered (constructed) in-camera, instead of being composited in a post-production process.

Through the practice, stillness constituted a way of being present to the land itself. This presence required holding receptive attention. It was a disciplined openness that resisted the impulse to immediately categorise or analyse what I encountered. This openness operates within what Varela et al. (2016) identified as groundlessness, which "is revealed in cognition as 'common sense,' ... knowing how to negotiate our way through a world that is not fixed and pre-given but that is continually shaped by the types of actions in which we engage" (p. 191). My relationship to time and space became fluid, responsive to the emergent qualities of each encounter. Such a process of disciplined immersion changed the way I experienced the lake. It became a co-participant. In stillness, my body became the instrument and receiver, tuned to shifts in temperature, light, and movement.

I accepted changes in the conditions of the land, which sometimes led to an awareness of senses I could not explain logically: the presence of danger beyond a stand of trees, or feelings of intimacy and intrusion during a night when the water and atmosphere were completely still.⁸²

These layers of experience were reflected in the treatment of the images. This is why time is drawn out between frames and reflected in slowed movement, limited colour, sound, and elevated texture. In the sequences the minute becomes great and the eternal, minute. Duration and stillness are layerings of that which is invisible but present. Accordingly, the images express embodied dwelling and focused stillness that speaks to my spirit and its communion with the lake. In sequences such as *Surface* (Figure 5.9) and *Decay* (Figures 5.4 and 5.5), layering occurs within the camera, with a narrow plane of focus that is established between the blurred foreground and backgrounds.⁸³

The process of suspending evaluative experience became integral to effective recording. Suspension involved a kind of extended pausing that enabled unnecessary things to subtract themselves from the encounter. What I was left with was a kind of deep stillness that was both physical and non-physical. It was a pause in a slow rhythm that I discovered was necessary for something to become whole and expressible (to come into form).

I experienced the sense of being drawn forward in an embodied way as rhythm. As music coheres through rhythmic structure, I found myself caught up in focused feeling and action when connected to what I was experiencing. This rhythm was not assured; it arose when immersion became effortless and the camera tools I was using seemed to disappear. I responded to my surroundings in a flow of experience, where layers of environmental information became a form of harmony. This recalls a manner of experiencing time as "pure duration," which Bergson described as

the form which the succession of our conscious states assumes when our ego lets itself live, when it refrains from separating its present state from its former states ... It does not set them alongside its actual state as one point alongside another, but forms both the past and the present states into an organic whole, as happens when we recall the notes of a tune, melting, so to speak, into one another. (1957, p. 100)

I found security in this rhythm, as a form of tacit environmental knowing of what it was to 'be' in the land. This 'knowing' state worked alongside my technical understanding as a co-dependent process. Maturana and Varela's (1980) concept of autopoiesis helped me to understand how this rhythmic quality manifests as the ongoing coordination between organism and environment, where knowledge emerges through the practice of sustained engagement.



Figure 5.17

Restlessness During Recording (2024)

Often, visits during intense weather conditions made immersion difficult, and I felt greater resistance from the land and from my equipment, as my attention shifted rapidly between anxieties over aspects of the lake, such as the wind and temperature. Attention to such conditions removed me from focused, pre-reflective involvement. These shifts I accepted as part of the process, and I tried to suspend judgement. Copyright 2024 by the author.

THE NATURE OF CLOSENESS

The five screen-based sequences in the exhibition are intimate. They are close. Closeness describes something that is both physical and metaphysical. It is a drawing together of myself and the land, where at times I feel the weight of silence in my chest, and my breath is intimately received into the stillness of the atmosphere.

In developing this research, I built an intimate relationship with a lake. It was a singular place, championed, yet tragic. Initially, I felt estranged, and I often encountered a sense of resistance. But, as I built a relationship with the location, I moved from external understandings of the environment and its history towards a form of knowing and connecting, and things began to change.

Through repeated sensing and recording, I developed ways of being *toward* the lake, deepening existing familiarity to it through my creative action. This connection between myself and the land was, in Varela et al. (2016)'s terms, a "bringing forth of meaning from a background of understanding" (p. 149), where my camera disappeared in my involvement. Heidegger might have referred to this kind of rhythm as ready-to-hand: "the more we seize hold of [equipment] and use it, the more primordial does our relationship to it become" (Heidegger, 1962, p. 98).

My repeated presence had purpose, and I formed a relationship grounded in being involved with and caring for the environment.

I hurt for it...

... dwelled within it.

This increasing connection felt like an opening and release. Experience became shared as presentness, extended beyond the physical. I felt the land care for me (Figure 5.18). There was aliveness in the water, trees, and clay; they were aware that I was there. The lake that I recorded became a living/dying entity, and the time I spent with it accumulated a kind of trust that permeated the flow of my recording and responding.

While being, walking, and recording, I observed aspects that transcended matter and understanding. I experienced what Dewsbury and Cloke described as "immaterial push of spirit alongside the materiality of landscape" (2009, p. 695). In this state, I experienced "relations between bodily existence, [my] felt practice and faith in something immanent but not manifest as such" (2009, p. 695).

I felt the presence of God in the unknowable.

Care became a reciprocal thing. I developed a fondness for the land's presence, its familiar environmental details, and the intimacy of quiet moments. Attunement felt mutual (Ingold, 2000). Visits became less focused on recording and more on absorbing what the lake would reveal to me. Closeness formed through my opening to the environment and its opening to me; a co-dwelling with one another. I found a presence that could not be fully known through the physical.

In this relationship, rationality was disarmed. Sometimes what I experienced seemed contradictory. I was sensitised to multiple dimensions of being there. There was sickness and strength:

Beauty in decay;

peace in miasma.

Time was a shared moment;

a small piece of eternity.

These paradoxical relationships were similar to Ruwhiu's (2001) explanation of the spiritual as "always present, integrated into everything, the source of both pain and suffering and healing and wellbeing" (p. 63). In a manner similar to Valentine and colleague's discussion of wairua, I felt an "interconnectedness between ... [my] human situation and an esoteric realm [and] ... a wider connection to the universe as a living entity" (Valentine et al., 2017, p. 65).

It is a very difficult thing to communicate something so deep in scaled moving image sequences, because the embodied experience of recording absorbs and transcends the physical. The work in the exhibition transports the viewer back to a momentary duration in time (an intimate experience that dissolves and extends time). Smells, sounds, and emotions shape the recordings as communions; shared experiences with a living thing. At the time of recording, these communions were both physical and non-physical. However, in the exhibition we paradoxically sense the presence of the physical through the absence of smell, touch, and sound. We engage in what Mortensen Steagall called "non-aural listening" that exists "as an intersection between the physical and the spiritual" (2019, p. 162). In each of the works, the spiritual resides in the nature of closeness, which Cooper (2019) described as the "sacred space between being, place, language, and landscape [that] is integral to the way humans perceive, value, interact, and manage their environments" (p. 34).

Figure 5.18

Moonbow over Waikare (2024)

During a visit to the lake at night, in May 2024, I encountered an unexpected moment where trust and intuition led to an intensely intimate experience of stillness and connection. While filming a moonrise timelapse sequence, I felt drawn to the sky above the trees. There appeared a faint streak in the sky (white, to my limited colour vision). The image recorded with my camera revealed a moonbow, a rare phenomenon I had never experienced. I felt in this moment that I was the only person to see this. The lake had opened to me. It was trusting me. Aware of my finitude, I encountered the expanse of God. I was one with the still night; my camera was a window that saw beyond the limitations of my body.







CHAPTER 6

Conclusion

Conclusion

INTRODUCTION AND SUMMARY

This practice-led doctoral thesis considered the nature of embodied engagement with the polluted Lake Waikare. The study asked:

How might lens-based recording serve in expressing an embodied connection to land?

The thesis framed the Anthropocene as inseparable from cognition. In so doing, it repositioned environmental concerns inside a state of embodied relationality. Synthesising photographic and moving image sequences recorded on location, the study drew on Bergson's (1957) concept of duration and the nature of stillness as expressions of intimate connection. The five moving image sequences (*Depths, Memory, Decay, Current, and Surface*) constitute a visual account of embodied encounters that were activated through subjectivity, reflection, and iterative experimentation.

The exegesis opened by positioning the researcher. This segued into a historical, social, and ecological account of the lake's deterioration and current position within the local community. This positioning then progressed into a review of contextualising literature relating to embodiment, time, and stillness. Supplementing this was a consideration of the work of five artists for whom embodied encounters with land form a central concern of their contemporary practice, as well as three reviews of renegotiated time in lens-based creative practice.

The project's heuristic research design was then unpacked, and a critique was offered of the strengths and challenges of the approach. Finally, a critical commentary drew ideas of time, stillness, embodiment, and closeness into an analysis of the work and the design developed for the culminating exhibition.

CONTRIBUTIONS TO KNOWLEDGE

The thesis considered the nature of, and voice for, an embodied connection to land. It proposes that land might be valued through intimate relationality rather than distanced, globalised considerations. Broadly, the research proposes three contributions to knowledge.

Communicative Lens-Based Practice

Firstly, it contributes to scholarship (as artistic practice) which examines ways in which synthesised, lens-based recording can communicate physical and non-physical dimensions of land that are perceived through embodied experience (Burton, 2015; Mortensen Steagall, 2019; Wu, 2021).

Intimacy

Secondly, the thesis provides an example of how sustained engagement with a local environment, through situated practice, can offer an intimate rather than a global perspective on the Anthropocene.⁸⁴ In concord with writing by Fagan (2023), Ingold (2021), and Kidwell (2024), the study proposes an intimate rather than a global view of land, where broader ideas may be encapsulated in the contemplation of single location. To achieve this, cognition has been understood not as a dualistic mechanism but as something situated, emerging through bodily engagement and interaction with the land (Heidegger, 1962; Ingold, 2000; Merleau-Ponty, 2005; Varela et al., 2016). As such, the study contributes to considerations of the Anthropocene by showing how a personal experience of time, constructed through lens-based recordings and composition, can contribute artistically to broader social and ecological understandings.

⁸⁴ Although the Anthropocene was recently rejected as a formally defined geological epoch (IUGS, 2024), human impact on the environment continues to be recognised globally (Fagan, 2023).

Transcending Physical Documentation

Thirdly, as an extension of this engagement, the study offers considerations of time, stillness, and spirituality as devices for transcending figurative documentation. Accordingly, the artworks move beyond didactic, documentary accounts of the physical.

FURTHER RESEARCH

This research draws into focus issues that are familiar to people who live near Lake Waikare. As one of the most degraded bodies of water in New Zealand (Verburg et al., 2010), the location frequently appears in literature regarding water quality. In my discussions with community members, I continue to encounter requests that the artistic practice and analysis of the site form part of a wider public campaign that supports scientific analysis of, and advocacy for, the environment. To this end, I have been asked to make my review of the history, community, and ecology of Lake Waikare⁸⁵ available to the community through a discrete publication.

Publishing

During this study I shared research in diverse fora. I presented papers at the AUT Postgraduate Research Symposium (2024), and at the LINK 2024 6th International Conference in Practice-oriented Research and Global South.

My article “The Dying Lake: Waikare and the Embodied Artist,” has been peer reviewed and accepted for publication in October 2025, in the *Link Praxis Journal of Practice-led Research and the Global South*. In the article I unpack the methodology employed in explicating the study.

After lodgement of the thesis in 2026, I will be writing an article for the *Video Journal of Education and Pedagogy*,⁸⁶ offering a critical discussion of my practice and the nature of embodied, lens-based recording in fostering connection to land in the Anthropocene.

Giving Back to the Community

Although I presented a body of creative work in December 2024 as part of the LINK 2024 6th International Conference in Practice-oriented Research and Global South (van Vliet & Mortensen Steagall, 2024), the internationalisation of the research was prefigured by a solo installation during October and November 2024, at Te Wai Ngutu Kākā Gallery in Auckland, where I screened a series of sequences titled *The Dying Lake: Waikare and the Embodied Artist*. Although the exhibition was public, the focus was on presenting work to invited members of the local community.⁸⁷

However, I was cognisant of the fact that seeing the work involved local people driving in to the city, and I began to think about the responsibility I have to make the work more locally accessible. Given that the sequences were recorded in the community to which I belong, I am planning exhibitions in Te Kauwhata as a way to whakahoki (return or give back).

The first of these initiatives will be a contribution to a larger, curated exhibition of work that will focus on the history of Lake Waikare and the Whangamarino Wetland. The project, led by Liz Tupuhi, will draw together narratives and photographs from mana whenua (Indigenous custodians of the land), land owners, and community members. The exhibition seeks to inform the Te Kauwhata community of the history of their waterways and document their current, degraded states. The installation is scheduled to open on February 13, 2026, in the Lakeside Village Centre.

In 2026, I am applying for university research to host an associated exhibition in the same Lakeside Village Centre. Here, I will present the artistic work emanating from this thesis. The initiative is scheduled for June 29–July 17, 2026. A catalogue that provides historical and ecological information about the lake will be included in the exhibition.⁸⁸

⁸⁵ See Chapter 2: History, Community and Ecology.

⁸⁶ Journal homepage: <https://brill.com/view/journals/vjep/vjep-overview.xml?language=en>

⁸⁷ These individuals received specific invitations.

⁸⁸ The exhibition will be designed as a transportable installation that can be compacted as MP4 files. This approach will enable the work to travel nationally and with minimal cost.

Further Creative Work

I appreciate that my artistic approach to a location that has largely been the subject of scientific analysis may seem anomalous. However, Lake Waikare is a multidimensional space and multidimensional challenge. I believe that art that is accessible and intimate in its embodiment, local in its engagement, and global in its concerns has a significant contribution to make. I am reminded in this regard of Hannah Arendt, the American philosopher and political theorist, who noted:

The reality of the public realm relies on the simultaneous presence of innumerable perspectives and aspects in which the common world presents itself and for which no common measurement or denominator can ever be devised. For though the common world is the common meeting ground of all, those who are present have different locations in it, and the location of one can no more coincide with the location of another than the location of two objects. Being seen and being heard by others derive their significance from the fact that everybody sees and hears from a different position. This is the meaning of public life ... Only where things can be seen by many, in a variety of aspects, without changing their identity, so that those who are gathered around them know they see sameness in utter diversity, can worldly reality truly and reliably appear. (Arendt, 1958, p. 57)

‘To reliably appear’ is a challenge and a responsibility that I take seriously, because the lake and I are related. This relationship will continue beyond the end of the thesis.

Waikare does not stand alone. It is part of a wider damaged ecosystem. I am interested in expanding my artistic inquiry to other damaged waterways that connect to the lake. The Whangamarino Wetland (internationally recognised under the Ramsar Convention) is also suffering from the effects of human interference. Recent damage to the wetland environment included an avian botulism outbreak in early 2023 (Fish and Game New Zealand, 2023), and a wildfire in October 2024 (“Whangamarino Wetland Will Take Decades to Recover from Fire,” 2024).

Beginning in July 2026, I will expand my research to consider other affected waterways in the catchment (focusing on the Whangamarino Wetland and Whangamarino River). Because I have formed connections during my research with members of the Nga Muka Development Trust, Waikato Regional Council, and the Department of Conservation, I continue to seek opportunities to collaborate on projects that will increase awareness of the importance of these waterways. One such initiative is the *Whangamarino Action Plan*, which aims to establish a formal institutional and community based approach to revitalising the local water bodies. My new research will involve visiting and recording the wetland area and investigating the nature of connection to its environments. I will contribute this material to an online educational repository of information about the action plan.⁸⁹

⁸⁹ At the time of lodging this thesis, the webpage for the Whangamarino Action Plan is still being developed.

IN CLOSING...

*The shallow lake is silent,
A shadow of her former self.
Once bright, blue and shimmering,
It is now scarred
.... choking for life.
What justification is there,
For bullying nature?
Disregarding
Her innocent water spilled.*

I was 19 years old in 2017, when I wrote these words. It is not great poetry, but I was finding my way as an undergraduate in my first project about Lake Waikare. Although the words from my younger self have some applicability today, I now appreciate that I and the lake extend into one another. It is also greater than I can understand. In Merleau-Ponty's words, "The world is not what I think, but what I live through. I am open to the world, I have no doubt that I am in communication with it, but I do not possess it; it is inexhaustible" (Merleau-Ponty, 2005, pp. xviii–xix).

I no longer see value in blaming people for the lake's degradation. I understand myself to be part of a complex whole that constitutes 'the environment.' When attuned, I am connected to its life and grief. I have discovered something profound that is beyond physical dimensions, beyond science—an embodied position that embraces and transcends the physical.

I move forward into the world, sensitive
to the land upon which I walk.

Connected

... through stillness.





References

References

- 1000 Māori place names. (2024). New Zealand history. <https://nzhistory.govt.nz/culture/maori-language-week/1000-maori-place-names>
- Allsen, T. (1996). Spiritual geography and political legitimacy in the eastern Steppe. In H. J. M. Claessen & J. G. Osten (Eds.), *Ideology and the formation of early states* (pp. 116–135). Brill.
- Arendt, H. (1958). *The human condition* (2nd ed.). University of Chicago Press.
- Aristotle. (1984). Physics. In J. Barnes (Ed.), *The complete works of Aristotle* (6th ed.). Princeton University Press. (Original work published ca. 340 B.C.E.)
- Aristotle. (2007). *Categories* (E. M. Edghill, Trans.). eBooks@Adelaide. (Original work published ca. 350 B.C.E.)
- Aristotle. (2014). Physics, book IV. In J. Barnes (Ed.), *Complete works of Aristotle: The revised Oxford translation* (Vol. 1, pp. 354–378). Princeton University Press. (Original work published ca. 340 B.C.E.)
- Auckland University of Technology. (2025). *AUT postgraduate handbook*. https://www.aut.ac.nz/__data/assets/pdf_file/0003/796224/AUT-Postgraduate-Handbook-V1.4-September-2025-Final.pdf
- Autin, W. J., & Holbrook, J. M. (2012). Is the Anthropocene an issue of stratigraphy or pop culture? *GSA Today*, 22(7), 60–61. <https://doi.org/10.1130/G153GW.1>
- Bags of game. (1935, May 7). *Waikato Times*, 117(19569), 9. <https://paperspast.natlib.govt.nz/newspapers/WT19350507.2.82>
- Balane, M. (2014). *The Lake Waikare low enthalpy geothermal resource: An initial study of its origin* (Technical Report No. 3131619). Waikato Regional Council.
- Barry, A., & Maslin, M. (2016). The politics of the Anthropocene: A dialogue. *GEO: Geography and Environment*, 3(2), Article e00022. <https://doi.org/10.1002/geo2.22>
- Beatty, W. (2017). *Contemporary photographic landscape practices and the affective gaze* [Doctoral thesis, Deakin University]. Deakin Research Online. https://dro.deakin.edu.au/articles/thesis/Contemporary_photographic_landscape_practices_and_the_affective_gaze/21111598/1/files/37454770.pdf
- Bennett, J. (2010). *Vibrant matter*. Duke University Press. <https://doi.org/10.2307/j.ctv111jh6w>
- Bergson, H. (1911). *Matter and memory* (J. H. Muirhead, Ed.). Swan Sonnenschein.
- Bergson, H. (1957). *Time and free will* (F. L. Pogson, Trans.). George Allen & Unwin.
- Biggs, R. (1866, January 4). *4 pages written 4 Jan 1866 by Reginald Newton Biggs in Wairoa to Sir Donald McLean*. MS-Papers-0032-0162, McLean Papers, Alexander Turnbull Library, National Library of New Zealand. <https://paperspast.natlib.govt.nz/manuscripts/MCLEAN-1018860.2.1>
- Bissell, D., & Fuller, G. (Eds.). (2011). *Stillness in a mobile world*. Routledge.

- Blyth, J. (2011). *Ecohydrological characterisation of Whangamarino Wetland* [Master's thesis, The University of Waikato]. University of Waikato Research Commons. <https://researchcommons.waikato.ac.nz/server/api/core/bitstreams/ac06d370-e65f-4a3f-9ddc-5b5788504cce/content>
- Boffa Miskell. (2016). *Lakeside Te Kawwhata: Private plan change ecological report*. Lakeside Developments Limited.
- Bolton, G. (2010). *Reflective practice: Writing and professional development* (3rd ed.). Sage.
- Brown, A. W. (2016). *David Claerbout: "I sculpt in duration."* Studio International. <https://www.studiointernational.com/david-claerbout-interview>
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42. <https://doi.org/10.3102/0013189X018001032>
- Brownhill, R. J. (1968). Michael Polanyi and the problem of personal knowledge. *The Journal of Religion*, 48(2), 115–123. <https://doi.org/10.1086/486119>
- Buffon, G.-L. L. (2018). *The epochs of nature* (A.-S. Milon, M. Zalasiewicz, & J. Zalasiewicz, Trans.). University of Chicago Press. (Original work published 1788)
- Burton, R. (2015). *A creative consideration of climate adaptation as a social and ecological palimpsest*. [Master's thesis, Auckland University of Technology]. Tuwhera. <https://hdl.handle.net/10292/9138>
- Cheptum, I. (2013). *Preliminary assessment of low enthalpy Ohinewai geothermal system* (Technical Report No. 2013/08). Waikato Regional Council.
- Claerbout, D. (2016). *Olympia (The real time disintegration into ruins of the Berlin Olympic stadium over the course of a thousand years)*. David Claerbout. <https://davidclaerbout.com/Olympia-The-real-time-disintegration-into-ruins-of-the-Berlin-Olympic>
- Claerbout, D. (2023). *Backwards growing tree*. David Claerbout. <https://davidclaerbout.com/Backwards-Growing-Tree-2023>
- Conradson, D. (2007). The experiential economy of stillness: Places of retreat in contemporary Britain. In A. Williams (Ed.), *Therapeutic landscapes*. Routledge. <https://doi.org/10.4324/9781315551166>
- Conradson, D. (2011). The orchestration of feeling: Stillness, spirituality and places of retreat. In D. Bissell & G. Fuller (Eds.), *Stillness in a mobile world* (pp. 71–86). Routledge.
- Cooke, J., & Cox, T. (2015, September 17). *Lake Waikare water quality modelling: Using a new model to investigate flushing strategies*. Water New Zealand Annual Conference. https://www.waternz.org.nz/Article?Action=View&Article_id=103
- Cooper, D. (2019). The spiritual geography of landscape. *Prism*, 15(1), 34–49. <https://www.prismjournal.org/uploads/1/2/5/6/125661607/v15-no1-a3.pdf>
- Copernicus, N. (1995). *On the revolutions of the heavenly spheres* (C. G. Wallis, Trans.). Prometheus Books. (Original work published 1543)
- Crutzen, P. (2016). Geology of mankind. In P. Crutzen & H. G. Brauch (Eds.), *Paul J. Crutzen: A pioneer on atmospheric chemistry and climate change in the Anthropocene* (pp. 211–215). Springer International Publishing. https://doi.org/10.1007/978-3-319-27460-7_10
- Crutzen, P., & Schwagerl, C. (2011, January 4). *Living in the Anthropocene: Toward a new global ethos*. Yale E360. https://e360.yale.edu/features/living_in_the_anthropocene_toward_a_new_global_ethos
- Crutzen, P., & Stoermer, E. (2000). The “Anthropocene.” *IGBP Newsletter*, 41, 17–18.
- Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. Harcourt College Publishers.
- Dana, J. D. (1863). *Manual of geology*. Theodore Bliss & Co. http://archive.org/details/bub_gb_QjwDAAAQAAJ
- David, B. O., Özkundakci, D., Pingram, M., Bergin, D., & Bergin, M. (2018). “The CarP-N neutral project”: Removal, processing and reuse of invasive fish in local terrestrial conservation projects. *Journal of Applied Ecology*, 55(4), 1567–1574. <https://doi.org/10.1111/1365-2664.13155>
- Dean-Speirs, T., Neilson, K., Reeves, P., & Kelly, J. (2014a). *Waikato region shallow lakes management plan: Volume 1* (Technical Report No. 2014/58). Waikato Regional Council. <https://www.waikatoregion.govt.nz/services/publications/tr201458/>
- Dean-Speirs, T., Neilson, K., Reeves, P., & Kelly, J. (2014b). *Waikato region shallow lakes management plan: Volume 2* (Technical Report No. 2014/59). Waikato Regional Council. <https://www.waikatoregion.govt.nz/assets/WRC/WRC-2019/TR201459.pdf>
- Department of Conservation. (2010, March). *Ramsar Convention on Wetlands 10th conference of parties* [Factsheet]. <https://www.doc.govt.nz/globalassets/documents/conservation/land-and-freshwater/wetlands/ramsar-convention-on-wetlands-10th-conference-of-parties-factsheet.pdf>
- Department of Conservation. (n.d.). *Koi carp*. <https://www.doc.govt.nz/nature/pests-and-threats/freshwater-pests/koi-carp/>
- Descartes, R. (1999). *Discourse on method* (D. A. Cress, Trans.). Hackett Publishing. (Original work published 1637)
- Dewsbury, J. D., & Cloke, P. (2009). Spiritual landscapes: Existence, performance and immanence. *Social & Cultural Geography*, 10(6), 695–711. <https://doi.org/10.1080/14649360903068118>
- Dissolution of societies. (1996, September 5). *New Zealand Gazette*, 106, 2738. <https://library.victoria.ac.nz/databases/nzgazettearchive/pubs/gazettes/1996/1996%20ISSUE%20106.pdf>
- Dotov, D. G., Nie, L., & Chemero, A. (2010). A demonstration of the transition from ready-to-hand to unready-to-hand. *PLOS ONE*, 5(3), 9433. <https://doi.org/10.1371/journal.pone.0009433>

- Doughty, K. (2023). Therapeutic landscapes of stillness: Creating affective sanctuary through practices of cocooning and immersing. *Geografiska Annaler: Series B, Human Geography*, 107(2), 102–116. <https://doi.org/10.1080/04353684.2023.2281558>
- Douglass, B. G., & Moustakas, C. (1985). Heuristic inquiry: The internal search to know. *Journal of Humanistic Psychology*, 25(3), Article 3. <https://doi.org/10.1177/0022167885253004>
- Fagan, M. (2023). The paradox of Anthropocene inaction: Knowledge production, mobilization, and the securitization of social relations. *International Political Sociology*, 17(1), Article olad002. <https://doi.org/10.1093/ips/olad002>
- Faumuina, C. P. (2022). 'Asi—The presence of the unseen [Doctoral thesis, Auckland University of Technology]. Tuwhera. <https://hdl.handle.net/10292/15350>
- Fish and Game New Zealand. (2023, March 19). Regional council must act on deadly botulism outbreaks. <https://www.fishandgame.org.nz/environment/news/regional-council-must-act-on-deadly-botulism-outbreaks/>
- Fyers, W. B. (1991). *My memoirs by W.B. Fyers: Part one*. W. B. Fyers.
- Fyers, W. B. (1994). *My memoirs by W.B. Fyers: Part two*. Janice Dowdeswell.
- Galerie Rudolfinum. (2020, February 20). *David Claerbout: Interview; Galerie Rudolfinum* [Video]. YouTube. <https://www.youtube.com/watch?v=8pXDZj8tbC8>
- Galilei, G. (1967). *Dialogue concerning the two chief world systems: Ptolemaic and Copernican* (S. Drake, Trans.; 2nd ed.). University of California Press. (Original work published 1632)
- Goethe, J. W. von, Eckermann, J. P., & Soret, F. J. (1850). *Conversations of Goethe with Eckermann and Soret* (J. Oxenford, Trans.). Smith, Elder & Co. <http://archive.org/details/conversationsofg01goetuoft>
- Goodband, L. (2023). *Video art by pioneer Bill Viola comes to RAMM*. RAMM. <https://rammuseum.org.uk/news/video-art-by-pioneer-bill-viola-comes-to-ramm/>
- Gray, C. (1996). *Inquiry through practice: Developing appropriate research strategies*. No Guru, No Method? International Conference on Art and Design Research, Helsinki, Finland. <http://carolegray.net/Papers%20PDFs/ngnm.pdf>
- Green, D., & Raygorodetsky, G. (2010). Indigenous knowledge of a changing climate. *Climatic Change*, 100(2), 239–242. <https://doi.org/10.1007/s10584-010-9804-y>
- Griffith, J. (1992). *Beliefs and holy places: A spiritual geography of the Pimeria Alta*. University of Arizona Press.
- Grim, J. (Ed.). (2001). *Indigenous traditions and ecology: The interbeing of cosmology and community*. Harvard University Press.
- Groth, C., & Mäkelä, M. (2016). The knowing body in material exploration. *Studies in Material Thinking Journal*, 14. <https://materialthinking.aut.ac.nz/papers/220.html>
- Gutiérrez-Ginés, M. J. (2019, November). The Waikare Learning Community: The outcome of the Vision Mātauranga Project. *Putting Waste to Work*, 21, 4. https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE49412558
- Gutiérrez-Ginés, M. J., Bisht, A., Meister, A., Robinson, B. H., Clarke, D., Tupuhi, G., Alderton, I., Horswell, J., Wang, K. I.-K., Bohm, K., Taylor, M., Adamson, O. M., Simcock, R., O'Neill, T. A., Nikau, T., & Ambrose, V. (2022). *Maanuka dominated ecosystems to improve water and soil quality in Lake Waikare catchment* (No. CSC22012). Waikato River Authority. https://waikatoriver.org.nz/wp-content/uploads/2022/06/WRA16-008-Final-Report-WRA-2022_10.pdf
- Hadot, P. (1988). *The inner citadel* (M. Chase, Trans.). Harvard University Press.
- Hallowell, A. I. (1955). *Culture and experience*. University of Pennsylvania Press.
- Harmsworth, G. R. (1997). Māori values for land use planning. *New Zealand Association of Resource Management (NZARM) Broadsheet*. 37–52.
- Haughton, S. (1866). *Manual of geology* (2nd ed.). Longmans, Green, Reader, and Dyer.
- Heidegger, M. (1962). *Being and time* (J. Macquarrie & E. Robinson, Trans.). Blackwell.
- Heidegger, M. (1971). *Poetry, language, thought* (A. Hofstadter, Trans.). Harper Colophon Books.
- Heidegger, M. (2011). *The concept of time* (I. Farin, Trans.). Continuum.
- Henare, M. (2001). Tapu, mana, mauri, hau, wairua: A Maori philosophy of vitalism and cosmos. In J. A. Grim (Ed.), *Indigenous traditions and ecology: The interbeing of cosmology and community* (pp. 197–221). Harvard University Press.
- Henderson, M. (1993). What is spiritual geography? *Geographical Review*, 83(4), 469–472.
- Hernandez, W. A. (2016). St. Augustine on time. *International Journal of Humanities and Social Science*, 6(6), Article 6. <https://cs.uwaterloo.ca/~ijdavis/qic890/4.pdf>
- Hicks, B. (2007). *How many koi? Preliminary estimates of koi carp abundance from boat electrofishing* (CBER Contract Report No. 59). The University of Waikato. <https://researchcommons.waikato.ac.nz/entities/publication/d00675f7-e422-4a4f-a3be-4458e860805e>
- Higgins, M. W. (2016). *Heretic blood: The spiritual geography of Thomas Merton*. Wipf and Stock Publishers.
- Holiday accidents. (1927, January 4). *Manawatu Times*, LII(3496), 7. <https://paperspast.natlib.govt.nz/newspapers/MT19270104.2.56>
- Hoyle, E. (2024). Documenting grief: A heuristic inquiry. In W. Ings & K. Tudor (Eds.), *Heuristic enquiries: Research across disciplines and professions* (pp. 86–104). Routledge. <https://doi.org/10.4324/9781003507758>
- Hughes, C. (2015). *Aquinas on being, goodness, and God*. Taylor & Francis.

- Husserl, E. (1964). *The phenomenology of internal time-consciousness* (J. S. Churchill, Trans.). Indiana University Press. (Original work published 1905)
- Husserl, E. (2001). *Logical investigations* (J. N. Findlay, Trans.). Routledge. (Original work published 1900)
- Ingold, T. (2000). *The perception of the environment: Essays on livelihood, dwelling and skill*. Routledge.
- Ingold, T. (2004). Culture on the ground: The world perceived through the feet. *Journal of Material Culture*, 9(3), 315–340. <https://doi.org/10.1177/1359183504046896>
- Ingold, T. (2021). *The perception of the environment: Essays on livelihood, dwelling and skill* (2nd ed.). Routledge.
- Ings, W. (2011). Managing heuristics as a method of inquiry in autobiographical graphic design theses. *International Journal of Art & Design Education*, 30(2), Article 2. <https://doi.org/10.1111/j.1476-8070.2011.01699.x>
- Ings, W., & Tudor, K. (Eds.). (2024). *Heuristic enquiries: Research across disciplines and professions*. Routledge.
- International Union of Geological Sciences. (2024, March 20). *The Anthropocene*. <https://www.iugs.org/post/the-anthropocene-iugs-ics-statement>
- Jenkyn, T. W. (1854). On the effects of organic agents on the Earth's crust. *Popular Educator*, 4, 139–141.
- Johnson, H. D. (1921, September 24). Maori place-names [letter to the editor]. *New Zealand Herald*, LVIII(17895), 13. <https://paperspast.natlib.govt.nz/newspapers/NZH19210924.2.127.4>
- Jones, R. (2023). *Embodied landscapes: Process and participation in filmmaking* [Doctoral thesis, Falmouth University]. Falmouth University Research Repository. https://repository.falmouth.ac.uk/5632/1/JONES%2C%20R%20Thesis_2024_PhD_Embodied%20Landscapes.pdf
- Kant, I. (1998). *Critique of pure reason* (P. Guyer & A. W. Wood, Trans.). Cambridge University Press. (Original work published 1781)
- Kelly, J. (2015). *Rangiriri: Lives and times 1870-1970*. Jenny Kelly.
- Kidwell, J. H. (2024). Personal knowledge: Teaching place-based religious ethics for a climate emergency. *Journal of Moral Education*, 54(1), 107–118. <https://doi.org/10.1080/03057240.2024.2362996>
- Klein, J. (2010). What is artistic research? *Gegenworte*, 23. <https://gloriagduran.com/wp-content/uploads/2012/11/Klein-ON-ARTISTIC-RESEARCH.pdf>
- Kleining, G., & Witt, H. (2000). The qualitative heuristic approach: A methodology for discovery in psychology and the social sciences; Rediscovering the method of introspection as an example. *Forum: Qualitative Social Research*, 1, Article 1. <https://doi.org/10.17169/fqs-1.1.1123>
- Kong, L. (1993). Negotiating conceptions of 'sacred space': A case study of religious buildings in Singapore. *Transactions of the Institute of British Geographers*, 18(3), 342–358. <https://doi.org/10.2307/622464>
- Land, Air, Water Aotearoa (LAWA). (n.d.-a). *Lake Waikare water quality*. Retrieved February 18, 2025, from <https://www.lawa.org.nz/explore-data/waikato-region/lakes/lake-waikare/>
- Land, Air, Water Aotearoa (LAWA). (n.d.-b). *Trophic level index*. Retrieved July 28, 2024, from <https://www.lawa.org.nz/learn/glossary/t/trophic-level-index/>
- Land, Air, Water Aotearoa (LAWA). (2024). *Toxic algae*. <https://www.lawa.org.nz/learn/factsheets/can-i-swim-here/toxic-algae/>
- Lane, B. (2002). *Landscapes of the sacred: Geography and narrative in American spirituality*. Johns Hopkins University Press.
- Latva-Somppi, R., & Mäkelä, M. (2020). Exploring ecological and material sensitivity through craft practice in the context of the Venice Lagoon. *Aisthesis: Pratiche, Linguaggi e Saperi Dell'Eestetico*, 13(1), 31–46. <https://doi.org/10.13128/Aisthesis-10916>
- Lawrence, L., & Ridley, G. (2018). *Lake Waikare and Whangamarino wetland catchment management plan* (No. Doc #12669108). Waikato Regional Council. <https://www.waikatoregion.govt.nz/assets/WRC/Council/Policy-and-Plans/hazard-catchment-management/CMP-catchment-management-plans/lake-waikare-whangamarino-wetland/Pt1-catchment-overview.pdf>
- Leavy, P. (2020). *Method meets art: Arts-based research practice*. Guilford Publications.
- Leavy, P. (2025). *Handbook of arts-based research*. Guilford Publications.
- Le Grice, J. S., & Braun, V. (2016). Mātauranga Māori and reproduction: Inscribing connections between the natural environment, kin and the body. *AlterNative: An International Journal of Indigenous Peoples*, 12(2), 151–164.
- Lehmann, M., Hamilton, D., Muraoka, K., Tempero, G., Collier, K., & Hicks, B. (2017). *Waikato shallow lakes modelling* (No. 94). <https://researchcommons.waikato.ac.nz/items/ca45287e-9c4c-44a5-b1bd-cc145a539823>
- Lewis, S. L., & Maslin, M. A. (2015). Defining the Anthropocene. *Nature*, 519(7542), 171–180. <https://doi.org/10.1038/nature14258>
- Ling, L., & Ling, P. (2016). *Methods and paradigms in education research*. IGI Global.
- Long, A. A. (2002). *Epictetus: A stoic and Socratic guide to life*. Clarendon Press.
- Lyell, C. (1990). *Principles of geology* (Vol. 1). University of Chicago Press. (Original work published 1830)
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Educational Researcher*, 16(2), Article 2.
- Mäkelä, M. (2007). Knowing through making: The role of the artefact in practice-led research. *Knowledge, Technology & Policy*, 20(3), Article 3. <https://doi.org/10.1007/s12130-007-9028-2>

- Mäkelä, M. (2016). Personal exploration: Serendipity and intentionality as altering positions in a creative practice. *Formakademisk*, 9(1), Article 2. <https://doi.org/10.7577/formakademisk.1461>
- Mäkelä, M., & Atkaş, B. (2022). In dialogue with the environment: The environment, creativity, materials and making. *Craft Research*, 13(1), 9–34. https://doi.org/10.1386/crre_00064_1
- Mäkelä, M., & Aktaş, B. M. (2023). Learning with the natural environment: How walking with nature can actively shape creativity and contribute to holistic learning. *International Journal of Art & Design Education*, 42(1), 139–154. <https://doi.org/10.1111/jade.12447>
- Malhi, Y. (2017). The concept of the Anthropocene. *Annual Review of Environment and Resources*, 42, 77–104. <https://doi.org/10.1146/annurev-environ-102016-060854>
- Marina Abramovic Institute. (2020). *The Abramović method*. <https://www.mai.art/the-abramovic-method>
- Markman, A. (2018, October 8). Why people aren't motivated to address climate change. *Harvard Business Review*. <https://hbr.org/2018/10/why-people-arent-motivated-to-address-climate-change>
- Marsden, M., & Henare, T. A. (1992). *Kaitiakitanga: A definitive introduction to the holistic world view of the Māori*. Ministry for the Environment.
- Martin, C. (2011). Turbulent stillness: The politics of uncertainty and the undocumented migrant. In D. Bissell & G. Fuller (Eds.), *Stillness in a mobile world* (pp. 192–208). Routledge.
- Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and cognition: The realization of the living*. Springer.
- McGee, M. (n.d.). *The healing power of stillness*. Michael McGee.
- Merleau-Ponty, M. (1967). *The structure of behavior* (A. L. Fisher, Trans.). Beacon Press.
- Merleau-Ponty, M. (2005). *Phenomenology of perception* (C. Smith, Trans.). Routledge.
- MIT Climate Portal. (n.d.). *What we know about climate change*. <https://climate.mit.edu/what-we-know-about-climate-change>
- Mitchell, W. J. (1992). *The reconfigured eye: Visual truth in the post-photographic era*. MIT Press.
- Moore, P. (2012). Knowing stillness. *Humanities Research*, 18(1), Article 1.
- Moorfield, J. (n.d.). Mauri. In *Tē aka Māori dictionary*. Retrieved October 14, 2025, from <https://maoridictionary.co.nz/word/3960>
- Morison, J. L. (1971). Augustine's two theories of time. *New Scholasticism*, 45, 600–610. <https://doi.org/10.5840/newscholas197145461>
- Mortensen Steagall, M. (2019). *The process of immersive photography: Beyond the cognitive and the physical* [Doctoral thesis, Auckland University of Technology]. Tuwhera. <https://hdl.handle.net/10292/12251>
- Moustakas, C. E. (1990). *Heuristic research: Design, methodology, and applications*. Sage Publications. <https://doi.org/10.4135/9781412995641>
- Muir, J. (1979). *John of the mountains: The unpublished journals of John Muir* (L. M. Wolfe, ed.). University of Wisconsin Press.
- Muir, J. (1995). *Steep trails*. Project Gutenberg. <https://www.gutenberg.org/ebooks/326>
- Music, G. (2015). *The good life: Wellbeing and the new science of altruism, selfishness and immorality*. Routledge.
- Nagel, T. (1974). What is it like to be a bat? *The Philosophical Review*, 83(4), 435–450.
- Nankin, H. (2013). Minds in the cave: Insect imagery as metaphors for place and loss. *Swamphen: A Journal of Cultural Ecology*, 3, 1–15. <https://doi.org/10.60162/swamphen.3.10602>
- Nankin, H. (2015). *Gathering shadows: Landscape, photography and the ecological gaze* [Doctoral thesis, RMIT University]. <https://harrynankin.com/writings/gathering-shadows-landscape-photography-and-the-ecological-gaze/>
- Neilson, K., Hodges, M., Williams, J., & Bradly, N. (2018). *Waikato and Waipā River restoration strategy: Volume 2* (No. 12770427). Waikato Regional Council.
- Newton, I. (1846). *Newton's principia: The mathematical principles of natural philosophy* (A. Motte, Trans.). Daniel Adee. (Original work published 1687)
- Nga Muka Development Trust. (2017, July 3). [Nga Muka Development Trust letter of support]. https://www.waikatodistrict.govt.nz/docs/default-source/your-council/public-consultations/ppc20/ppc20-technical-documents/ppc20-nga-muka-dt-letter-of-support---july-2017.pdf?sfvrsn=11b7bcc9_2
- Ngatai, S. (2018, 9 September). Aotearoa: Stories behind names. *The New Zealand Herald*. <https://www.nzherald.co.nz/travel/aotearoa-stories-behind-names/HPRU2T7MF34SBTXDG7AFUUHBJA/>
- Norris, K. (1993). *Dakota: A spiritual geography*. Houghton Mifflin Harcourt.
- Obrist, H. U. (Interviewer). (2004). Le moment: David Claerbout [Interview]. In *Point of view: An anthology of the moving image* [11 DVD box set]. The New Museum; Bick Productions.
- Olwig, K. (2008). Performing on the landscape versus doing landscape: Perambulatory practice, sight and the sense of belonging. In T. Ingold & J. L. Vergunst (Eds.), *Ways of walking: Ethnography and practice on foot*. Taylor & Francis.
- Pallasmaa, J. (2012). *The eyes of the skin: Architecture and the senses*. John Wiley and Sons.
- Pallasmaa, J. (2017). Embodied and existential wisdom in architecture: The thinking hand. *Body and Society*, 23(1), Article 1. <https://doi.org/10.1177/1357034X16681443>
- Paora, T. (2024). Heuristic inquiry, rangahau, the explicit and the esoteric. In W. Ings & K. Tudor (Eds.), *Heuristic enquiries: Research across disciplines and professions* (pp. 25–44). Routledge. <https://doi.org/10.4324/9781003507758>

- Paton, M. J. (2014). *Five classics of fengshui: Chinese spiritual geography in historical and environmental perspective*. Brill.
- Pinxit, V. (2016). *Stillness: A meditation in new media art* [Doctoral thesis, Queensland University of Technology]. QUT Eprints. <https://eprints.qut.edu.au/93556/>
- Plato. (1970). *Phaedo* (F. J. Church, Trans.). MacMillan Coll Div. (Original work published ca. 399 B.C.E.)
- Plato. (1977). Timaeus (D. Lee, Trans.). In *Timaeus and Critias* (pp. 27–127). Penguin Group. (Original work published ca. 360 B.C.E.)
- Pohatu, T. W. (2011). Mauri: Rethinking human wellbeing. *Mai Review*, 3, 1–12. <https://www.journal.mai.ac.nz/maireview/article/890>
- Polanyi, M. (1965). On the modern mind. *Encounter*, 24(5), 12–20.
- Polanyi, M. (1967). *The tacit dimension*. Doubleday.
- Porges, S. W. (1995). Orienting in a defensive world: Mammalian modifications of our evolutionary heritage; A polyvagal theory. *Psychophysiology*, 32(4), 301–318. <https://doi.org/10.1111/j.1469-8986.1995.tb01213.x>
- Potts, J. H. (1880). *The golden dawn*. P. W. Ziegler.
- Provincial stock route. (1932, July 20). *New Zealand Herald*, LXIX(21239), 15. <https://paperspast.natlib.govt.nz/newspapers/NZH19320720.2.179>
- Putnam, H. (1981). *Reason, truth, and history*. Cambridge University Press.
- Rahula, W. (1974). *What the Buddha taught*. Grove Press.
- Reason, P. (1988). *Human inquiry in action: Developments in new paradigm research*. Sage Publications.
- Reeves, P., Hancock, N., & Mazziere, F. (2012). *Ecological impacts of the flood control scheme on Lake Waikare and the Whangamarino wetland, and potential mitigation options* (Contract report no. 2766). <https://www.waikatoregion.govt.nz/assets/WRC/Council/Policy-and-Plans/HR/S32/D/3154305.pdf>
- Rickaby, J. (1911). *Scholasticism*. Constable.
- Rival, L. (2009). Towards an understanding of Huaorani ways of knowing and naming plants. In M. N. Alexiades (Ed.), *Mobility and migration in indigenous Amazonia: Contemporary ethnoecological perspectives* (pp. 54–71). Berghahn.
- Roberts, M., Norman, W., Minhinnick, N., Wihongi, D., & Kirkwood, C. (1995). Kaitiakitanga: Māori perspectives on conservation. *Pacific Conservation Biology*, 2(1), 7–20.
- Rogers, C. R. (1967). *On becoming a person: A therapist's view of psychotherapy*. Constable. (Original work published 1961)
- Rosenberg, T. (2008). New beginnings and monstrous births: Notes toward an appreciation of ideational drawing. In S. Garner (Ed.), *Writing on drawing: Essays on drawing practice and research* (pp. 109–124). Intellect Books.
- Rowe, D. (2007). Exotic fish introductions and the decline of water clarity in small North Island, New Zealand lakes: A multi-species problem. *Hydrobiologia*, 583, 345–358. <https://doi.org/10.1007/s10750-007-0646-1>
- Royal, T. C. (2007). Papatūānuku: the land. In *Tē Ara—the Encyclopedia of New Zealand*. <http://www.TeAra.govt.nz/en/whakapapa/11430/papatuanukus-children>
- Rust, C., Mottram, J., & Till, J. (2007). *Review of practice-led research in art, design and architecture*. Arts and Humanities Research Council.
- Ruwhiu, L. A. (2001). Bicultural issues in Aotearoa. In M. Connolly (Ed.), *New Zealand social work: Contexts and practice* (pp. 54–71). Oxford University Press.
- Ryle, G. (1949). *The concept of mind*. University of Chicago Press.
- Sela-Smith, S. (2002). Heuristic research: A review and critique of Moustakas's method. *Journal of Humanistic Psychology*, 42(3), Article 3. <https://doi.org/10.1177/0022167802423004>
- Shapiro, L. A. (2010). *Embodied cognition*. Routledge.
- Sherson. (2006). *Kahikatea, cabbage trees and koromiko* (2nd ed). W. J. Deed Printing.
- The shooting season. (1934, April 16). *Waikato Times*, 115(19231), 10. <https://paperspast.natlib.govt.nz/newspapers/WT19340416.2.120>
- Sonesson, G. (1999). Post-photography and beyond: From mechanical reproduction to digital production. *Visio*, 4(1), 11–36.
- Spinoza, B. D. (1994). *A Spinoza reader: The ethics and other works*. Princeton University Press. (Original work published 1677)
- Sponsel, L. E. (2001). Is Indigenous spiritual ecology just a new fad? Reflections from the historical and spiritual ecology of Hawai'i. In J. A. Grim (Ed.), *Indigenous traditions and ecology: The interbeing of cosmology and community* (pp. 159–174). Harvard University Press.
- Sponsel, L. E. (2012). *Spiritual ecology: A quiet revolution*. Praeger.
- Starke, J. (2020). *The possibility of prayer: Finding stillness with God in a restless world*. InterVarsity Press.
- Steffen, W., Crutzen, P. J., & McNeill, J. R. (2007). The Anthropocene: Are humans now overwhelming the great forces of nature? *Ambio*, 36(8), 614–621. <https://doi.org/10.2307/25547826>
- Stoppani, A. (1873). *Corso di geologia* [Geology course] (Vol. 2). G. Bernardoni e G. Brigola. http://archive.org/details/bub_gb_Mb40AERZXUMC
- Te Kauwhata Districts Historical Society. (2003). *Vintage memories of Tē Kauwhata*. W. J. Deed Printing.
- To drain Lake Waikare. (1923, August 29). *New Zealand Herald*, LX(18490), 11. <https://paperspast.natlib.govt.nz/newspapers/NZH19230829.2.126>
- Trigg, D. (2017, September). Bill Viola: A retrospective. *Art Review*. <https://artreview.com/ar-september-2017-review-bill-viola-1/>

- Tudor, K. (2022). Supporting critical self-enquiry: Doing heuristic research. In S. Bager-Charleson & A. McBeath (Eds.), *Enjoying research in counselling and psychotherapy* (pp. 57–79). Springer. https://doi.org/10.1007/978-3-031-13942-0_4
- Tudor, K. (2023). Critical heuristics in psychotherapy research: From ‘I-who-feels’ to ‘We-who-care—and act’. In K. Tudor & J. Wyatt (Eds.). *Qualitative Research Approaches for Psychotherapy*. Routledge.
- Valentine, H., Tassell-Mataamua, N., & Flett, R. (2017). Whakairia ki runga: The many dimensions of wairua. *New Zealand Journal of Psychology*, 46(3), 64–71.
- van Vliet, D. (2025a). The dying lake: Waikare and the embodied artist. *Link Praxis Journal of Practice-Led Research and Global South*, 3(1). <https://doi.org/10.24135/link-praxis.v3i1.48>, 89–138.
- van Vliet, D. (2020). *Duregraph: Exploring duration in the post-photographic image* [Master’s thesis, Auckland University of Technology]. Tuwhera. <https://hdl.handle.net/10292/13454>
- van Vliet, D. (2025b). The dying lake: Waikare and the embodied artist. *Rangahau Aranga: AUT Graduate Review*, 4(1). <https://doi.org/10.24135/rangahau-aranga.v4i1.253>
- van Vliet, D., & Mortensen Steagall, M. (2024). The dying lake: Waikare and the embodied artist. In M. M. Mortensen Steagall (Ed.), *LINK 2024 6th International Conference in Practice-Oriented Research and Global South* (pp. 18–21). <https://doi.org/10.24135/link2024.v5i1.215>
- Varela, F. J., Thompson, E., & Rosch, E. (2016). *The embodied mind: Cognitive science and human experience* (Rev ed.). MIT Press.
- Ventling, F. D. (2018). Heuristics: A framework to clarify practice-led research. *Journal of Design, Art & Technology [DAT]*, 3(2), Article 2. <https://doi.org/10.29147/dat.v3i2.88>
- Ventling, F. D. (2024). Heuristics in visual arts enquiry. In W. Ings & K. Tudor (Eds.), *Heuristic enquiries: Research across disciplines and professions* (pp. 69–85). Routledge.
- Verburg, P., Hamill, K., Unwin, M., & Abell, J. (2010). *Lake water quality in New Zealand 2010: Status and trends* (Technical Report Nos HAM2010-107). National Institute of Water & Atmospheric Research. <https://environment.govt.nz/publications/lake-water-quality-in-new-zealand-2010-status-and-trends/>
- Vernadsky, W. I. (1945). Biosphere and noösphere. *American Scientist*, 33, 1–12.
- Viola, B. (n.d.). *Biography*. Bill Viola. <https://www.billviola.com/biograph.htm>
- Waikato District Council. (2021, July 21). *An urgent upgrade to Tē Kauhata’s wastewater treatment plant is expected to address wastewater discharge issues into Lake Waikare*. <https://www.waikatodistrict.govt.nz/news/article/2021/07/19/an-urgent-upgrade-to-te-kauwhata-s-wastewater-treatment-plant-is-expected-to-address-wastewater-discharge-issues-into-lake-waikare>
- Waikato Regional Council. (n.d.). *Water quality glossary*. <https://www.waikatoregion.govt.nz/environment/water/lakes/water-quality-glossary/>
- Waikato Regional Council. (2016, July). *Lake Waikare and Whangamarino wetland catchment management plan*. <https://www.waikatoregion.govt.nz/assets/WRC/Council/Policy-and-Plans/hazard-catchment-management/CMP-catchment-management-plans/lake-waikare-whangamarino-wetland/4975-Whangamarino-sub-catchment-newsletter-WEB.pdf>
- The Waikato River Authority. (2020, February 11). *The restoration of Lake Waikare* [Video]. YouTube. <https://www.youtube.com/watch?v=9YknXeoKmlk>
- Walker, S. (1991). A choreography of the universe: The Afro-Brazilian candomble as a microcosm of Yoruba spiritual geography. *Anthropology and Humanism*, 16(2), 42–50. <https://doi.org/10.1525/ahu.1991.16.2.42>
- Walker, M. J. C., Bauer, A. M., Edgeworth, M., Ellis, E. C., Finney, S. C., Gibbard, P. L., & Maslin, M. (2024). The Anthropocene is best understood as an ongoing, intensifying, diachronous event. *Boreas*, 53(1), 1–3. <https://doi.org/10.1111/bor.12636>
- Wallace, B. A. (1999). The Buddhist tradition of samatha: Methods for refining and examining consciousness. *Journal of Consciousness Studies*, 6(2–3), 175–187.
- Walsh, B. (2019). Why your brain can’t process climate change. *Time*. <https://time.com/5651393/why-your-brain-cant-process-climate-change/>
- The war at Auckland. (1863, November 27). *The Colonist*, VI(635), 3. <https://paperspast.natlib.govt.nz/newspapers/TC18631127.2.15>
- Warner, M. (2006). *Phantasmagoria: Spirit visions, metaphors, and media into the twenty-first century*. Oxford University Press.
- Weinert, F. (2013). *The march of time: Evolving conceptions of time in the light of scientific discoveries*. Springer.
- Wendt, S. (2011). *Breaking the medium of painting down: Interview with Sam Taylor-Wood*. Artpulse. <http://artpulsemagazine.com/breaking-the-medium-of-painting-down>
- Werner, K. (2020). Enactment and construction of the cognitive niche: Toward an ontology of the mind-world connection. *Synthese*, 197(3), 1313–1341. <https://doi.org/10.1007/s11229-018-1756-1>
- Werner, K. (2022). *The embodied philosopher: Living in pursuit of boundary questions*. Palgrave Macmillan.
- Werner, K., & Kielkowicz-Werner, M. (2022). From shared enaction to intrinsic value: How enactivism contributes to environmental ethics. *Topoi*, 41(2), 409–423. <https://doi.org/10.1007/s11245-021-09750-5>
- Whangamarino wetland will take decades to recover from fire—DOC. (2024, October 29). *Radio New Zealand*. <https://www.rnz.co.nz/news/national/532246/whangamarino-wetland-will-take-decades-to-recover-from-fire-doc>

- What's in a name. (1929, September 10). *Waikato Times*, 106(17812), 6. <https://paperspast.natlib.govt.nz/newspapers/WT19290910.2.33>
- Wickham, L., & Puddick, J. (2025). *Environmental health report: Harmful algal bloom field study; Lake Waikare 2024* [FW24023]. Institute of Environmental Science and Research. <https://www.esr.cri.nz/digital-library/environmental-health-report-harmful-algal-bloom-field-study-lake-waikare-2024/>
- Winton. (n.d.). *Lakeside*. Retrieved July 18, 2024, from <https://winton.nz/our-neighbourhoods/lakeside/>
- With dog and gun. (1932, April 29). *Waikato Times*, 111(18623), 2. <https://paperspast.natlib.govt.nz/newspapers/WT19320429.2.5>
- Witze, A. (2023). This quiet lake could mark the start of a new Anthropocene epoch. *Nature*, 619(7970), 441–442. <https://doi.org/10.1038/d41586-023-02234-z>
- Witze, A. (2024). Geologists reject the Anthropocene as Earth's new epoch—After 15 years of debate. *Nature*, 627(8003), 249–250. <https://doi.org/10.1038/d41586-024-00675-8>
- Wu, R. (2021). Aeroglyph variations. *Obscura*. <https://obscura.io/collections/reuben-wu>
- Zalasiewicz, J., Waters, C. N., Ellis, E. C., Head, M. J., Vidas, D., Steffen, W., Thomas, J. A., Horn, E., Summerhayes, C. P., Leinfelder, R., McNeill, J. R., Gałuszka, A., Williams, M., Barnosky, A. D., Richter, D. de B., Gibbard, P. L., Syvitski, J., Jeandel, C., Cearreta, A., Cundy, A. B., ... Zinke, J. (2021). The Anthropocene: Comparing its meaning in geology (chronostratigraphy) with conceptual approaches arising in other disciplines. *Earth's Future*, 9(3), Article e2020EF001896. <https://doi.org/10.1029/2020EF001896>
- Zalasiewicz, J., Waters, C., & Williams, M. (2020). *The Anthropocene*. In F. Gradstein, J. G. Ogg, M. D. Schmitz, & G. M. Ogg (Eds.), *Geologic time scale 2020* (pp. 1257–1280). Elsevier.
- Zalasiewicz, J., Waters, C. N., Williams, M., Barnosky, A. D., Cearreta, A., Crutzen, P., Ellis, E., Ellis, M. A., Fairchild, I. J., Grinevald, J., Haff, P. K., Hajdas, I., Leinfelder, R., McNeill, J., Odada, E. O., Poirier, C., Richter, D., Steffen, W., Summerhayes, C., ... Oreskes, N. (2015). When did the Anthropocene begin? A mid-twentieth century boundary level is stratigraphically optimal. *Quaternary International*, 383, 196–203. <https://doi.org/10.1016/j.quaint.2014.11.045>
- Zalasiewicz, J., Williams, M., Haywood, A., & Ellis, M. (2011). The Anthropocene: A new epoch of geological time? *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 369(1938), 835–841. <https://doi.org/10.1098/rsta.2010.0339>
- Zalasiewicz, J., Williams, M., Smith, A., Barry, T., Coe, A., Bown, P. R., Brechley, P., Cantrill, D., Gale, A., Gibbard, P., Gregory, F. J., Hounslow, M. W., Kerr, A. C., Pearson, P., Knox, R., Powell, J., Waters, C., Marshall, J., Oates, M., Rawson, P., & Stone, P. (2008). Are we now living in the Anthropocene? *GSA Today*, 18(2), 4–8. <https://doi.org/10.1130/GSAT01802A.1>

Appendix



Auckland University of Technology Ethics Committee (AUTEC)

11 June 2024
Marcos Steagall
Faculty of Design and Creative Technologies

Dear Marcos

Re Ethics Application: **24/131 Familiar Territory: Embodiment, land and the hybridised image**

Thank you for your responses to AUTEC's conditions.

Your ethics application has been approved for three years until 11 June 2027.

Note: The working title has been updated to include Lake Waikare

Non-Standard Conditions of Approval

1. In 'How was I identified...' section of the Information Sheet include '1965'.
2. Inclusion in the Researcher Safety Protocol of an escalation plan i.e. how will key support people react if the agreed contact protocols are not followed.

Non-standard conditions do not need to be submitted to or reviewed by AUTEC unless requested but must be completed before commencing your study.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC.
2. All public facing documents must have the AUTEC approval number and be of a high standard of spelling and grammar. Dates on the Information Sheet(s) and Consent Form(s) must be consistent.
3. Any amendments to the project must be approved by AUTEC prior to being implemented.
4. A progress report is due annually on the anniversary of the approval date.
5. A final report is due at the expiration of the approval period, or, upon completion of project.
6. Any serious or adverse events must be reported to AUTEC, this includes unforeseen issues that might affect continued ethical acceptability of the project.
7. AUTEC grants ethical approval only. You are responsible for obtaining management permission for access from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

The application number and title need to be referenced on all correspondence related to this project.

All forms are available online <http://www.aut.ac.nz/research/researchethics>

For any enquiries, please contact ethics@aut.ac.nz
(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: David-joel.van.vliet@aut.ac.nz; Welby Ings

