School of Media, Creative Arts and Social Inquiry

Reframing the Western Environmental Gaze through Art Practice: From Anthropocentrism to Interconnectedness

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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

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ABSTRACT

This project aimed to critically challenge the Western environmental gaze, contributing to contemporary dialogues in environmental aesthetics by demonstrating how art practice can explore the concept of ecological interconnectedness across diverse temporalities. Through a series of sculptures, assemblages, immersive installations, and field trip documentation, the research examines the hubris in notions of control over more-than-human phenomena, particularly within Western Australia's unique geological context. Four anthropocentric perspectives frame the investigation—mastery, hierarchy, passivity, and atemporality—which evolved from the artwork's intent and theoretical underpinnings. This methodological journey has revealed the challenges of critiquing ingrained cultural frameworks. While the project does not claim to have overcome the Western environmental gaze, it demonstrates how artistic engagement can create moments of interruption and reflection, productively destabilising prevailing environmental imaginaries. By situating current environmental concerns within Earth's deep history and potential futures, this research contributes to a more comprehensive understanding of ecological interconnectedness through creative practice.

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CONTENTS

INTRODUCTION

This practice-led research seeks to challenge ubiquitous, yet problematic, Western[1] understandings of the human relationship with more-than-human[2] ecologies and temporalities. Situated within the broader discourse of environmental aesthetics[3], it critically engages with selected anthropocentric perspectives through a range of approaches, including sculpture, assemblage, immersive installation, field trip documentation, and interdisciplinary theory. The unique geology of Western Australia, marked by ancient mineralogy and the forces of contemporary industry, shapes the context for my artistic responses. Some artworks directly engage with site-specific locations in remote and arid bioregions, while others attempt to translate those experiences into gallery settings.

The project draws upon anthropologist and archaeologist Barbara Bender's concept of the 'Western gaze'. Bender defines the Western gaze as one "that skims the surface; surveys the land from an ego-centred viewpoint; and invokes an active viewer (the subject) and a passive land (object)" (1999, 31). Her paper "Subverting the Western Gaze: Mapping Alternative Worlds" (1999) emphasises how this gaze embeds structures of power and colonial hierarchies within ways of perceiving and representing the world. Expanding on the concept of the Western gaze, interdisciplinary scholar Roslynn Haynes states: "For people from a western culture, the visual sense is fundamental. The gaze is not only a means of looking at the world and locating ourselves; it is also a means of domination, of claiming possession" (2000, 63). However, as Haynes also notes, the more-than-human environment often proves "singularly recalcitrant" (64) to such attempts at conquest and depiction.

1 I use the term 'Western' with an awareness of both its constructed nature and historically contingent boundaries. I capitalise the term consistent with the Chicago Manual of Style.

2 Drawing upon philosopher Donna Haraway (2016), I use the term 'more-than-human' to signify the dynamic assemblage of nonhuman agents, forces, and processes inherently entangled with the world's unfolding. This neologism aims to decentre the human subject, emphasising agency across all beings and entities. While acknowledging its potential to reinscribe binaries, I employ the term to avoid tropes attached to the terms 'nature' and 'environment.'

3 The philosophical study of the aesthetic experience of the environment (Carlson 2024).

SCOPE

Western Environmental Gaze

This exegesis focuses on a specific manifestation of the 'gaze' in relation to the environment[4]. While other analyses of the gaze have explored race, discipline, and gender (Bhabha 1991; Foucault 1979; Butler 1990), the 'environmental' emphasis offers a focused analytical lens, which is encapsulated in the phrase 'Western environmental gaze.' I use this phrase as a rhetorical device that provides a focal point for my research[5].

The Western environmental gaze is a conceptual framework I use to examine a prevalent perspective in Western society, wherein elements of the environment are commonly viewed as objects or processes to be surveyed, identified, mastered, and controlled for human interests. It is important to note that this 'gaze' does not denote a single perspective but rather serves to encompass a constellation of interrelated, historically contingent, and often universalised ideas and assumptions prevalent in Western thought. To this extent, this terminology necessitates a degree of abstraction to encapsulate the complexity of Western ways of knowing and being. As philosopher Bruno Latour has explored, these common views tend to position the human[6] as ontologically distinct from nature[7] (2017, 6). While these ideas have significantly influenced Western environmental thought, I also recognise that they do not represent every individual's viewpoint.

Central to the gaze, and reflecting Bender's perspectives, are colonial hierarchies shaping ways of knowing and being. These hierarchies influence how the more-than-human environment is seen, understood, and ultimately treated (Bender 1999).

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4 I employ the term 'environment' while recognising its contested status and acknowledging its potential to imply a dichotomy between humans and a singular 'environment.' My usage of the term serves to both illuminate this binary and, in other instances, to acknowledge its more expansive connotations of ecological entanglement.

5 Similar terms, such as the 'colonial gaze,' 'environmental gaze,' and 'ecological gaze,' have been used in related contexts. However, the phrase 'Western environmental gaze' more precisely captures the specific focus of this project.

6 The concept of 'human' as a universal is contested within specific academic, historical, and cultural contexts, particularly in posthumanism. Geographer Kathryn Yusoff argues that the notion often reflects a Western liberal ideal that emerged during the Renaissance and Enlightenment (2018, 110). In this exegesis, I employ the term as a means to investigate the contradictions this particular notion has imposed upon the human/nature binary.

7 Given the complexity in defining 'nature,' I have chosen not to capitalise it, allowing for the term's conceptual multiplicity. I use it with awareness of its inherent heterogeneity, avoiding a limiting definition.

Throughout this research project, I examine the Western environmental gaze through four interrelated anthropocentric perspectives:

- Mastery: the conviction of mastery and control over nature
- Hierarchy: the presumption of inherent hierarchies within nature
- Passivity: the assumption that rocks and minerals are passive
- Atemporality: anthropocentric interpretations of temporality, including atemporality or the lack of temporal awareness

These four perspectives, which I collectively refer to as 'anthropocentric perspectives,' reflect my personal research journey and artistic objectives. Labelling these perspectives emerged through the practice-led research and they form a part of my findings for this research. In this project, these perspectives act as useful lenses for narrowing the scope of enquiry. Through a reflexive process, these anthropocentric perspectives have functioned as lenses for critical enquiry, while also enabling me to explore nuances in my artworks. At the same time, they have offered alternative avenues for understanding the complex interactions between specific cultural paradigms and environmental perceptions.

Through a series of artworks and this accompanying exegesis, this project explores the question: In what ways can art practice interrogate the Western environmental gaze to disrupt anthropocentric perspectives and foreground nonhuman ecologies and temporal scales?

ACKNOWLEDGEMENT OF COUNTRY

A fundamental aspect of addressing the Western environmental gaze in Australia involves recognising Aboriginal and Torres Strait Islander peoples' sovereignty and enduring connections to Country. I acknowledge and pay my deepest respects to the Martu, Pintupi, Wajarri Yamaji, and Nyoongar peoples, the Traditional Custodians of the lands where my artistic process unfolded. Ongoing custodianship and profound connection to Country continue to thrive, offering invaluable perspectives on environmental stewardship and serving as a source of inspiration for this project.

Respecting the specific cultural context of each site is integral to my project. Throughout the project, the process of seeking appropriate permissions to access land offered invaluable learning experiences, which have deepened my understanding of the ongoing impacts of settler-colonialism on these communities. Simultaneously, this process has revealed profound narratives of resilience, survival, and hope. While acknowledging the significance of these stories, I recognise that I am not the appropriate person to share them as an Anglo-Celtic Australian. Individuals and groups within academia and the First Nations communities are better positioned to convey these experiences. Therefore, I aim to contribute in ways that are meaningful while respecting boundaries more effectively addressed by First Nations voices.

DEFINING TERMINOLOGY

This project employs the term 'environmental aesthetics' to encompass a broad range of concepts and ideas related to the perception and representation of nature, art, and culture (Carlson 2024). 'Aesthetics,' a term frequently used throughout this exegesis, carries specific historical and philosophical weight in art discourse. The term extends far beyond its colloquial usage as a synonym for 'beautiful' and embodies a complex set of ideas and practices. As art and philosophy editor Michael Kelly articulates, aesthetics encompasses "the philosophical analysis of the beliefs, concepts, and theories implicit in the creation, experience, interpretation, or critique of art" (1998, xi). This definition underscores the term's dual role in philosophical enquiry and cultural critique, aspects that are central to this project's exploration of the Western environmental gaze.

At certain points throughout this project, the focus turns towards geological concepts. To establish a clear framework, it is pertinent to define and contextualise key terms used throughout this exegesis.

The Macquarie Dictionary (2020) provides three primary meanings for 'geology':

1. The science that deals with the earth, the rocks of which it is composed, and the changes which it has undergone or is undergoing.
2. The body of knowledge relating to this science.
3. The geological features of a locality.

Early geologist William Phillips distinguished between geology and mineralogy in 1815, stating, "mineralogy [is] the study of rocks in particular; geology, study of the 'earth in general'" (Phillips 1815, as quoted by Porter 1977, 146). However, there is a fourth connotation wherein 'geology' refers to mineral resources. Geographer Kathryn Yusoff characterises geology as "[a] colonial mode of classification" (2018, 80):

> I seek to undermine the givenness of geology as an innocent or natural description of the world, to see its modes of inscription and circulation as a doubling of the notion of property—property as a description of mineralogy and property as an acquisition (as resource, land, extractive quality of energy or mineral). (20)

Yusoff is suggesting that the concept of geology is not as universal nor as innocent as it appears. Her understanding highlights the colonial undertones and the commodification of the Earth as a resource. As she further asks, "historically, when was geology anything but political in its narratives about the world, origins, and the weaponization of extraction as a motivation and mode of dispossession?" (106). Yusoff's position takes aim at hegemonic Western power relations and biased gazes, revealing the complex entanglements between geology, colonialism, and capitalism.

I, therefore, use the following terms in this exegesis to maintain clarity and consistency:

- 'Geologic' or 'geological' when discussing Earth processes and materials that extend beyond the concept of resources.
- 'Geology' when denoting the scientific field or landforms, aligning with the Macquarie Dictionary's definition, whilst remaining aware of the contested epistemology that Yusoff brings forth.
- 'Mineralogy' or 'lithic[8]' when referring specifically to minerals and rocks.

8 'Lithic', derived from 'lithosphere,' refers to the rocks and minerals of the Earth's outer layer.

SHIFTS IN METHODOLOGY

In the project's early stages, the aim was to subvert visual representations and perceptual patterns associated with the Western environmental gaze through artistic interventions. As the research progressed, gaining a firm critical foothold on these concepts became increasingly challenging due to their reliance on the very tropes targeted for subversion. Striking the right balance proved difficult; too subtle an approach risked the subversion going unnoticed, while being too overt could render the original trope unrecognisable.

Deep time, a term introduced by John McPhee in his 1981 book *Basin and Range*, refers to the concept of geological time (McPhee 1981). This notion of immense temporal scales became central to my research, as I hypothesised that its vastness would counteract anthropocentric perspectives. Paradoxically, it was through attempting to represent the unrepresentable that a significant finding emerged, leading to a methodological shift. I pursued this direction by creating site-responsive artworks and performances with the predetermined aim of subverting anthropocentrism. However, as I engaged in the field, my initial objective gave way to a heightened attentiveness to nonhuman registers and agency—initially unnoticed—in the artworks.

This shift in approach fostered a renewed relational engagement by re-situating the works within a more-than-human perspective, thereby more effectively challenging aspects of the Western environmental gaze beyond the original intent. The research recognised the agency of the more-than-human in the creative process—an agency that conceptually returned my gaze.

The final chapter in this exegesis marks a distinct methodological change applying what I had learnt. It centres on a singular, focused theme that acts as a microcosm, encapsulating larger issues of space, time, and colonialism. This transformation proved effective in addressing the intricacies of the Western environmental gaze—an aim that had previously seemed elusive when tackling more open-ended approaches. Importantly, this evolution would not have occurred without the experience gained through the previous site-responsive works and the realisations they prompted.

PROJECT BACKGROUND

Anecdotes

The anecdotes to follow recount formative experiences that have informed the theoretical underpinnings of this research, without which the intent of the project would be incomplete. My impetus for this project, and my desire to challenge the Western environmental gaze, stem from my past as an alpinist. While this project does not directly involve climbing or mountains, the themes I explore originate from those pivotal lived experiences—a decade-long obsession, demonstrated by over 300 ascents across five continents.

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In 2006, upon reaching the summit of Denali (Mt McKinley)—the highest mountain in Alaska and one of the coldest mountains in the world—a telling photograph captures me striking the pose of a conqueror with an ice axe held above my head. This image readily invites analysis along multiple readings, but a prominent interpretation reveals a problematic dynamic of triumph, echoing the Western environmental gaze's valorisation of human dominance over a perceived adversarial nature (Figure 1).

A drastic shift in this perspective occurred in 2010 after a solo ice climb on New Zealand's Mount La Perouse. I was descending the mountain's east-face after summiting, when a falling boulder hit me, knocking me over a cliff edge. I remember falling, somersaulting, screaming, and my leg breaking. The last thing I remember was my head striking something before blacking out in an event I perceived as my imminent end.

While the immediate physical and psychological trauma of the accident has long since healed[9], it served as a catalyst for a profound shift in my worldview. After the accident, my previously cherished concept of nature, which had shaped how I saw myself in relation to the world, underwent an active dismantling. This personal deconstruction resonated with an ongoing scholarly critique within the environmental humanities, revealing troubling parallels between my former climber's worldview and the perspectives of mastery, hierarchy, passivity, and atemporality that are central to my critique of the Western environmental gaze.

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9 The severity of my injuries nearly resulted in the amputation of my lower left leg due to compartment syndrome. Surgical intervention left 15 pieces of metal in the left tibia, a slight limp, and lengthy scars from a fasciotomy procedure. Despite the initial challenges, I made a significant recovery, enabling my return to activities such as rock climbing and long-distance walking.

Figure 1. Striking a pose on the summit of Denali / Mount McKinley, Alaska, 6,190 metres (20,310 feet) above sea level. Photo: Taken by an unknown climber who reached the summit around the same time.

Upon critical reflection, it became evident that certain mythified imaginaries concerning the character of nature had fostered a mindset that nearly cost me my life on the mountain. Despite possessing acute awareness of natural processes in alpine environments and a sound grounding in ecological principles, prior to the accident, I saw humanity as antagonistic to an idealised vision of nature. Encultured beliefs reifying the human/nature binary pervaded my underlying thinking. This brush with mortality shone a light on the contradictions that position humankind as extrinsic to, rather than inextricably interconnected with, the encompassing processes of nature. The accident exposed the limitations and potential consequences of uncritically internalising narratives rooted in the human/nature divide, underscoring the entanglement of ideology, action, and their material impact. These insights led me to identify the four key anthropocentric perspectives mentioned above, shaped by my mountaineering experiences.

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SITUATING THE PROJECT

Following the accident, a pivotal period of self-reflection unfolded. This introspective phase coincided with my undergraduate and honours studies, during which I conducted theoretical and creative investigations into subjects within the environmental humanities. These pathways converged, paving the way for this postgraduate research. Although my artistic focus has shifted away from mountains, I maintain an interest in challenging certain assumptions embedded in orthodox environmental perceptions within settler-colonial societies.

Posthumanism—along with related discourses—became central to my research, particularly its critique of the colonial underpinnings of Western epistemology and ontology. The work of philosopher and historian Michel Foucault, particularly *The Order of Things* (1970), was influential, illuminating how knowledge has been historically organised in the West since the Renaissance. Foucault's deconstruction of (French) natural history and biology offered key insights into the constructed nature of scientific classifications and hierarchies, provoking a critical reconsideration of my own assumptions.

This research project is situated within the context of a growing recognition of ecological interconnectedness in contemporary discourse. This perspective acknowledges humanity as an intrinsic, co-constitutive element within the broader environment (Haraway 2016;

Latour 2017; Morton 2009)—a view that diverges from traditional anthropocentric notions positioning humans as separate from nature. Rather than proposing definitive answers or calls to action, the project investigates the transitional spaces between emerging ecological understandings and established social structures and cultural paradigms. Through this process, the research becomes a reflexive journey. It questions my own assumptions and documents my evolving relationship with the more-than-human within the geo-cultural landscapes of Western Australia. My artworks often explore a tension between the systemic pursuit of domination over the environment in the West and the environment's resistance to such forms of domination.

Chapters

Chapter 1 marks a transition from critiquing habitat dioramas to exploring geological perspectives. I examine how Western epistemological frameworks have influenced atemporal representations of ecology in dioramas, drawing on scholars like feminist theorist Donna Haraway. Her poststructuralist analysis, articulated in her essay "Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City, 1908-1936" (1984), examines the habitat dioramas in the Akeley Hall of African Mammals section of the American Museum of Natural History. Through this examination, Haraway reveals how cultural narratives and power structures shape representations of the environment, a perspective that underpins much of this research. The chapter traces my evolving artistic practice, from appropriating diorama motifs to incorporating mining drill chips and core samples in an exhibition called *Abiotica*. Another important theoretical concept to this chapter is geontology, introduced by anthropologist Elizabeth A. Povinelli in her book *Geontologies: A Requiem to Late Liberalism* (2016). It provides a crucial framework for examining the ontological divide between life and nonlife. Povinelli's figure of the Desert also serves as a powerful metaphor for spaces perceived as lifeless or depleted, informing the project's approach to mineral landscapes and resource extraction. The works of Thomas Hirschhorn and Mark Dion offer compelling examples of critical engagement with institutional representations of nature, subverting traditional museum displays to expose underlying ideologies. This shift towards geological themes sets the foundation for the project's exploration of the Western environmental gaze through the lenses of mastery, hierarchy, passivity, and atemporality. The chapter delves into the historical contexts of these concepts, examining the influence of Enlightenment taxonomy and the Chain of Being on Western perceptions of nature.

In Chapter 2, I unpack the creation of my video work *Levitating Bushman*, set in Wajarri Yamaji country. I begin by introducing two anecdotes from my lived experience as a long-distance desert bushwalker, which help frame the subsequent discussions. The artwork serves as a pivotal piece, marking a transition from direct references to habitat dioramas, towards site-responsive works. In exploring the cultural significance of the Australian desert, interdisciplinary scholar Roslynn Haynes' *Seeking the Centre: The Australian Desert in Literature, Art and Film* (1998) provides valuable insights into its mythologisation. Her work illuminates how cultural constructions of the desert as simultaneously alluring and repellent have shaped artistic representations and cultural imaginaries. The chapter examines how the video engages with and subverts traditional depictions of the desert, employing caricature to destabilise these representations. The chapter also contextualises the work within broader Australian art traditions, particularly those stemming from Western artistic perspectives.
In addition to examining contemporary artists, my research engages with the historical lineage of environmental representation in Australian art as viewed through a settler colonial lens. The work of painter Sidney Nolan, particularly his *Burke and Wills* series (1961-1962), provides important historical context for understanding how settler Australian artists grappled with representing the landscape and its cultural significance. Nolan's critical engagement with explorer mythology and his portrayal of the desert as both menacing and mystical offer a crucial backdrop for my own explorations. Acknowledging the far longer history, deep connections to the land, and significant artistic contributions of First Nations peoples, this survey predominantly examines Western art traditions. This approach is taken due to the study's focus on the settler imagination of the environment. Through this analysis, I reflect on my own positionality as an artist engaging with these landscapes and histories.

Chapter 3 focuses on my immersive installation *Mineral Rites* (2021) created for the exhibition *A Forest of Hooks and Nails* at the Fremantle Arts Centre. The work transforms a gallery into a simulated salt lake environment, exploring environmental aesthetics and challenging perceptions of minerals as passive. It stems from a personal encounter with a bird on Wilkinkarra / Lake Mackay in Pintupi country. Philosopher Manuel DeLanda's essay "Nonorganic Life" (1992), expands the concept of lifelike processes beyond organic matter. This geophilosophical perspective informs the project's engagement with geological and mineralogical themes. It challenges conventional perceptions of nonliving matter as passive, offering new ways to understand the agency of inorganic entities. The work's development represents a material refinement, as I learnt to distil complex field experiences into gallery

installations. This approach aligns with the reimagining of exhibition spaces that has emerged in contemporary practice. For example, I examine Olafur Eliasson's *Riverbed* (2014) in which he brought tonnes of rocks into the museum setting, creating a work that destabilises audience expectations and blurs the boundaries between natural and artificial environments (Eliasson 2014). The chapter outlines how my work engages with Australian Gothic sensibilities and its unexpected resonance with social media aesthetics. I discuss the technical and conceptual challenges of creating an immersive environment within the confines of a gallery space, and how this process led to unexpected insights about audience engagement.

Chapter 4 explores a series of site-responsive artworks created during field trips to the Jack Hills in Wajarri Yamaji country. Central to this is a 24-hour endurance performance standing before ancient rocks, documented in a time-lapse video. I draw on Stephen Jay Gould's insights on the metaphorical nature of deep time in the book *Time's Arrow, Time's Cycle* (2001) and W. E. H. Stanner's concept of 'everywhen' that explores First Nations peoples' traditional perspectives ([1953] 1979). The chapter marks a significant methodological shift as I move from attempting to subvert the Western environmental gaze to embracing the absurdity of such attempts. This leads to unexpected insights and a renewed relational engagement with nonhuman entities and temporalities, reshaping my understanding of both methodology and artworks. I discuss how the experience of creating these works in situ led to a heightened awareness of nonhuman agencies and rhythms, challenging my initial artistic intentions. The chapter also examines the ethical considerations of working in culturally and geologically significant sites, and how these considerations informed my artistic approach. A crucial reference point emerges in Nicholas Mangan's series *A World Undone* (2012), which examines metasedimentary rocks from the Jack Hills in Wajarri Yamaji country. By crushing these ancient materials and presenting them in a new context, Mangan raises questions about the relationship between colonialism, power, and geological timescales (Magagnoli 2020). In exploring temporal artworks, I also found inspiration in performance artists like Sarah Cameron Sunde and Todd McMillan, whose durational works engage directly with more-than-human phenomena. Their approaches to time and endurance have informed my own explorations of deep time and scales beyond the human.

The final chapter applies the methodological lessons from the previous chapter. It focuses on the development of kinetic sculptures that function as mechanical flipbooks. These sculptures feature animations based on two themes: geological survey maps and Fremantle's historic timeball—a specialised signalling device once used in maritime navigation. The latter series of work regarding the timeball represents a culmination of my methodological journey by focusing on specific historical events to examine broader themes of temporality and environmental mastery. This chapter demonstrates how my artistic approach has evolved to address complex environmental themes through more focused, tangible examples, offering promising avenues for future explorations of environmental aesthetics. Artist Rebecca Baumann's *Automated Colour Field* (2011) serves as an important reference. Her use of modified flip-clocks creates a continuously shifting visual field representing temporal concepts through mechanical means. This work demonstrates how seemingly simple mechanisms can create complex, ever-changing compositions that challenge traditional notions of time and representation. I reflect on the iterative process of creating these mechanical works, and discuss how the technical challenges of the project led to new insights about representation and temporality. Invoking geographer Doreen Massey's (2005) critique of cartographic representation, I explore how these sculptures challenge notions of human control over more-than-human phenomena. The chapter concludes by considering how this final body of work synthesises the conceptual and methodological developments of the entire research project.

Significance

This exegesis contributes to contemporary dialogues in environmental aesthetics by demonstrating how art practice can foster relational engagements with nonhuman entities and temporalities. Through a series of site-responsive artworks, performances, and installations, the research examines the limitations of human attempts to comprehend and control the environment. By engaging with geological timescales, mineral landscapes, and colonial technologies of measurement, the project reveals the paradoxes inherent in efforts to represent or master the environment.

The artistic methodology developed here, which translates field experiences into gallery installations, offers an innovative approach to addressing complex ecological themes. By oscillating between expansive site-specific works and more focused examinations of historical artefacts, the research illuminates multiple entry points for critiquing the Western environmental gaze. Significantly, this project does not aim to completely overcome this

perspective, but rather to create moments of interruption and reflection. The insights gained through sustained artistic engagement with deep time, mineral agency, and the paradoxes of representation provide valuable contributions to ongoing discourses on environmental aesthetics. While acknowledging the impossibility of fully escaping cultural frameworks, the research demonstrates how art can productively engage with and unsettle dominant environmental imaginaries.

CHAPTER 1. UNEARTHING — *ABIOTICA*

INTRODUCTION

The *Abiotica*[1] exhibition marked a pivotal transition in this project, from critiquing habitat dioramas to focusing on geological and temporal perspectives. The artworks attempted to crystallise an emerging awareness of a temporal disparity in the Western perception of the environment. This chapter aims to articulate the motivation behind the exhibition and function as a contextual review for the subsequent chapters by establishing the intertwined histories that have contributed to specific paradigms within the Western environmental gaze. While individual perceptions of the environment are subjective, this chapter dissects the collective imaginaries of the environment in the West, including mastery, hierarchy, passivity, and atemporality. These interwoven concepts provide the parameters for a vast subject and offer a framework for tracing the artworks' development. Drawing on scholars like Donna Haraway and Karen Wonders, I explore how particular Western epistemological frameworks have influenced atemporal representations of ecology in habitat dioramas. My focus then shifts to geological themes, exploring mineralogical concepts through the use of exploration geology drill chips[2] and drillcore[3] in *Abiotica*. From here, I examine the notion of the inorganic as passive and devoid of agency, informed by the work of anthropologist Elizabeth A. Povinelli. Her figure of the Desert[4] provides a powerful analogy underlying my approach to creating artworks sourced from the residual materials of extractivism.

UNEARTHING — *ABIOTICA*

During the early phase of this research project, I visited the renowned habitat dioramas at the American Museum of Natural History (AMNH) in New York. These grand wildlife displays

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1 The title deliberately alludes to the term 'abiotic,' highlighting one half of the binary between 'biotic' (organic) and 'abiotic' (inorganic).

2 Drill chips (chips or mineral samples) are the outcome of mineral exploration drilling, achieved through the use of a reverse-circulation drill rig that drills into the underlying geology, producing crushed-up rock, clay, or ore.

3 Drillcore (core or core sample) refers to a solid cylindrical stone rod, obtained by drilling down into the bedrock—usually extracted at quite some depth—with an exploration drill rig and diamond core drill bit. A geologist uses the solid drillcore samples to gather a geological picture, usually concerning the potential of a mineral deposit.

4 'The Desert' serves as a metaphor for the aftermath of resource extraction and the perception of the nonliving as inert—awaiting a technological fix.

offered a starting point for examining and deconstructing environmental aesthetics. Habitat dioramas originated in natural history museums in the 19th and early 20th centuries[5]. These displays were traditionally envisaged as educational scenarios at the intersection of art and science. They incorporate zoological taxidermy specimens arranged in combination with foreground structures to simulate a wildlife habitat. Set behind glass, the lifelike assemblage blends seamlessly into a background landscape painting to help create the illusion of depth and a complete panorama (Figure 2). Cultural critics have also examined how colonial and imperialist ideologies were involved in their creation (Haraway 1984; Wonders 2003, 90). While wandering the halls of the AMNH, I found myself being captivated by the painted, curving alcoves wrapping around the backs of the dioramas. From certain vantage points, the artifice of their assembly became discernible, offering a glimpse into how they were built (Figure 3).

Figure 2. AMNH (diorama detail). Photo: Rob Kettels and Deanna Wilson.

5 The phenomena of grand habitat dioramas were restricted mainly to the United States and Swedish natural history museums.

Figure 3. AMNH (diorama detail). Photo: Rob Kettels.

Prior to my visit, I had engaged with Haraway's essay "Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City, 1908-1936" (1984). This essay offers a feminist and poststructuralist critique of the habitat dioramas in the Akeley Hall of African Mammals section of the AMNH. These impressive dioramas were conceived by Carl Akeley, a renowned taxidermist, hunter, and conservationist who was a friend of President Theodore (Teddy Bear[6]) Roosevelt. Situating Akeley's dioramas within the broader societal context of the time, Haraway reveals how the complex intersections of nationalism, science, education, class, gender, race, and politics shaped the creation, content, and presentation of these displays.

These factors ultimately influenced the narratives that the dioramas conveyed to the public, serving to naturalise and legitimise hegemonic, white male hierarchies and power relations of early 20th century America. Moreover, Haraway's (1984) text exposes how Akeley's dioramas, while intended to educate the public about nature, were also influenced by his racialised misunderstanding of Darwinism, a view that was rooted in the discredited scientific paradigms of eugenics.

Haraway's poststructuralist notion of nature as a construct rather than a knowable objective reality (2013, 296) informed my approach to interrogate the aesthetic conventions of habitat dioramas. To interrogate these conventions, I isolated and exaggerated specific elements of the dioramas, repurposing them as central motifs in my own artworks. In the exhibitions *Heathcote Select*[7] (2019) and *Abiotica*[8] (2019), which took place early in this project, I constructed large curved structures in emulation of the alcoves found in habitat dioramas. Inside the curves, I painted gradients that evoked the skyscape backgrounds commonly seen in the dioramas at the AMNH (Figures 4 and 5).

Abiotica, the more substantial of the two exhibitions, marked a significant development in my art practice. Within this exhibition, mineral samples were positioned strategically on the gallery floor, along with a video that is the topic of Chapter 2, three sculptural forms using drill chips, and a large hand-built curve with drillcore samples suspended in front of it. Set behind the curve and pinned onto plinths were a dead butterfly and a dragonfly.

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6 'Teddy Bear' was the nickname associated with Theodore Roosevelt, which Haraway references in the title of her essay "Teddy Bear Patriarchy."

7 *Heathcote Select* was held at the Goolugatup Heathcote Gallery, Perth.

8 *Abiotica* was held at the Paper Mountain gallery, Perth.

Figure 4. Rob Kettels, Installation view of *Abstract Diorama*, 2019. Goolugatup Heathcote Gallery, Perth. Photo: Rob Kettels.

Figure 5. Rob Kettels, Installation view of *Abiotica*, 2019. Paper Mountain, Perth. Photo: Rob Kettels.

By appropriating the alcove and skyscape-gradient as motifs, I sought to explore to the underlying representational system to which they belong—a system that embodies a normative iconography of nature and presents complex ecological phenomena as idealised tableaux. By taking fragments of the habitat diorama—a relic of the past—and recontextualising them to create new narratives, my methodology resonated with certain postmodernist strategies, such as appropriation and pastiche. This approach aimed to disrupt the grand narratives and claims to faithful representation that the original dioramas often present. Throughout this investigative period, I explored the application of the curve in various scenarios, testing its potential to subvert and reimagine the traditional diorama format (Figure 6).

Figure 6. Exploring diorama fragments in new contexts, 2019, Canning River, Perth. Photo: Rob Kettels.

In his installation *Diorama* (1997), artist Thomas Hirschhorn critically engages with the habitat diorama as an institutional emblem (Figure 7). By assembling his makeshift diorama using crude materials and kitschy nature posters, Hirschhorn subverts the supposed realism of ecology typically portrayed in museum dioramas. Through parody, he undermines the notions of authenticity that are often imbued in traditional museum displays, challenging the concept of an objective and unmediated representation of 'reality.' Hirschhorn's practice questions the "emergence, maintenance and disappearance of human constructions and endeavors" (Dezeuze 2017, 5), and his playful compositions interrogate the authority of the museum and the "legitimizing discourses" (Streitberger 2016, 1) underpinning such representations.

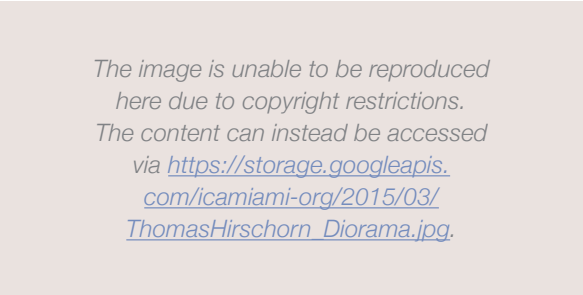

Figure 7. Thomas Hirschhorn, *Diorama*, 1997. Cardboard, foil, posters, tape. Institute of Contemporary Art, Miami. (ICA 2020).

In 2017-2018, the Schirn Kunsthalle in Frankfurt held a major art exhibition titled *Diorama: Inventing Illusion*, which was dedicated to the history of the diorama. Another major art exhibition in 2017 titled *Dioramas* was shown at the Palais de Tokyo, in Paris, and it was dubbed "an exhibition that explores the diorama as an unexpected source of inspiration for contemporary art" (Palais de Tokyo 2017).

In addition to Haraway's critique and Hirschhorn's artistic approach, my use of the habitat diorama motif was informed by diorama scholar Karen Wonders' doctoral thesis "Habitat Dioramas: Illusions of Wilderness in Museums of Natural History" (1993). Wonders' comprehensive study of the illusionistic methods and detailed documentation of depth-creation techniques employed in constructing these displays provided valuable observations. Wonders also explores the ideologies that the taxidermists, modellers/sculptors, and background painters carried into the habitat dioramas through their emblematic representation of ecological scenes. Wonders notes that "habitat dioramas reflect the way in which nature is perceived and valued...for this reason, they often unintentionally reveal more about society than they do about natural history" (1993, 148). This insight reveals how habitat dioramas serve as potent lenses for critically examining the cultural and historical contexts shaping the Western environmental gaze. Analysing the social conditions of their creation would provide a figurative and literal 'window' into this perspective.

The substantial curve and gradient in *Abiotica*, marked by suspended drillcore samples, represents a significant juncture in this project's trajectory (Figures 8 and 9). Titled *Inverted Gaze,* the artwork signals the point at which I transition from habitat dioramas to more geological themes, serving as a hybrid between the two directions and reflecting my evolving train of thought at the time. Through a process of experimenting with the protean forms and motifs, *Inverted Gaze* was an attempt to crystallise certain concerns I sensed about the Western perception of the environment.

Figure 8. Installing the diorama-esque curve, Paper Mountain, 2019. Photo: Larissa Lösch.

Figure 9. Hand painting the skyscape. Photo: Larissa Lösch.

Although my ideas were still in development at this point in the project, the artworks in *Abiotica* contained fragments of the key themes and concepts addressed in the following sections. By positioning the drillcore centrally to align with the audience's eyeline, I consciously mirrored the prominent placement of taxidermied specimens in the AMNH dioramas (Figure 10). However, by privileging the inorganic instead of 'life'[9], I inverted the biocentric hierarchy found in habitat dioramas (Wonders 1990, 101). This choice sought to disrupt conventional representations of nature in museum displays and contribute to the broader discourse surrounding the depiction of nature in art.

An ancillary element to my diorama was a dead butterfly and dragonfly pinned onto plinths and tucked behind the alcove structure, deliberately placed in a less prominent position to subvert the typical focus on biological specimens in natural history displays (Figure 11). These specimens, once vibrant with life, but in their current state of entropy, served as symbols of the continuous cycles of transformation between the organic and inorganic. Their presence in the context of disrupting a natural history museum exhibit raises questions about how nature is constructed and represented within Western epistemology and art. The juxtaposition of the insects with the drillcore aims to blur conceptual boundaries between life and nonlife, and challenges hierarchical categorisations of ecology.

9 I have added scare quotes around 'life' to highlight the irony of taxidermy signifying life when it is in fact dead.

Figure 10. Rob Kettels, *Inverted Gaze*, 2019. Timber, MDF, paint, drillcore, dragonfly and butterfly. *Abiotica*, Paper Mountain, Perth. Photo: Rob Kettels.

Figure 11. Rob Kettels, *Inverted Gaze* (detail), 2019. Timber, MDF, paint, drillcore, dragonfly and butterfly. *Abiotica*, Paper Mountain, Perth. Photo: Rob Kettels.

Engaging with Haraway's and Wonders' texts allowed me to develop a more nuanced understanding of how the seemingly innocuous aesthetics of nature, encapsulated in the tradition of habitat dioramas, are actually laden with cultural and ideological baggage that perpetuates problematic worldviews, such as mastery, hierarchy, passivity, and atemporality. As Haraway astutely observes, "nature cannot pre-exist its construction" (2013, 296), thus suggesting that the Western concept of nature is not an inherent reality or entity, but rather "nature for us is *made*, as both fiction and fact" (297, original italics). This notion challenges the idea that nature is a universal, incontrovertible fact awaiting discovery and representation. Instead, it proposes that understandings of nature are shaped by a complex interplay of factors, including cultural narratives, scientific practices, historical/political contexts, and, importantly, physical phenomena itself.

The veneration of picturesque and sublime landscape scenes as the archetype for nature emerges from a complex fusion of historical paradigms that have shaped and produced the aesthetics of nature in the West (Cronon 1996). In the late 18th century, cleric William Gilpin (1782) popularised the picturesque through his travel guides and essays, essentially providing a set of principles for depicting nature.[10] As author Rebecca Solnit explains, this period saw the emergence of a significant cultural shift in the perception of nature:

> A cultural framework arose that would inculcate such tendencies in the wider public, give them certain conventional avenues of expression, attribute to them certain redemptive values, and alter the surrounding world to enhance those tendencies. It is impossible to overemphasize how profound the effect of this revolution on the taste for nature [was]. (2002, 93)

10 The picturesque and sublime were influential aesthetic concepts in the 18th and 19th centuries. The picturesque emphasised nature's beauty in a visually pleasing way, while the sublime referred to its awe-inspiring and sometimes terrifying aspects. These concepts significantly influenced the perception and depiction of nature in art, literature, and popular culture during this era.

A century later, art critic and amateur geologist John Ruskin, an advocate for Romanticism, penned minute details on the aesthetics of mountains, epitomising the sublime. In his works, such as *Modern Painters: Volume IV* ([1860] 2010), Ruskin fetishised the geology of mountains, codifying "the principles of executing landscape painting concretely" (Lubowski-Jahn 2011, 329). The iconography of picturesque and Romantic landscape painting has profoundly influenced popular culture, art, media (Latour 2017; Morton 2009; Cronon 1996), and notably, the design of habitat dioramas (Wonders 1990, 94).

While social constructionism provides valuable insights into how cultural and historical factors shape the perception of the environment, it is important to consider alternative perspectives that challenge the notion that an understanding of nature is solely determined by cultural constructs. Anthropologist Tim Ingold's sensory anthropology emphasises the role of embodied experience and direct engagement with the environment in shaping an understanding of the world, challenging the idea that cultural constructs are the only determinants of environmental understanding (1992, 45). The relationship between direct sensory perception and social constructionism is intricate and exceeds the purview of this chapter. Scholars such as Ingold (1992) and Howes (2022) have extensively debated this topic. In the context of this project, it is important to recognise that these two perspectives are not necessarily mutually exclusive and can coexist. Chapter 4 will further explore the nuances of this relationship and its implications for this art project.

When discussing the contrasting perspectives of mountaineering and rock climbing, Solnit offers a thought-provoking insight into the different modes of observing and experiencing nature. Solnit asserts that "since the eighteenth century, nature has been imagined as scenery, and scenery is what is seen at a certain distance, but climbing puts one face-to-face with the rock, with a wholly different kind of engagement" (2002, 140). She suggests that traditional mountaineering emphasises the desire to experience nature as awe-inspiring vistas, while technical rock climbing focuses on a haptic, close-up engagement with the environment.

I argue that Solnit's comparison not only points to different viewpoints in climbing but also to a larger shared cultural worldview that emphasises a visual bias in the experience and observation of the more-than-human environment. Solnit's analogy of the intricacies of close-up forms (the rock climber's view) and sublime landscapes (the mountaineer's view) reflects this visually oriented encounter. Several scholars argue that Western epistemology is heavily influenced by visual perception and observation. For example, Haraway critiques the idea of objectivity in Western science, claiming that vision is not a neutral sense (1988, 581), while Ingold suggests that Western ways of knowing prioritise a detached, observational stance towards the environment (2000, 6).

Philosopher Timothy Morton argues in *Ecology Without Nature* (2009) that the aestheticisation of nature as a pristine entity, fixed in time, presents a limiting scope to imagine the human place within the world, as it is intimately bound with anachronistic aesthetics, notably those from the Romantic era. He suggests that this idealised imaginary offers a radical alternative to the "mechanical or total administered hurly-burly" of civilisation (2009, 114), but maintains that returning to a lost nature is forever excluded, as the aesthetics are "always anachronistic" (124). Morton's ideas draw from the aesthetic theories of philosopher Theodor Adorno, who argues that nature has no inherent aesthetic dimension; instead, it is "socially constructed within a political and economic system, and any discourse of 'natural beauty' must be linked to contemporary artistic practices" (Zuidervaart 1998, 18). Adorno's aesthetic theory, which I explore further in Chapter 4, suggests that art's attempts to represent mythologised nature are, in a sense, efforts to universalise the subjective understanding of nature (Huhn and Zuidervaart 1997; Flodin 2018, 4).

Hierarchy

Wonders notes that unlike American habitat dioramas, which reflected frontier expansion and Wilderness narratives, Swedish dioramas emphasised Linnaean classification (1993, 6). To provide context for the artworks discussed later in this chapter and the project as a whole, it is important to briefly examine the emergence of Enlightenment[11] taxonomy, natural history, and the Chain of Being[12]. These factors have shaped the ontological foundations within Eurocentric cosmologies (Foucault 1970) and influenced the Western perception of the environment (Lovejoy [1933] 1970; Merchant [1980] 1989).

As natural philosophers in the Enlightenment sought to classify and understand the material world, their efforts were heavily influenced by the Chain of Being's emphasis on gradations of existence (Lovejoy [1933] 1970; Humphries 2005). The botanist Carl Linnaeus[13] developed a classification system based on physical traits, with the Chain of Being as a foundational framework[14] (Lovejoy [1933] 1970, 25).

The Chain of Being, a concept that originated in ancient Greek philosophy and medieval Christian thought, gained renewed prominence during the Enlightenment (Lovejoy [1933] 1970; Humphries 2005, 1). It was a hierarchical cosmology that organised all forms of existence into a linear progression from the most basic to the most perfect, with elements ordered by perceived sentience. This hierarchy was believed to be infinitely static, unchanging, and divinely ordained, with each entity having its predetermined place in the order of the universe (Lovejoy [1933] 1970; Humphries 2005, 1).

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11 The Enlightenment roughly spanned the period from the mid-17th century to the early 19th century, with its most influential period being the 18th century.

12 The [Great] Chain of Being, also known as the Scala Naturae (Ladder of Nature), blends beliefs from Plato, Aristotle, and Medieval Christianity. At the bottom of the ranking is the inorganic world of rocks, metals, and minerals, and the hierarchy progresses through plants, animals, human beings, angels, and finally to God at the apex (Lovejoy [1933] 1970).

13 Also known as Carolus Linnæus.

14 It is important to note that taxonomy has evolved over time, transitioning from the Linnaean system to employ methods such as mitochondrial DNA and RNA sequences for species differentiation (Hebert et al. 2003, 313).

Philosopher and historian Michel Foucault argues in *The Order of Things: An Archaeology of the Human Sciences* (1970) that Enlightenment natural history, particularly Linnaeus' work, marked a significant shift in Western thought. He elaborates:

> The temporal series cannot be integrated into the gradation of beings. The eras of nature do not prescribe the internal time of beings and their continuity; they dictate the intemperate interruptions that have constantly dispersed them, destroyed them, mingled them, separated them, and interwoven them. There is not and cannot be even the suspicion of an evolutionism or a transformism in Classical thought; for time is never conceived as a principle of development for living beings in their internal organization. (Foucault 1970, 164)

Foucault suggests that Enlightenment-era[15] taxonomy and natural history were developed without the concept of time, putting them at odds and incompatible with Darwinism, which relies on vast timescales for evolution to occur. As a result, Foucault argues Linnaean taxonomy and Enlightenment natural history were fixed in time and presented as a static tabulation, devised without considering the element of time (1970, 164).

Contemporary artist Mark Dion's sculptural practice involves a critique of this system, and of natural history more broadly, and connects to Foucault's ideas about the intertwining of knowledge and power. One of his notable works, *The Classical Mind (Scala Naturae and Cosmic Cabinet)* (1994), features a tiered plinth, with each level displaying distinct elements (Figure 12).

15 When Foucault uses the term 'Classical thought' in *The Order of Things*, he is referring to the period roughly spanning the 17th and 18th centuries, which largely overlaps with the Enlightenment. However, his conception of this period is quite specific and differs from traditional understandings of the Enlightenment. For Foucault, the Classical age is characterised by a particular episteme, or way of organising knowledge. He argues that during this time, knowledge was based on representation and the ordering of things according to resemblance and difference.

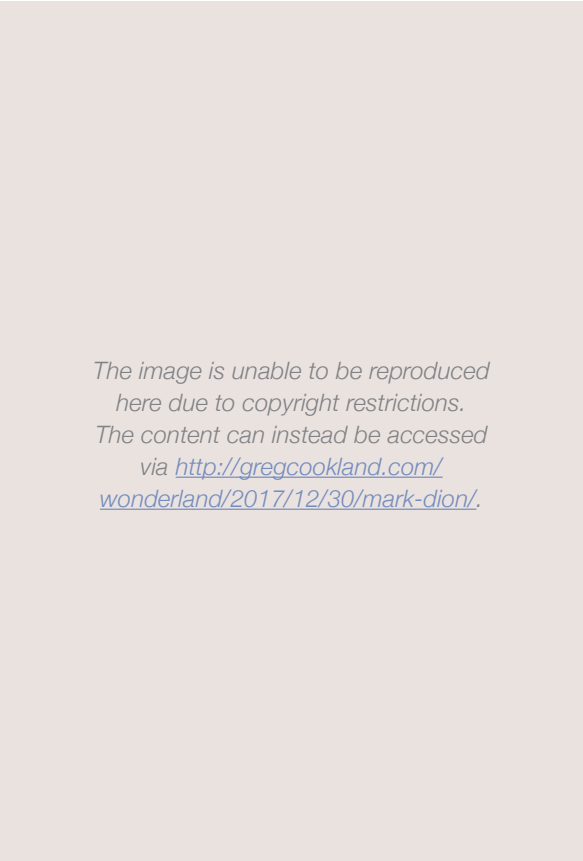

Figure 12. Mark Dion, *The Classical Mind (Scala Naturae and Cosmic Cabinet),* 1994. Plywood, found objects. Institute of Contemporary Art. Boston. Photo: Greg Cook. (Cook 2017).

It progresses from a still-life representation of clocks and books to minerals, fungi, fruit, shells, taxidermy, etc., culminating in a disproportionately large marble bust of a male, illustrating the hubris of humanity[16]. Dion's portrayal effectively highlights the anthropocentrism of considering this hierarchy as an accurate representation of natural history, ultimately revealing it as inflated and self-serving. When discussing *The Classical Mind*, Dion says:

> This notion of hierarchy, this notion of some things being better than others, this notion of humans on top is one of the most poisonous, and pernicious, and long-lasting ideas in the history of Western thought. And it is the justifications of all sorts of rankings and taxonomies and modes of oppression. (Dion 2017)

16 My use of the word 'humanity' here reflects the universalising interpretations of the 'human' that developed within Renaissance and Enlightenment humanism. This notion, which often centred on a Western, white, male ideal, played a key role in creating a problematic divide between 'human' and 'nature,' contributing to the hubris evident in the artwork's prioritisation of the male figure.

Dion's critique directly addresses the problematic nature of the Chain of Being and its lasting impact on Western thought. By highlighting the hierarchical structure and the placement of humans at the top, Dion exposes how this concept has been used to justify various forms of subjugation. Like Foucault's analysis, Dion's work emphasises the constructed nature of these hierarchies.

Foucault's notion that "natural history is nothing more than the nomination of the visible" (1970, 144) emphasises how the understanding of nature has been shaped by the ways it is observed and categorised. He also argues that this epistemology is not transmitted as a linear, cohesive origin; instead, it manifests as fragmented and discontinuous modes of representation that evolved over time (Foucault 1970, 378). This suggests that these concepts are not passed down through culture as a single, unbroken narrative, but rather as an amalgamation of abstracted and disjointed ideas, perpetuating a complex and ever-shifting discourse on the perception of nature.

Atemporality

As I explored the sociohistorical contexts of Enlightenment natural history and its missing element of time[17], it became apparent that the portrayals of nature in habitat dioramas were also intertwined with perceptions of time—or more precisely, the absence of time. This timeless quality of habitat dioramas can be traced back to the influence of Romanticism on their aesthetic conventions. Wonders notes that habitat dioramas follow the aesthetic traditions of Romanticism (2003, 94), while Morton observes that "it may surprise some that Romanticism, far from supporting sheer temporality, developed a static poetics of environments suspended in time" (2009, 102). Thus, Romanticism's influence on habitat dioramas contributes to their portrayal of ecology as steeped in a mythologised timelessness. As Wonders notes, the aesthetic conventions of habitat dioramas, such as the use of dramatic lighting, the careful arrangement of specimens, and the creation of idealised, picturesque scenes, are closely tied to the Romantic tradition in art (1993, 20-21).

17 The concept of deep time, although proposed by James Hutton in his *Theory of the Earth* (1788), was not widely recognised during the Enlightenment period (Rudwick 2014, 101). It was several decades after the Enlightenment when Charles Lyell's *Principles of Geology* (1830-1833) helped solidify deep time as a substantiated scientific understanding of the Earth's geological history (Rudwick 2014, 229).

Furthermore, Michael J. Reiss, a scholar of bioethics, observes that "the Mammal Halls at the American Museum of Natural History provide a precise and apparently timeless recreation of ecosystems from the past" (2015, 282). Reiss' observation supports my argument that habitat dioramas perpetuate an atemporal portrayal of ecology, which, as I have established earlier, draws influence from other atemporal concepts, such as Linnaean taxonomy and, as noted by Morton, Romanticism's sentimentalism that suspends nature in time.

While individual perceptions of nature vary, it is important to recognise that dominant cultural archetypes have significantly impacted how nature is collectively understood and engaged with in Western contexts (Rose 2004). Atemporal representations of ecology used to construct an understanding of humanity's relationship with the environment obscure the intricate web of connections and the constant state of change that characterises ecological interconnectedness. As anthropologist Deborah Bird Rose argues, "complex time concepts are necessary to understanding ecological processes" (2004, 25). Thus, without considering the temporal dimension, the understanding of ecology remains incomplete. However, Rose also suggests that maintaining these atemporal constructs is self-serving, deflecting responsibility and enabling regimes of colonial violence (2004, 12), a topic I take up later in this chapter when discussing anthropologist Elizabeth A. Povinelli's book *Geontologies: A Requiem to Late Liberalism (*2016) and further unpack in Chapter 2.

Appreciating deep time's influence allows for the interpretation of present ecology not as a static entity, but as a snapshot within a continuous saga of transformation. Geologist Marcia Bjornerud calls this understanding 'time*ful*ness,' saying it is a "consciousness of how the world is made by time" (2018, 5). This perspective encourages a greater understanding of the Earth's dynamic processes, while de-centring the human. When viewed in deep time, author Robert Macfarlane states, "things come alive that seemed inert…the world becomes eerily various and vibrant again. Ice breathes. Rock has tides. Mountains ebb and flow. Stone pulses. We live on a restless Earth" (2019, 15). Macfarlane's description highlights the dynamic nature of the planet, where even seemingly immutable elements are part of an ongoing process of becoming.

My fascination with environmental aesthetics and its association with time, or lack thereof, created a natural overlap for me to follow more geological ways of thinking. Furthermore, geological themes also opened up dialogues and potential that are more pertinent to my circumstances in Western Australia, characterised by extensive mining and drilling activities. Consequently, the shift to geological modes of research transformed into a tangible subject that I could actively incorporate into my artistic practice.

*

Several years ago, I chanced upon discarded drillcore in a dump at an abandoned exploration mining camp. This camp was situated deep within Martu Country, in an exceptionally remote corner of the Great Sandy Desert (Figure 13). I found myself in this area after completing a multi-day hike with a friend through the trackless desert west of Ngayartakujarra, also known as Lake Dora. At the time, I found the discarded drillcore intriguing, but I was unaware that this chance encounter would later prove to be a turning point—igniting my curiosity in geology and mineralogy and significantly influencing the direction of my artistic practice.

Figure 13. Discarded drillcore samples, Martu Country, Great Sandy Desert. Photo: Rob Kettels.

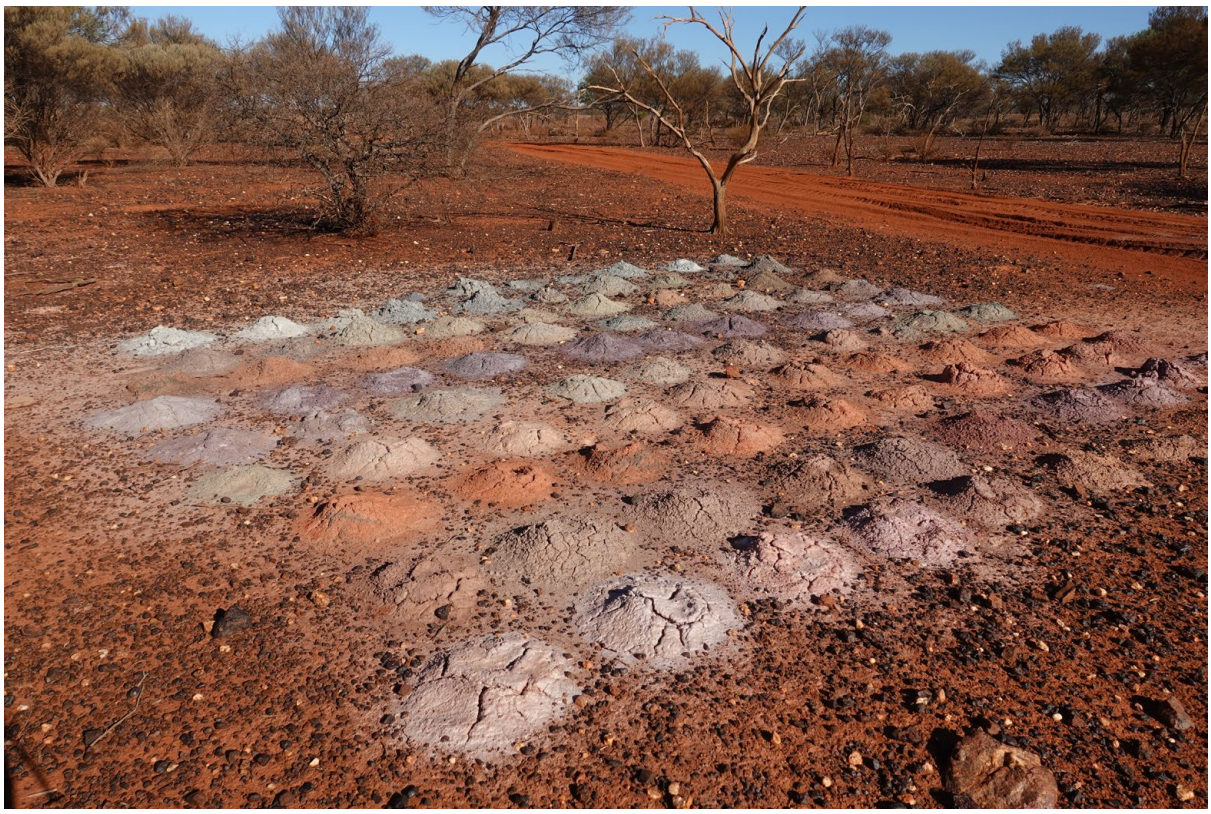

Figure 14. A grade control site in the field showing piles of drill chip samples, Wajarri Yamaji Country, Murchison. Photo: Rob Kettels.

A year after stumbling across it, I ultimately decided to go back and salvage some for the *Heathcote Select* exhibition, which led me on a substantial 3,500-kilometre round trip. On my return journey, I came across drill chips by the side of the Great Northern Highway. This marked my first encounter with the residual exploration drilling mineral samples, which were spread out on the ground in ordered rows, called grade control[18] (Figure 14). Again, at the time I did not recognise their significance but in preparation for the *Abiotica* exhibition six months later, I embarked on a field trip north of Meekatharra in Wajarri Yamaji country. There, I, along with a colleague, collected approximately 250 kg of discarded chips from around six grade control sites in preparation for the show.

*

18 Grade control is when drill chips from a drill rig are systematically laid on the ground to aid a geologist in forming a geological profile and assessing the likelihood of a mineral deposit. This process involves analysing the concentration of valuable elements within the samples. After the mineral content is recorded, the drill chip samples are often left to slowly weather back into the ground through entropy.

In anticipation of *Abiotica*, I undertook preliminary compositional trials and developed an exhibition of the chips in the Quarter Gallery, an exhibition space located on the Curtin University campus (Figures 15, 16, and 17). Notably, the gallery is a repurposed shipping container, featuring a glass front reminiscent of a habitat diorama. This association proved particularly relevant to the project's overarching themes. The Quarter Gallery provided an ideal environment to sort, mix, and arrange the large collection of chips brought back from the field trip.

Figure 15. Installation view in Quarter Gallery (detail), 2019, Perth. Photo: Rob Kettels.

Figure 16. Rob Kettels, Installation view of the glass-fronted diorama-like Quarter Gallery, 2019, Perth. Photo: Rob Kettels.

Figure 17. Arrangement of drill chips in Quarter Gallery, 2019, Perth. Photo: Rob Kettels.

Prior to the *Abiotica* exhibition, my familiarity with drill chips was limited to a few encounters in the field. The incorporation of these materials into *Abiotica* marked the beginning of an exploratory, practice-led research methodology, through which I sought to deepen my understanding of their significance. This approach involved engaging in conversations with geologists to gain insights into the role of drill chips in mining and drilling methods, as well as experimenting with their material properties and aesthetic potential within the context of my artistic practice. Through these discussions, I learned that drill chips play a crucial role in guiding decision-making in mineral extraction. To me, they were intriguing artefacts, and I began to make connections between their physical properties, sociopolitical implications, and role as a broad symbol of the Anthropocene. For *Abiotica*, I experimented with a new composition that differed from the Quarter Gallery test. This arrangement incorporated both the geologists' calico bags and a layout of chips on the floor (Figures 18 and 19).

Figure 18. Rob Kettels, *Drill Chip Assemblage* (detail), 2019. Drill chips, geologist's calico cotton bags, rocks. *Abiotica*, Paper Mountain, Perth. Photo: Rob Kettels.

Figure 19. Rob Kettels, Installation view of *Drill Chip Assemblage*, 2019, Abiotica, Paper Mountain, Perth. Photo: Rob Kettels.

Through these tactile investigations, I made an important association that would shape the development of this project: the methodical arrangement of mineral piles in the grade control site—a tangible manifestation of scientific classification—reflects the Western environmental gaze's propensity to categorise and order nature.

The arrangement of the mineral samples on the floor played a crucial role in conveying the themes and ideas explored in *Abiotica*. In a work called *Drill Chip Assemblage*, I arranged the chips in a manner reminiscent of the grade control sites I encountered in the field. In preparation for the installation, my method of acquainting myself with the mineral samples involved a hands-on process of mixing, arranging, crushing, and pulverising (Figure 20).

This material manipulation also involved altering the sequence in which they emerged from the ground, effectively disrupting the order that a geologist relies on for an accurate assessment, thus nullifying their results. While my composition was an appropriation of a grade control site in the field, it deviates from the conventional notion of a Duchampian readymade. This distinction arises from the substantial effort I devoted to deliberately reordering the elements into colour gradients (Figure 21), effectively subverting the intended purpose and broader implications of the grade control taxonomy.

Figure 20. Getting acquainted with the drill chips, Quarter Gallery, 2019, Perth. Photo: Rob Kettels.

Figure 21. Mixing the drill chip colours in Quarter Gallery, 2019, Perth. Photo: Rob Kettels.

This approach to engaging with geological and post-industrial sites resonates with the legacy of artists associated with the Land Art and Earth Art movements of the 1960s and 1970s. Robert Smithson, whose work is often situated within these contexts, famously engaged with disused industrial areas in his *Nonsite* (1968-1969) series. Each *'Nonsite'* was in fact a representation of an actual site, accompanied by documentation, such as maps, photographs, text, and samples of rocks, minerals, and ore. These materials were presented in containers, on mirrors, or as piles within a gallery setting, arranged in specific ways. For example, in *A Nonsite (Franklin, New Jersey 1968)* (1968), the rocks in the artwork corresponded to geological formations depicted in an accompanying didactic photograph. Editor Jack Flam states that the *Nonsites* "represent the focused articulation of part of the site" but that in the gallery they take on a life of their own (1996, xviii). As he claims, this created a dialectical relationship between the physical site and its representation within the confines of the gallery (xviii).

Shifting focus to a more recent work, artist Janet Laurence has created a monumental vertical 'Wunderkammer' titled *Cliff* (2022) in collaboration with geologist Peter Kinny by metaphorically tilting a natural history museum's geology collection 90 degrees upright (Figure 22). Situated on a stark concrete wall in the School of Design and the Built Environment building at Curtin University, *Cliff* presents an impressive collection of Western Australian mineralogy, featuring 159 sizeable specimens. By defining Western Australia as the collection's physical site, Laurence creates a dialectical relationship between the colonial state and the work's association as a contemporary Wunderkammer, raising questions about mineral extractivism and the colonial history of natural history collections.

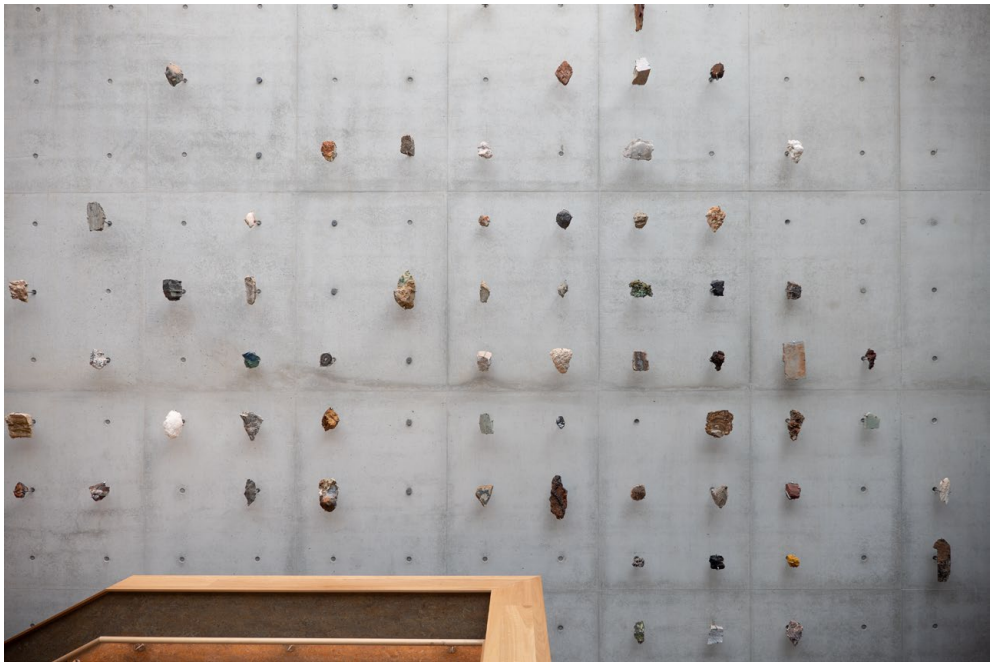

Figure 22. Janet Laurence, *Cliff*, 2022. Rocks and metal brackets. Curtin University, Perth. Photo: Rob Kettels.

As Kinny (2022) notes, "there are broader conversations that the work prompts—about politics, about the ways wealth in this part of the country has been accrued." While *Cliff* draws attention to the complex histories surrounding mineral extraction, its documentation of rock types and origins follows natural history collection methods, evoking the legacy of colonial appropriation and display. In contrast, my work, *Drill Chip Assemblage*, aims to challenges colonial taxonomies by reordering the mineral samples and subverting the scientific classification systems, offering a more critical counterpoint to the conventions of geological display. While *Cliff* prompts critical discussions, it also provides the opportunity to engage with the significance and beauty of the geological specimens, a point that is not lost on me as I consider the broader educational and public art motivations behind Laurence's work.

By engaging with the remnants of industrialism and ordering minerals into piles aesthetically, *Drill Chip Assemblage* is a reference point to Smithson's *Nonsites*; however, conceptually, it draws more from Povinelli's (2016) metaphorical figure of the Desert, representing not only literal sites of a desert biome[19] but also places marked by depletion, lifelessness, or the aftermath of resource extraction. Her figure of the Desert served as an important theoretical background for the exhibition and my thinking at the time. In Povinelli's evocative language, the Desert "stands for all things understood as denuded of life—and by implication, all things that could, with the correct deployment of technological expertise or proper stewardship, be (re)made hospitable to life" (2021, 136). The act of disrupting, even transgressing, the geologist's ordering system and imposing my own aesthetic taxonomy involved a cathartic gesture of piecing shattered and crushed rock back together into discrete groups after its violent aggregation from a drill hole in the bedrock. This intervention, one of reassembly and reclassification, thus served as a symbolic counter-narrative to the colonial undertones of mastery, hierarchy, passivity, and atemporality.

Passivity

Abiotica explored the conceptual boundaries between living and nonliving within the context of the Western environmental gaze, a term that encapsulates a pervasive yet often unrecognised trait in Western thought: the division between the organic and inorganic (Povinelli 2016; Merchant [1980] 1989). As someone raised within the Western paradigm, I recognise that this binary has shaped my own perception of the environment. The organic-inorganic dichotomy has led to a perspective that separates these entities into two distinct temporal dimensions (Rose 2004, 15; Merchant [1980] 1989), perceiving the living as active and the nonliving as passive (Povinelli 2016).

However, *Drill Chip Assemblage* challenges this binary both theoretically and metaphorically by revealing traces of interaction between the living and nonliving. In a poignant display, small insects left footprints on the drill chips (Figure 23), demonstrating the entanglement of life and nonlife in even the seemingly barren environment of the art gallery. The audience also interacted with the work, accidentally kicking the piles and spreading them out, slowly altering their shape, reminiscent of erosion.

19 A 'biome' is an ecological region classified according to the dominant vegetation.

Figure 23. Drill chips with insect tracks, Quarter Gallery, 2019, Perth. Photo: Rob Kettels.

Alongside my background research into the emergence of geology and biology during the Enlightenment, Povinelli's *Geontologies* provided a foundation for understanding how the politics of late liberalism[20] are framed through the division of life and nonlife. By challenging the perception of the abiotic as 'inanimate' and devoid of agency, the exhibition aimed to question the notion of life as an isolated entity, underscoring its inextricable link with the mineralogical.

This perspective aligns with Povinelli's critical engagement with the persistent presence of structural racism and colonialism within the framework of neoliberalism. She positions the life/nonlife binary as an ontology that maintains power structures for enabling an extractive gaze. This ontological framework helps situate my work in *Abiotica*, as the drill chips become a medium through which to explore these conversations and implicitly raise questions about the recognition and respect for First Nations sovereignty. Povinelli illustrates the complex interplay between First Nations and Western ontologies by introducing a 2013 legal case in the Northern Territory in *Geontologies*. The case involved the Kunapa people and a mining company that was convicted of deliberately desecrating a sacred site called Two Women Sitting Down*,* a geological formation (Povinelli 2016, 4-5). This case highlights the contrasting understandings and misunderstandings of the abiotic and the ways in which these differing ontologies intersect with issues of power, sovereignty, and the ongoing impact of colonialism.

20 Povinelli situates late liberalism's emergence after a legitimacy crisis within neoliberalism prompted by social movements in the late 1990s and early 2000s. For example, the portrayal of settler colonial governments as paternalistic guardians is debunked as a myth (Povinelli 2016).

Povinelli unpacks a multifaceted and layered geontology[21], revealing how First Nations ontologies concerning the sentience of rocks and nonliving[22] objects are not easily integrated into Western conceptual frameworks. The Kunapa view the rocks as powerful entities imbued with sentience, a perspective that is offset by the architecture of late liberalism, which positions rocks as inert objects and resources (Povinelli 2016). Povinelli's analysis highlights the complexity of the power dynamics involved when First Nations sacred sites and the agency of the abiotic are at stake.

Rose's exploration of First Nations ontologies reveals that in many First Nations worldviews, "everything in the world is alive: animals, trees, rains, sun, moon, some rocks and hills, and people are all conscious" (1996, 23). This understanding of the world as "bursting with life" (23) encompasses the interconnectedness of plants, animals, time, lore, kinship, land management, culture, and spirits within the concept of Country. This holistic outlook contrasts with the prevailing Western perspective on landscape and environment, especially considering the previous discussions regarding habitat dioramas and environmental aesthetics. Rose notes that in the dominant, modern Western sensibility, landscape is a scene to behold from an outside position, while First Nations worldviews emphasise the inherent liveliness and autonomy of all facets, along with human participation (10).

By using extracted drill chips in *Abiotica*, I aim to create a space for these nuanced and layered conversations. While I do not speak for First Nations peoples' understandings on sentience, as it is not my role or place, there is a centuries-long precedent in Western traditions that explores the question of agency in living and nonliving matter.

Historian of science Jessica Riskin provides valuable context for understanding Povinelli's thoughts on the agency of nonlife in *The Restless Clock: A History of the Centuries-Long Argument over What Makes Living Things Tick* (2016). Riskin traces the long-standing debate between mechanistic materialism and vitalism from the early modern period[23] to the present

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21 Geontology, as defined by Povinelli, is the study of the relationship between life and nonlife, particularly the distinction shaped by power and ontologies. It examines the ways in which the life/nonlife binary is used to justify the exploitation of resources and the marginalisation of First Nations perspectives.

22 In this context, 'nonliving' refers to entities that Western perspectives consider inanimate, but which First Nations ontologies recognise as possessing sentience and living ancestor spirits.

23 The early modern period was roughly from the late 15th century to the late 18th century, marked by the Renaissance.

day. She explores how scientists and philosophers have conceptualised agency, from the mechanistic view[24] that sees living things as mere machines to the vitalist perspective[25] that attributes a special 'life force' to animate beings. Riskin's work reveals the complex ways in which thinkers have grappled with the question of agency and the nature of life, shedding light on contemporary debates explored in Povinelli's *Geontologies*.

Mastery

Historian of science and philosopher Carolyn Merchant argues that the inclination to view the nonliving as passive can be traced back to the rise of mechanistic materialism in Western thought, a shift that gained momentum during the Renaissance. In her book *The Death of Nature* ([1980] 1989), Merchant asserts that Francis Bacon, a prominent 17th century natural philosopher, articulated the most compelling justification for harnessing and controlling nature to serve human ends. This "Baconian imperative" (Merchant [1980] 1989, 164) played a pivotal role in the Scientific Revolution[26] and, as Merchant argues, continues to resonate today.

According to Merchant, the transition to empirical science brought about a fundamental transformation in the representation of the world. The portrayal of Earth shifted from that of a living organism filled with internal spirit to a lifeless, inert machine. This transformation reached its pinnacle in the early 20th century, fuelled by the ascent of a largely secular, reductionist approach to scientific enquiry that emphasised strictly confined, objective rationality (Merchant [1980] 1989, 28).

However, this brute mechanistic view is being questioned, and recent developments in various scientific fields, such as quantum physics, are challenging the strict dichotomy between the living and nonliving. Building on the insights of quantum physics, feminist scholar Karen Barad's (2007) concept of "agential realism" offers a compelling framework for rethinking the relationship between the organic and inorganic, which argues for a fundamentally entangled

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24 Riskin discusses the philosopher René Descartes, who famously argued for a dualistic view of mind and body, with the mind being a non-physical substance distinct from the mechanical workings of the body. This perspective, known as Cartesian dualism, had a profound influence on subsequent debates about agency and the nature of life (Riskin 2016).

25 Riskin also examines the work of the philosopher Immanuel Kant, who sought to reconcile the mechanistic and vitalist perspectives. Kant argued that living things possess a unique kind of purposiveness or *telos* that cannot be reduced to mere mechanism alone (Riskin 2016).

26 The Scientific Revolution, which roughly spanned from the mid-16th century to the late 17th century (1550-1700), was a period of significant developments in mathematics, physics, astronomy, biology, and chemistry that transformed society's view of nature and laid the foundations for modern science.

and intra-active understanding of the world, where the boundaries between subject and object are blurred and constantly renegotiated.

Yet, the perception of the nonliving as inert and devoid of agency is still pervasive. Maintaining this worldview, as many notable scholars have pointed out, serves the interests of those who seek to assert mastery and control over the environment and people, particularly First Nations peoples (Povinelli 2016; Merchant [1980] 1989; Yusoff 2018; Rose 2004). By perpetuating the notion that minerals lack agency, those who benefit from extractive practices can justify the exploitation of resources and the dismissal of First Nations ontologies (Povinelli 2016, 19).

Povinelli, however, challenges this notion of passivity through her concept of the Desert as a space of enduring resistance, where alternative modes of being and relating to the nonliving persist despite the imposition of liberal progress narratives and state power (2016, 19). As Yusoff argues, "Extractable matter must be both passive (awaiting extraction and possessing of properties) and able to be activated through the mastery of white men" (2018, 2-3). The Desert, in this sense, becomes a site where the hubris of mastery and the vested interest in passivity are subverted, revealing the inherent vitality and complexity of nonlife and the inorganic.

When exploring the attributes of the chips in another work called *Future Strata* (2019), I experimented by combining the mineral samples with BondCrete, pollen, flower stamens, and plastic to fashion artificial strata (Figure 24). Once the BondCrete set I then drilled out a cylindrical core sample (Figure 25) and exhibited these as experimental sculptures (Figures 26 and 27). Adding pollen into the strata echoed paleoclimatologists' use of pollen trapped in ancient sediment or ice core to reconstruct past ecosystems (Frazer 2009, 64). These experimental works served as material explorations to test how the mineral samples could be manipulated and combined with other elements. While valuable in understanding the properties and potential of the drill chips, layering them with too many extraneous elements, I felt, obscured the range of meanings that could be ascribed to them. Ultimately, this method clarified the direction I did not want to pursue. Rather than failures, these works were essential steps in the trial-and-error process of coming to terms with the multifaceted significance of drill chips, encompassing geological, philosophical, and artistic dimensions.

Figure 24. Adding flower stamens into the drill chip mix. Photos: Rob Kettels.

Figure 25. Drilling out the drill chip block for *Future Strata*, 2019, *Abiotica*, Paper Mountain, Perth. Photo: Rob Kettels.

Figure 26. Rob Kettels, *Future Strata*, 2019. Drill chips, BondCrete, pollen, flower stamens, and plastic. *Abiotica*, Paper Mountain, Perth. Photo: Rob Kettels.

Figure 27. Rob Kettels, *Future Core*, 2019. Drill chips, BondCrete, pollen, flower stamens, and plastic. *Abiotica*, Paper Mountain, Perth. Photo: Rob Kettels.

In preparation for *Abiotica*, I hand-polished the drillcore over two weeks, using increasingly finer sandpaper to reveal intricate details and colour. Starting out as matte and dusty cylindrical stone rods, the polishing process revealed subtleties and stories of Earth processes spanning billions of years while concomitantly exposing the marks of industrial intervention left by the diamond drill bit. This juxtaposition accentuated the convergence of time, industrialism, and the human touch in the present moment. As I studied the drillcore during polishing, I produced a small series of illustrations to better comprehend and visually interpret the stone's details (Figure 28). These illustrations, although not intended for exhibition, opened a portal to the sublime, drawing me into trying to imagine the timescales and geological processes involved in their formation and the complex interplay of anthropogenic forces that brought these subterranean specimens to the surface.

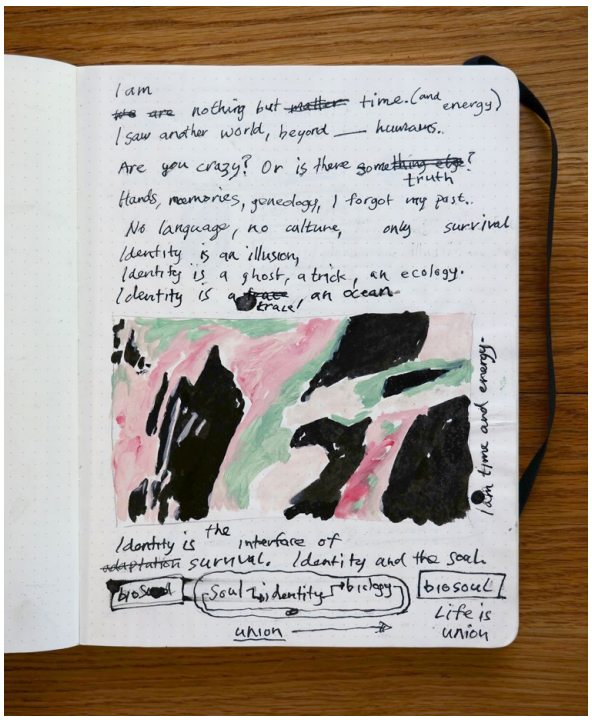

Figure 28. Sketch book thinking; finding imaginative stories through illustrating the drillcore. Photo: Rob Kettels.

Artist Lee Harrop has established a successful career working with core samples by inscribing them with carefully considered text or wordplay that often carries multiple meanings or has etymological significance to the subject she is exploring. Harrop's approach enhances the drillcore without overburdening it with excessive ornamentation, contrasting with my approach in *Abiotica*, where the suspension of drillcore in front of the alcove aesthetically overwhelmed the core's inherent harmony, potentially diminishing its power and meaning.

Through collaborations with state geological surveys, Harrop engages with drillcore while acknowledging their sociopolitical significance and adding artistic interpretation. Harrop has found creative ways to address critical issues. In 2021, she devised an art project called #inmybackyard that invited visitors to her exhibition to take a blank core sample, place it in their backyard, and post the image on Instagram. By subverting the common phrase 'not in my backyard', this project encourages individuals to confront their own complicity with mining.

The notion of complicity resonates with my own journey. Prior to *Abiotica*, I firmly adhered to an ideological stance that scrutinised mining activities. However, exploring chips and drillcore from both geological and social perspectives has led me to recognise my own interconnectedness within a complex web of material exchange spanning multiple temporalities and ecologies (in the broadest sense). This realisation decentres the human and acknowledges the subjectivity of nonhuman agency, necessitating a transition from biocentrism to a biogeological-temporal perspective (Bakke 2017, 42; Hird 2012, 235). Acknowledging this interconnectedness has made me aware of my role as a beneficiary of extractivism. By recognising my own complicity within these systems, the project becomes a means to confront and address my own gaze and assumptions, encouraging a more critical and reflective approach to engaging with the geological, and the complex implications of industrial and anthropogenic activities.

CONCLUSION

The chapter has traced my transition from critiquing the aesthetics of habitat dioramas to focusing on remnants of exploration geology. It has established habitat dioramas as being grounded in specific Western epistemological frameworks that perpetuate an atemporal cosmology. The exploration of habitat dioramas provided the foundation for engaging with the implications of drill chips and drillcore, and introducing Povinelli's figure of the Desert, which served as an important theoretical background for the exhibition. This engagement has led to an examination of the ontological division between the organic and inorganic in Western thought. The chapter has also given a concise account of the sociohistorical factors that underpin the four key concepts of mastery, hierarchy, passivity, and atemporality, which I use as lenses to explore the Western environmental gaze, orienting the research and my art practice towards geological and temporal themes.

CHAPTER 2: TIME-LAG — *LEVITATING BUSHMAN*

See https://vimeo.com/350691212 to view video.

INTRODUCTION

The *Levitating Bushman* (2019) video was featured in the *Abiotica* exhibition and made while visiting Wajarri Yamaji country during the same trip where I collected drill chips for *Abiotica*. Due to its distinctiveness from the other artworks in the exhibition, I have dedicated a standalone chapter to this work. The video serves as a pivotal work, marking a transition from direct references to habitat dioramas, and points towards site-responsivity in upcoming works.

The Australian desert[1] has long served as a canvas for colonial imaginations, often portrayed as an 'unknown' space outside human history (Haynes 1998). This chapter examines the notion of atemporality in settler colonial (mis)representations of the desert. *Levitating Bushman* engages with these mythologies and tropes by employing caricature to destabilise such traditional depictions. By analysing the interplay of personal experience, artistic practice, and theoretical frameworks, I argue that portraying the desert as atemporal obscures both notions of deep time and the ongoing presence of First Nations peoples. The artwork and this accompanying chapter emerge as a self-reflective response to my own situatedness within these entrenched perspectives.

TIME-LAG — *LEVITATING BUSHMAN*

Set in an arid biome within Wajarri Yamaji country, located in the Murchison region of Western Australia, *Levitating Bushman* features a shirtless white male figure, myself, seemingly defying gravity as I hover several centimetres off the ground while slowly navigating the surrounding geography (Figure 29). Although the arid and rocky terrain may initially appear peripheral to the central figure, it plays a crucial role in the video's overall symbolism, representing the complex and often fraught settler relationship with the desert.

1 The generalisation of the term 'desert' in this framework is deliberate. This notion, and its implications, are further explored in the chapter.

Figure 29. Rob Kettels, *Levitating Bushman* (screen stills), 2019. Photos: Larissa Lösch.

Integral to this scene is the profound presence of the Wajarri Yamaji people, whose cultural practices have endured for millennia on these traditional lands and continue to this day[2] (Winton et al. 2016, 64). To advance my understanding of cultural sensitivity in my research and artistic practice, I completed a Wajarri Cultural Awareness Training course, developed by the Wajarri Yamaji Aboriginal Corporation[3], prior to making *Levitating Bushman*. This training deepened my understanding of cultural protocols and responsibilities while on Wajarri Yamaji Country, thus informing the creation of *Levitating Bushman* and prompting key points of reflection in viewing and interpreting the final piece.

Defining Atemporality

The concept of 'atemporality,' as employed in this project, denotes the absence or irrelevance of time, or existence outside the framework of time. It has implications in this chapter, particularly in the examination of colonial representations of the Australian desert. Interdisciplinary scholar Roslynn Haynes notes: "The desert signified a place of few visual objects but seemingly limitless space where time seemed stationary, giving rise to the view of the desert as unchanging and charged with a sense of the infinite" (1998, 30). Such a view aligns with broader colonial practices of temporal displacement. Furthermore, geographer Kathryn Yusoff describes how atemporality functions in colonial contexts: "I argue that the semiotics of White Geology creates atemporal materiality dislocated from place and time—a mythology of disassociation in the formation of matter independent of its languages of description and the historical constitution of its social relations" (2018, 4). Yusoff's insight illuminates how atemporality disconnects landscapes and materials from their cultural and historical contexts, a central aspect of colonial representations.

To clarify, the concept of atemporality as used in this exegesis differs from recent applications of the term in cultural discourse, where 'atemporality' describes cultural shifts beyond postmodernism. Author William Gibson has employed the term atemporality to describe a cultural condition where all eras seem to exist simultaneously due to digital archiving and instant access to information (Sterling 2010).

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2 The Wajarri Yamaji people possess deep cultural ties to this land, with a history of habitation extending back at least 33,000 years (Winton et al. 2016, 64). Native Title rights cover an area of 83,943 square kilometres, including the area in which this video was recorded.

3 The training included, among many things, watching former Prime Minister Kevin Rudd's 2008 apology speech to the Stolen Generations.

While ‘timelessness’ is often used synonymously with atemporality, it carries additional connotations of classic quality, perhaps in a work of art, or unchanging nature over long periods, rather than an outright lack of time. These distinctions are noteworthy for understanding the nuances of temporal representation in colonial discourse.

Defining the Desert

While acknowledging the existence of numerous named deserts and the merging of their boundaries with other arid and semi-arid biomes, the homogenisation of the term ‘desert’ in this context is deliberate. This choice stems from my primary focus on the desert as a cultural trope in Australian cultural traditions, rather than as a strictly defined geographical entity. The mythologisation of the Australian desert as “simultaneously alluring and repellent” (Haynes 1998, i) plays a significant role in shaping the imaginary of the desert in the settler colonial psyche (Figure 30).

Figure 30. Sidney Nolan, *Central Australia*, 1950. Oil on board, 122.0 x 152.5 cm. Art Gallery of New South Wales. (AGNSW 2024).

Haynes elucidates that early European descriptions of the Australian desert carry two opposing but interwoven archetypes:

> The wilderness image, presents the desert as harsh, infertile and punitive; the other, which can be identified as visionary, constructs it as a place of spiritual enlightenment…these two prototypes have been consistently applied to the Australian desert in literary and artistic judgement for two centuries, sometimes with one or other predominating, sometimes in an ambiguous alliance. (1998, 26)

The allegorical use of the desert is evident in the rich lineage of settler colonial artists who, adhering to Western art traditions, have turned to the Australian desert as a mode of expressing a national identity that has been emerging and evolving since British colonisation. This identity, however, should not be confused with the far longer history of Aboriginal and Torres Strait Islander peoples, who have inhabited the continent for at least 65,000 years (Clarkson et al. 2017).

Background — The Bushwalker's Gaze and Emplaced Experiences in the Desert

To better establish the ideas and arguments explored in *Levitating Bushman* and the project more broadly, it is beneficial to first contextualise my lived experience in desert regions. Following a severe climbing accident—as mentioned in the Introduction—I relocated to Western Australia. As a means of recovery and to acquaint myself with my new home state, I embarked on long-distance desert bushwalking, immersing myself in desert biomes for weeks at a time, which profoundly shaped my perspective.

While this bushwalker's gaze inevitably influences these encounters, it is crucial to acknowledge that my experiences are in no way intended to supplant the extensive knowledge of Aboriginal and Torres Strait Islander peoples. Instead, these experiences are voiced to offer insights into my artistic choices and enhance the subsequent theoretical research. The following anecdotes describe two formative desert encounters that have shaped the conceptual foundation of *Levitating Bushman*. These reflective accounts demonstrate how emplaced experience and a practice-led methodology have informed my artistic practice.

*

Singing Sand Dunes

In 2012, I undertook a 300 km solo walk across the southern part of Great Sandy Desert in Martu country[4], navigating it via sun, stars, compass, and GPS through trackless rangelands and sand dunes in an area the Martu call Karlamilyi (Figure 31). Before embarking on this journey, I sought permission from Kanyirninpa Jukurrpa[5] and met with elder and artist Muuki

4 After completing the walking section, I reached my mountain bike stashed 120 km westward along the Talawana Track. From there, I rode back to my 4WD, concealed behind a sand dune, completing a 420 km round journey.

5 Kanyirninpa Jukurrpa (KJ) is a Martu organisation established to support Martu communities in managing their land, preserving culture, and building a sustainable economy.

Taylor in Parnngurr / Cotton Creek Community for final approval. I used topographic maps and conducted prior research via Google Earth to pinpoint both charted and uncharted waterholes to replenish my water supplies over the course of the 15-day trek. The profound sense of solitude and immersion in Karlamilyi's vastness remains with me even today, highlighting the enduring impression the area left on me.

Figure 31. Deep in Martu Country, Karlamilyi. Photo: Rob Kettels.

During the journey through Karlamilyi, I had a strange sonic encounter. Midway through the trek, in an extremely inaccessible area—over a three-day walk from Parnngurr / Cotton Creek, the nearest community—I entered an erg (or 'tali' in the Pintupi language), an area of desert dominated by sand dunes. As I traversed the dunes (Figure 32), a resonating and disconcerting droning sound was omnipresent, resembling the propeller of a far-off aircraft, except there was no aircraft. The pulsating sound was so pervasive that it was impossible to pinpoint an origin. Initially, I doubted my own hearing, unsure if the sound was a trick of the mind or a case of low-frequency tinnitus. Yet, as the drone persisted, I began to mythologise

its presence. The haunting resonance evoked the deep harmonics of a didjeridu[6], leading me to imaginatively attribute the sound to an otherworldly origin, as if it were coming from supernatural beings, perhaps indicating I was intruding in this area. My fear stemmed from not knowing what I was dealing with; it was a fear of the unknown. As soon as I departed the erg, the droning sound abruptly ceased.

Figure 32. A 'selfie' deep in Martu Country, Karlamilyi, a three-day walk to the nearest 4WD track. Photo: Rob Kettels.

Unbeknownst to me at the time, there exists a scientific explanation involving what are termed 'singing sand dunes,' which, under specific conditions, emit a drone characterised by a 50 to 300 Hz acoustic output. This phenomenon is thought to result from a combination of factors, such as wind blowing sand down the side of the dune, grain size, humidity, and various other mechanisms that cause a vibrating resonance (Sholtz, Brett, and Nori 1997; Twidale 1971). This personal encounter with the sounds of the desert establishes two key issues central to this chapter. First, my imaginative dialogue with 'singing sand dunes' highlights the symbolic settler colonial imagination of the desert, blurring the physical and mythological. Secondly, it challenges the portrayal of the desert as silent and atemporal in settler colonial folklore. This droning sound becomes a motif in *Mineral Rites*, which is discussed in Chapter 3.

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6 "The word didjeridu is not an Aboriginal one. It was coined by anthropologist Herbert Basedow in the 1920s who likened the word to the sound of it being played" (AIATSIS 2024).

Failure and the Explorer Trope

In another solo desert trek—a walking art project that was part of my 2017 third-year undergraduate degree—I attempted to walk across Wilkinkarra / Lake Mackay, Australia's fourth-largest (ephemeral) lake in the Western Desert, in Pintupi country[7]. To gain permission for the walk, I wrote to the Ngaanyatjarra Council[8]; however, the final approval came from meeting artist and elder Warlimpirrnga Tjapaltjarri in person at Kiwirrkurra Community. As I ventured towards the centre of the lake, pulling a custom-built cart laden with up to eight days' worth of food and water, the salty surface progressively became muddier (Figure 33).

Figure 33. Tire tracks leading to the horizon, Wilkinkarra / Lake Mackay, Pintupi Country. Photo: Rob Kettels.

7 In what, with a touch of hyperbole, I referred to as the most remote place in Australia—a claim that, while not entirely verifiable, nonetheless underscores the profound isolation and inaccessibility of the location, considering the lake's surface area is 3,494 square kilometres and up to 110 kilometres in length.

8 The Ngaanyatjarra Council represents the interests of around 1,800 Ngaanyatjarra, Pintupi, and Pitjantjatjara Traditional Owners (Yarnangu) who reside in the eleven member communities of the Ngaanyatjarra Lands (Ngaanyatjarra 2024).

To prevent my cart from sinking into the lake's surface, I needed to deflate the tires, but regrettably, the inner tubes got pinched by the rim, and both tires went flat. Foolishly, I had neglected to pack a puncture kit and pump in my rush to leave for the journey. Despite my attempts to repair the tires by stuffing them with spinifex grass (Figure 34), I failed to achieve my goal of reaching an arbitrary GPS coordinate on the far side of the 'dry' salt lake. This apparent failure, however, prompted a re-evaluation of the walking art project, leading to valuable insights and new perspectives on failure in contemporary art.

Figure 34. Stuffing tire with spinifex grass on a small 'island' on Wilkinkarra / Lake Mackay, Pintupi Country. Photo: Rob Kettels.

Upon reflection, it became clear that I was inadvertently repeating (albeit on a much smaller scale) the trope of the heroic European explorer venturing into the 'unknown' in settler Australian legend. Reflecting on this experience, my art practice shifted direction to critique the hubris of human domination over nature—a theme that emerged from the lake venture and now underpins the intent behind *Levitating Bushman*. Mocking my own folly and failure has become a recurring motif in my art practice.

These two desert journeys, with their distinct encounters and revelations, demonstrate how emplaced experience and a practice-led methodology have informed the foundational concepts of *Levitating Bushman*, where themes such as the trope of the failed heroic explorer and the portrayal of the desert as a mythical, atemporal domain are further investigated.

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The Art of Levitation

Levitating Bushman functions as an artistic expression that contributes to the project's broader aim of questioning the Western environmental gaze. The conceptual foundation underpinning the video emerged early in the project as an experimental and reflexive response to the site. This approach is contextualised through the backstory of the field notes, emphasising the role of lived experience in shaping the research trajectory. Employing elements of caricature and self-mockery, the video examines colonial tropes embedded in settler imaginaries of the desert—characterised as both enigmatic and foreboding, as well as timeless and unchanging—and explores my own positionality in relation to them.

To create the video, artist Larissa Lösch took a photo of me at the exact high point of a jump; I jumped 660 times over the course of five hours. To coordinate the footage, each time I took a step backwards, I also rotated slightly before the next jump. Lösch took an equal-sized step forward with a tripod, and we repeated this process[9]. The illusion of levitation is enhanced by the absence of visible signs of ascent, such as kicked-up dust or footprints—a feature made possible by the hard, colluvial ground of the location.

The video's intent is not to capture temporality itself, but to investigate temporality and its lack thereof in settler culture imaginaries. This exploration probes the purpose such imaginaries serve, particularly within the context of power structures and dominant narratives. These imaginaries, when critically examined, reveal more about cultural paradigms than the character of the desert itself, pointing to deeper, often unacknowledged histories and presences within the land.

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9 The video originated from trials undertaken in the days before, where I also jumped hundreds of times. Originally, we used longer exposures while I jumped—to try and create a ghostly blur—but they were too inconsistent in terms of having to synchronise the jump and the shutter release.

Process and Intent

The title *Levitating Bushman* is a playful characterisation of the romanticised Australian bushman. This archetype, linked to masculinity and colonial identity, evokes a nostalgic yearning for an idealised national identity rooted in 'the bush' (AWM 2024). Author John Carroll (1992) argues that the urban bourgeois romanticised the bushman in the 19th and 20th centuries, shaping the stereotype through historical figures and events such as pioneers, explorers, bushrangers, the swagman, and the ANZAC. My own spatial disorientation in the video serves as a self-effacing admission that contrasts with the bushman's expected competence, mocking my own ties to this influential mythos and the cult of the inland explorer-hero.

Levitating Bushman is steeped in parody, with the figure in the video appearing at once austere and serious, yet also absurd and bewildered. The figure's seeming perplexity adopts an Australian art historical heritage established by post-war modernist painters such as Albert Tucker, Sidney Nolan, Arthur Boyd, and David Boyd, who depicted tortured figures, particularly the early European explorers venturing into the reputedly terrifying desert (Haynes 1998). As Haynes observes, "With few exceptions Nolan's explorers are solitary individuals in a dead land, parodies of the nineteenth-century grand historical canvases that had glorified them" (2000, 68). In this context, parody does not elicit overt laughter; rather, it lies in the act of taking a romanticised Australian icon and undermining it. Haynes further notes, commenting on Nolan's *Burke and Wills* (1961–1962) series:

> The paintings are no longer ones of homage to a noble hero but a critique of colonial arrogance and incomprehension, as epitomised by this ill-devised expedition which made no attempt to accommodate itself to the continent it set out to dominate. (1998, 214)

Haynes suggests that Nolan's depictions are a satirical critique of traditional heroic narratives (Figure 35). Rather than glorifying these figures, Nolan presents them as isolated and out of place in a harsh, lifeless landscape. *Levitating Bushman* follows in the footsteps of Nolan by playfully mocking traditional images of European explorers in the Australian desert.

The image is unable to be reproduced here due to copyright restrictions. The content can instead be accessed via https://www.artgallery.nsw.gov.au/collection/works/445.1995/.

Figure 35. Sidney Nolan, *Burke and Wills expedition, 'Gray sick'*, 1949. Ripolin enamel and oil-based red ochre on hardboard, 91.5 x 121.5 cm. Art Gallery of New South Wales. (AGNSW 2024).

My appearance in the video employs visual cues that subtly caricature the iconography of the European explorer (Figures 36 and 37). My explorer-esque beard, jeans, and large belt buckle allude to the explorer trope, yet the vibrant orange running shoes indicate more contemporary resonances. The shoes, levitating above the ground, guide the viewer's attention to the underlying sunbaked and weathered geology. Although imperceptible, the landscape holds an ineffable presence and a sublimity without end—deep time. The colluvium beneath my feet is a result of geological processes that far predate human history, formed through gradual debris deposition and erosion over 2.6 billion years (Collins 2024).

Figure 36. Rob Kettels, *Levitating Bushman* (screen still), 2019. Desert apparition, floating above primordial ground. Photo: Larissa Lösch.

The image is unable to be reproduced here due to copyright restrictions.

Figure 37. Albert Tucker, *Explorer and his Camel*, 1979. Gouache and watercolour on paper. Tolarno Galleries. (Olsen and McGrath 1981).

Haynes observes that "by virtue of [Australia's] great geological age and its supposed silence until the Europeans came, the desert was also commonly referred to as a-temporal" (1998, 5). The geology featured in the video functions in a dual role, simultaneously challenging and exemplifying aspects of the Western environmental gaze. On one hand, it possesses its own vitality and autonomy, independent of human mediation or intervention. This autonomy challenges the notion of a "technological fix"—a concept Povinelli explored through the Desert figure, as discussed in Chapter 1 (2021, 136).

On the other hand, the representation of this geology in the video inadvertently reflects the trope of atemporality I associate with the Western environmental gaze. The seeming timelessness of the geological setting, when framed within the context of an anthropocentric narrative, can reinforce the perception of an unchanging, ahistorical landscape. This tension between the inherent dynamism of geological processes and their static representation in human timescales illustrates the complexity of engaging with more-than-human temporalities through artistic practice.

The video's composition presents the intersection of multiple temporal scales, ranging from my feet disturbing a rock to the eons-long erosion processes. These multifaceted timescales interweave with the disrupted intertemporal dynamics of the video and the human figure, illuminating complex temporal dynamics that challenge conventional perceptions of the desert as static or atemporal. The staccato cadence of the time-lapse footage emphasises a fragmentation and disruption of linear time. This approach decentres the *telos* of anthropocentric views of time, revealing an intricate temporality of continuity and discontinuity that extends beyond human experience, with geological timescales that render the human figure seemingly inconsequential and absurd.

As I have established, *Levitating Bushman* engages with settler colonial tropes through caricature, exaggerating the figure of the explorer to the point of absurdity. The work examines and questions the cultural implications and assumptions embedded in representations of the Australian desert, particularly those that have historically portrayed it as atemporal. While Western art has long grappled with concepts of time and temporality—from Romanticism (Morton 2009) to contemporary experiments with duration (Groom 2013)—*Levitating Bushman* is specifically concerned about the cultural narratives and power structures that certain depictions of the desert as 'timeless' have historically supported. The work's apparent affirmation of these tropes is deliberately overstated, employing sarcasm as a form of critique.

Levitating Bushman critiques not the artistic representation of time itself, but rather the specific cultural narratives and power dynamics that certain atemporal representations of the Australian desert have historically served. By using caricature as commentary, the piece invites viewers to question not just the aesthetic choices, but the underlying cultural assumptions, whose consequences will be examined as the chapter progresses.

The video thus engages with longstanding artistic tropes that highlight the inadequacy of Eurocentric paradigms in comprehending the Australian desert's characteristics. The video's ethereal visuals, featuring a floating figure detached from the ground, evoke a sense of the uncanny. Haynes argues that the Australian desert can only be "legitimately cast as the implacable agent of existential terror" because its "physical threat remains actual" (1998, 196). This duality underscores the desert's oscillation between physical reality and symbolic construct, where spatial geography and imagined landscape continuously inform each other. Field experiences, such as encounters with 'singing sand dunes' in Karlamilyi, exemplify the interplay between subjective, culturally mediated perception and physical engagement with the environment. These tropes—albeit fragmented and recuperated—persist in settler Australian cultural productions, attesting to the enduring influence of colonial mythologies on the nation's cultural imagination. The apparent tension between the geology's autonomy and its potentially atemporal representation is presented as a deliberate aspect of the work, used to provoke reflection and challenge conventional perceptions.

Abiotica

In *Abiotica*, the video was projected silently, as I determined that a soundtrack detracted from the viewer's experience of the work. The gallery setting provided an opportunity to observe audience reactions and engagement with the piece. Feedback often focused on the video's unique production techniques. The figure in *Levitating Bushman*, though appearing strong throughout the journey, seems estranged from the landscape. It possesses an odd, apparition-like quality, as if montaged in situ using Photoshop or augmented with artificial intelligence (AI). Many audience members were uncertain whether it was created in the field or not.

This visual effect evokes an unsettling atmosphere, recalling the Australian Gothic tradition or the spectral presence of figures in a Nolan painting. However, the video underwent minimal postproduction, limited to aligning the horizon. The footage consists of original photos, underscored by the occasional appearance of flies on the camera lens.

The choppy, stitched-together footage disrupts the cinematic convention of 24 frames per second, creating incomplete vignettes of the desert expanse. The intervals between the frames contribute to a lingering sense of something elusive, just beyond grasp, perhaps even invisible to the eye. After experimenting with different frame rates, I settled on 3 frames per second, though the actual capturing and performing of each jump took much longer in real-time. This time-lag between events adds to the overall distorted impression of intertemporality.

Abiotica highlighted the importance of context and presentation. The video sparked a dialogue about human interaction with arid environments juxtaposed in Paper Mountain, an inner-city galley. Overall, *Abiotica* served as a testing ground, translating site-responsivity from the field to the gallery environment. *Levitating Bushman* allowed me to gauge audience reactions and deepen my understanding of how the work communicates its themes in a gallery context. These insights have been instrumental in shaping the ongoing development of site-responsive pieces that inform the upcoming phases of this project.

Traditions

As British colonisation took hold in Australia, colonists arrived with a complex array of European history and culture shaping their worldviews. Haynes suggests that many colonists' outlooks were informed by "the socio-economics of the Industrial Revolution, the rationalism of the Age of Enlightenment, the justification for British imperialism, and the artistic and literary fashions of Romanticism" (2000, 63). She further argues that the European concept of place was already fundamentally rooted in a Cartesian duality: a subject-object dichotomy between the self and an external land.

During the Romantic period, writers and artists refashioned Edmund Burke's notion of the sublime, expanding its association beyond mountains to reinvent the void in horizontal expanses such as the ocean, tracts of steppe, and deserts (Haynes 2000, 71). Philosopher Rudolf Otto observes, "Empty distance, remote vacancy is, as it were, the sublime in the horizontal. The wide stretching desert, the boundless uniformity of the steppe have real sublimity and even in us Westerners they set vibrating chords of the numinous" (Otto 1923, as quoted by Haynes 2000, 70). The Romantic valorisation of nature as eternal and ineffable contributed to the trope of the atemporal desert, serving as an allegory for a mystical domain outside the boundaries of human history (Figure 38). The notion of the desert as empty and

lifeless resonates with the colonial doctrine of *terra nullius*[10]. The colonial gaze, as Haynes argues, was fundamental for colonial settlers, as it served "not only as a means of locating themselves within the land but of claiming possession" (1998, 23).

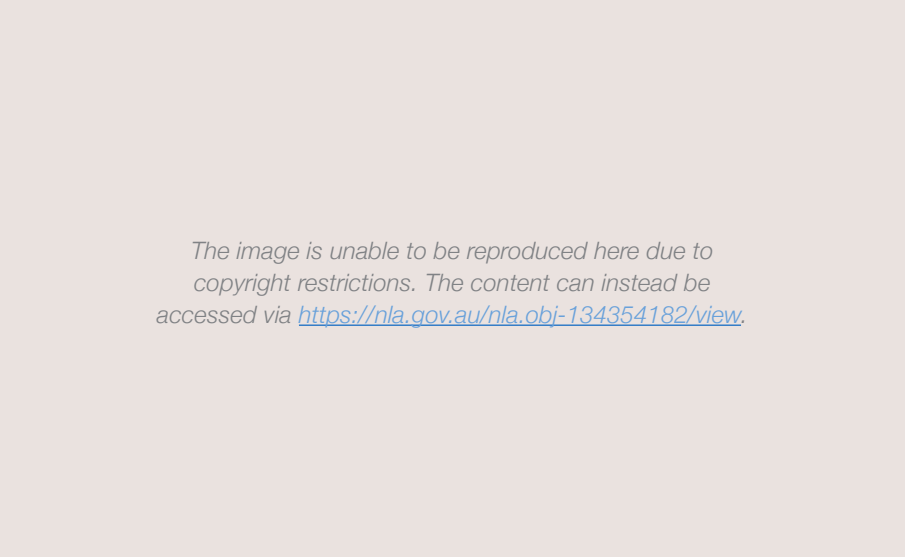

Figure 38. S. T. Gill, *Country North-West of Tableland*, 1846. Watercolour, 19 x 30.7 cm. National Library of Australia, Canberra. (NLA 2024).

Motifs of the desert's quiescence and atemporality recoup the legacy of Romanticism, reflecting a tradition that, as Morton argues, portrays environments as immutable and temporally transcendent (2009, 101). This Romantic tradition, which co-evolved with Gothic sensibilities in Europe, took on a distinctive colonial inflection in the Australian context. Scholar Gerry Turcotte links Romanticism to a specific Gothic sensibility, stating,

> while realism and romanticism typically have been divided by a rhetorically clear line in fiction, much writing produced in the Australian colony blended elements of each, and this is perhaps the way in which Australia began to map out a specifically local variant of the gothic mode. (1998, 3)

10 This concept, meaning 'land belonging to no one,' was used by the British to justify colonisation of Australia in 1770, paving the way for dispossession, displacement, and marginalisation of First Nations peoples (NLA 2024).

The Australian desert initially seems at odds with the classical European Gothic tradition, associated with Romanesque architecture, aristocratic villains, or dark forests concealing horrors. However, this contrast belies a similarity in psychological effects (Haynes 1998). While the traditional Gothic instils dread through confinement, the Australian Gothic achieves this through immensity and geographic alterity (Turcotte 1998; Haynes 1998; Wolff 2019).

For example, when standing on the edge of Wilkinkarra / Lake Mackay, I felt there was an impelling power. The barren expanse stretching unbroken to the horizon evoked the sublime as I tried to fathom the 'void' before me (Figure 39).

Figure 39. Wilkinkarra / Lake Mackay, Pintupi Country. Photo: Rob Kettels.

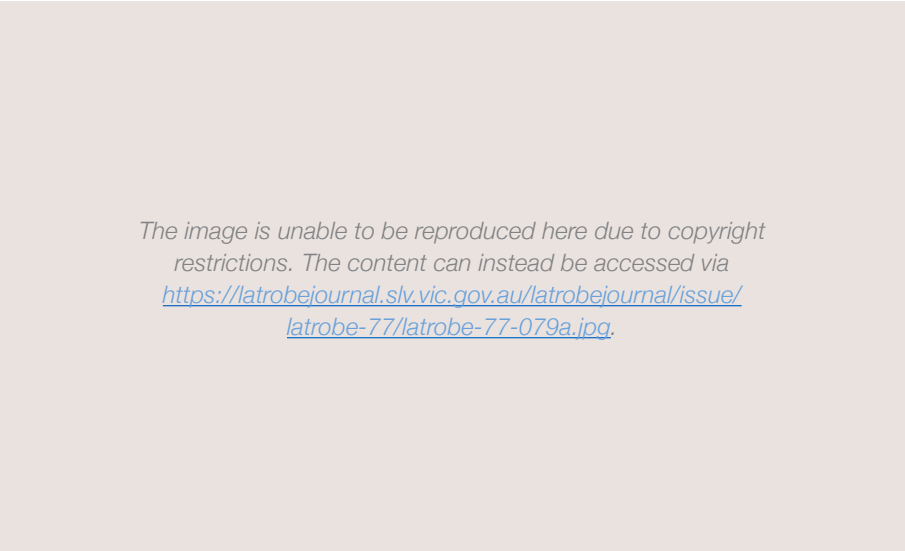

Figure 40. Ludwig Becker, *Border of the Mud-Desert near Desolation Camp*, 1861. Watercolour, 14.0 x 22.8 cm. La Trobe Picture Collection, State Library Victoria. (SLV 2024).

In her analysis of desert landscapes, Haynes offers insights into such experiences. She describes the perception of the desert as a "synaesthetic experience when the visual perception of spatial immensity is superimposed on the sense of a changeless land" (Haynes 1998, 184). Haynes further elaborates on this, drawing parallels between the desert's overwhelming sensory experience and elements of Gothic literature. She suggests that the sense of isolation and the sheer magnitude of the desert can instil terror comparable to that found in Gothic narratives—a terror born not of specific threats, but of the vastness and seeming indifference of the environment itself (1998, 184) (Figure 40).

Wolff explains that Australian modernist painters portrayed the desert as a Gothic landscape, depicting it as a hostile, alien environment. In their artworks, the desert dwarfs and threatens human presence, effectively transforming the landscape itself into an antagonist (Wolff 2019, 192). This tradition embodies colonial fears: feelings of isolation, entrapment, and anxiety about the 'unknown' (Turcotte 1998, 10). The 'singing sand dunes' in Karlamilyi evoked this Gothic atmosphere, exemplifying how colonial tropes can inform perception, mystifying the line between the tangible desert and its imaginary counterpart.

The early explorers' encounters with Australia's vast, arid expanses profoundly shaped the collective perception of the desert in the settler colonial imagination (Haynes 1998, 36). The 'unfamiliar' environment became a canvas upon which both the explorers and broader settler society projected their own fears, anxieties, and feelings of vulnerability (Cathcart 2013, 2; Stadler 2019, 337).

Cultural Displacement

In Shaun Gladwell's video *Approach to Mundi Mundi* (2007), the artist rides a motorbike down a straight bitumen 'outback' road with outstretched arms in a cruciform pose (Figure 41). The work presents a solitary male figure moving through an arid, sparsely vegetated plain, functioning as a conduit to explore Australian landscape and identity. Gladwell employs a single-perspective, nonlinear narrative approach, a visual strategy rooted in earlier structural experimental video art of the late 1960s and 1970s.

The image is unable to be reproduced here due to copyright restrictions. The content can instead be accessed via https://www.artgallery.nsw.gov.au/collection/works/L2011.60/.

Figure 41. Shaun Gladwell, *Approach to Mundi Mundi* (production image), 2007. 2-channel digital video. Art Gallery of New South Wales. Photo: Josh Raymond. (AGNSW 2024).

Gladwell's imagery evokes the lone heroic messianic trope often associated with the Australian desert. Prominent First Nations scholar Marcia Langton, commenting on the concept of Wilderness in settler colonial culture, remarks, "this characteristic metaphor of the heroic lone white male or female throughout colonial history in texts, images and ideas derives from the earliest myths of apotheosis of the white explorer/conquerors" (1996, 18). While Langton's observation is not specifically about Gladwell's work, it provides insight into the cultural context from which such imagery emerges.

The Art Gallery of New South Wales collections catalogue describes *Approach to Mundi Mundi* as having "a spellbinding sense of quietude permeating his work...paradoxically moving yet also still, this work figuratively 'swallows' time" (AGNSW 2007). This perspective, emblematic of the Western environmental gaze, implies that human agency activates an apparently static and silent background, thus reinforcing the colonial perception of the desert as atemporal.

This interpretation resonates with Povinelli's concept of the Desert, which characterises a space perceived as barren and inert, seemingly requiring human intervention to bestow life, habitability, and agency upon it (2021, 136). However, this pervasive gaze overlooks the agency of nonhuman entities and processes—including temporal dimensions—within ostensibly lifeless or post-industrial landscapes.

While these colonial perspectives have shaped much of Australia's cultural narrative, Gladwell's work draws upon both fine art traditions, such as Sidney Nolan's iconic *Ned Kelly* series (1946–1947), and popular cinematic representations of the Australian desert (NGA 2014). This engagement creates a rich, layered interpretation of the landscape that acknowledges historical perspectives while reframing them through a contemporary lens. Gladwell, specifically, pays homage to the iconic Mundi Mundi lookout, a location in George Miller's *Mad Max 2: The Road Warrior* (1981) (Figure 42). In films like *Mad Max*, the Australian 'outback' transcends its role as mere backdrop, functioning instead as a "leitmotif or ubiquitous character" (Milner 2013, 96), imbued with uncanny and possibly supernatural forces.

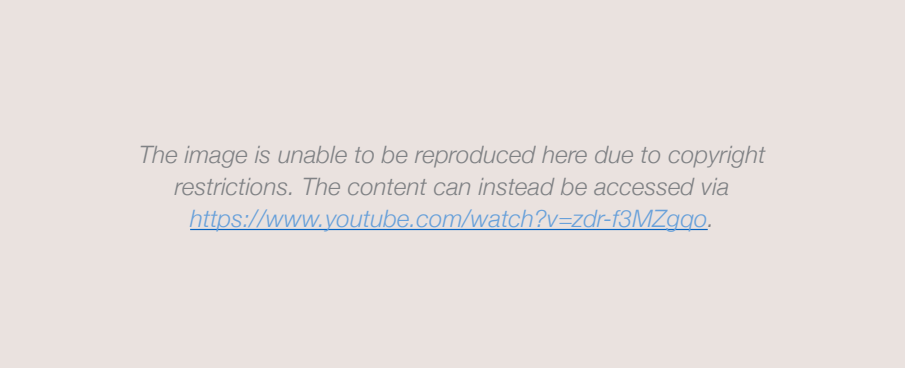

Figure 42. Screen still from *Mad Max 2: The Road Warrior* (1981). Directed by George Miller. (Movieclips 2024).

These artistic and cinematic creations share a common thread in their emblematic use of the desert, serving as an expression of the existential angst of the colonial subject. As Haynes notes, each generation reinvents its myths in response to particular needs; in Australian art, this is particularly evident in the recasting of explorer mythology and the portrayal of the desert as either a menacing sublime or a mystical realm for pilgrimage (Haynes 1998, 226).

Nolan stands out among Western artists who have shaped Australia's desert mythology in the national consciousness. His *Burke and Wills* series parodies the heroic narratives that have shaped the popular perception of explorers in Australia's colonial history. By presenting

the figures as “awkward and ill-placed” (Olsen and McGrath 1981, 58) in a vast, ominous landscape, Nolan exposes their “psychological motivation and spiritual state” (Haynes 2000, 68), inviting a reappraisal of the once-revered expedition. Nolan’s distinctive modernism, characterised by simplified forms, charges the desert with an eerie resonance, rendering the figures alien (Figures 43 and 44). Nolan’s iconic works, such as *Burke and Wills at the Gulf* (1961) and *Burke* (1962), engage critically with the concept of Australia’s interior that journalist Alan Moorehead (1963) termed “the ghastly blank.” These paintings neither wholly endorse nor repudiate this characterisation, but rather illuminate the underlying mythology.

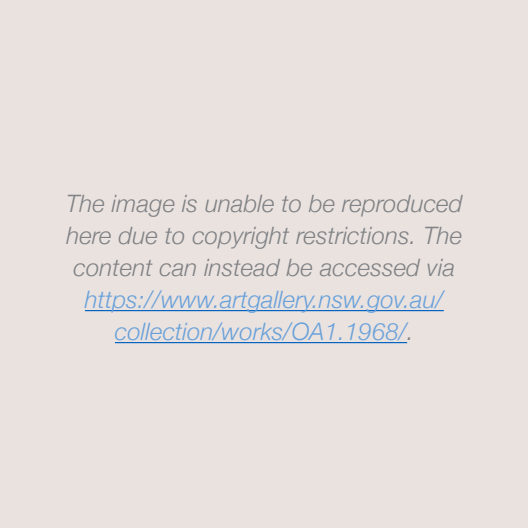

Figure 43. Sidney Nolan, *Burke*, 1962. Oil on composition board, 122 x 122 cm. Art Gallery of New South Wales, Sydney. (AGNSW 2024).

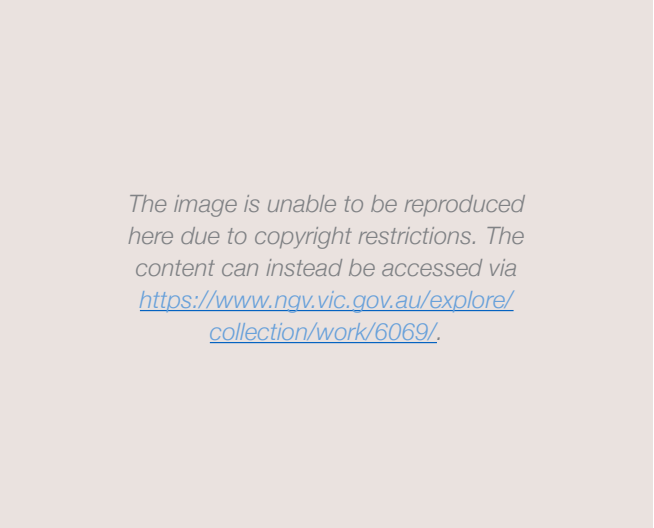

Figure 44. Sidney Nolan, *Burke and Wills at the Gulf*, 1961. Synthetic polymer paint on composition board, 122.2 × 152.6 cm. National Gallery of Victoria, Melbourne. (NGV 2024).

Art historian Sarah Engledow observes that “the figures are apparitions, ghost-like in a landscape of mirages—man and nature finding themselves together…in a shifting, indivisible mix” (Engledow 2009, as quoted by Wolff 2019, 199). This interpretation corresponds with curator Edmund Capon’s (2018) characterisation of Nolan’s work as presenting “the landscape as the theatre for human drama.” The interplay between the colonial male explorer figure and the seemingly hostile landscape engenders a complex narrative of settler national identity. This visual dialogue between human endeavour and environmental challenge creates a multifaceted portrayal of the settler Australian experience, elevating the work beyond straightforward representation. Nolan himself elucidates this complexity, articulating his approach: “I wanted to deal ironically with the cliché of the ‘dead heart’...I wanted to paint the great purity and implacability of the landscape” (Nolan, as quoted by Haynes 2000, 67).

Painter John Olsen's commentary on Nolan's work provides a crucial insight into the representation of time:

> In the Australian desert there seems to be no place for man at all; there seemed no past, no present and no future, only an overwhelming withering of will and a numbing sense of despair. Nolan has shown us that man, in this environment, is a figure of the absurd. (Olsen and McGrath 1981, 58)

This observation is central in situating the concept of atemporality within Nolan's oeuvre. Olsen's words encapsulate the idea of the desert as a space outside of time, where human presence becomes absurd and insignificant. This notion of "no past, present or future" has influenced the portrayal of the Australian desert, perpetuating a view of the landscape as timeless.

Levitating Bushman engages with myths embedded in the settler colonial psyche, which Nolan's paintings, among other cultural works, have contributed to developing. My work simultaneously repeats and questions these myths, particularly the concept of the male figure ill-at-ease in nature—cast against an adversarial and atemporal desert. The apparent dichotomy between the geology's inherent dynamism and its seemingly static portrayal is intentionally woven into the fabric of the work. This juxtaposition serves as a catalyst for contemplation and a means to disrupt established viewpoints. The video inevitably falls short of fully capturing the desert's temporality, as time itself lacks an aesthetic dimension. However, the geology, though seemingly passive, exerts a profound yet veiled influence, subtly shaping the video's imagery and meaning. The levitating figure elicits attention with its awkward clockwork-like movement, yet the desert's unassuming presence dominates the composition, its endurance far outlasting the fleeting human performance.

In Context

The mythification of the interior's deserts as a timeless Wilderness not only overlooks deep time but more alarmingly deflects and obfuscates the history and ongoing presence of First Nations peoples, reinscribing the landscape with Eurocentric biases (Haynes 1998; Rose 2004). Anthropologist Deborah Bird Rose contends that an analysis of temporal ruptures and flows in Western conceptions of time reveals "the deflection of responsibility" (2004, 15). This perspective illustrates the relationship between temporal constructs and colonial accountability.

Langton's contention that "with a few exceptions...[settler Australian] landscape art has been a visual representation of the myth of *terra nullius*" (1996, 14) aligns with her broader argument about "the relationship between cultural expressions, especially art, and conquest" (11). This relationship, traceable from early colonial landscape paintings to contemporary works, reveals cultural productions as indicators of colonial anxiety. As established in Chapter 1, the notion of Wilderness—directly influenced by Romanticism—is steeped in a mythological timelessness. Crucial to my claim of temporal dissonance, Langton further asserts that "the valorisation of 'wilderness' has accompanied an amnesia of the fate of indigenous peoples" (1996, 19). The mythic space of Wilderness, a concept that refashions the *terra nullius* thesis, portrays the landscape as 'unknown' to early settlers, evoking their sense of deracination and alienation. This 'unfamiliar' landscape, viewed through the colonial gaze, is depicted in art as immutable and 'blank,' thereby obscuring the violent history of colonisation. Consequently, the seemingly innocent representation of the desert as atemporal racialises the landscape, reinscribing it with problematic assumptions.

Levitating Bushman attempts to avoids reinscribing the land with problematic assumptions by positioning the work as a reflexive examination of settler colonial biases, shifting the focus away from the land and onto the cultural frameworks through which it is perceived. The video employs caricature as an artistic strategy, specifically mocking the explorer archetype and my own associations with this trope, serving as an indirect method of questioning established representations. The intertemporality inherent in the time-lapse format, with its interruption of linear time, subtly undermines the notion of the desert as an atemporal space.

The video not only raises questions about human culture but also captures a moment of nonhuman subjectivities and agencies. The geological setting on Wajarri Yamaji country, with its ancient colluvium, contrasts sharply with the fleeting presence of the human figure. This juxtaposition highlights the enduring age of the area. When considered alongside the connection of the Wajarri Yamaji people to this land, it challenges Eurocentric perspectives and biases. The purportedly immutable desert reveals itself as dynamic when considering temporal scales that render human presence seemingly inconsequential and absurd.

CONCLUSION

Levitating Bushman serves as both a caricature and a critical examination of the Australian desert's representation in settler colonial art. This chapter has illuminated the pervasive trope of atemporality, tracing its roots from Romantic and Gothic traditions to its manifestation in contemporary works. While the portrayal of atemporality has been a powerful aesthetic device in settler colonial cultural productions and imaginaries, it fundamentally obscures the desert's inherent temporality and the enduring presence of First Nations peoples. The video disrupts linear notions of time, creating an unsettling intertemporality that symbolises the settler colonial imagination's struggle to comprehend the desert landscape. Through self-mockery and exaggeration, *Levitating Bushman* simultaneously embodies and critiques the explorer archetype, thus exposing the underlying anxieties and misconceptions embedded in the Western environmental gaze.

CHAPTER 3: TRANSLATING LAKE AESTHETICS — *MINERAL RITES*

INTRODUCTION

Mineral Rites (2021) is my immersive installation that explores environmental aesthetics through a simulated dry salt lake environment reminiscent of a habitat diorama. The work stems from a personal encounter with a bird on Wilkinkarra / Lake Mackay in Pintupi country, which sparked the idea for a multisensory experience within an art gallery. While the audience experienced the installation without direct reference to my original avian encounter on the lake, I created an optical illusion of depth that mimicked the vastness of a salt lake at sunset. The alluring but uncanny atmosphere in the installation extends the investigations from Chapter 2 into aesthetic tropes of the Australian interior deserts. Simultaneously, the work aimed to critique aspects of the Western environmental gaze, by examining the assumptions that the inorganic is passive by transforming a gallery into an interactive mineral landscape. The installation exemplifies my artistic methodology of translating field experiences into artworks that invite new interpretations of familiar environmental narratives.

TRANSLATING LAKE AESTHETICS — *MINERAL RITES*

Functioning as an expansive walk-in diorama of a salt lake, *Mineral Rites* (2021) was an immersive installation I created for the *A Forest of Hooks and Nails* exhibition at the Fremantle Arts Centre (FAC), curated by Tom Freeman, and was part of the Perth Festival program. The work was set in the neo-Gothic building of the FAC on Whadjuk Nyoongar country. Upon entering the room, audiences were immersed in a hyper-saturated liminal space. Like a diorama, an optical illusion of depth, seemingly extended beyond the confines of the gallery walls, aiming to alter the visitors' visual perception. This immersive space comprised a hand-painted gradient resembling a sunset on the walls, pink lighting gels[1] on the windows, 2.5 tonnes of salt crystals covering the floor, and a low-frequency audio component (Figure 45).

1 Lee Filter lighting gels are photography-grade colour tinted transparent film traditionally used in stage lighting.

Figure 45. Rob Kettels, *Mineral Rites*, 2021. Salt, lighting gels, paint and audio. FAC, Perth. Photo: Rob Kettels.

The attempt to replicate a landscape as a diorama embraces a degree of artificiality, a concept I explored in Chapter 1, and I sought to amplify this artifice within the confines of an art gallery. My approach aimed to produce a playful yet unsettling encounter, attempting to capture the essence of a cultural dissonance I experienced prior to creating *Mineral Rites*. This experience occurred during a six-day trek across Wilkinkarra / Lake Mackay, an ephemeral salt lake on Pintupi country (Australia's fourth largest lake). While the details of this trek are detailed in Chapter 2, the following anecdote reveals the specific circumstances of the encounter that cultivated the idea for *Mineral Rites*. This provides context for the artistic choices made in the installation, particularly in terms of how I attempted to translate a personal, expansive experience into a confined, artificial space while maintaining its emotional and cultural resonance.

*

Avian Encounter

As the sun was dipping below the horizon at the end of another day's trek across the vast salt desert, I established camp and embarked on creating a short time-lapse video of myself silhouetted against a vivid sunset (Figure 46). My 4WD, left at the lake's edge, was now a three-day walk behind me. The extreme remoteness of the location was underscored by the fact that from there it was a further 100 km drive along a rugged 4WD track to reach Kiwirrkurra, Australia's most isolated community (Ngaanyatjarra 2024). During this admittedly self-indulgent act of capturing myself on video, I was startled by a Whiskered Tern (Chlidonias hybrida) alighting on my nearby bag—a significant event given the bird was the only obvious sign of life[2] I had encountered on the lake aside from the relentless flies.

Figure 46. This sunset and an out-of-frame tern inspired *Mineral Rites*. Photo: Rob Kettels.

2 The only macrofauna I saw (to be expanded on later in this chapter).

Juxtaposed against the vast landscape and under the tern's seemingly curious gaze, the act of capturing a 'selfie' felt absurd, serving as an unexpected mirror that reflected back the peculiarity of my behaviour when stripped of its usual societal context. This realisation was particularly striking when contrasted against what I perceived, perhaps romantically, as the bird's unaffected state. The stark contrast between my technologically-mediated behaviour and the tern's seemingly unfettered existence in this remote landscape prompted a critical examination of the artifices of modern life. This fleeting moment—the interplay of the setting sun, the sheer remoteness, the seemingly boundless expanse, and the cringeworthy encounter with the tern—crystallised into the essence I sought to capture in *Mineral Rites*.

*

The encounter with the tern on Wilkinkarra / Lake Mackay became a potent analogy for exploring certain assumptions inherent in the Western environmental gaze, particularly the perception of passivity in nonliving matter. This field experience—central to my artistic methodology—prompted a critical examination of the ontological divide between *geos* and *bios*, a concept explored by Elizabeth A. Povinelli (2016) in her work on geontologies. The juxtaposition of the tern set against the seemingly inert mineral expanse of the lake served as a metaphor for the broader Western tendency to separate the organic from the inorganic, often assigning agency only to the former. The installation thus emerged as a space to interrogate these assumptions, foreshadowing the engagement with philosopher Manuel DeLanda's (1992) concept of 'nonorganic life' and inviting a reconsideration of agency in mineral landscapes.

Nonorganic Life

Mineral Rites serves as an artistic investigation into the concept of passivity, one of the four perspectives I use to critique the Western environmental gaze. By filling the gallery space with salt, I aimed to spotlight the common (mis)conception of minerals as passive (Figures 47 to 49). This approach questions the hierarchical division between living and nonliving entities that often characterises Western thought (Povinelli 2016). While the installation primarily offered viewers a sensory experience, it provided me with a space to reconsider assumptions about the agency and vitality of the inorganic. Through the use of salt as a primary medium, the work encourages a reframing of the environmental gaze, blurring the lines between active and passive, living and nonliving.

Figure 47. Large salt crystals (detail) in situ in *Mineral Rites*, 2019, FAC. Photo: Rob Kettels.

Figure 48. Installation documentation, spreading out the salt crystals for *Mineral Rites*, 2021, FAC. Photo: Rob Kettels and Maxxi May.

Figure 49. The salt crystals enhancing the optical effects in *Mineral Rites,* 2021, FAC. Photo. Rob Kettels.

Incorporating the salt crystals into my work became a tangible means to contemplate DeLanda's speculative concept of nonorganic life. Influenced by the ideas of philosophers Deleuze and Guattari in *A Thousand Plateaus: Capitalism and Schizophrenia* (1987), DeLanda challenges the traditional boundaries between life and nonlife, suggesting that lifelike processes can emerge in various forms and materials, not limited to organic matter. For instance, he claims, "self-organising processes drive the geological cycle" (1992, 142); one example is the birth and erosion of mountains *ad infinitum*. When viewed through the paradigm of expanded assemblages, and non-linear processes, even seemingly inanimate objects like salt crystals can appear animate. DeLanda speaks about rocks and the lithosphere as follows:

> A rock may seem to us the archetypal example of permanence and stability, but when one takes the long view, even rocks flow: their atoms migrate along grain borders (self-diffusion), dislocation boundaries within grains move, cracks and fissures propagate. In this sense, the flow of rocks is very viscous; they constantly change, but at extremely slow speeds. (1992, 143)

DeLanda's nonorganic life theory resonates with *Mineral Rites*. The regeneration of salt crystals on Lake Deborah—the source of the salt—mirrors his assertions, affirming the growth phenomenon inherent in crystals. This embrace of a broader definition of life, which encompasses self-organising processes in the lithosphere and beyond, challenges anthropocentric and biocentric perspectives. Even rock, the epitome of permanence, reveals itself as viscous, with shifting atoms and evolving forms that occur across dizzying scales of deep geological time.

Approach

The approach of transforming field-based observations into artworks is integral to my artistic practice. It unites lived experience with artistic creation, enabling the work to develop new meanings within the context of its presentation. Therefore, *Mineral Rites* was presented to the audience as a distinct experiential artwork, without the subtext of the avian encounter. The installation functions as an accessible entry point for audiences of all ages and art historical backgrounds, blending intrigue with visual allure. Viewers are drawn into the colour and the overall aesthetic experience of the space. Set within the neo-Gothic architecture of FAC, visitors directly engaged with the installation's visual, auditory, and spatial elements, experiencing the work as an immersive environment in itself, rather than a didactic representation of a salt lake.

Artist Olafur Eliasson (2014) observes that artists cannot control how their work is ultimately interpreted; he says artists "give the vision of expression to somebody else," acknowledging the inherent subjectivity of audience experience. The installation's alluring hyper-saturated colours and uncanny atmosphere resonated strongly with audiences, who enthusiastically documented their experiences through self-portraits within the space. For a six-week period, *Mineral Rites* became a popular backdrop for social media content, particularly on Instagram, inadvertently but poignantly bringing the 'selfie' experience on Wilkinkarra / Lake Mackay full circle (Figure 50).

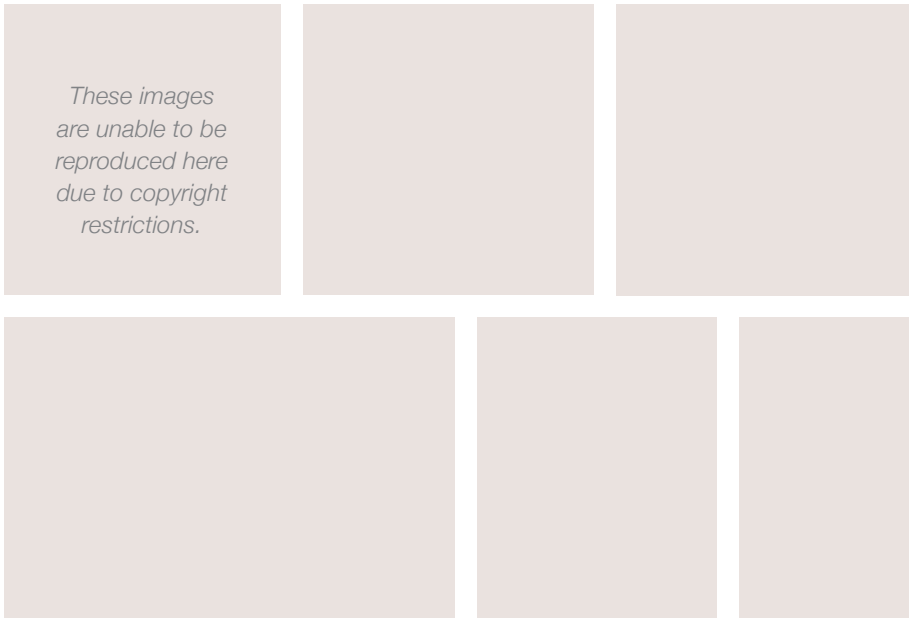

Figure 50. A selection of social media images that *Mineral Rites* was tagged in during the exhibition period showing genuine expressions of the sublime. Credit from left to right: #possumsugarhoneyslaybear, #cosmic_ostrich, #fremantleartscentre, #fox_sea, #sianboucherd.

Figure 51. Mineral Rites as an impromptu set for a music video. Photo: Rob Kettels.

Due to its ambiance *Mineral Rites* also became an impromptu set for a music video by Felicity Groom (Figure 51). Interestingly, many of the accompanying comments indicated that visitors perceived the experience of *Mineral Rites'* immersive environment as genuinely awe-inspiring rather than a pastiche of natural sublimity. This suggests that the work's evocation of my experience of the lake succeeded, with the installation taking on its own authentic and aesthetic expression, distinct from my original inspiration in the field.

Clarifying the Title

In selecting the title "Mineral Rites," I intentionally chose "Rites" over "Rights," creating a multi-layered wordplay that serves several purposes. The use of "Rites" establishes an allegorical link between minerals and spiritual or ritual practices, suggesting a deeper, perhaps sacred, relationship with the inorganic. This title challenges the common notion that minerals are inert and therefore a mere resource to be exploited; instead, it imbues them with a sense of cultural significance. The homophonic relationship between "Rights" and "Rites" creates a subtle implication that minerals might possess rights, questioning the established relationship with the inorganic. This deliberate wordplay aligns with the installation's broader themes of challenging established environmental aesthetics and perceptions.

Translation (Materials)

Translating the essence of a setting sun, an awkward encounter with a tern, and the expansive space of a lake presented a creative challenge. I chose to address this through a focused material palette of paint, salt, lighting gels, and audio, each element carefully pared back to evoke the multisensory experience of that moment. To help convey this sense of space, I researched principles derived from diorama scholar Karen Wonders' PhD dissertation (1993). Her research, which documented the meticulous colour-mixing and testing processes of habitat diorama painters, informed my approach to creating depth and atmosphere through a convincing optical illusion.

James Wilson, a revered painter known for diorama backgrounds, described his approach as "Art celandri artemisia," or the use of art to conceal art (Wonders 1993, 212). In a similar vein, the apparent simplicity of my gradient was designed to transport the audience into another realm. The process of creating a gradient that would generate the greatest sense of depth began with sketchbook iterations (Figure 52), which were focused on refining the tint and gradation of the two colours to achieve a balanced mid-tone.

The gradient transitioned from blue-grey to pink, with the most effective mid-tone being a mauvy-grey, which balanced the two extremes. The intention was for the audience to experience the space without noticing the technical aspects of the painted walls, merging art with the illusion and experience of depth (Figure 53).

Figure 52. Perfecting the gradient in sketchbook iterations. Photos: Rob Kettels.

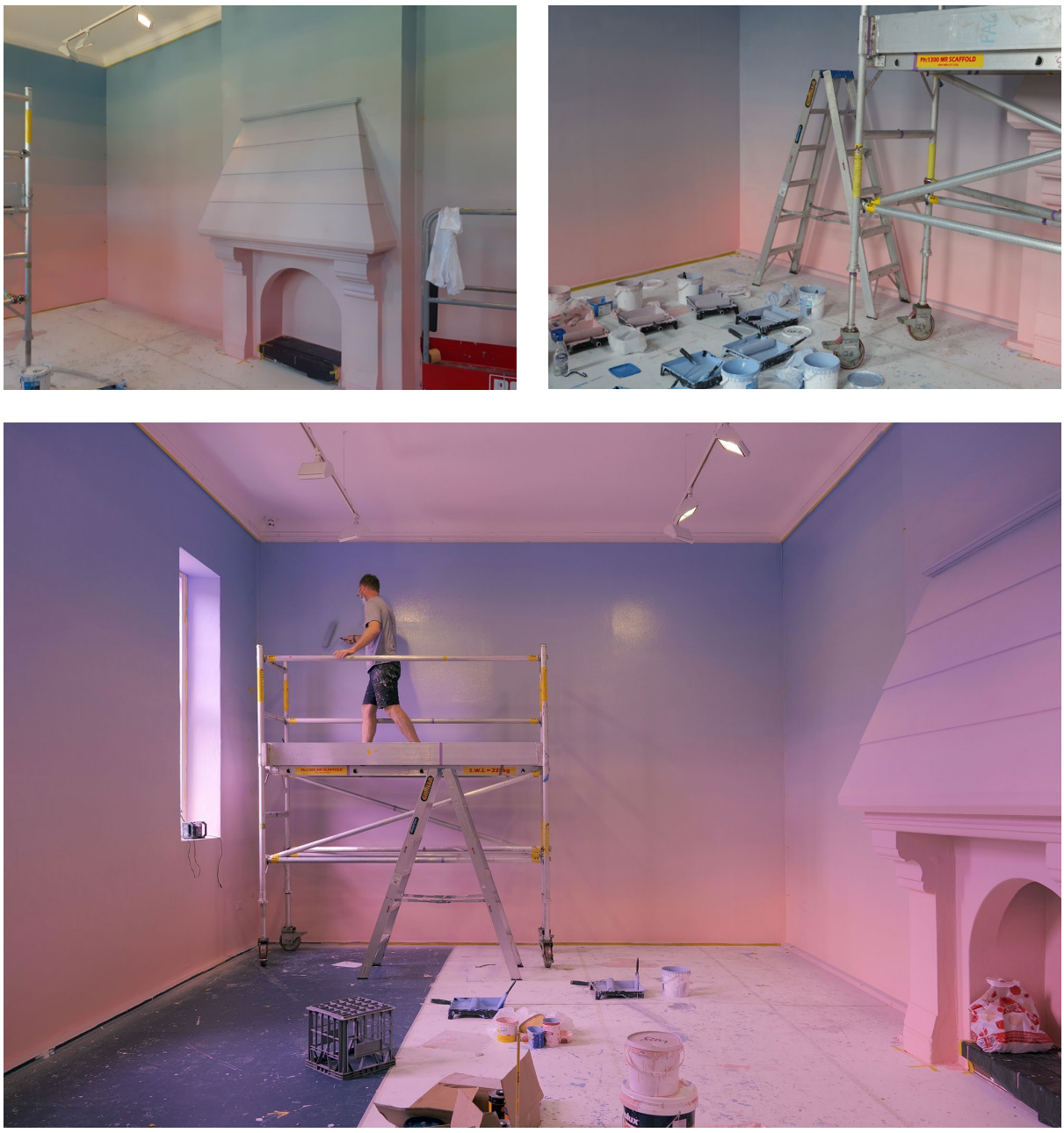

Figure 53. Creating the gradient for *Mineral Rites*: Walls were divided into sections using a laser level, and paint mixed in 14 colour steps. Hot weather thinner extended the drying time, allowing for smoother blending with rollers. Photos: Rob Kettels and Jacobus Capone.

The work of social thinker and champion of Romanticism John Ruskin has been an important touchstone in the development of this research project. Ruskin's advocacy for Romanticism and the Gothic, as well as his articulation of the aesthetic experience of the sublime, provide a valuable historical framework. As explored in Chapter 2, the concept of the sublime not only applied to mountains but also extended to desert landscapes (Haynes 2000, 71).

The colour tones of *Mineral Rites* evoke the colour palette of Romantic sublime skyscapes. In *Modern Painters: Volume 1 (of 5)* ([1860] 2010), Ruskin writes, "the serenity, space, and sublimity naturally inherent in blue and pink…the heated sky is broken with gray…there is not a grain of pure blue; all is subdued and warmed at the same time by the mingling gray" (534). The mauvy-grey of my sunset embodies this Ruskin-esque sublime skyscape, and pays homage to the meticulous colour work of the diorama painters (Figures 54 to 56).

Figure 54. The skyscape of the Alaskan Brown Bear habitat diorama at AMNH with Ruskin-esque sensibilities. Photo: Deanna Wilson and Rob Kettels.

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Figure 55. Belmore Brown painting background for Alaskan Brown Bear Group, May 1941. Photo: Charles H. Coles. (AMNH 2024).

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Figure 56. Belmore Brown painting sky for Alaskan Brown Bear Group, 1941. Photo: Charles H. Coles. (AMNH 2024).

To further enhance the optical illusion of space, I covered the glass in the three bay windows with pink Lee Filter lighting gels. These gels modified the colour temperature of the sunlight entering the space, transforming the room's ambience to a rose hue. This altered the perception of the gradient, making it appear more saturated than its actual subdued mauvy-grey mid-tone, while further imparting a three-dimensional quality to the space (Figures 57 and 58). The gradient's effect of depth was amplified by the luminescent glow of 2.5 tonnes salt crystals on the floor, which captured and reflected light throughout the space. The crystals' substantial size and whiteness enhanced the optical effects created by the gradient and lighting gels (Figure 59). Furthermore, the use of salt as a primary element in *Mineral Rites* was a way for me to explore the notion of minerals as passive, and to invite viewers to reconsider the agency of the crystalline.

Figure 57. Magenta Lee Filter lighting gels on the windows in Doongorok / Gallery 3, FAC, creating an immersive colour environment. Photo: Rob Kettels.

Figure 58. Lighting gels on the windows adding to the sense of depth in Doongorok / Gallery 3, FAC. Photo: Rob Kettels.

Figure 59. Luminescent salt crystals reflecting the coloured light in Doongorok / Gallery 3, FAC. Photo: Rob Kettels.

Aesthetic Tensions

The unsettling aesthetic tension I created in the space, balanced between allure and unease, speaks to settler colonial imaginings of the desert. Interdisciplinary scholar Roslynn Haynes observes that "the desert—simultaneously alluring and repellent—has a hypnotic presence in Australian culture" (1998, i). As established in Chapter 2, settler colonial artists have contributed to and perpetuated this mythology and iconography of the interior. This uncanny interplay was further enhanced by the architectural context of the installation. Built in the 1860s, the neo-Gothic architecture of the FAC was integral to the concept and execution of *Mineral Rites*. Gallery 3, now known as Doongorok, is distinguished by its neo-Gothic chimney and three large bay windows (Figure 60).

The origins of Australia's Gothic sensibilities can be traced back to traditional European Gothic traditions, particularly Ruskin's conception of Gothic architecture as deliberated in *The Stones of Venice, Vol. 2* [1851] (1904) (Turcotte 1991, xv; Wolff 2019, 193). This Gothic framework has been applied to the Australian landscape, evolving into a unique Australian Gothic that often depicts the desert as terrifying in its seemingly endless expanse (Turcotte 1991; Wolff 2019).

As Turcotte notes, "The Antipodes was a world of reversals, the dark subconscious of Britain. It was, for all intents and purposes, Gothic *par excellence*" (1998, 1). This Australian Gothic, expanded on in Chapter 2, is intertwined with the weight of colonial history and often appears as a trope in artistic representations of Australia's desert interior (Haynes 1998, 185). Haynes elaborates on this connection:

> The arbitrary terrors of the Gothic are given physical form in the violent and unpredictable sandstorms that can obliterate all geographical markers in a few minutes; the apparitions of ghostly forms is parodied in the phenomenon of the mirage, while a more subtle sense of the supernatural is supplied by the eeriness, silence and loneliness experienced in the desert. (1998, 184)

Figure 60. Neo-Gothic chimney (ca. 1860s) in Doongorok / Gallery 3, FAC. Photo: Rob Kettels.

The auditory component of *Mineral Rites* also references the Australian Gothic tradition. Film scholar Johnny Milner (2013) explores how soundtracks convey the 'gothic' in Outback cinema. In his analysis of *The Proposition* (2005), Milner notes that musicians Nick Cave and Warren Ellis use "deep ominous drones…[that] engage with folk imaginings and colonial subject-matter" (2013, 99). The soundtrack in *Mineral Rites* uses an archival recording of 'singing sand dunes'—a reference to my experience in Karlamilyi's dune country, as discussed in Chapter 2. This recording, played through a subwoofer hidden in the chimney, provides a deep, almost subliminal drone that permeated the space, creating an eerie atmosphere that contrasted with the saccharine aesthetic of pink paint, magenta lighting gels, and glistening salt crystals. The absence of objects in the space highlighted the auditory elements, with crunching salt underfoot producing a resonating sound. These sonic elements drew attention to the viewers' presence within the artwork, transforming them from passive observers to integral components of the experience.

Riverbed

Riverbed (2014) stands as a noteworthy art installation created by the artist Olafur Eliasson. The work was exhibited at the Louisiana Museum of Modern Art in Denmark and it influenced my approach to *Mineral Rites*. *Riverbed* is made up of over 160 tonnes of sand, small river pebbles, and larger basalt rocks. A stream was created by pumping water through a hidden system of pipes. The water is constantly circulating, creating a sense of movement and change. *Riverbed* provides valuable insights into how the public perceives the transformation of a gallery space into something unexpected. Moreover, it draws parallels with natural history dioramas and representations of the inorganic.

In essence, *Riverbed* creates a tension that oscillates between meditative contemplation and a scene reminiscent of a post-apocalyptic landscape. In this portrayal, the museum itself seems either engulfed in a landslide or reclaimed by nature. Eliasson's perspective on this installation is clear; he acknowledges that *Riverbed* is undeniably a simulated environment, prompting critical questions about the classification of what is natural and what is human-made (Eliasson 2014). *Riverbed* intentionally blurs those boundaries (Figure 61).

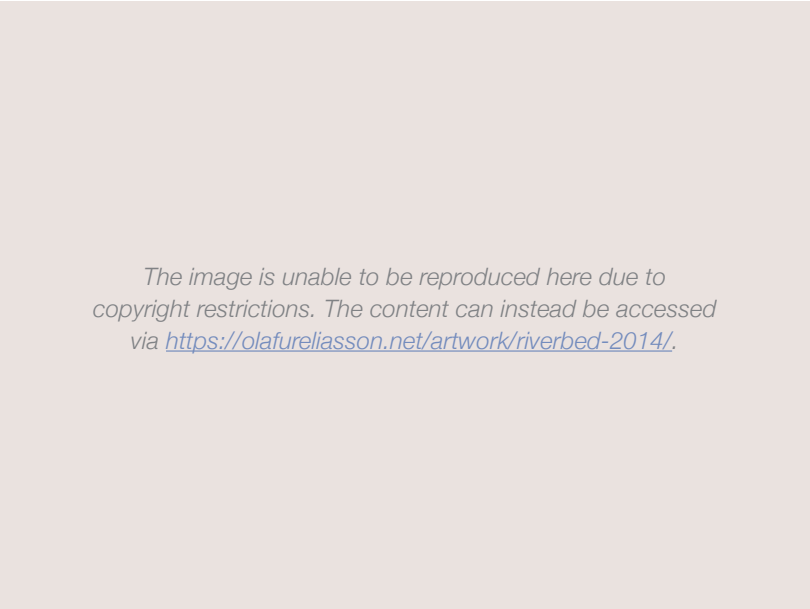

Figure 61. Olafur Eliasson, *Riverbed*, 2014. Louisiana Museum of Modern Art, Humlebæk, Denmark. Photo: Anders Sune Berg. (Eliasson 2023).

Crucially, Eliasson deliberately exposes the manufactured nature of this experience, aiming to "destabilise" (2014) the expectations of those who enter it. He states, "[the] discomfort lays in changing your models of contracting how you move with your ground" (Eliasson 2014). This strategy is not a commentary on the state of the environment per se, says Eliasson (2014), but, rather, an enquiry into the relationship between the audience, the artwork, and the museum in shaping the understanding of reality.

Mineral Rites deliberately disrupts the viewers' sensory engagement. The presence of crystalline properties underfoot encourages a heightened awareness of texture and sound, creating a tactile and auditory encounter that extends engagement beyond the purely visual. An immersive sunset gradient, reaching from floor to ceiling, combined with a diffused pink lighting effect from gels on the windows, disorients the viewers' ability to rely on depth perception and traditional visual cues. The absence of a solid floor, replaced by a covering of salt, further challenges spatial perception, inviting a more synaesthetic experience.

This creates a sense of uncertainty and encourages exploration, prompting viewers to actively navigate the space. The absence of sound from the outside and the synthesised soundscapes in *Mineral Rites* stemming from the salt underfoot and low frequency drone of the soundtrack amplify the audience's awareness of their own movement. This aural ambiguity draws attention to the sensory experience of space and encouraged viewers to move through the space, their bodies becoming integral to the artwork. The act of navigating the uneven terrain or encountering unexpected sensory stimuli triggers embodied responses, blurring the lines between observer and participant. The crunching of salt underfoot not only creates an immersive experience but also highlights the active role of supposedly 'passive' minerals in shaping the viewer's engagement with the space.

What I draw from *Riverbed* is how the audience collaboratively shapes the work through their presence within the space. Eliasson (2014) aptly articulates this sentiment when he states, "you can encounter my artworks from the perspective of someone with a solid art-historical background, or you can simply walk into the exhibition without knowing anything about my work—and still feel spoken to." For scholar Mette Thobo-Carlsen, *Riverbed* is "staged as a three-dimensional environment, an immersive structure, that surrounds the visitors and moves the visitors in various ways." She contends, "The exhibition thereby encourages the visitors to unlearn the normative ways of communication and learning in museums" (Thobo-Carlsen 2016, 141). Exploring *Mineral Rites* by walking through it offers visitors an opportunity to physically experience a tactile and emotive engagement with the exhibit's space.

Agras Vulcano Mineral Rights

Lara Almarcegui's *Agras Vulcano Mineral Rights* (2019) and *Mineral Rites* converge not only in name but also in their approach to the Smithson-esque practice of placing minerals on the gallery floor, a lasting homage to his *Nonsite* works (1968–1971). Almarcegui's work, displayed at the Institut Valencià d'Art Modern (IVAM) in Spain, stemmed from geological investigations focusing on the Agras volcano (Figure 62). Almarcegui's art practice revolves around acquiring the mineral and mining rights for diverse sites throughout Europe. Through this process, she illuminates how landscapes are governed and commodified by economic and political interests. Her aim is to raise public awareness regarding the existence of these mineral resources and to discourage their exploitation, while challenging conventional notions of land use and value. Almarcegui assembled pozzolanic ash into a substantial pile that spanned the entire floor of IVAM's main gallery (Romakin 2021, 79).

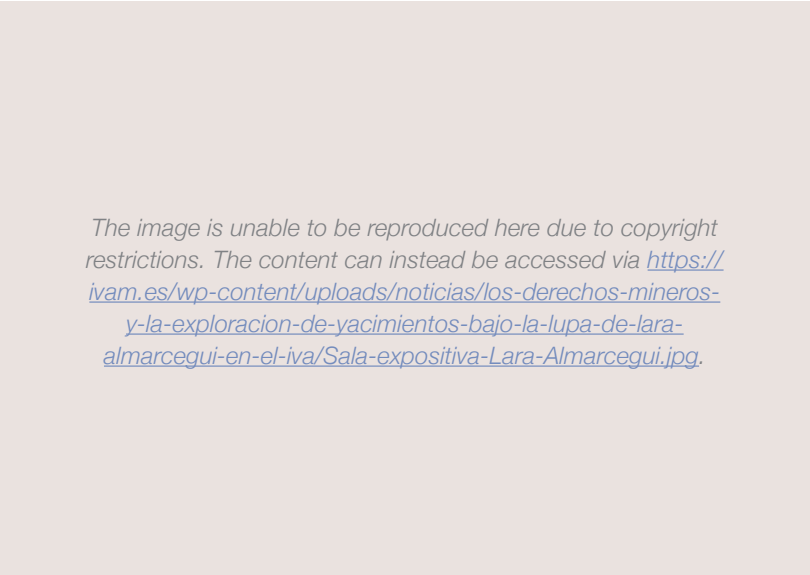

Figure 62. Lara Almarcegui, *Agras Vulcano Mineral Rights* (installation view), 2019. Pozzolanic ash. Photo: Juan García Rosell. (IVAM 2023).

Almarcegui's concept of applying for such leases without any intention of mining the sites serves as a subversion of the typical extraction activities that occur throughout the duration of the lease. This approach aligns with the ethos of the New Mineral Collective (NMC), an art collaboration based in Tromsø, Norway, consisting of Tanya Busse and Emilija Škarnulytė, humorously self-described as the "least productive mining company in the world" (NMC 2024). They state, "NMC infiltrates the extractive industry with alternative forces such as desire, body mining and acts of counter prospecting" (NMC 2024). Moreover, they add a layer of satire and commentary to the ongoing discussions regarding the Anthropocene thesis, shedding light on the paradoxes and complexities inherent in critiquing resource exploitation.

By engaging with these themes and approaches, my practice positions itself within contemporary dialogues about environmental art, viewer participation, and the role of galleries in shaping the understanding of nature and culture. My work builds on and contributes to ongoing artistic explorations of human-nature relationships, geological time, and the sensory experience of landscape.

It is worth noting that the salt I used in *Mineral Rites* involved a level of extraction; however, they were sustainably sourced from Lake Deborah (WA Salt 2024). During winter, rain dissolves a portion of the lake's crust, bringing brine to the surface. Then, the summer sun takes over and evaporates the brine, leading to the formation of fresh salt crystals on the lake's surface (Salama, et al. 1992, 587). This occurs annually in what Salama et al. say

is a “continuous process of salt recycling” (1992, 577). After the exhibition, I endeavoured to dispose of the salt responsibly. A portion was returned to WA Salt for reuse, while the remainder, which could not be recycled due to contamination, was disposed of in landfill in accordance with local regulations. This highlights the challenge of critiquing a system in which I am intrinsically embedded. At the same time, however, I recognise that avoiding materials derived from extractivism within my sculptural practice would impose substantial limitations on creative possibilities. These tensions are further addressed in Chapter 4.

Returning to the provocation for *Mineral Rites* and the encounter with the tern on Wilkinkarra / Lake Mackay, the tern was strictly speaking not the only life I saw; rather, it was the only macrofauna I observed. The lake itself teemed with less visible forms of life. The surface of the lake was covered in a grey algae that has a symbiotic relationship with a salt-dependent bacterium classified as a halophile (Stan-Lotter 2011, 437-441) (Figure 63). Below the surface, there were also macroinvertebrates and brine shrimp (Moulds 2018).

Figure 63. Surface of the Wilkinkarra / Lake Mackay showing grey algae. Photo: Rob Kettels.

This realisation highlights the complexity of life forms even in a seemingly barren landscape, echoing anthropologist Elizabeth A. Povinelli's Desert figure and her notion of the technological fix, as explored in Chapter 1. It deepens the analogy drawn from the field encounter, challenging simplistic perceptions of mineral landscapes as lifeless expanses. The contrast between the visible tern and the hidden microbial life forms parallels with the cultural dissonance I experienced, which became a catalyst for creating the uncanny atmosphere in *Mineral Rites*. By exaggerating this binary in the gallery setting, the installation tapped into the Gothic notion of the "unfamiliar landscape" (Turcotte 1991, 59). This approach allowed me to translate the sense of displacement I felt on the lake into an artistic experience that explored perceptions of nonorganic life, space, and sensory perception. By reimagining the salt lake experience within a gallery setting, *Mineral Rites* aimed to interrupt the ubiquity of the Western environmental gaze, particularly the assumption of passivity in inorganic matter, proposing a more nuanced perspective that considers the potential agency of minerals beyond anthropocentric definitions.

CONCLUSION

Mineral Rites weaves together my personal experience, theoretical underpinnings, and the installation's impact on viewers. This chapter has delved into the artistic journey that gave rise to this installation, tracing how a personal encounter with a bird on a remote salt lake transformed into a multi-layered artwork designed to disrupt audience sensory expectations. The narrative has unfolded alongside the artistic choices, from the colours in the gradient to the use of an unsettling soundtrack, each element carefully crafted to create a disorienting yet immersive experience. By reimagining the salt lake experience within a neo-Gothic gallery setting, the work creates a liminal space that evokes Gothic sensibilities while simultaneously challenging perceptions of minerals as passive. Drawing on concepts of nonorganic life, the installation invites viewers to reconsider the agency and vitality of inorganic matter. Through this multifaceted approach, *Mineral Rites* not only serves as a platform for critical reflection on the assumptions inherent in the Western environmental gaze, but also exemplifies my artistic methodology of transforming field-based observations into immersive installations that challenge established perceptions and invite nuanced ways of engaging with the environment.

CHAPTER 4: PARADOX OF DEEP TIME — JACK HILLS FIELD TRIPS

INTRODUCTION

Located in Wajarri Yamaji country, the Jack Hills stand as an enduring testament to Earth's ancient history, with ancient zircon crystals interbedded into the metaconglomerate[1] rocks. This site served as the setting for three artistic field trips, extending the geological and temporal themes explored in previous chapters. Building upon that foundation, this chapter explores a series of site-responsive artworks made in the presence of globally significant rocks. While my initial approach to the site was shaped by specific artistic aims, particularly the idea of subverting notions of mastery and control, I had not anticipated the distinct character and agency of the site itself. My perspective of the artworks underwent a transformation as they unfolded. This fostered a renewed relational engagement with the surrounding nonhuman entities and temporalities, prompting insights that reshaped my understanding of both the methodology and the artworks.

PARADOX OF DEEP TIME — JACK HILLS FIELD TRIPS

This chapter explores the intent and implications arising from site-responsive artworks in the Jack Hills and their subsequent display in the exhibition *Timestamp* (2021) at Goolugatup Heathcote Gallery in Perth. Central to these works is an endurance performance where I stood before extraordinarily ancient rocks for 24 hours (Figure 64), documented in a time-lapse video (see https://youtu.be/wMNe7jsJFys; best viewed at 1080 resolution). The project also included ephemeral assemblages[2] constructed in situ using exploration geology supplies. Finally, among the photographs taken on Erawondoo Hill was an image that was exhibited in *Timestamp* that captures the rock outcrop known as 'W74,' or the 'discovery site' (Spaggiari, Pidgeon, and Wilde 2007), which is the source of the Earth's oldest terrestrial matter on record.

1 Metaconglomerate is metamorphosed sedimentary rock composed of pebbles cemented together. In the Jack Hills, these pebbles contain ancient zircon crystals. Zircons are durable minerals that can survive geological processes, preserving information about Earth's early history.

2 Assemblage refers to sculpture or installation created by arranging found objects. These items, often everyday materials, are combined to form a new artistic whole, conveying meaning beyond their individual significance.

Figure 64. Durational performance where I stood in place near Erawondoo Hill for a single rotation of the Earth—or, twenty-four hours. Photo: Rob Kettels and Larissa Lösch.

Geography of the Jack Hills

Spanning 90 kilometres across Beringarra Station, the Jack Hills consists of steep scarps and rocky hills rising above a desert plain. Notably, Erawondoo Hill, a seemingly unremarkable plateau within the Jack Hills, is renowned in geology for being the largest repository of the oldest known terrestrial matter on record (Cavosie, Valley, and Wilde 2019; Spaggiari, Pidgeon, and Wilde 2007). Zircon crystals interbedded within 'younger' metasedimentary rocks can reach over 4 billion years to the Hadean eon[3], with the oldest substantiated date of 4.382 billion years (Cavosie, Valley, and Wilde 2019).

3 The Hadean eon (4.56 to 4.0 billion years ago) derived its name from Hades, the Ancient Greek underworld. The term 'Hades' can signify the name of the god ruling the underworld and also the name of the realm itself.

My approach to the field trips was grounded in respect for the site's geological and cultural significance[4]. The Wajarri Yamaji hold Native Title over 83,943 square kilometres (NNTT 2023), including the Jack Hills. A significant archaeological site in Wajarri Yamaji Country provides evidence of long-term human presence in the region, yielding radiometric dates of 33,000 years (Winton et al. 2016), reflecting the Wajarri Yamaji people's connection to Country that continues today. The ethical and legal framework governing the Erawondoo Hill heritage site prohibits the removal of any materials. Throughout the field trips I was careful not to create any site-responsive artworks inside the National Heritage List area, resulting in an exhibition that relies on documentation and representation rather than physical samples from Erawondoo Hill.

Situating Time

Central to the Jack Hills field trips was the challenge of fathoming deep time, which was preserved in the ancient zircons. In *Time's Arrow, Time's Cycle: Myth and Metaphor in the Discovery of Geological Time*, paleontologist Stephen Jay Gould (2001, 3) asserts that "deep time is so alien that we can really only comprehend it as metaphor." He argues that these metaphors are inevitably inscribed with Western epistemological traditions. Gould's message underscores how the meaning of deep time only gains clarity when the enduring metaphors themselves are recognised as having been shaped by European scientific and theological discourse across centuries[5]. The artworks at the Jack Hills engage with both the metaphorical nature of deep time and its tangible presence in the ancient rocks themselves.

While Gould emphasises that deep time is comprehensible only through metaphor, this concept is scientifically measurable, and the zircons of the Jack Hills serve as a prime example. These ancient minerals, often significantly older than their host rocks, provide crucial data for understanding Earth's geological history. To accurately determine their age, geochronologists or physicists employ the Sensitive High-Resolution Ion Microprobe (SHRIMP), a sophisticated

4 For the field trips, I secured necessary approvals from the Wajarri Yamaji Aboriginal Corporation and have completed the Wajarri Yamaji Cultural Awareness training course. Separately, I obtained permission from Beringarra Station to camp on the pastoral lease. Additionally, I hold a Miner's Right issued by the Department of Mines, Industry Regulation and Safety, granting the legal authorisation to camp on pastoral leases in Western Australia.

5 Gould examines the works of key figures in the evolution of British geology like Thomas Burnet, James Hutton, and Charles Lyell, who wrestled with fundamental enigmas such as direction and immanence in their attempts to comprehend geological time. Their respective theories—Burnet's catastrophic vision, Hutton's cyclical model, and Lyell's uniformitarianism—exemplify how different cultural worldviews shaped the metaphors used to conceptualise geological time.

mass spectrometer[6] (Figure 65). The process of separating the zircon grains from the rock is done in a geoscience laboratory by carefully crushing sample rocks; this process will be discussed later in this chapter with reference to Nicholas Mangan's artwork *A World Undone* (2012). The zircons grains are usually less than the width of a human hair. This technology utilises uranium-thorium-lead geochronology, which is based on the principle that

> a newly-formed zircon incorporates uranium and thorium atoms into its crystal structure but contains no lead...since the exact rate at which uranium decays into lead is known, the current ratio of lead to uranium in a sample of the zircon can be used to reliably determine its age. (Boltwood 1907, as quoted by Newman 1977, 12)

Thus, while deep time eludes intuitive understanding, scientific tools enable its quantification.

Figure 65. Visiting Curtin University's SHRIMP at the John de Laeter Research Centre. Photo: Rob Kettels.

When considering First Nations peoples' traditional understandings of time, the concept of 'everywhen' offers rich insights. In W. E. H. Stanner's book *White Man Got No Dreaming* ([1953] 1979), he states, "One cannot 'fix' The Dreaming in time: it was, and is, everywhen" (24). Stanner elaborates that everywhen encapsulates "things that once happened; a kind of charter of things that still happen; and a kind of *logos* or principle of order transcending everything significant for Aboriginal [people]" ([1953] 1979, 24). He asserts that The Dreaming encompasses various dimensions within itself, making it a challenge to subject to Western modes of understanding. For example, Western conceptions of time are often perceived as abstract, detached from the material world, and inherently non-repeatable (Gould 2001).

6 The SHRIMP precisely measures the age of various minerals, including the zircons from the Jack Hills, through high-resolution isotopic and trace element microanalysis (Curtin University 2023).

Conversely, the concept of everywhen envelops and coexists with the material realm, suggesting the persistence of the past and the future within the present moment (Stanner [1953] 1979, 24)—a perspective in which the notion of deep time becomes irrelevant.

Anthropologist Deborah Bird Rose calls practices of "discontinuity and continuity...Whitefella cultural constructions of time" (2004, 14) affirming that the notion of deep time in the linear sense is not universal. This became vividly apparent while I was standing atop Erawondoo Hill where a stark contrast emerged: I was existing in the present moment (potentially approaching the end of the Holocene) while the rocks beneath my feet encapsulated crystal fragments dating back to the Hadean.

After watching New York-based artist Sarah Cameron Sunde's work *36.5 / A Durational Performance with the Sea* (2013–2022), I considered how an endurance or durational performance approach might play out at the Jack Hills site. Sunde stands in tidal bays for a full tidal cycle, as water engulfs her body and then reveals it again. Eco-critic Una Chaudhuri (2020) says, "The surface simplicity of the work belies the complexity of its theoretical, aesthetic, and political potential." Sunde's work poetically and elegantly brings a heightened awareness to water, particularly the broader allegory of rising sea levels (Figure 66). Similar to her work, the setting for my endurance performance was immersed in the grandeur of sublime nature. Yet, unlike Sunde's dynamic scenery, mine was marked by stillness and hidden vastness.

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Figure 66. Sarah Cameron Sunde, *36.5 / A Durational Performance with the Sea*, 2019. Bay of All Saints, Brazil. Photo: Juh Almeida. (Sunde 2023).

ARTWORKS IN DIALOGUE WITH DEEP TIME

Endurance Performance

This section aims to capture the implications arising from my site-responsive endurance performance, which involved standing before ancient rocks in the Jack Hills for a full rotation of Earth. Standing still for 24 hours is surprisingly arduous and I relied on all my experience as a climber and former endurance athlete to fulfil the challenge (Figure 67).

Figure 67. Still images taken during a twenty-four-hour durational performance and time-lapse video overlooking the Jack Hills, Wajarri Yamaji Country, Western Australia in 2020. Photos: Rob Kettels and Larissa Lösch.

On arrival in the Jack Hills, I set up camp two kilometres south-west of Erawondoo Hill, adhering to the parameters defined by the National Heritage List boundary. Although I was not on Erawondoo Hill, some of the rocks in this location were metaconglomerate known to hold ancient zircons. I was assisted by Larissa Lösch, who supported me from a camp 70 metres down a rocky slope. Throughout the 24-hour duration I had the sense I was on a quest akin to what anthropologist Jill Dubisch would consider "a secular pilgrimage" (2004, 131). Before leaving home, I had a photo of a zircon crystal screen-printed onto a t-shirt to wear during the event. Yet this was no ordinary crystal—it was a reproduction of the oldest terrestrial matter found on Earth by geologists (Figures 68 and 69). The t-shirt thus became a symbolic artefact for the journey ahead.

Figure 68. Wearing the zircon t-shirt at W74, Erawondoo Hill, Jack Hills in Wajarri Yamaji country, Western Australia. Photo: Rob Kettels and Larissa Lösch.

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Figure 69. The Hadean Eon zircon crystal found in metaconglomerate rocks at W74 and dated to be 4.382 billion years old (Cavosie, Valley, and Wilde 2019, 263).

I am not alone in considering the Jack Hills a site for pilgrimage. For many geologists and astrobiologists who come from around the world, Erawondoo Hill is 'ground zero' for conducting research into the formation of early Earth. In Dubisch's framing of secular pilgrimage, the experience offers the possibility for transformation (2004, 120).

From my perspective, I had hoped I might be able to imagine deep time more clearly. Even if unrealistic and naïve, I thought perhaps I could catch a glimpse of time long before European settlement, before the arrival of First Nations peoples, before megafauna and dinosaurs, and even before the first microbial life. But try as I might, I could not mentally traverse any further back in time than when I started the 24-hour period.

Throughout the event, I needed to balance saving energy with maintaining just enough alertness to endure the 24-hour period. This equilibrium led me into an altered state—not one of meditation, but rather a kind of stupor. As I stood there, my mind and body slowed to a near-inertia. However, within this stupor, I experienced a profound awareness of my place within vast geological and cosmic scales. As my cognition ebbed, my physical senses became more attuned to the subtle changes in my surroundings. This synesthetic experience was accentuated due to the age of the surrounding geology, but also to exposure to the elements.

The 24-hour duration amidst the ancient rocks and zircons offered a profound sense of encounter with the legacy of deep time, and more recently, the discoveries of the geologists. While standing in stillness, the performance transitioned from an intended commentary on anthropocentrism to silent witnessing and cosmic absurdity. The vastness of geological time exposed the futility of my attempts to quantify, categorise, and fathom it. This shift arose from the sheer magnitude of the site's antiquity, prompting a reconsideration of the inherent limitations of Western cultural frameworks in comprehending the vastness of geological time and the complex narratives embedded within the land.

In *The Myth of Sisyphus and Other Essays* ([1955] 1991) philosopher Albert Camus' interpretation of the Greek myth of Sisyphus provides an existential lens for examining the dimensions of my vigil before primordial geology. In this myth, Sisyphus is condemned to eternally roll a boulder up a hill, only for it to roll back down, *ad infinitum*[7], in the underworld of Hades (the namesake of the Hadean eon, thus linking the Sisyphus myth and the Jack Hills zircons). Camus ([1955] 1991), through his exploration of absurdity, offers a crucial insight: subjective meaning can be derived from a seemingly futile endeavour through the acceptance of its inherent absurdity, and the conscious choice to find value in the act of persistent striving, despite the apparent lack of purpose.

This perspective suggests that, akin to Sisyphus finding meaning in his eternal task, there is inherent value in the ongoing effort to grapple with concepts that exceed human comprehension, even while acknowledging their ultimate inaccessibility. The value I gained from my seemingly futile attempt to fathom deep time emerged not from achieving this impossible goal, but from unexpected sensations and observations of nonhuman languages that arose during my prolonged stillness.

The experience of standing there for such a long period (for a human) brought about perceptions I usually overlook when mobile. The following poetic monologue is an abridged account of the audio track that accompanied the time-lapse video I exhibited in *Timestamp*. As daybreak neared, with the 24-hour duration nearly over, I tucked a cell-phone beneath my t-shirt and spontaneously recorded my experience. This recording was never intended for public dissemination or exhibition, thus preserving my unfiltered thoughts capturing the sentiments of the moment.

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7 In the pantheon of Greek myth, Sisyphus, king of Ephyra, stands alone for his cunning and audacity. Beloved by his people, he defied mortality twice by first tricking Thanatos (god of death) and later escaping from Hades, the underworld. However, Zeus, king of the gods, deemed such transgression intolerable. Thus, Sisyphus' punishment was as ingenious as his crimes. Condemned to eternal torment, he was forced to roll an immense boulder up a steep mountain. On reaching the summit, his triumph would be cruelly snatched away. With a thunderous crash, the boulder would tumble back down, consigning him to repeat the Sisyphean cycle in perpetuity.

*

After twenty-three-hours of standing here,
with one-hour to go,
all I am left with are the metaphors I imagine myself to be,
and at the moment they seem inadequate.

These metaphors are not really my own,
they are inscribed through the cultural time I live in,
but the correlations I make with them are my own,
and that is all I have right now.

I think about my mineralogical origins,
but the pain in my body reminds me I am not a rock.
I think about the land,
interconnected, severed, convergent, witnessing.

I slow my thinking down, I slow my breathing down,
but not in a fancy Zen way, more just vegging-out,
but I'm good at that (I laugh).

I look out across the Jack Hills, I can see small bluffs,
and Miniritchie trees dwarfed by the extremes of weather,
the scene is, by now, imprinted in my retina.

I stare back again to the rocks containing ancient zircons,
wondering whether I can ever engage them more meaningfully,
I hope for an epiphany to imagine geological time—
nothing comes.

But instead my mind makes shapes in the rocks,
the shapes are not scary but rather comical, cartoon-like in character,
the rocks become animate, they look ridiculous, I want to laugh at them.

Instead of feeling isolated or lonely,
the rocks make good company and I form a bond with them.
A centipede bites my ankle, the sun bakes my neck, I listen to the wind through the trees,
I wriggle my toes and sway side to side,
gosh, this is hard, but I've gone through tougher things before.

Observation retreats,
and the five senses merge.
I stare out onto the vast plain below,
and wonder if I will ever be able to understand space and time more meaningfully,
I try to recall Bergson and Deleuze,
but they are no help, standing here on the edge of time.

So, instead,
I watch the afternoon sun cast elongated shadows that creep slowly across the land,
as day turns to night and the celestial sky appears,
I follow a star on its journey towards the horizon before it silently slips below.

I think about my identity and matter,
regardless of how hard I try I cannot unify them,
but the pain in my body reminds me they are one.

I think about scientific time recorded in the zircons,
I think about First Nations time recorded in the land,
I think about my time recorded in memory.
I think about the atoms from the Big Bang present in my body,
part of me is as old as these zircons—
still nothing comes.

I look back at the scene, it looks exactly as it did when I started,
but the correlations I make have changed, instead of observing,
I now have formed a bond.

*

The poetic monologue traces an evolution in my perspective, moving from an observational stance to one of connection. It concludes without an epiphany, leaving room for continued reflection. Standing in one spot for 24 hours provided a unique opportunity—and a privilege—to be more attentive to scales beyond the human and witness a day in the life of zircon crystals billions of years old. Through the length and arduousness of the performance, pathways emerged, revealing a personal connection with the more-than-human through sensory and embodied language. Here, a different kind of value surfaced: the initial quest for grand meaning gave way to a quieter form of engagement with the surroundings.

In another durational performance, *By the Sea* (2004), Australian artist Todd McMillan stood overlooking the ocean for twelve-hours (Figure 70). McMillan's video work serves as a reconstruction of Caspar David Friedrich's painting *Monk by the Sea* (1808) in which a solitary figure is juxtaposed by a brooding ocean (Figure 71). Notably, during McMillan's first attempt, he needed resuscitation from exposure. However, on the second and successful attempt, McMillan says,

> there's a certain point in the film where you'll see cracks of lightning and it starts to pour down rain, I was freezing and crying, it was truly horrific, [my] pathetic-ness and trembling undercuts that notion of the macho and big idea. (MCA 2012)

While McMillan's approach to reenacting the aesthetics of the sublime and Friedrich's *Monk by the Sea* is sincere, my intent was characterised by the existential humour of embracing the absurd, a theme that runs through my site-responsive works, such as *Levitating Bushman*. Yet the reality of my experience was not funny. Instead, it was hard—and eventually surprisingly rewarding.

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Figure 70. Todd McMillan, *By the Sea*, 2004. 16 mm transferred to single channel digital video. Sydney. (MCA 2022).

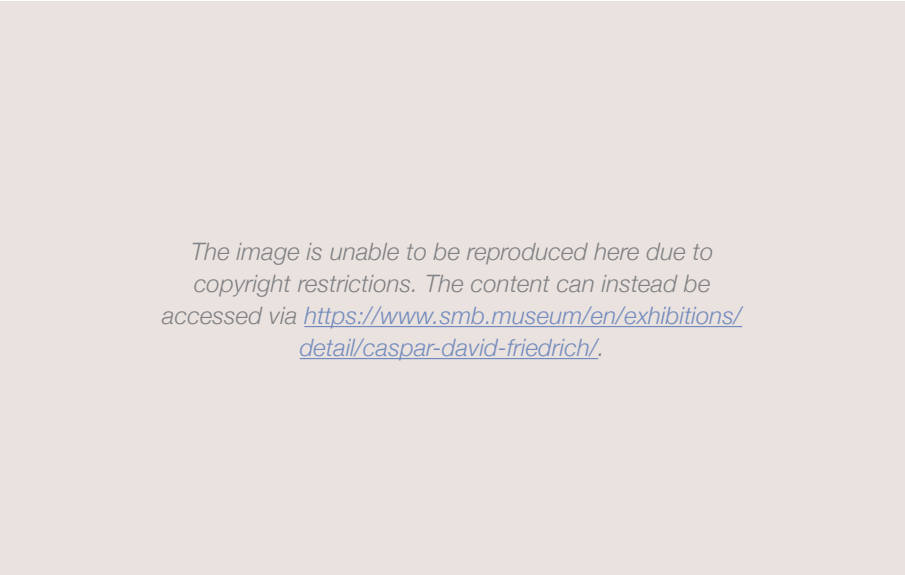

Figure 71. Caspar David Friedrich, *The Monk by the Sea*, 1808-1810. Oil on canvas. Photo: Nationalgalerie der Staatlichen Museen zu Berlin. (SMB 2022).

Drawing parallels with McMillan's experience, my first attempt at the 24-hour duration failed at the four-hour mark: two things happened, lighting for the camera malfunctioned during the night, ruining the time-lapse video, and the overnight temperature dropped to an unbearable 6°C in the single layer of the zircon t-shirt. On the second and successful attempt, I lit a fire which illuminated the night scene for the time-lapse video and also kept me warm. Much like McMillan's observation about how his experience undercut notions of the macho and the sublime, my performance ceased to be about the grandiosity of standing before 'the oldest known matter on Earth' and achieving a '24-hour endurance performance.' Instead, it yielded to an acceptance that the insights I was seeking were beyond reach. As the hours blurred into one another, I became a silent witness to nature's unfolding. Standing there was a chance to reconnect to something eternally enduring yet so blindingly obvious it goes unnoticed in my city dwelling life. Previously overlooked nonhuman rhythms and registers became heightened through an intersensory encounter. The rocks, no longer objects to be understood, become companions, participants in a shared experience.

This is not to romanticise the event. The physical pain and the mental fatigue were all very real. But within that struggle, a glimmer of something else emerged—a sense of humility, a connection to the vast web of existence, a willingness to embrace the absurd. The value of this endeavour lay not in the attainment of profound knowledge or grand epiphanies, but rather meaning was found in the act of trying. The 24-hour vigil, though finite, unlike Sisyphus' eternal torment, mirrors his embrace of the absurd and futile.

Through this performance, I discovered the importance of persevering with temporal engagement. As Rose argues, complex temporal concepts are crucial for comprehending ecological processes (2004, 25). In my deliberate choice to engage with the absurd, to confront the vastness of deep time, and to try to find my own small place within it, this process revealed unexpected insights. The experience fostered a more nuanced temporal awareness, expanding perspectives beyond immediate human timescales and situating current environmental concerns within the broader context of Earth's deep history and potential futures.

In the sterile confines of the white cube gallery far from the arid expanse of the Jack Hills, the time-lapse video called *A Day in the Life of a Hadean Eon Zircon Crystal* (2021) became a poignant testament to the limitations of representation (Figure 72). The video, compressed and fragmented, fails to capture the full sensory immersion and existential weight of the lived experience. It shrinks the vastness of time into digestible snippets, leaving viewers with a mere glimpse of the profound connection I forged with the ancient landscape.

Figure 72. Rob Kettels, *A Day in the Life of a Hadean Eon Zircon Crystal*, 2020-2021. Single channel time-lapse AV, 30 mins, silent. Goolugatup Heathcote Gallery. Photo: Rob Kettels.

However, in its failure are opportunities for the viewer to make and find meaning, through the very act of striving. The video, then, is not a record of failed comprehension, but a celebration of the act of trying. Viewers, unable to fully grasp my lived experience, are instead invited to participate in the act of trying. They find glimpses—my feet firmly rooted to the ground even though my upper body flickers; the sped-up celestial sky on its eternal rotation; changes in shadows as day marches to night. A hidden existential humour unfolds in two layers: the absurdity of my futile quest, which ultimately yielded unexpected meaning, and the viewers' own attempts to grasp the compressed immensity of time through the video's fleeting details. The video, in its raw depiction of my struggle, becomes a shared space of grappling with the unknowable, inviting viewers to join the act of trying, even in the face of the infinite.

Site-Responsive Assemblages

During the initial two field trips to the Jack Hills, I created four exploratory assemblages using materials sourced from a geology supplies warehouse including: pin tags, survey pickets, and flagging tape. These items were selected for their minimal environmental impact, ensuring that the installations would be temporary and leave no trace once dismantled.

I constructed two assemblages using 250 multicoloured survey pins inserted into the ground, and inscribed them with phrases, statements, and quotes devised during the endurance performance (Figure 73). The first assemblage was installed on Banded Iron Formation (BIF), which presents fascinating correlations and convergences. Formed over 2.4 billion years ago, BIF played a crucial role in oxygenating Earth's atmosphere[8]. Today, it serves as the raw material for iron ore, carrying significant economic implications. This relationship of ancient geological processes and modern industrial use creates a striking contextual backdrop for the assemblage, highlighting the convergence between deep time, industrialism, and the pins.

8 BIFs are sedimentary rocks rich in iron minerals, formed during the Proterozoic era until about 2.4 billion years ago. Their formation resulted from iron and silica precipitation in ancient oceans, largely due to iron-oxidising bacteria like cyanobacteria. This process contributed to the Great Oxygenation Event, transforming Earth's atmosphere and oceans, and paving the way for aerobic life. The interaction between microbial life and BIF formation was crucial in shaping the Earth's early geobiosphere (Knoll 2021, 95).

Figure 73. The first installation of 250 survey pins, in situ, on Proterozoic Banded Iron Formation. Photo: Rob Kettels.

In a related exploration of BIF's multifaceted significance, Open Spatial Workshop (OSW), the Melbourne-based trio comprising artists Terri Bird, Bianca Hester, and Scott Mitchell, exhibited a video titled *Metabolic Scales* (2023) at Cement Fondu Gallery, Sydney. This work "seeks to unfold the complex biogeochemical interactions that take place in the heterogeneous environments where geology meets life" (OSW 2023), examining the biological, geological, and economic entanglements bound up in banded iron formations. OSW (2023) uses art to examine how "geological processes coupled with an ethics of production attuned to deep-time, can reconfigure understandings of possible futures." The trio's work explores material agency and temporal imprints in ecological entanglements, challenging anthropocentric views of nonhuman elements across various scales.

The second assemblage was installed on metasedimentary rocks similar to those found on Erawondoo Hill (Figure 74). The significance of the location resonates with the anthropocentric themes inscribed on the pins. Intended as a humorous snapshot of specific characteristics, beliefs and behaviours of the settler colonial society I live within, the messages encompassed both achievements and follies, illustrating a broad spectrum of endeavours and perspectives. In essence, the collection of inscriptions formed a caricature of prevalent cultural narratives that promote the hubris of human exceptionalism (Figures 75 and 76).

While unremarkable individually, these chosen inscriptions, when assembled together in close proximity to some of the oldest known rocks on Earth, appeared absurd. This juxtaposition highlighted the inherent folly of human exceptionalism against the backdrop of geological time. It also reiterated the broader theme of absurdity explored throughout the Jack Hills project. The use of "we" on the pins represents a homogenised perspective, underscoring the assumed universality in certain neo liberal worldviews. Some examples of the inscriptions include:

we see UFOs,
we have the periodic table,
we breed dogs,
we have the stock market,
we believe in hell,
we have Andy Warhol,
we killed off the Dodo.

Figure 74. The second installation of 250 survey pins, in situ, on metaconglomerate rock known to contain the oldest recorded terrestrial material on Earth. Photo: Rob Kettels.

Figure 75. 250 survey pins (detail), each with a handwritten caricature to foreground the tropes that help build the notion of human exceptionalism in the 'geologic' of the Anthropocene. Photo: Rob Kettels.

Figure 76. Sitting in the camp writing on 250 survey pins. Photo: Rob Kettels and Larissa Lösch.

The third assemblage, which used flagging tape hanging from trees, was aesthetically the least successful. Interestingly, near W74, fragments of the original flagging tape placed by early geologists serve as historical markers of the 'discovery site' (Figures 77 and 78). This remnant flagging tape later became the subject of an oil painting in *Timestamp* (Figure 79).

Figure 77. Remnant flagging tape. Photo. Rob Kettels.

Figure 78. Remnant flagging tape. Photo. Rob Kettels.

Figure 79. Rob Kettels, *Original Flagging Tape,* 2021. Oil on canvas. Goolugatup Heathcote Gallery, Perth. Photo: Daniel Grant.

The last assemblage comprised a circle of 50 survey pickets embellished with colourful flagging tape (Figure 80). The exaggerated proliferation of picket and flagging tape served as an allegorical representation of environmental mastery. This caricature of domination operates on multiple levels. On the surface, it parodies attempts to impose order on nature. However, the subtext of the caricature reveals more sombre implications. Beneath this parody lies an expression of grief in the face of ecological crisis. The caricature does not negate the underlying sadness; rather, it makes it more poignant.

Figure 80. A colourful intervention of space with 50 survey pickets, each with a ribbon of flagging tape. Photo: Rob Kettels.

Renewed Relational Engagement

Upon installation, the assemblages defied my expectations and took on a life of their own. The vibrant hues of the pins, pickets, and flagging tape engaged in an unanticipated dialogue with the surrounding landscape, creating a visual harmony that challenged my initial conceptual framework. The land itself emerged as an active participant in the artistic process. While the original intent of the artworks was not negated, nonetheless it became enveloped by the site's inherent dynamism and agency. This unexpected association allowed me to attune myself to previously overlooked rhythms and patterns within nonhuman nature, resulting in an artwork and methodology that better integrated concepts of ecological and temporal interconnectedness.

Environmental factors—sunlight, shadows, and gentle breezes—animated the assemblages. The pins' colours oscillated against the stark rocks, while the flagging tape fluttered in the breeze, creating a visual and auditory interplay. Once in place, the inscribed messages on the pins became inconsequential when compared to the dialogue between human expression and natural forces. This metamorphosis transcended my original intent, offering new insights that might otherwise have been overlooked, thus expanding the assemblages' meaning. Upon removal, the assemblages left no trace.

A World Undone

Artist Nicholas Mangan produced a series of artworks titled *A World Undone* (2012) using rock samples from the Jack Hills. At the time of my field trips, I was unaware of Mangan's work. In retrospect, it is fascinating to observe the contrast in methodology. Yet there are also similarities in that Mangan uses the mineralogical and geological as a lens through which to critique contemporary society. One notable difference, however, is that Mangan purchased the Jack Hills metasedimentary rock from eBay (Magagnoli 2020, 418), whereas my experience was literally grounded in the location.

Mangan's work explores the global exchange of matter and colonial power (MCA 2021). The centrepiece of *A World Undone* is a twelve-minute HD video filmed using a high-resolution ultra-slow-motion camera, which records crushed particles of the Jack Hills metasedimentary rock falling and swirling against a black background (Figure 81). Art historian Paolo Magagnoli suggests the dust is an analogy for the "use of explosives to break up the ore material that has been removed from the earth" (2020, 419). After the filming, the finely crushed rock was poured between two glass panes, resembling layers of strata in a cross-section of a mountain, in a piece called *A World Undone (Protolith)* (2012) (Figure 82). Mangan states, "the disaggregation of the rock was my attempt to disrupt and redirect its course" (2016, 65), alluding to a reversal of Earth's formation and the impacts of mining.

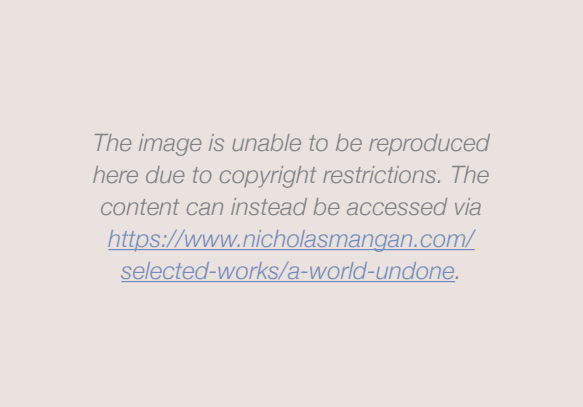

Figure 81. Nicholas Mangan, *A World Undone* (installation view), 2012. Institute of Modern Art, Brisbane, 2016. Photo: Carl Warner. (Mangan 2024).

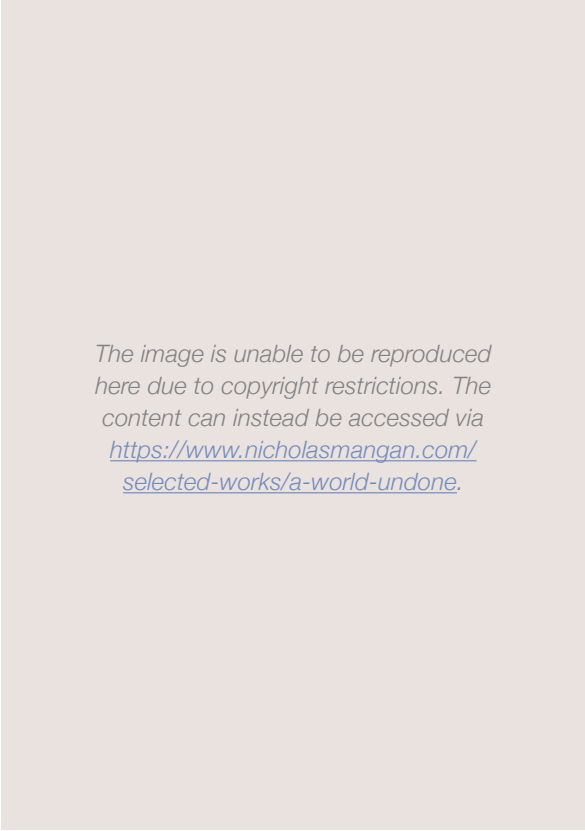

Figure 82. Nicholas Mangan, *A World Undone (Protolith)*, 2012. Aluminium, glass, crushed metasedimentary rock, 150 × 90 × 3 cm. Mexico. Photo: Isaac Contreras. (Mangan 2024).

In my interpretation, the act of crushing the rock into particles in the *A World Undone* video resembles the processes that geoscientists use to separate zircon crystals from their metasedimentary rock encasing, before analysing them in the SHRIMP to determine their age. Magagnoli suggests that Mangan's

> 'undoing' of zircon recalls the big bang theory of the formation of the universe and implies that nothing is ever lost in nature, despite the violent cutting of the earth's surface. It proposes that extraction can offer the potential for renewal. (2020, 419)

This interpretation highlights the cyclical nature of geological processes and the interconnectedness of matter across time and space. Zircons pose a challenge to simplistic interpretations. This is because while matter generally undergoes constant change, zircons exhibit remarkable stability over vast geological timeframes, stretching back to the formation of Earth.

A World Undone also includes several photographic prints showing staged documentation: one image depicts the crushed rock on an artist's cutting mat with a geo pick and plastic sample bags; another shows the rock sample positioned on top of an old copy of *Principles of Physical Geology* (1945) by Arthur Holmes (Figure 83). Cultural theorist Ana Teixeira Pinto argues that Mangan portrays the Anthropocene "as the brutal process through which all things, however remote, are torn from their surroundings and brought to the marketplace" (2016, 148). This perspective aligns with geophilosopher Manuel DeLanda's assertion that "the world is amorphous and we cut it out into forms using language" (1999, 32), suggesting that categorisations, binaries, and 'othering' are forms of control and violence.

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Figure 83. Nicholas Mangan, *Matter over Mined*, 2012. C-type print, 69 x 103 cm. (Mangan 2024).

An interesting perspective on *A World Undone* is its contextual positioning as a critique of colonial, institutional, and industrial abuse of power—particularly involving geology and mining. As art historian Anne Marsh notes, political art forms "often reinscribe the system they try to dislodge" (1993, 107). Mangan's crushing of the Jack Hills rock—while intended as symbolic—paradoxically reinscribes the explicit and implicit colonial violence he is challenging. Destroying rock of such antiquity for institutional art or shock value seems unjustified. Magagnoli picks up on Mangan's concomitant critique of extractivism and "celebration of the quarry as a productive, even generative, space" (2020, 419).

Another of Mangan's works, *Notes from A Cretaceous World* (2010), addresses the environmental degradation of Nauru, a Pacific island affected by extractivism. Magagnoli observes that in this piece, "Mangan implicates his own practice in the commodification of Nauru" (2020, 422). According to Magagnoli, Mangan's intent was "to deliberately objectify the island" rather than romanticise it as a "lost Paradise or Garden of Eden" (422).

Mangan's work succeeds in provoking critical dialogue about these complex issues. By deliberately implicating himself in the very processes he critiques, Mangan highlights the intricate web of complicity that exists in the engagement with geological resources and colonial histories. A key insight from his 'new materialist' approach is its prompting of reflection on the origins of all materials used in artistic practice. Acknowledging the concealed journeys and transformations these components undergo before reaching the artist's studio necessitates a reassessment of their perceived 'newness' and the ethical implications of their use.

In contrast to Mangan's artistic interpretation of the Jack Hills zircons, my research approach involved direct, embodied engagement with the site itself. This firsthand experience allowed for a different kind of understanding, grounded in the physical presence of the landscape and its geological significance.

Photography

On my final visit to the Jack Hills, while driving on the road leading to the site, my 4WD collided with three kangaroos, damaging my vehicle[9]. Despite this, I reached Erawondoo Hill at dawn as the first rays of light appeared on the horizon. The collision left me unsettled, influencing the aesthetics of the photographs. The photographs reflect a palpable tension that resonates with themes of the Australian Gothic, capturing an unease punctuated by a certain mystical quality. The resulting images were unplanned and spontaneous, capturing the essence of the mythologised Australian desert.

As Roslynn Haynes argues, this romanticised landscape evokes an ineffable sense of menace, allure, and timelessness (1998, i). These images also revealed an unexpected resemblance to more temperate landscapes, heightening the uncanny atmosphere. This sense of unease was not only existential but also tinged with the fresh memory of the incident.

One of these images, exhibited in *Timestamp*, depicts W74 spotlit as if it was in a museum exhibit. This photograph, tinged with an otherworldly atmosphere, stands as a finished artwork. Its uncanny familiarity is reminiscent of museum dioramas stripped of their taxidermy exhibits (Figure 84). In other unpublished images, the stark rocky landscape is transformed into a frozen tableau, the miniritchie trees resemble conifers, conjuring archetypal diorama scenes reminiscent of the High Sierras or Swedish highlands. These scenes echo the romanticised and static portrayals of nature previously critiqued in this exegesis (Figures 84 to 87). This visual parallel highlights the futility of attempting to encapsulate deep time, even in photographing Earth's oldest known rock outcrop. These photographs, then, do not document deep time; rather, they unveil its elusiveness.

9 On return to Perth, my 4WD was written off as beyond repair.

Figure 84. Rob Kettels, *'W74' Earth's Oldest Known Matter*, 2021. Pigment ink print. Goolugatup Heathcote Gallery, Perth. Photo: Rob Kettels.

Figure 85. Unpublished photograph of Erawondoo Hill. Photo: Rob Kettels.

Figure 86. Unpublished photograph of Erawondoo Hill. Photo: Rob Kettels.

Figure 87. Unpublished photograph of Erawondoo Hill. Photo: Rob Kettels.

Philosopher Theodor Adorno's assertion that "the natural appears as a sign for history...where it seems to be most historical, appears as a sign for nature" (Adorno and Hullot-Kentor 2006, 264) alludes to the mutual constitution of natural history and human history. This interplay is vividly exemplified, where the contrast between primordial geology and modern illumination accentuates a temporal dissonance. Nature, even at its most seemingly pristine, bears the imprint of human history, shaped by cultural interpretation. The diorama-like quality of the photographs, juxtaposing the ancient rock formations with artificial lighting, captures this dialectical relationship between nature and culture, effectively freezing a moment in time.

Although the futility of capturing deep time's immensity echoes the absurdity of Sisyphus' task, the experience of witnessing the sunrise over Erawondoo Hill provided a tangible connection to Earth's eternal axial motion, offering a perceptible measure of time, although it is not time itself. Like Sisyphus finding meaning in his endless labour, the value emerges in the act of trying to grasp the incomprehensible, and bearing witness to Earth's rhythms, and discovering a renewed relational engagement with nonhuman nature through the artworks.

Creating site-responsive artworks and experiencing their effects heightened my senses, cultivating an attentiveness to subtle changes in my surroundings and deepening my understanding of often-overlooked rhythms in nature. This perceptual shift culminated in a heightened recognition of the agency inherent in the more-than-human environment as it engaged my creative endeavours—an agency that conceptually returned my gaze.

Following the capturing of these images, and concerned about my vehicle's reliability, I embarked on a 900-kilometre drive back to Perth, concluding the fleeting 5-hour visit to the Jack Hills.

CONCLUSION

While previous chapters critiqued the Western environmental gaze without seeking to overcome it, the series of artworks in this chapter unexpectedly led to moments where my own perspective began to shift. The seemingly futile pursuit of attempting to comprehend the incomprehensible, led to meaningful discoveries, including a heightened attentiveness to nonhuman registers and agency—initially unnoticed—in the artworks. This shift in approach fostered a renewed relational engagement by re-situating the works within a more-than-human perspective, challenging aspects of the traditional Western environmental gaze. Situating my own experience within Earth's history, the Jack Hills artworks fostered a nuanced ecological consciousness that disrupted conventional anthropocentric views. Moments of interconnectedness, arising from sustained engagement with deep time, offered a subtle yet significant reconsideration of the Earth's broader ecological and temporal contexts, which interrupted the anthropocentrism inherent in the Western environmental gaze.

CHAPTER 5: (DIS)CONTINUITY — KINETIC FLIPBOOKS

INTRODUCTION

This chapter explores the development and conceptual underpinnings of a series of kinetic sculptures exhibited in 2023 (see https://vimeo.com/1004839699 to view video). These flipbooks, driven by electromechanical components, present animated sequences based on geological survey maps of Western Australia and Fremantle's historic timeball—a now defunct maritime signalling device. These focal points serve as entry points to challenge the notion of human mastery over the environment, while simultaneously acknowledging the allure of precise measurement and representation. The chapter examines a tension between human attempts to systematise nature and the inherent resistance of nonhuman environments to such notions. The evolution of these kinetic sculptures marks a shift in approach to exploring the Western environmental gaze, one that emerged from methodological realisations at the Jack Hills. These insights revealed that oppositional approaches often overshadow more nuanced perspectives. In exploring these themes, I draw upon philosopher Timothy Morton's concept of hyperobjects to consider the vast scales and complex agencies at play in my work. The following sections delve into the conceptual framework, technical development, and thematic exploration of this project.

(DIS)CONTINUITY — KINETIC FLIPBOOKS

In 2023, I exhibited kinetic sculptures at the Bunbury Biennale, Fremantle Print Awards, and Fremantle Biennale. These works functioned as mechanical flipbooks (assemblies) that operate via a rotating spindle driven by electromechanical components. Each assembly comprises 80 printed paper cards secured to the spindle, a 12V motor, gears, a timing belt, and a combination of hand-made and manufactured parts, creating a looped animation (Figure 88). Through these animations, I delve into two artistic investigations: (1) geological survey maps of Western Australia, and (2) Fremantle's historic timeball.

Figure 88. Rob Kettels, *Time Machine (ii)*, 2023. Kinetic sculpture. Fremantle Print Awards, Perth. Photo: Rob Kettels.

These kinetic sculptures are human creations made with nonhuman materials. Their mechanical nature introduces an interchange between human design and nonhuman processes. The whirring motors, rotating spindles, and flipping cards create a sensory experience that, although engineered, operates autonomously once set in motion, blurring the line between human intention and nonhuman agency.

These investigations serve as entry points to explore the Western environmental gaze and revisit thematic elements and anthropocentric perspectives from my previous projects. They exemplify attempts to impose order on the vastness of nonhuman phenomena through representation and precise measurement. The common thread between the two projects is their engagement with more-than-human scales, explored through specific, tangible focal points. However, as this chapter will reveal, such efforts to master nature through scientific and technological means ultimately highlight the limitations of these pursuits.

The term ‘hyperobject’ was coined by philosopher Timothy Morton to describe entities that are “massively distributed in time and space relative to humans” (2013, 1). It provides a conceptual framework for thinking about phenomena so vast in temporal and spatial scales that they challenge traditional ideas of what constitutes an object. Morton uses this concept to explore various large-scale phenomena that significantly impact the planet and human existence. The hyperobject framework describes these phenomena as having qualities such as viscosity, i.e., “that they ‘stick’ to beings that are involved with them” (Morton 2013, 1); nonlocality, i.e., their full extent cannot be realised in any particular local manifestation (1); and temporal undulation, i.e., they exist on such vast time scales that they appear to come in and out of phase with human temporality (24). Morton’s hyperobject concept offers a valuable lens through which to examine the nonhuman agencies both represented in and inherent to my artistic works.

Originating from basic conceptual sketches, the project evolved through successive cycles of research and development[1] over a period of eighteen months (Figure 89). The initial prototypes primarily utilised handmade and hardware store parts. Subsequent versions saw progressive refinements in both mechanical technique and the incorporation of better quality components[2]. These developments not only enhanced the operation of the works but also elevated their finesse, resulting in a more visually compelling presentation.

Figure 89. Developing the kinetic sculptures, 2022-2023. Photos: Rob Kettels.

1 The assemblies integrated a diverse range of elements, including handcrafted components, purchased parts, fabricated items, printed materials, and laser-cut pieces.

2 The Fremantle Print Awards unit operated smoothly for three months, running six hours daily without mechanical failure, while the Fremantle Biennale installation successfully ran eight units concurrently for one month.

While the conceptual foundation and research underpinned their creation, viewers could appreciate the works purely as captivating visual experiences. The assemblies offered an approachable form of interaction for diverse audiences and across generations, combining the intrigue of visible mechanics with the aesthetic appeal of animated images.

Geological Maps (Bunbury Biennale and Fremantle Print Awards)

My initial sculpture, titled *Time Machine*, was exhibited at the Bunbury Regional Art Gallery as part of the Bunbury Biennale. The assembly housing the maps comprised laser-cut stainless-steel panels, imparting an austere industrial aesthetic while concealing most of the internal mechanisms (Figure 90).

Figure 90. Rob Kettels, *Time Machine*, 2023. Stainless-steel housing. Bunbury Biennale. Photo: Rob Kettels.

The concept evolved in *Time Machine (ii)* presented at the Fremantle Arts Centre (FAC) for the Fremantle Print Awards. This second iteration, constructed from clear acrylic, employed a transparent design that revealed the rotation of the inner spindle and the kinetic patterns created by the paper cards brushing against the baseplate (Figure 91). Both versions produced a distinct auditory experience, combining the rustling of flipping paper cards with the high-pitch whine of the 12V motor, eliciting varied responses from audiences.

Figure 91. Rob Kettels, *Time Machine (ii)*, 2023. Acrylic housing. Fremantle Print Awards, Perth. Photo: Rob Kettels.

The two versions incorporated cropped geological maps, primarily dating from the 1950s to 1990s. These original maps—acquired from the Geological Survey of Western Australia—were digitally scanned and reproduced on 300 gsm watercolour paper using a pigment ink printer. The title *Time Machine* alludes to the connection between geological time and the machine in which the maps are displayed, conceptually linking the assemblies to previous artworks concerning deep time.

Anthropologist and archaeologist Barbara Bender contends that maps are embedded with complex social and historical contexts, arguing that "maps can be seen as part instrument, part result of [the] Western Gaze" (1999, 31). This perspective further emphasises the subjective nature of maps and their role in shaping the understanding of environmental spaces.

Initially, the geological maps captivated me with their aesthetic qualities, evoking abstract art. While the visual appeal is immediately apparent, their scientific value lies in the detailed alphanumeric codes printed within the coloured shapes. These codes, when deciphered, reveal a wealth of geological information[3]. The geological maps I selected are diagrammatic

3 For example, a notation like 'Czl' expands to specific geological information such as "Cenozoic Laterite deposit—lateritic duricrust, massive and rubbly; iron-rich over mafic rock" when referenced against the accompanying legend (GSWA 2017).

cross-sections of the Earth's upper crust, focusing on the vertical axis rather than the horizontal, and were chosen for their simplicity of design. When set in motion within the assembly, their vibrant chromatic palette and distinct shapes generated a technicolour optical illusion.

The geological maps featured in *Time Machine* can be understood as representations of hyperobjects. These maps attempt to capture vast geological processes that occur over timescales, and involving complexities, beyond human perception and measurement. Morton's concept provides a valuable framework for considering the temporal and spatial vastness that these maps attempt to represent. As Morton notes, "Because they so massively outscale us, hyperobjects have magnified this weirdness of things for our inspection: things are themselves, but we can't point to them directly" (2013, 12). Furthermore, the kinetic element of the sculptures speaks to the dynamic, agential nature of these processes, suggesting the constant flux and motion inherent in geological timescales that extend far beyond human perception.

To deepen my understanding of the maps' content beyond their visual appeal, I undertook a course on interpreting geological maps and their field applications. This course introduced a range of map types from traditional printed maps, like those used in my assemblies, to digital applications integrating multiple layers. The course covered maps such as aeromagnetic surveys, bedrock geology, gold distribution patterns, and mineral and tenement data. I achieved practical application of this knowledge through several gold prospecting expeditions. These experiences enhanced my understanding of geological mapping and provided a multifaceted perspective on geological representation.

Unlike modern geophysical imaging techniques[4] that provide data from remote sensing methods[5], the older geological maps represent a unique juxtaposition between the physical lithosphere and the human hand. Geographer Doreen Massey asserts that "a map of a geography is no more that geography—or that space—than a painting of a pipe is a pipe"

4 Modern geophysical imaging techniques encompass a range of methods that measure "wavelength ranges of the electromagnetic spectrum" (Gupta [2017] 2018, 3), including "satellite imagery, aerial photography, global positioning system GPS technology, and geographic information systems GIS-based cartography" (USGS 1995).

5 Remote sensing means, in essence, "obtaining information about an object without touching the object itself" (Gupta [2017] 2018, 1).

(2005, 220). Massey's analogy of René Magritte's painting *The Treachery of Images* (1929)[6] underscores a crucial point: these older geological maps serve as subjective representations of, rather than equivalent to, the physical lithosphere, thus occupying a paradoxical space between representation and geological phenomena.

Geographer Mark Monmonier, in *How to Lie with Maps*, elaborates on this paradox: "to portray meaningful relationships for a complex, three-dimensional world on a flat sheet of paper or a video screen, a map must distort reality…[and] to avoid hiding critical information in a fog of detail, the map must offer a selective, incomplete view of reality" (1996, 1). In the context of the Geological Survey of Western Australia maps—as Riganti et al. (2016) note in their chronicle of Western Australian geological mapping from 1894 to 2015—this selective representation has evolved significantly over time.

For example, Ferdinand von Sommer's 1848 sketches represent the earliest geological maps of Western Australia. The 1910 map, which represents a significant advancement in the series of official state geological maps, offered the first comprehensive geological interpretation of the entire state. By 1966, the maps had incorporated aerial photograph interpretation and aeromagnetic data (Riganti et al. 2016). Despite these technological advancements, the vastness and complexity of geology still necessitate simplification and symbolisation (Riganti et al. 2016). As a consequence, these maps remain interpretive—inadvertently imbuing them with an unintended 'artistry' (Figure 92).

Figure 92. Geology of the Kimberley Region, Western Australia, West Kimberley, 1976. A fine example of the 'artistry' of geological survey maps. (GSWA 1976).

6 René Magritte's painting *The Treachery of Images* famously depicts a pipe with the caption "This is not a pipe" (in French). Massey's analogy alludes to the fact that the painting is merely a representation of a pipe, not the pipe itself.

Beyond the challenges of objectivity and interpretation, the Geological Survey maps face another limitation. They are, by nature, atemporal representations, capturing only a snapshot in time. While geological processes and mineral compositions have evolved over hundreds of millions of years, the static nature of these maps does not convey the concept of deep time—nor is this their intended purpose—they present only the current state of the lithosphere.

Geologist Christopher Scotese developed a method that addressed this limitation when he created a continental drift flipbook in 1973 (Scotese 2004, 729). This flipbook visually animates the movement of continents over the past 750 million years and offers a dynamic representation of plate tectonics (Figure 93).

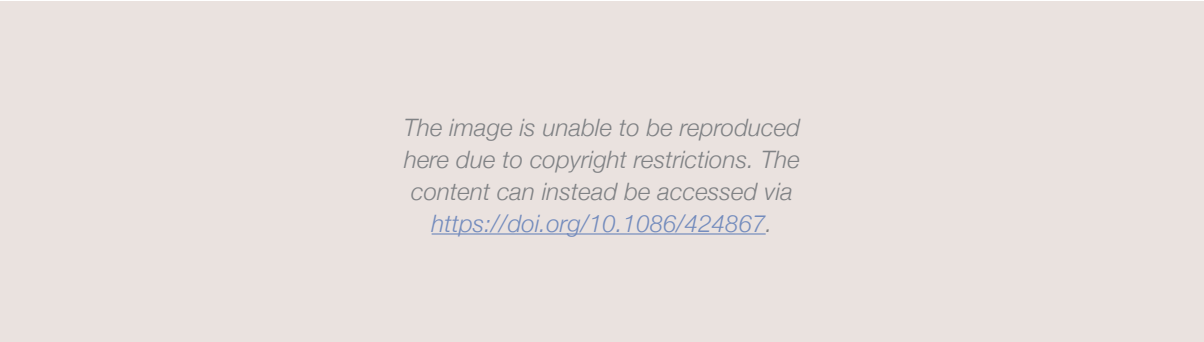

Figure 93. Christopher R. Scotese, *A Continental Drift Flipbook*, 1973. Chicago. (Scotese 2004).

The shifting geography depicted in the flipbook captures the imagination, which geologist Andrew Knoll describes as follows:

> Every few seconds, words like 'crash,' 'crunch,' and 'rrri-ppp' flash by, highlighting continental collisions and breakup. In 1788, James Hutton [known as a founder of modern geology] wrote that the geologic record shows 'no vestige of a beginning, no prospect of an end,' and that is certainly the feeling I get from Chris's flip book. (2021, 56)

The mechanical workings of my kinetic sculptures, independent of the narrative in the animations, present a visual language with temporal allegories. The continuously rotating spindle and flipbook cards, that are intermittently paused by a stationary pin, create a relationship between uninterrupted motion and momentary time-lags. The spindle's ceaseless rotation suggests an allegory for time as a continuous flow, while the interruptions in the flipbook cards introduce a discontinuity.

There is a resemblance to the time-lapse method employed in *Levitating Bushman*. In the video, the manipulation of time creates an unsettling intertemporality. This disruption to the perception of linear time challenges conventional understandings of temporal progression. The work interrupts notions of *telos* with abrupt shifts, mirroring the mechanical interplay in the kinetic sculptures. Across both mediums—sculpture and video—this temporal manipulation figuratively disrupts the subjective experience of time as a linear progression of past, present, and future.

Scotese's flipbook provides a novel way to visualise continental drift. However, by compressing millions of years into seconds, the flipbook inadvertently diminishes the immense durations involved in geological processes. This compression, while visually engaging, echoes Massey's and Magritte's pipe analogy, suggesting that any representation of deep time remains a simplified abstraction of an incomprehensible expanse of geological time. Like my experience in the Jack Hills with recognising nonhuman agencies, Morton describes a "gigantic coral reef of sparkling things" lying beneath our everyday perceptions (2013, 14). The subtext to my works speaks of the unsettling vastness of geological time, echoing Morton's concept of hyperobjects and their impact on the perception of the world.

Timeballs (Fremantle Biennale)

The installation *Timeball*[7] (2023), created for the Fremantle Biennale, responded to the Biennale's theme of 'signals' through eight kinetic sculptures, each presenting a distinct narrative. Despite shifting from geological themes to meet the Biennale's brief, the installation maintains this project's focus of exploring anthropocentric perspectives. These animations collectively wove a speculative narrative, examining the repercussions of a sailing ship's return journey to Europe with an inaccurately set chronometer[8] due to an error in clock time at the Fremantle timeball (Figures 94 to 96). Central to the installation was an investigation into Fremantle's historic timeball[9]—an instrument formerly employed in seafaring navigation.

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7 At PS Art Space, as part of the Fremantle Biennale, my installation *Timeball* was exhibited alongside another kinetic work by Bori Benko. Both pieces were featured in the overall exhibition titled *Resonant*.

8 A marine chronometer is a highly accurate timepiece (originally a clock) designed to maintain precision despite a ship's motion and varying environmental conditions. Self-taught clock-maker John Harrison developed the first groundbreaking chronometer called 'H4' in the early 1760s, and it was successfully tested on voyages in the late 1760s and early 1770s (Sobel 2011).

9 Two timeballs principally operated in Fremantle: the earlier one, built in 1900, was located near the Round House, with the ball housed in a tower. It was removed in 1903 to make way for a newer timeball, which was positioned atop the Harbour Trust Building and operated until 1936. Neither of them exists today, although there is a symbolic ball on the flagstaff near the Round House on Arthur Head (SLWA 2024).

Horologist John Harrison revolutionised maritime navigation in the late 18th century. His groundbreaking marine chronometer, the H4, solved the longitude problem[10] by maintaining accuracy within seconds over months at sea. This device allowed maritime navigators to calculate their position precisely using time and coordinates. Harrison's work laid the foundation for the development of timeballs. These signalling devices were installed at ports around the world, ensuring effective maritime navigation worldwide.

During the late 18th century to the mid-20th century, determining a ship's longitude at sea relied on precise timekeeping. A ball, dropping down a timeball mast at precisely 1:00 pm from a location onshore and visible to ships in the port, signalled the exact local time. The timeball was used to check and adjust a chronometer onboard a ship for accuracy and to set it before departure. To find the longitude, navigators required two pieces of information: the current time aboard the ship and the simultaneous time at a location with a known longitude, typically their home port. These two times "enabled the navigator to convert the hour difference into geographical separation" (Sobel 2011, 5). This time difference, converted to degrees based on Earth's rotation (one hour representing 15 degrees), revealed the ship's east-west position to find the longitude (Sobel 2011, 5). The easier to determine north-south position uses celestial observations to find the latitude; this latter method had been used for centuries by mariners.

This obsolete piece of heritage served as the focal point for my installation by representing a symbol of colonial mastery over time and space[11]. However, the installation problematises a reductive, one-sided critique of colonialism by integrating aesthetics and precision that subtly reference my family's connection to timeballs. The installation explored the tensions between temporal mastery and its unintended consequences.

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10 The longitude problem was a challenge in maritime navigation for millennia, as sailors were unable to accurately determine their east-west position at sea (Sobel 2011). Determining the longitude accurately at sea remained a significant challenge until the late 18th century. The development of accurate marine chronometers in the 1760s greatly improved precise longitude calculations using time and the coordinate system of degrees, minutes, and seconds.

11 Regarding my use of the terms 'time' and 'space,' I acknowledge the rich existing discourse on this subject (Ingold 2011; Massey 2005; Lefebvre [1974] 1991), however this section does not engage with the metaphysical and theoretical aspects of these concepts, as these lie beyond the scope of this project. Instead, I employ these terms specifically in a navigational context with reference to coordinate systems and timekeeping for position determination.

The global navigation system symbolised by the Fremantle timeball in the *Timeball* installation can be viewed through the lens of hyperobjects. This system, spanning the entire globe and involving complex networks of time measurement and spatial coordination, exemplifies Morton's concept of hyperobjects. The far-reaching consequences of a small timeball error, as explored in my installation, illustrate the "nonlocal and atemporal" (2013, 47) nature of hyperobjects, where effects can manifest across vast distances and timeframes. Morton's assertion that "the notion of being located at all is only epiphenomenal to a deeper, atemporal implicate order" (47) resonates with the *Timeball* installation's exploration of global navigation systems. These systems, while seemingly fixed in time and space, operate within broader, more complex paradigms that defy simple localisation.

Figure 94. Timeball at Arthur Head, ca. 1900-1903. (SLWA 2024).

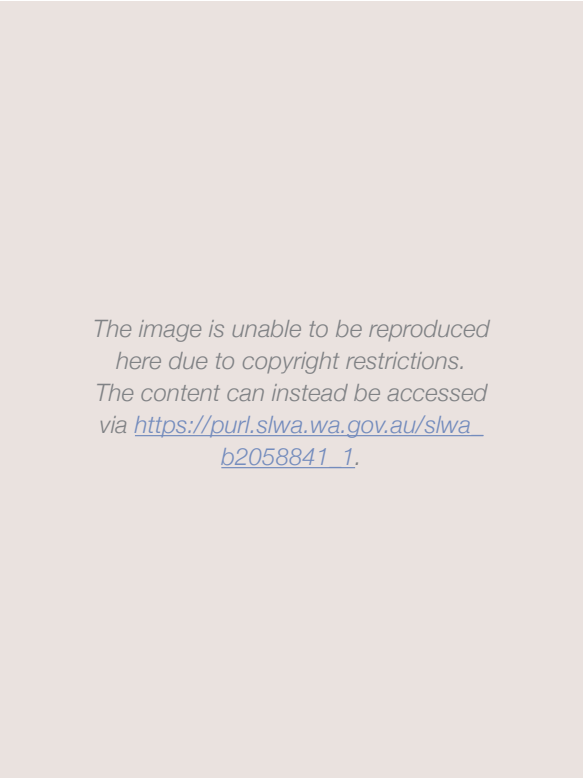


Figure 95. Timeball and Fremantle Lighthouse, Arthur Head, ca. 1900-1903. (SLWA 2024).

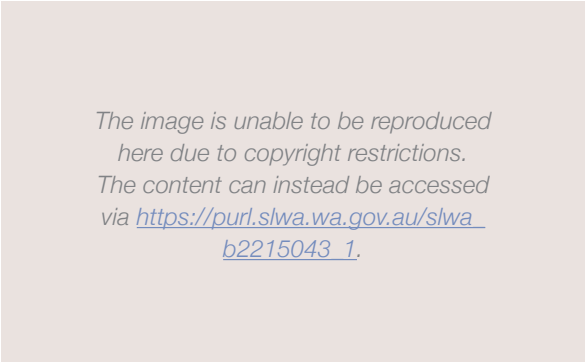


Figure 96. Watching the arrival of the Duke and Duchess of York from the tower of the Fremantle Harbour Trust building, ca. 1927. (SLWA 2024).

In creating the artworks, I aimed to balance an aesthetic tension between homage and critique. My grandfather, a retired naval engine room artificer (engineer/fitter and turner), utilised his machinist skills to restore Melbourne's Williamstown timeball for the 1988 Bicentenary[12]. My family has since created further narratives through regular visits to the Williamstown timeball to mark important family events. This intergenerational practice has evolved into a recurring tradition, intertwining personal history with the broader heritage of timeballs.

The eight animations in my installation unfold a fictional narrative based on a real event in 1910, when Fremantle's timeball was malfunctioning and dropping at the wrong time, which resulted in ships' chronometers being set to the wrong time. The *Daily News* newspaper

12 Australia's 1988 Bicentenary, which celebrated the First Fleet of British ships arriving at Sydney in 1788, was marked both by festivities and the largest protest ever held in the city. Captain Arthur Phillip, who led the First Fleet, had at least one chronometer aboard his ship, HMS *Sirius* (Chapman 2010).

(1882–1955) reported that “during the year 1910…the greatest error recorded during the year was 0.44sec” (NLA 2023). Although this does not sound like much, but by the time a ship sailed 14,500 km back to Europe, the initial error would have compounded and placed the ship at the wrong coordinates.

The narrative in the animations depicts the unforeseen repercussions of a vessel’s voyage to Europe with its chronometer imprecisely calibrated due to the timeball’s miscalculation, ultimately leading to navigational chaos and a shipwreck. According to Dava Sobel, author of *Longitude*, the British Empire’s expansion was underpinned by its technological mastery over global navigation, “for it was by dint of the chronometer that Britannia ruled the waves” (2011, 153). As part of Britain’s industrial-military complex, the chronometer became instrumental in colonial expansion, aiding in the mapping and claiming of distant territories (Sobel 2011).

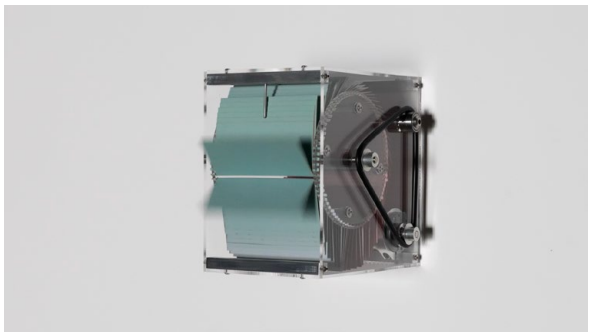
This historical context sets the stage for the fictional narrative presented in the animations. The story explores the inherent hubris in attempts to master time, while also representing an evolution in my artistic methodology. By focusing on a specific historical event, this work employs a tangible and direct method to examine the limitations of environmental mastery and control. This examination is achieved through a multi-faceted approach that combines historical imagery, symbolic representations, and artistic reinterpretations. The narrative unfolds through eight sequential animations (Figure 97 and 98), each contributing to a layered exploration of the theme. By juxtaposing archival photographs with abstract representations and Romantic era paintings, the work creates a visual dialogue between past and present, highlighting the desire to control nature and the unforeseen consequences of such attempts.

Figure 97. Installation view of *Timeball,* 2023, PSAS, Fremantle Biennale. Photo: Rob Kettels.

(1) The first animation presents a colourful, segmented circle representing a clock, a nod to the error in clock time in the Fremantle timeball. This piece sets the stage for the unfolding narrative.

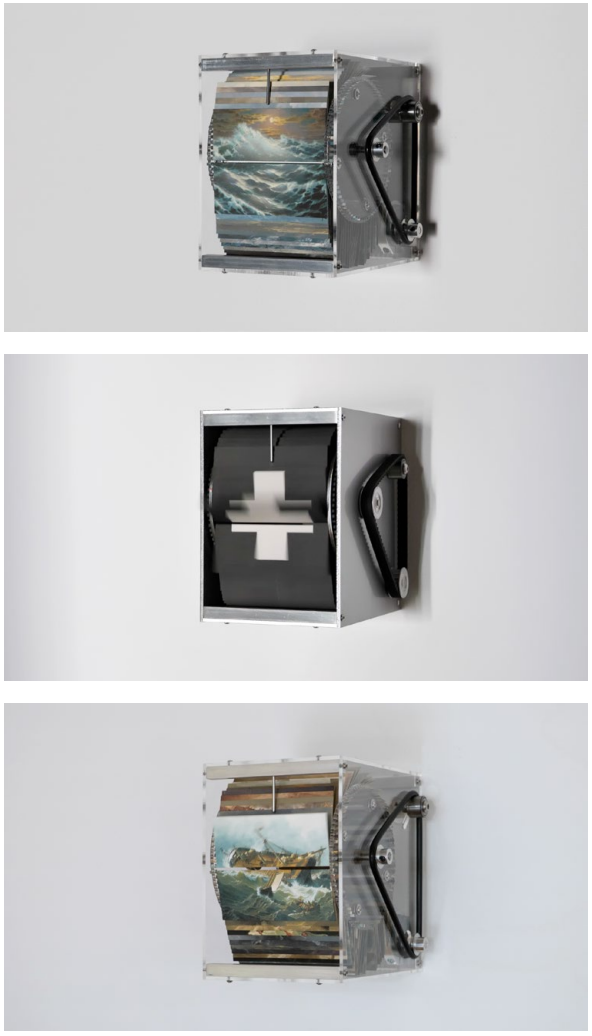
(2) Following this, there is an archival photograph of the Fremantle timeball tower that is brought to life. The reanimated mast shows the descent of the ball and the fluttering of flags in the breeze, connecting the installation to its specific geographical context.

(3) The third animation distils the timeball to its essence, i.e., a simple black circle dropping downwards, symbolising the timeball's function as a visual time-signalling device.



(4) The fourth piece shifts focus to the marine environment, displaying a gradient that transitions from pink to light eggshell green. This colour scheme subtly evokes the ocean's hues while also referencing the gradients discussed in Chapters 1 and 3.

(5) The fifth animation introduces a globe etched with longitude and latitude lines, marked by a solitary red dot moving along a chaotic course back to Europe. This symbolises a vessel's journey and the disorientation resulting from the original timeball error.



(6) The subsequent piece presents eighty separate Romantic era seascape paintings. Their horizons are aligned and show varied ocean conditions conveying a sense of journey. This sequence also ties back to Eurocentric notions of the sublime, imparting a historical and artistic context to the narrative.

(7) Addressing the perils of sea travel, the seventh animation features a simple descending cross, signifying emergency or evoking the iconography of a cruciform. This stark symbol underscores the potential dangers faced by the mariners.

(8) The narrative culminates with a selection of Romantic era shipwreck paintings depicting vessels succumbing to the sea's power. This final piece starkly illustrates the consequences of hubris regarding the mastery over time and space, thus bringing the installation's theme full circle.

Figure 98. The eight kinetic sculptures comprising *Timeball*, 2023, PSAS, Fremantle Biennale. Photo: Rob Kettels.

The progression from the initial clock face animation to the final shipwreck paintings creates a narrative arc illustrating the ripple effects of a single timekeeping error. Through the use of varied visual elements, the installation provides multiple entry points for viewers to engage with the theme.

While crafting the assemblies, I often reflected on my grandfather's legacy. His machinist skills in restoring the Williamstown timeball became a significant touchstone in my pursuit of mechanical proficiency. This timeball project explored the notion of mastery both theoretically and experientially, revealing insights into the concept from an embodied, lived experience.

Harrison stands as an exemplar who undoubtedly achieved mastery in precisely measuring time. Whilst researching the background story for the installation and working on the mechanical parts, I gained a newfound appreciation for Harrison's extraordinary precision and horological knowledge. The development of my assemblies involved a steep learning curve in basic engineering and mechanical design. Although worlds apart from Harrison's or my grandfather's expertise, I found connections with them when using tools they would have also employed, such as the tap and die.

While my mechanical skills were functional, I recognised that the visual aspects of my components were crucial to the overall aesthetic. My research spanned both historical timepieces and contemporary art installations that explore temporal concepts.

Automated Colour Field

Perth-based artist Rebecca Baumann's *Automated Colour Field* (2011) is a wall-mounted installation that includes 100 modified 'flip-clocks' displaying rotating coloured cards. They operate independently at different cadences to create an unconventional timepiece that presents a continuously shifting visual field (Figure 99). The spontaneous arrangement of colour changes results in the element of chance in the artwork's composition. Baumann says:

> *Automated Colour Field* is a subtle play between materials, colour and movement. The way I often work with materials is to manipulate and control them to a point— then let them free to 'do what they do.' The clocks are placed on the wall in an orderly grid, but with their constant change, and randomly selected colour, uncontrollable compositions are created. (Baumann, as quoted by MCA 2024)

The installation's mechanical aspects, including a gentle hum, add auditory and kinetic dimensions to the visual experience. Baumann's inspiration for the work came from flip-clocks observed at a train station (MCA 2024).

Figure 99. Rebecca Baumann, *Automated Colour Field*, 2011. Flip-clocks and paper, 130 x 360 x 9 cm (installed). Museum of Contemporary Art Australia, Sydney. (MCA 2011).

This contextual reference, in my interpretation, imbues the piece with the varied rhythms of city life, with its continuous flows and punctuations. To me, the work offers a visual metaphor representing the interplay between continuity and discontinuity in the perception of time within a bustling built environment. I viewed *Automated Colour Field* at the *State of Abstraction* (2024) exhibition at the Art Gallery of Western Australia (AGWA). Having developing my own mechanics, I was particularly interested in its construction. It proved interesting to observe the similarities and differences.

Held Within a Word

First Nations artist Robert Andrew's *Held Within a Word* (2023), exhibited at the Perth Institute of Contemporary Arts (PICA), is a mechanical installation that activates strings connected to 150 charred branches and rocks suspended on two walls. The work features a custom-designed mechanical plotter created by Andrew driving the elements suspended across two gallery walls (Figure 100). The plotter is programmed to write out selected texts, which in turn moves the strings attached to the suspended materials. Over time, these movements build up visible marks on the gallery walls, effectively 'writing' onto the surface. Andrew (2023) explains, "the movement is generated by the words Elisha [Jacobs-Smith] gifted me, a couple of sentences in Wadjuk Noongar language. These are being used to drive the mechanism on the wall."

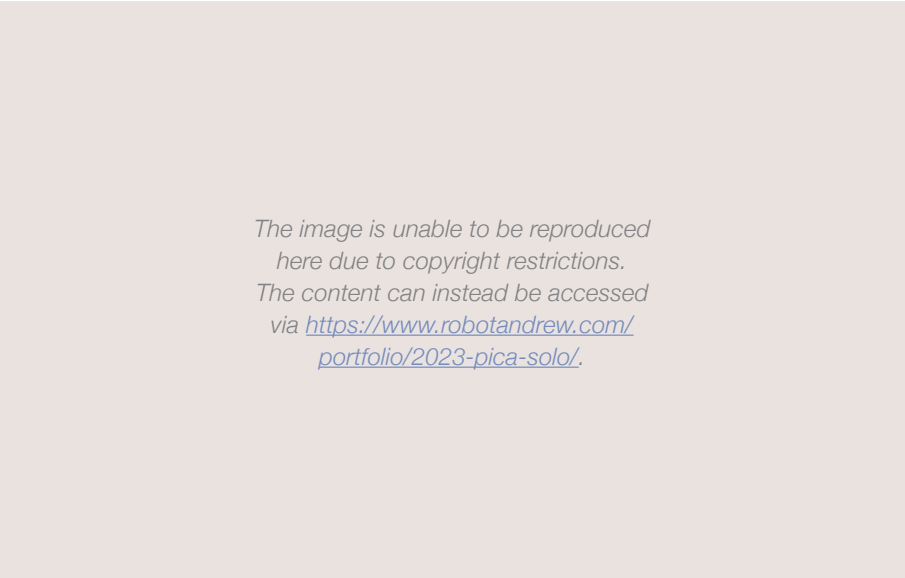


Figure 100. Robert Andrew, *Held Within a Word*, 2023. Electromechanical parts, found wood and rocks. Perth Institute of Contemporary Arts. Photo: Dan McCabe and Miles Noel. (Andrew 2023).

I saw *Held Within a Word* around the time I was building my mechanical assemblies. Andrew's mechanical system of aluminium pulleys and levers provided valuable insight into creating a complex system that appears simple, yet remains aesthetically compelling. While not a traditional clock, it is not a far leap to consider his work an elaborate contemporary timepiece. Rather than being driven by springs, gears, and escapements, it employs strings and pulleys to create a regular mechanised movement—the marks on the wall serving as evidence of the passage of time. From historical devices like maritime timeballs, to contemporary works such as *Automated Colour Field* and *Held Within a Word*, these creations interweave broader themes of temporality, representation, and attempts to measure and control natural phenomena.

Synthesis

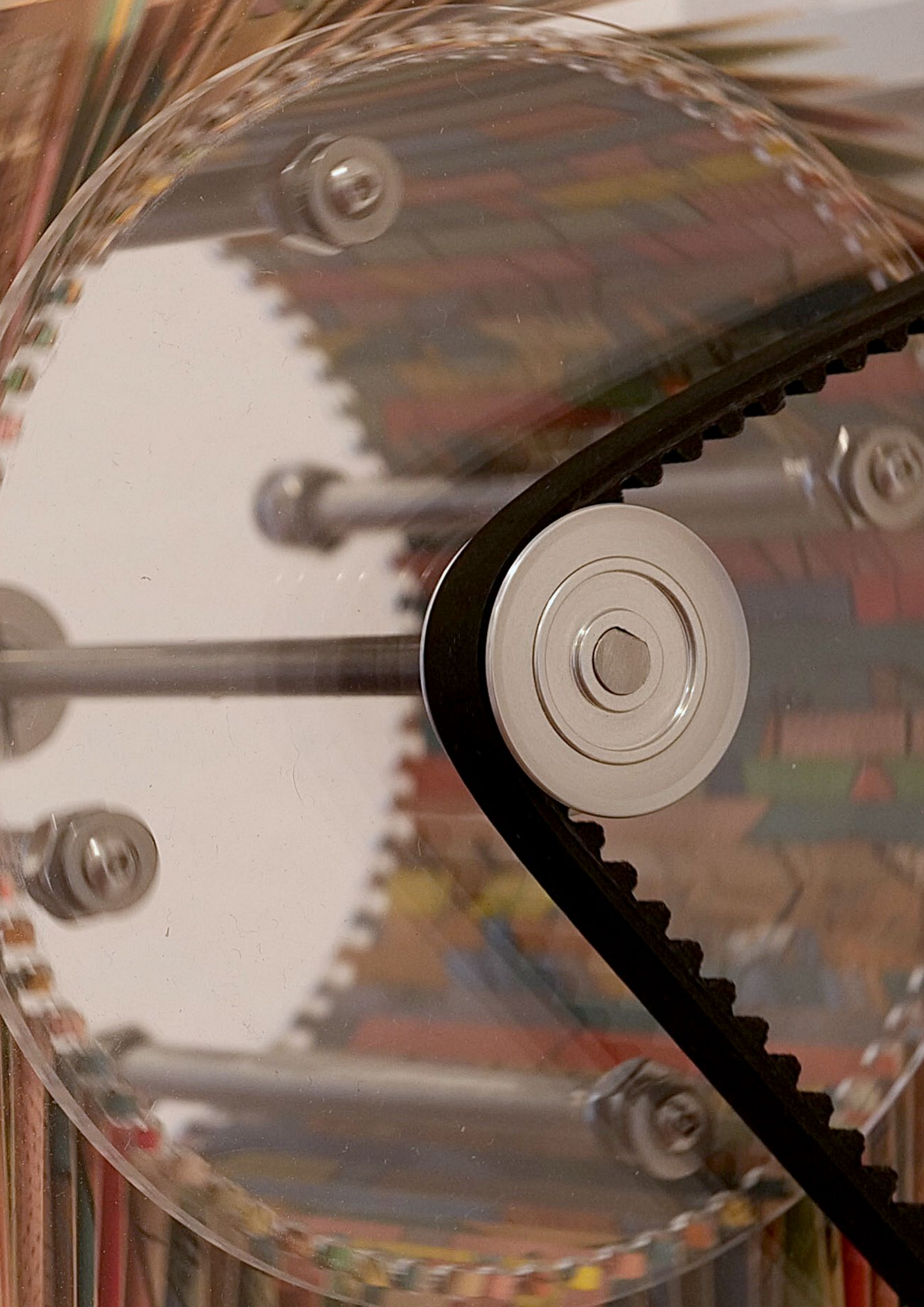
Previous site-responsive artworks and performances in this project grappled with capturing and distilling phenomena that extended beyond human scale into tangible forms. *Timeball* centred on a singular, focused theme: an error in Fremantle's timeball. This specific historical incident provided a framework to examine broader conceptual investigations that have been central to this project's direction and aims. The geological maps in *Time Machine* also connected immense temporal and spatial spans with tangible places and formations represented on the maps. Developing these specific narratives and histories proved more effective in addressing the intricacies of the Western environmental gaze—an aim that had previously seemed elusive when tackling more open-ended approaches.

The *Timeball* and *Time Machine* installations utilised specific historical narratives and maps as lenses through which to examine complex historical and cultural dynamics. Both works served as bridges between the immediate and the immense, illuminating wider themes of environmental control and hubris.

By bringing together elements such as geological maps, navigation systems, and mechanical motion, these kinetic sculptures create a space where viewers can engage with typically imperceptible scales and processes. This approach aligns with Morton's suggestion that art can play a crucial role in making scales beyond the human more accessible to understanding: "We need art that does not make people think (we have quite enough environmental art that does that), but rather that walks them through an inner space that is hard to traverse" (2013, 184). By grounding abstract concepts in concrete narratives and mechanical forms, these installations invite viewers to reconsider their relationship with nonhuman ecologies and temporalities in ways that challenge traditional anthropocentric perspectives.

CONCLUSION

This body of work invites viewers to reconsider their relationship with temporality and nonhuman agency. The animations produced by the flipbooks critique the hubris of attempts to impose colonial standards and measures on environmental spaces. These sculptures contribute to discussions on environmental aesthetics by challenging anthropocentric perspectives and emphasising the limitations of human understanding when confronted with nonhuman phenomena.



CONCLUSION

This project and accompanying exegesis contribute to contemporary dialogues in environmental aesthetics by demonstrating how art practice can foster relational engagements with more-than-human ecologies and temporalities, while critically challenging pervasive assumptions within the Western environmental gaze. Through a series of sculptures, assemblages, immersive installations, and field trip documentation, the research examines the limitations of human attempts to comprehend and control nonhuman phenomena. The works emanate from a distinctive Western Australian perspective, marked by ancient geology and the forces of contemporary industry. Geological and mineralogical themes emerged as central to the project, binding all the works and serving as a conduit for a posthumanist deconstruction of colonial perspectives. This focus on the lithic provided a unique lens through which to examine and challenge traditional Western epistemologies, offering new insights into the relationship between anthropocentric perception and the vast scales of geological time and ecological interconnectedness.

Key to this investigation was the application of four interrelated anthropocentric perspectives: mastery, hierarchy, passivity, and atemporality. These perspectives reflected my research trajectory and served as useful methods to narrow the scope of investigation. By exploring concepts such as deep time, mineral-rich terrains, and worldviews rooted in colonial history, this project exposes the inherent contradictions in attempts to depict or dominate the nonhuman environment.

This body of work unfolded on the traditional lands of the Martu, Pintupi, Wajarri Yamaji, and Nyoongar peoples. I extend my respect and acknowledge the enduring connection to Country and ongoing custodianship of Aboriginal and Torres Strait Islander peoples.

To critically examine the Western environmental gaze, the methodology evolved through distinct phases. Initially, I engaged with broad theoretical critiques to establish a foundational understanding. This then led me to adopt site-responsive practices, which allowed for an experiential approach. Finally, I narrowed my focus to specific historical phenomena and provided concrete examples to anchor the theoretical work.

The journey began with an exploration of natural history museum habitat dioramas, revealing how Western cultural narratives and power structures shape prodigious environmental representations, thus exposing the colonial and Enlightenment-era thinking in contemporary environmental perceptions. This exploration in Chapter 1 laid the critical groundwork for examining the four anthropocentric perspectives. A shift in direction occurred with the introduction of geophysical drill chips and core samples in *Abiotica*, which served as tangible manifestations of extractive practices and attempts to order the more-than-human environment. This was significant in developing a theoretical framework that challenged the perceived boundary between living and nonliving entities, prompting a reconsideration of minerals as potentially active and agential rather than immutable.

The creation of *Levitating Bushman* served as a pivotal work in examining settler colonial imaginings of the Australian desert. The video was analysed through the anthropocentric perspective of atemporality. This piece marked a transition towards site-responsivity and engaged with longstanding artistic tropes, consequently highlighting the inadequacy of Eurocentric paradigms in comprehending the Australian landscape.

Throughout the research process, I developed a methodology for translating field experiences into artworks, offering a novel approach to addressing complex ecological subjects. This culminated in *Mineral Rites*, an immersive installation that transformed a gallery into a simulated salt lake environment. The work explores Australian Gothic sensibilities while challenging the anthropocentric perspective of minerals as passive. By inviting viewers to reconsider the agency and vitality of inorganic matter, the salt-filled space prompts a re-evaluation of the assumed passivity in mineralogical domains.

The integration of site-responsivity and artistic output culminated in field trips to the Jack Hills, which manifested in a 24-hour endurance performance, in situ assemblages, and photographs. These experiences transformed my overall approach to the Western environmental gaze, revealing the monumentality of deep time and the limitations of human perception. While my initial approach to the site was shaped by specific artistic aims, particularly the idea of disrupting perspectives of mastery, I had not anticipated the distinct character and agency of the site itself. The recognition of nonhuman agencies and rhythms became integrated within the works, thereby reshaping my understanding of both methodology and artistic output. This evolution from subversion to relational engagement was a key finding and contribution in this research.

The final phase synthesised these findings through kinetic flipbook sculptures, offering a nuanced examination of the complexities inherent in the Western environmental gaze, particularly the perspective of mastery. This methodological shift proved effective in reconciling vast temporal and spatial scales that extend far beyond human perception. It addressed themes that had previously seemed elusive when tackled through more open-ended methods, ultimately providing a more comprehensive critique of anthropocentric perspectives.

This research shows that the core premise of critiquing the Western environmental gaze remains valid, yet gaining a firm critical foothold on this concept has been challenging due to its nebulous character. While this project has focused on examining this perspective, it does not claim to have entirely overcome or transcended it. The research acknowledges the ingrained nature of these cultural frameworks and the ongoing process of critically engaging with them. The project has sought to create moments of interruption and reflection, fostering temporal awareness and expanding perspectives beyond immediate human timescales. By situating current environmental concerns within the broader context of Earth's deep history and potential futures, the project has aimed to contribute to a more comprehensive understanding of ecological interconnectedness.

The journey from critiquing habitat dioramas to creating kinetic sculptures reflects not only a personal artistic evolution but also demonstrates that there is no singular, definitive way to address the complexities of the Western environmental gaze. Through sustained, multifaceted engagement—embracing both the grand scales of geological time and specific, tangible moments of human history—new perspectives and understandings have emerged, contributing to ongoing dialogues in the environmental humanities. My research demonstrates how art can productively engage with and destabilise prevailing environmental imaginaries.

LIST OF FIGURES

REFERENCES

Adorno, Theodor, and Robert Hullot-Kentor. 2006. *Things Beyond Resemblance: Collected Essays on Theodor W. Adorno.* New York: Columbia University Press.

AGNSW (Art Gallery of New South Wales). 2007. "Approach to Mundi Mundi." https://www.artgallery.nsw.gov.au/collection/works/L2011.60/#about.

AIATSIS (Australian Institute of Aboriginal and Torres Strait Islander Studies). 2024. "Didjeridu." https://aiatsis.gov.au/explore/didjeridu.

Andrew, Robert. 2023. "2023 PICA Solo: 'Held within a Word' Perth Institute of Contemporary Art." *Robert Andrew*. https://www.robotandrew.com/portfolio/2023-pica-solo/.

AWM (Australian War Memorial). 2024. "Forging the Nation—Bushman & Digger." https://www.awm.gov.au/visit/exhibitions/forging/identity/bushman_digger.

Bakke, Monika. 2017. "Art and Metabolic Force in Deep Time Environments." *Environmental Philosophy* 14 (1): 41-59. https://doi.org/10.5840/envirophil20173744.

Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning.* Durham: Duke University Press.

Bender, Barbara. 1999. "Subverting the Western Gaze: Mapping Alternative Worlds." In *The Archaeology and Anthropology of Landscape*, edited by Robert Layton and Peter Ucko, 31-45. London: Routledge.

Bhabha, Homi K. 1991. "'Race', Time and the Revision of Modernity." Oxford Literary Review 13, no. 1: 193-219. https://doi.org/10.3366/olr.1991.009.

Bjornerud, Marcia. 2018. *Timefulness: How Thinking Like a Geologist Can Help Save the World.* Kindle ed. New Jersey: Princeton University Press.

Butler, Judith. 1990. *Gender Trouble: Feminism and the Subversion of Identity*. 10th Anniversary ed. London: Routledge. https://doi:10.4324/9780203824979.

Camus, Albert. (1955) 1991. *The Myth of Sisyphus and Other Essays.* Translated by Justin O'Brien. 1st Vintage International ed. New York: Vintage Books.

Capon, Edmund. 2018. “Sidney Nolan Centenary.” https://www.artgallery.nsw.gov.au/artsets/e2ic90.

Carlson, Allen. 2024. *Environmental Aesthetics.* In *The Stanford Encyclopedia of Philosophy* (Summer 2024 ed.), edited by Edward N. Zalta and Uri Nodelman. https://plato.stanford.edu/archives/sum2024/entries/environmental-aesthetics/.

Carroll, John. 1992. *Intruders in the Bush: The Australian Quest for Identity.* Melbourne: Oxford University Press.

Cathcart, Michael. 2013. *Starvation in a Land of Plenty: Wills’ Diary of the Fateful Burke and Wills Expedition.* Canberra: National Library of Australia.

Cavosie, Aaron J., John W. Valley, and Simon A. Wilde. 2019. “The Oldest Terrestrial Mineral Record: Thirty Years of Research on Hadean Zircon from Jack Hills, Western Australia.” In *Earth’s Oldest Rocks*, 2nd ed., edited by Martin J. Van Kranendonk, Vickie C. Bennett, and J. Elis Hoffmann, 255-278. Amsterdam: Elsevier.

Chapman, Helen. 2010. *Who Came on the First Fleet?* South Yarra, Vic.: Macmillan Education Australia.

Chaudhuri, Una. 2020. “Resilience: A Journal of the Environmental Humanities.” *Resilience* 7.

Clarkson, Chris, Zenobia Jacobs, Ben Marwick, Richard Fullagar, Lynley Wallis, Mike Smith, Richard G. Roberts*,* et al. 2017. “Human Occupation of Northern Australia by 65,000 Years Ago.” *Nature* 547 (7663): 306-310. https://doi.org/10.1038/nature22968.

Collins, David. 2024. “Australian Geology Travel Maps.” https://trilobite.solutions/maps/.

Cronon, William. 1996. “The Trouble with Wilderness; or, Getting Back to the Wrong Nature.” *Environmental History* 1: 7-28. https://doi.org/10.2307/3985059.

Curtin University. 2023. “Sensitive High Resolution Ion Microprobe Facility (Shrimp).”https://research.curtin.edu.au/facilities/shrimp-microprobe-facility/.

DeLanda, Manuel. 1992. “Nonorganic Life.” In *Incorporations*, edited by Jonathan Crary and Sanford Kwinter, 129-167. New York: Zone Books.

———. 1999. “Deleuze, Diagrams, and the Open-Ended Becoming of the World.” In *Becomings: Explorations in Time, Memory, and Futures*, edited by Elizabeth Grosz, 29-41. Ithaca: Cornell University Press.

Deleuze, Gilles, and Félix Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia.* Minneapolis: University of Minnesota Press.

Dezeuze, Anna. 2017. *Almost Nothing: Observations on Precarious Practices in Contemporary Art.* Manchester: Manchester University Press. https://doi:10.7765/9781526123497.

Dion, Mark. 2017. "Mark Dion: The Classical Mind." Boston: ICA Boston. YouTube video, [3:50]. https://www.youtube.com/watch?v=JBYfv0Fb7IA.

Dubisch, Jill. 2004. "Heartland of America: Memory, Motion and the (Re)construction of History on a Motorcycle Pilgrimage." In *Reframing Pilgrimage: Cultures in Motion*, edited by Simon Coleman and John Eade, 107-134. Hoboken: Taylor and Francis, 2012.

Eliasson, Olafur. 2014. *Olafur Eliasson Interview: A Riverbed inside the Museum.* Edited by Louisiana Channel and Kamilla Bruus. YouTube video, [33:23]. https://www.youtube.com/watch?v=ZLUX3AI2Uic.

Flam, Jack, Robert Smithson. 1996. *Robert Smithson, the Collected Writings.* Berkeley: University of California Press.

Flodin, Camilla. 2018. "The Eloquence of Something that has No Language: Adorno on Hölderlin's Late Poetry." *Adorno Studies* 2 (1): 1-27.

Foucault, Michel. 1970. *The Order of Things: An Archaeology of the Human Sciences*. New York: Pantheon Books.

———. 1979. *Discipline and Punish the Birth of the Prison*. Social Theory. New York: Vintage Books.

Frazer, Heather. 2009. "Core Matters: Greenland, Denver and the GISP2 Ice Core." In *High Places: Cultural Geographies of Mountains, Ice and Science*, edited by Denis E. Cosgrove and Veronica Della Dora, 64-83. London: I. B. Tauris.

Gilpin, William. 1782. *Observations on the River Wye, and Several Parts of South Wales: Relative Chiefly to Picturesque Beauty, Made in the Summer of the Year 1770.* Cambridge Library Collection. n.p.

Gould, Stephen Jay. 2001. *Time's Arrow, Time's Cycle: Myth and Metaphor in the Discovery of Geological Time.* Kindle ed. Cambridge, MA, and London: Harvard University Press.

Groom, Amelia. 2013. *Time.* London: Whitechapel Gallery.

GSWA (Geological Survey of Western Australia). 2017. “Meekatharra.” Edited by P. J. Backhouse. Perth: Geological Survey of Western Australia.

Gupta, Ravi P. (2017) 2018. *Remote Sensing Geology.* 3rd ed. Berlin and Heidelberg: Springer Nature. https://doi:10.1007/978-3-662-55876-8.

Haraway, Donna. 1984. “Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City, 1908-1936.” *Social Text* 11: 20-64. https://doi.org/10.2307/466593.

———. 1988. “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective.” *Feminist Studies* 14 (3): 575-99. https://doi.org/10.2307/3178066.

———. 2013. “The Promises of Monsters: A Regenerative Politics for Inappropriate/D Others.” In *Cultural Studies*, edited by Lawrence Grossberg, Cary Nelson, and Paula A. Treichler, 295-336. 1st ed. New York: Routledge. https://doi.org/10.4324/9780203699140.

———. 2016. “Staying with the Trouble: Making Kin in the Chthulucene” *Experimental Futures: Technological Lives, Scientific Arts, Anthropological Voices.* Durham, North Carolina: Duke University Press,

Haynes, Roslynn D. 1998. *Seeking the Centre: The Australian Desert in Literature, Art and Film.* Cambridge: Cambridge University Press.

———. 2000. “RLA Lectures 2000: Seeking the Centre.” RLA Lectures 2000: Mysticism and The Muse. Sydney: University of Sydney Printing Service.

Hebert, Paul D. N., Alina Cywinska, Shelley L. Ball, and Jeremy R. deWaard. 2003. “Biological Identifications through DNA Barcodes.” *Proceedings of the Royal Society B: Biological Sciences* 270 (1512): 313-321. https://doi.org/10.1098/rspb.2002.2218.

Hird, Myra J. 2012. “Digesting Difference: Metabolism and the Question of Sexual Difference.” *Configurations* 20 (3): 213-237. https://doi.org/10.1353/con.2012.0019.

Howes, David. 2022. “The Misperception of the Environment: A Critical Evaluation of the Work of Tim Ingold and an Alternative Guide to the Use of the Senses in Anthropological Theory.” *Anthropological Theory* 22 (4): 443-466. https://doi.org/10.1177/14634996211067307.

Huhn, Tom, and Lambert Zuidervaart. 1997. *The Semblance of Subjectivity: Essays in Adorno’s Aesthetic Theory.* Cambridge, MA: MIT Press.

Humphries, Christopher J. 2005. *Systematics: Historical Overview.* Chichester: John Wiley & Sons, Ltd.

Ingold, Tim. 1992. “Culture and the Perception of the Environment.” In *Bush Base, Forest Farm: Culture, Environment, and Development*, edited by Elisabeth Croll and David J. Parkin, 39-56. London: Routledge.

———. 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill.* London: Routledge.

———. 2011. “Against Space: Place, Movement, Knowledge.” In *Being Alive: Essays on Movement, Knowledge and Description*, 145-155. London: Routledge.

Kelly, Michael. 1998. *Encyclopedia of Aesthetics*. Vol. 1: Oxford University Press.

Kinny, Peter. 2022. “Geological Wonderland at Curtin University.” https://www.indesignlive.com/projects/john-wardle-architects-curtin-university.

Knoll, Andrew. 2021. *A Brief History of Earth.* 1st ed. New York: Harper Collins.

Langton, Marcia. 1996. “What Do We Mean by Wilderness? Wilderness and Terra Nullius in Australian Art.” *The Sydney Papers* 8 (1): 11-31.

Latour, Bruno. 2017. *Facing Gaia: Eight Lectures on the New Climatic Regime.* Kindle ed. Cambridge: Polity.

Lefebvre, Henri. (1974) 1991. *The Production of Space.* Translated by Donald Nicholson-Smith. Malden, MA: Blackwell Publishing.

Lovejoy, Arthur O. (1933) 1970. *The Great Chain of Being: A Study of the History of an Idea. The William James Lectures Delivered at Harvard University, 1933.* 9th ed. Cambridge, MA: Harvard University Press.

Lubowski-Jahn, Alicia. 2011. “A Comparative Analysis of the Landscape Aesthetics of Alexander Von Humboldt and John Ruskin.” *The British Journal of Aesthetics* 51 (3): 321-333. https://doi.org/10.1093/aesthj/ayr017.

Macfarlane, Robert. 2019. *Underland: A Deep Time Journey.* Kindle ed. London: Hamish Hamilton.

Magagnoli, Paolo. 2020. “Blinded by Quarry Vision: Nicholas Mangan, Australia, and the History of Extraction in the South Pacific.” *Third Text* 34 (3): 415-435. https://doi.org/10.1080/09528822.2020.1823703.

Mangan, Nicholas. 2016. *Limits to Growth.* Berlin: Sternberg Press.

Marsh, Anne. 1993. *Body and Self: Performance Art in Australia 1969-92.* Melbourne: Oxford University Press.

Massey, Doreen. 2005. *For Space.* London: SAGE Publications.

MCA (Museum of Contemporary Art Australia). 2012. “Todd McMillan: By the Sea 2004.” Museum of Contemporary Art Australia. https://www.mca.com.au/collection/artworks/2006.39/.

———. 2021. *Nicholas Mangan: A World Undone.* MCA. https://www.mca.com.au/exhibitions/nicholas-mangan-a-world-undone/.

———. 2024. “Rebecca Baumann: Automated Colour Field, 2011.” Museum of Contemporary Art Australia. https://www.mca.com.au/collection/artworks/2011.20/.

McPhee, John A. 1981. *Basin and Range: Annals of the Former World.* 1st ed. New York: Farrar, Straus and Giroux.

Merchant, Carolyn. (1980) 1989. *The Death of Nature: Women, Ecology, and the Scientific Revolution.* Kindle ed. New York: Harper & Row.

Milner, Johnny. 2013. “Australian Gothic Soundscapes: The Proposition” [Paper in Sound Media, Sound Cultures themed section, edited by Karina Aveyard and Albert Moran]. *Media International Australia, Incorporating Culture & Policy,* Vol. 148, 94-106. https://doi.org/10.1177/1329878X1314800111.

Monmonier, Mark S. 1996. *How to Lie with Maps.* 2nd ed. Chicago: University of Chicago Press.

Moore, Alison. 2020. *The Macquarie Dictionary*. 9th ed. Sydney: Pan Macmillan Australia.

Moorehead, Alan. 1964. “The Ghastly Blank: The First Exploration of Australia.” *The Atlantic* (Boston). https://www.theatlantic.com/magazine/archive/1964/02/the-ghastly-blank-the-first-exploration-of-australia/657446/.

Morton, Timothy. 2009. *Ecology Without Nature: Rethinking Environmental Aesthetics.* Kindle ed. Cambridge, MA: Harvard University Press.

———. 2010. *The Ecological Thought.* Cambridge, MA: Harvard University Press.

———. 2013. *Hyperobjects: Philosophy and Ecology After the End of the World.* Minneapolis: University of Minnesota Press.

Moulds, Timothy. 2018. *Survey for Aquatic Macroinvertebrates for the Lake Mackay Sop Project, Western Australia*. Report by Invertebrate Solutions for Agrimin Ltd.

Newman, William. 1977. “Deep Time.” In *The Atomic Time Scale*. Denver: United States Department of the Interior Geological Survey.

NGA (National Gallery of Australia). 2014. “About *Approach to Mundi-Mundi: Silverton Road*. https://searchthecollection.nga.gov.au/object/253089.

Ngaanyatjarra. 2024. “Kiwirrkurra.” Ngaanyatjarra Council Group. https://www.ngaanyatjarra.org.au/kiwirrkurra.

NLA (National Library of Australia). 2023. “Daily News (Perth, Wa: 1882 - 1955), Saturday 14 January 1911, Page 8.” National Library of Australia. https://www.nla.gov.au/la.news-article81756212.

———. 2024. “Challenging Terra Nullius.” Digital Classroom. Assessed September 4, 2024. https://www.nla.gov.au/digital-classroom/senior-secondary/cook-and-pacific/cook-legend-and-legacy/challenging-terra.

NMC (New Mineral Collective). 2024. New Mineral Collective. https://www.newmineralcollective.com.

Olsen, John, and Sandra McGrath. 1981. *The Artist & the Desert.* Sydney: Bay Books.

OSW (Open Spatial Workshop). 2023. “Metabolic Scales.” Open Spatial Workshop. https://osw.com.au/Metabolic-Scales-2023.

Palais de Tokyo. 2017. “Dioramas.” Palais de Tokyo. https://palaisdetokyo.com/en/exposition/dioramas/.

PICA (Perth Institute for Contemporary Arts). 2023. “Robert Andrew: Held within a Word.” Perth Institute of Contemporary Arts. https://pica.org.au/whats-on/robert-andrew/.

Pinto, Ana Teixeira. 2016. “Alien Economies.” In *Limits to Growth.* Berlin: Sternberg Press.

Porter, Roy. 1977. *The Making of Geology: Earth Science in Britain 1660–1815.* Cambridge: Cambridge University Press.

Povinelli, Elizabeth A. 2016. *Geontologies: A Requiem to Late Liberalism.* Durham, NC: Duke University Press.

———. 2021. *Between Gaia and Ground: Four Axioms of Existence and the Ancestral Catastrophe of Late Liberalism.* Kindle ed. Durham: Duke University Press.

Reiss, Michael J. 2015. “The Cultural History and Learning Affordances of Natural History Dioramas.” In *Natural History Dioramas: History, Construction and Educational Role*, edited by Sue Dale Tunnicliffe and Annette Scheersoi, 279-288. Dordrecht: Springer Netherlands.

Riganti, A., J. F. Johnston, R. M. Hocking, and D. McB. Martin. 2016. *Mapping Western Australia: State Geological Maps 1894-2015.* 1st ed. East Perth, Western Australia: Geological Survey of Western Australia.

Riskin, Jessica. 2016. *The Restless Clock: A History of the Centuries-Long Argument Over What Makes Living Things Tick.* Kindle ed. Chicago: The University of Chicago Press.

Romakin, Helene. 2021. “Extremely Unagitated—a Closer Look at the Artistic Practice of Lara Almarcegui.” *On Curating* 50: 77-88.

Rose, Deborah Bird. 1996. *Nourishing Terrains: Australian Aboriginal Views of Landscape and Wilderness.* Canberra: Australian Heritage Commission.

———. 2004. *Reports from a Wild Country: Ethics for Decolonisation.* Sydney: University of New South Wales Press.

Rudwick, M. J. S. 1972. *The Meaning of Fossils: Episodes in the History of Palaeontology.* London: Macdonald.

———. 2014. *Earth's Deep History: How It Was Discovered and Why It Matters.* Chicago and London: The University of Chicago Press.

Ruskin, John. (1851) 1904. *The Stones of Venice, Vol. 2: The Sea Stories.* London: Routledge.

———. (1860) 2010. *Modern Painters, Volume 4 (of 5)*. Kindle ed. Project Gutenberg.

Salama, R., C. Barber, J. Hosking, and D. Briegel. 1992. "Geochemical Evolution of Lake Deborah East, Prototype Salt Lake in the Relict Drainage of the Yilgarn River of Western Australia." *Australian Journal of Earth Sciences* 39 (5): 577-590. https://doi.org/10.1080/08120099208728051.

Scotese, Christopher R. 2004. "A Continental Drift Flipbook." *The Journal of Geology* 112 (6): 729-741. https://doi.org/10.1086/424867.

Sholtz, Paul, Michael Bretz, and Franco Nori. 1997. "Sound-Producing Sand Avalanches." *Contemporary Physics* 38 (5): 329-342. https://doi.org/10.1080/001075197182306.

SLWA (State Library of Western Australia). 2024. *Lighthouse on Arthur Head, Fremantle.* Passey collection of photographs: 5323B/2041. https://purl.slwa.wa.gov.au/slwa_b1776403_1.

Sobel, Dava. 2011. *Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time.* New York: Walker.

Solnit, Rebecca. 2002. *Wanderlust: A History of Walking.* New York: Penguin Books.

Spaggiari, Catherine V., Robert T. Pidgeon, and Simon A. Wilde. 2007. “The Jack Hills Greenstone Belt, Western Australia; Part 2, Lithological Relationships and Implications for the Deposition of > or =4.0 Ga Detrital Zircons.” *Precambrian Research* 155 (3-4): 261-286. https://doi.org/10.1016/j.precamres.2007.02.004.

Stadler, Jane. 2019. “Atopian Landscapes.” In *A Companion to Australian Cinema*, edited by

Stan-Lotter, Helga. 2011. “Halobacteria – Halophiles.” In *Encyclopedia of Geobiology*, edited by Joachim Reitner and Volker Thiel, 437-441. Dordrecht: Springer Netherlands.

Stanner, W. E. H. (1953) 1979. *White Man Got No Dreaming: Essays, 1938-1973.* Canberra: Australian National University Press.

Sterling, Bruce. 2010. “Atemporality for the Creative Artist.” Wired. https://www.wired.com/2010/02/atemporality-for-the-creative-artist/.

Streitberger, Alexander. 2016. “Display Clash. The Diorama and/as Wunderkammer in Contemporary Art.” In *Seeing Through? The Materiality of Dioramas (1600-2010)*, Berne.

Thobo-Carlsen, Mette. 2016. “Walking the Museum—Performing the Museum.” *The Senses & Society* 11 (2): 136-157. https://doi.org/10.1080/17458927.2016.1190067.

Turcotte, Gerry. 1991. “Peripheral Fear: A Comparative Study of Australian and English-Canadian Gothic Fiction.” PhD diss., The University of Sydney. https://hdl.handle.net/2123/26314.

———. 1998. “Australian Gothic.” In *The Handbook to Gothic Literature*, edited by Marie Mulvey-Roberts, 10-20. London: Palgrave Macmillan.

Twidale, C. R. 1971. “Evolution of Sand Dunes in the Simpson Desert, Central Australia.” *Transactions — Institute of British Geographers* 56: 77-109. https://doi.org/10.2307/621543.

USGS (U.S. Geological Survey). 1995. *Aerial Photographs and Satellite Images*. Reston, VA. https://pubs.usgs.gov/publication/70045325.

WA Salt. 2024. “Created by Mother Nature.” WA Salt Group. http://wasalt.com.au/social-responsibility/.

Winton, Vicky, Viviene Brown, Matthias Leopold, Belinda D'Ovidio, Emielda Yusiharni, Annie Carson, and Colin Hamlett. 2016. "The First Radiometric Pleistocene Dates for Aboriginal Occupation at Weld Range, Inland Mid West, Western Australia." *Australian Archaeology* 82 (1): 60-66. https://doi.org/10.1080/03122417.2016.1163952.

Wolff, Mark. 2019. "In Search of a Tropical Gothic in Australian Visual Arts." *Etropic* 18 (1): 192-212. https://doi.org/10.25120/etropic.18.1.2019.3691.

Wonders, Karen. 1990. "The Illusionary Art of Background Painting in Habitat Dioramas." *Curator* 33 (2): 90-118. https://doi.org/10.1111/j.2151-6952.1990.tb00981.x.

———. 1993. "Habitat Dioramas: Illusions of Wilderness in Museums of Natural History." PhD diss., Uppsala University.

———. 2003. "Habitat Dioramas and the Issue of Nativeness." *Landscape Research* 28 (1): 89-100. https://doi.org/10.1080/01426390306532.

Yusoff, Kathryn. 2018. *A Billion Black Anthropocenes or None.* Kindle ed. Minneapolis, MN: University of Minnesota Press.

Zuidervaart, Lambert. 1998. "Theodor Adorno: Survey of Thought." In *Encyclopedia of Aesthetics*, edited by Michael Kelly, 16-20. New York: Oxford University Press.

APPENDIX

SCHOLARLY PUBLICATIONS

2022. “Abiotic Persperctives.” In *Swamphen.* vol. 8, 1-11. eds. Perdita Phillips and Louise Boscacci. Sydney: ASLEC-ANZ. (peer-reviewed, published)

CONFERENCE PAPERS

2019. “The Australian Mirage: Illusions of Shared Environmental Perception.” Paper presented at the Art in the Anthropocene Conference, Trinity College, Dublin, Ireland, June 7-9. (unpublished)

2019. “Abiotic Perspectives.” Paper presented at the *Encounters with and within the Anthropocene: Speculating on Particular - Planetary Aesthetics* panel, AAANZ Conference, Auckland University, Auckland, Aotearoa New Zealand, Dec 3-6. (unpublished)

2021. “Geo-imaginaries.” Paper presented at the *Works-in-Progress Module 2: Practices of Counter-Research* panel, ASLEC-ANZ Conference Aotearoa: Ngā Tohu o te Huarere: Conversations Beyond Human Scales, online, Nov 23-26. (unpublished)

2021. “Geo-imaginaries: and the Oldest Known Rocks on Earth.” Paper presented at the *Tectonic Plates* panel, ASLEC-ANZ Conference Aotearoa: Ngā Tohu o te Huarere: Conversations Beyond Human Scales, online, November 23-26. (unpublished)

EXHIBITION BY ROB KETTELS

This creative production is presented for the Degree of Doctor of Philosophy of Curtin University. It accompanies the exegesis titled: *Reframing the Western Environmental Gaze through Art Practice: From Anthropocentrism to Interconnectedness*.

LIST OF ARTWORKS

1. *Temporal Dissonance Erawondoo Hill*, 2021, pigment ink print, 70cm x 46cm.

2. *W74 Earth's Oldest Known Matter*, 2021, pigment ink print, 70cm x 46cm.

3. *Erawondoo Hill Tableau*, 2021, pigment ink print, 70cm x 46cm.

4. *Allegories of Subjugation*, 2020, survey pins, pigment ink print, 70cm x 46cm.

5. *Allegories of Subjugation (ii)*, 2020, survey stakes and flagging tape, pigment ink print, 70cm x 46cm.

6. *Explaining Humans to the Oldest Matter on Earth*, 2020, survey pins, pigment ink print, 70cm x 46cm.

7. *Levitating Bushman*, 2019, single channel video, looped 3:43, silent, 420cm x 210cm.

8. *A Day in the Life of a Hadean Eon Zircon Crystal*, 2020-2021, single channel video, looped 3:42, silent, 70cm x 40cm.

9. *Untitled* (poetic monologue), 2020-2024, pen and Indian ink on geologist's survey book paper, 20cm x 100.5cm.

10. *Diorama Gradient*, 2024, Dulux paint, Dulux Hot Weather Thinner, 1000cm x 260cm.

11(a). *Timeball*, 2023, stainless-steel housing, electromechanical parts, watercolour paper, 1 of 8 assemblies that formed the Fremantle Bienniale installation, 13cm x 18cm.

11(b). *Timeball*, 2023, acrylic housing, electromechanical parts, watercolour paper, 1 of 8 assemblies that formed the Fremantle Bienniale installation, 13cm x 18cm.

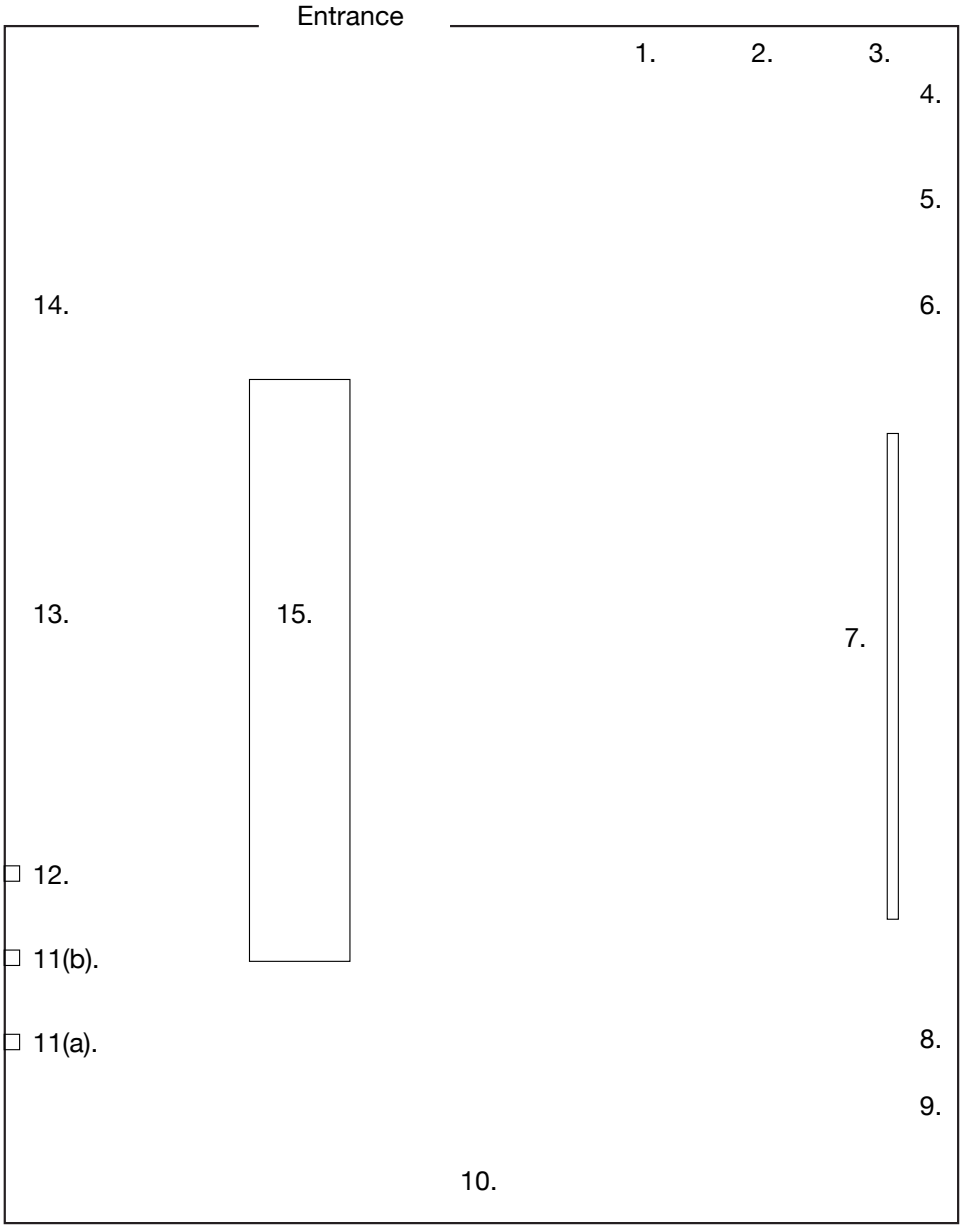
12. *Time machine (ii)*, 2023, electromechanical parts, watercolour paper, 13cm x 18cm.

13. *Allegories of Subjugation (iii),* 2024, survey pins, 100cm x 100cm.

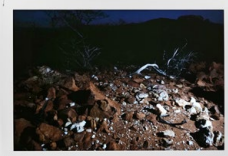
14. *Core Composition*, 2024, core samples, 220cm x 220cm.

15. *Drill Chip Assemblage (ii)*, 2024, drill hole plug, drill chips, core sample, 490cm x 120cm.

FLOOR SHEET



1.



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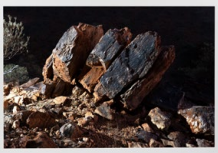

3.

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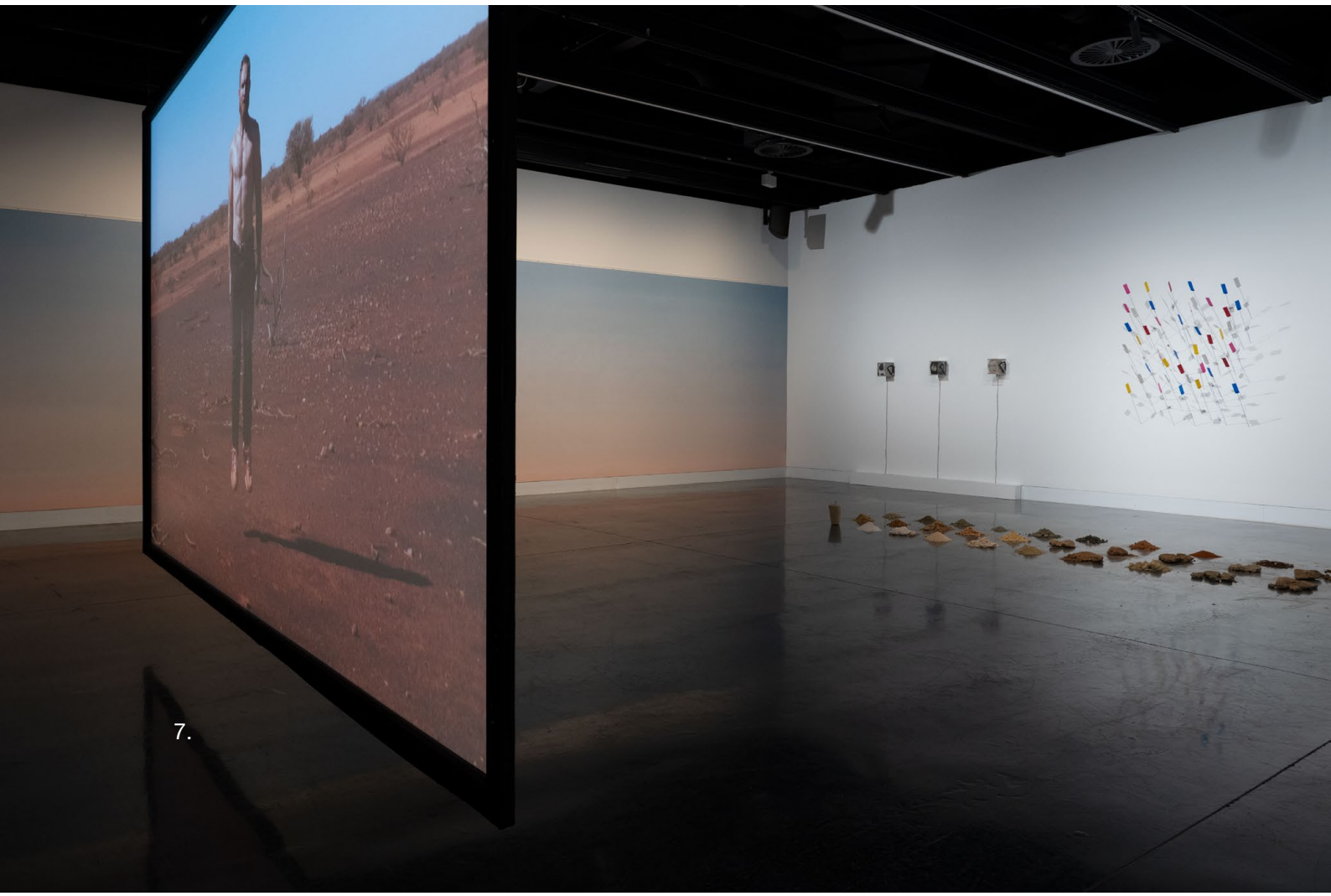
5.

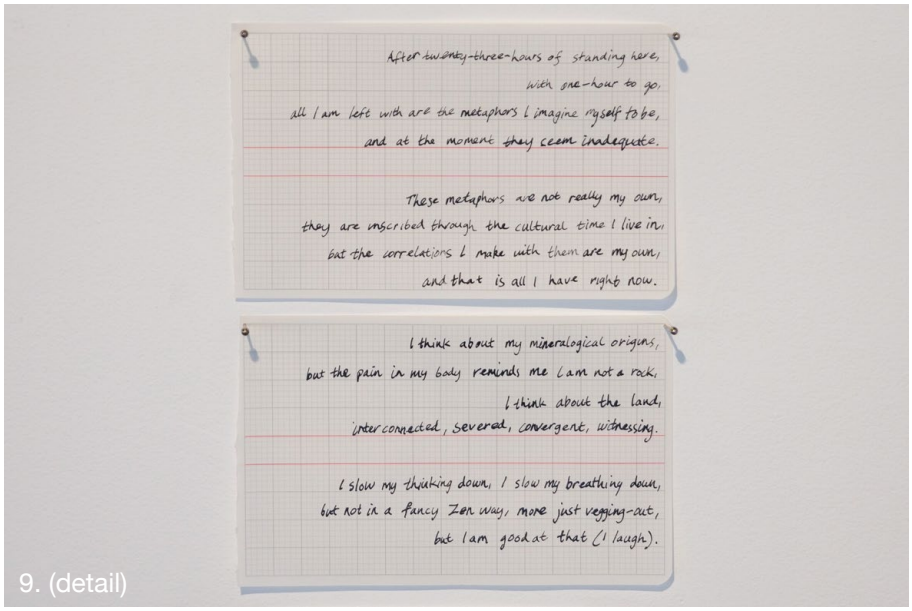
6.



7.

8.

9.



After twenty-three hours of standing here,
with one hour to go,
all I am left with are the metaphors I imagine myself to be,
and at the moment they seem inadequate.

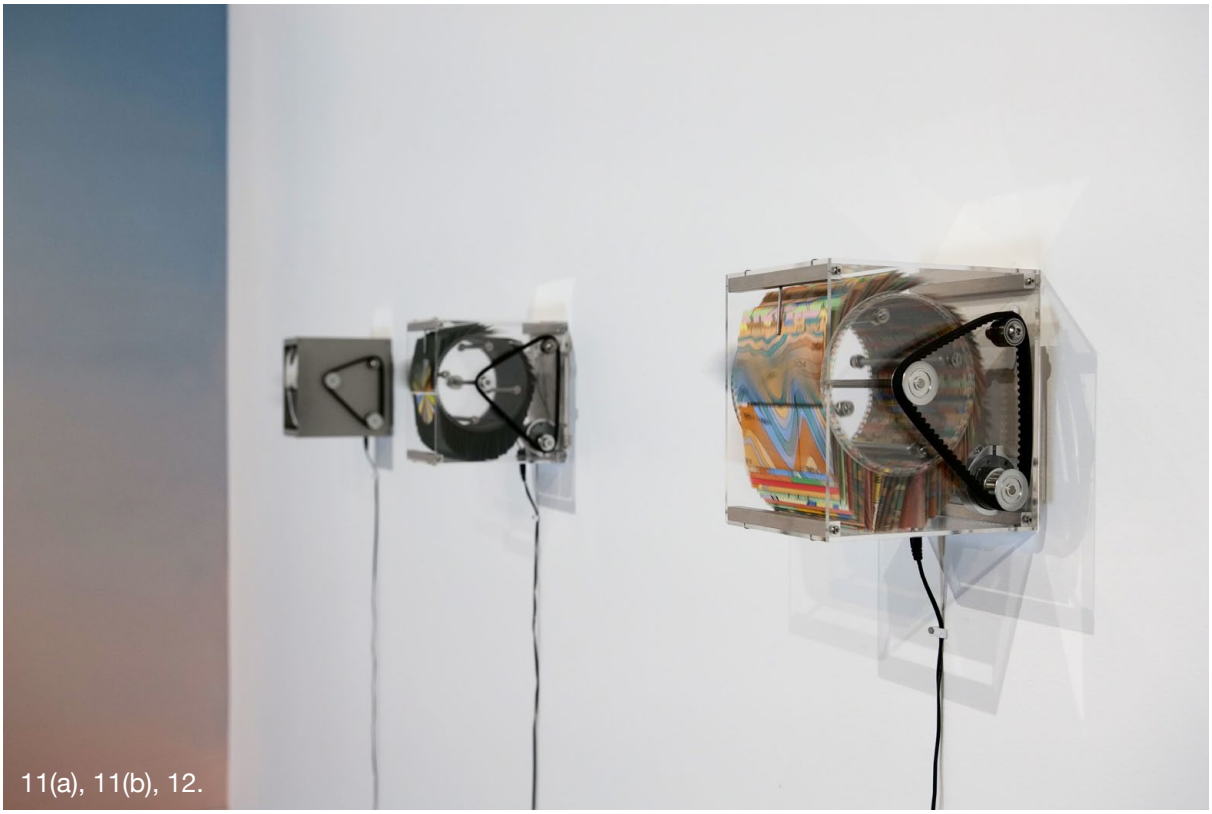
These metaphors are not really my own,
they are inscribed through the cultural time I live in,
but the correlations I make with them are my own,
and that is all I have right now.

I think about my mineralogical origins,
but the pain in my body reminds me I am not a rock.
I think about the land,
interconnected, several, convergent, witnessing.

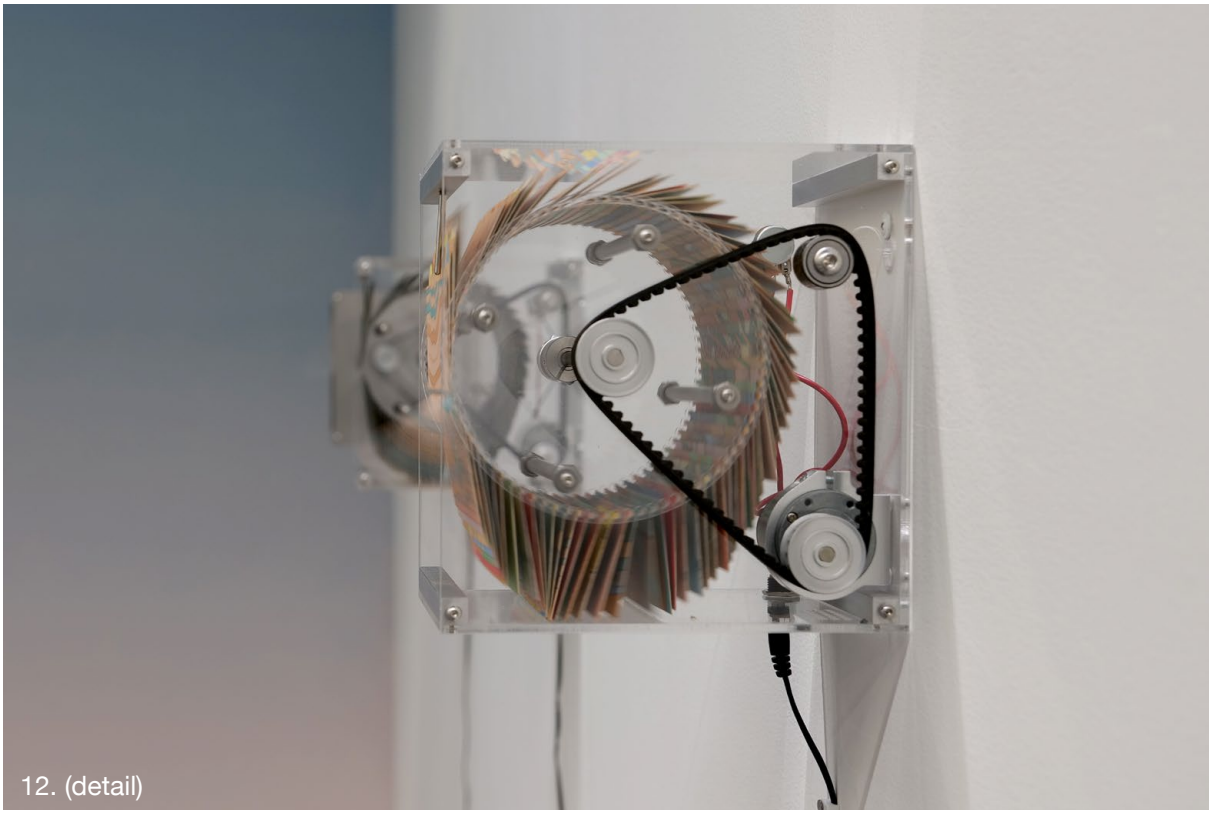
I slow my thinking down, I slow my breathing down,
but not in a fancy Zen way, more just vegging-out,
but I am good at that (I laugh).

9. (detail)

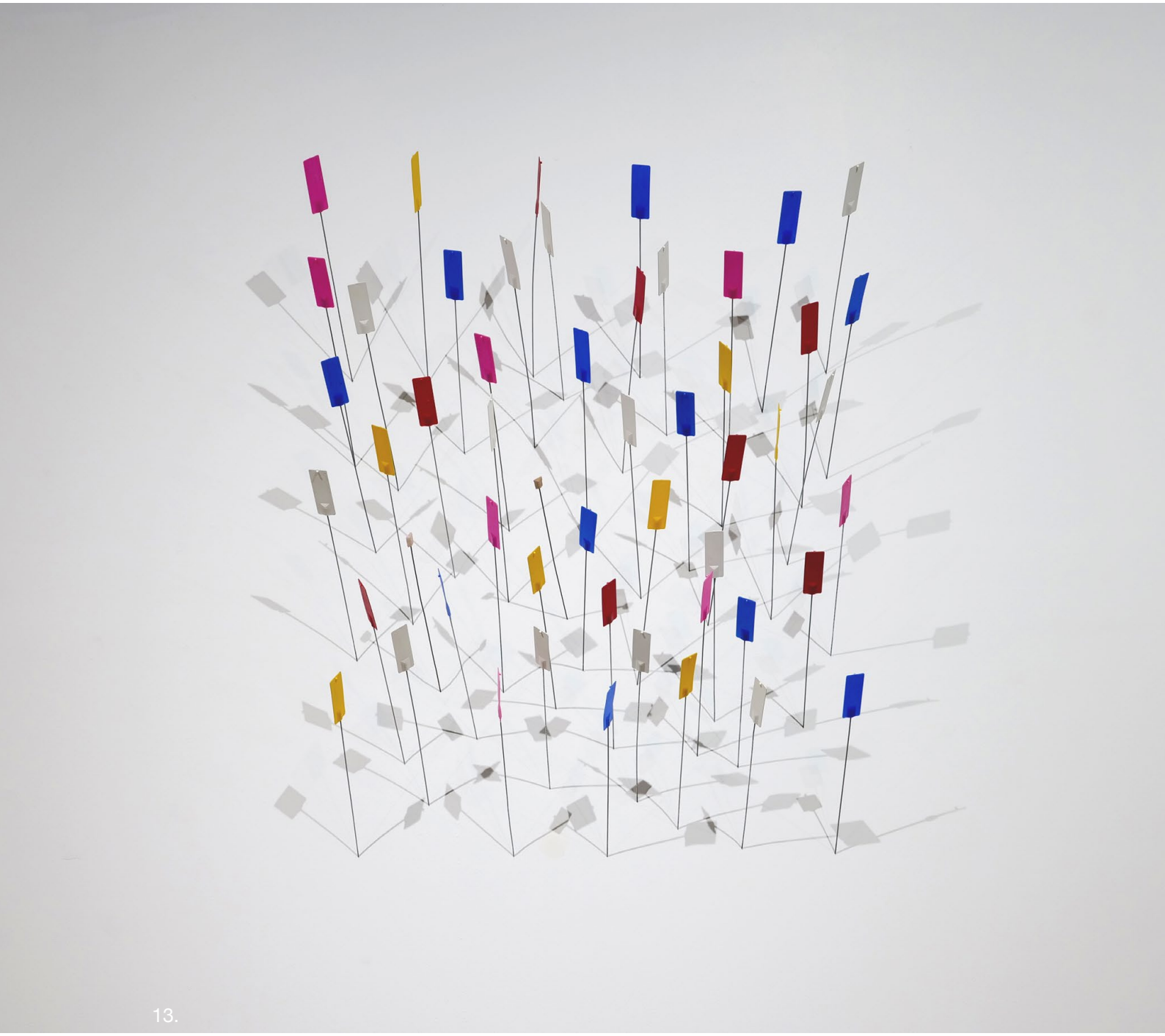
10.



11(a), 11(b), 12.



12. (detail)



13.

14.

15.