The Traces of Mining Activities in Riverscapes — a Lyrical and Performative Art-based Approach

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By

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Contents

Abstract

Keywords: Red River, mineral extraction, ritual, apology, performative time-based practice, Global South and Asian perspectives, ecofeminism, hydrofeminism, more-than-human, water relations, Chthulucene

This practice-based research investigates how performative time-based art can respond to the entanglements between humans and riverscapes. Beginning with broad ecological and theoretical concerns, it narrows to a specific site: the Red River in Camborne, Cornwall, UK, a waterway marked by centuries of mining activities. The Red River carries the visible traces of extraction in their striking red hue, flowing like blood and resembling a scar across the earth's surface. They stand as witness to human industrial ambition and as bearers of ecological devastation.

Approached from the perspective of an Asian female outsider, this research examines a polluted river that has been studied by scientists but rarely by artists. It challenges anthropocentric approaches, integrating Eastern and Western ecological philosophies, including ecofeminism, hydrofeminism, Global South and Asian perspectives, to explore a new state of harmonious interaction in which humans and the riverscapes co-exist. The practice employs cross-media methods to engage wider audiences, with ritual performance taking a central role. The core concept revolves around apologising to the Red River.

From this sustained practice, the thesis takes shape as a mythological guide for learning to apologise to wounded rivers. It offers a series of orienting gestures, inviting artists, researchers and communities to adapt them with care and precision in other riverscapes. In this sense, the research is designed to travel, carrying a way of attending, witnessing and making amends that can be taken up elsewhere.

The conceptual framework of the Chthulucene, articulated by Donna Haraway, provides orientation for this study. It unsettles linear narratives of progress and

foregrounds relational becoming across species. Here, it is approached as an ethical call that resonates with the guide developed through practice: to listen to rivers as co-inhabitants of damaged worlds, to trace their scars as shared histories, and to imagine futures grounded in reciprocity rather than extraction.

In the spirit of recognising the generative power of language and representation, I refer to the river as *they*, reflecting a commitment to resisting anthropocentric perspectives and recognising rivers as living, vibrant assemblages of more-than-human relations. The *more-than-human* here refers to organisms and life forms beyond the human, including entire ecologies, landscapes, mammals, amphibians, plants, insects, algae, and microbial communities...

This research positions itself as an intervention of ecological consciousness. It explores how experimental art-based approach can reshape perceptions, rebuild fractured relationships, and make amends for the ecological and cultural wounds inflicted upon riverscapes. By bridging theory and practice, it contributes to the ongoing discourse on more-than-human relations, offering a way of rethinking river-human interactions in the context of the Chthulucene and beyond.

Finally, I suggest that each of us carries the potential to become a walking, talking red river. Rivers bear witness to the wounds of extractivism. Walking with them becomes both an act of attention and a return to our fluid nature. Water flows through us, shaping how we live, feel, and remember. In their movements, we find echoes of ourselves, beings bound to a shared body of memory, rupture, and repair.

A Letter to the Red River

When I first encountered you, I knew nothing.

At first, it was your colour that captivated me. Layers upon layers of red shimmered with ever-changing light, spreading across the river in an unexpected and exhilarating way. I clearly remember being deeply drawn to the scene, mistaking visibility for vitality, difference for a form of beauty.

Later, I began to understand what lay behind that colour.

As one river among many, you are both like others and unlike them. Like countless rivers shaped by extraction, you carry long histories of damage made ordinary over time. Yet your iron-stained waters refuse to recede. What is hidden elsewhere is laid bare here. With you, mining does not fade into the background; your waters hold it, lingering and undeniable.

Perhaps it was not simply that I chose you. Your traces seemed to call me. Everything I saw, heard, smelt, and touched made it impossible to turn away.

I kept moving closer to you, then turning back, each time walking further along the riverbank, my excitement gradually replaced by unease. It turned out that the red was not a sign of abundance, but a mark of injury. It traced where metals entered your body, where mining settled into the riverbed, where harm had grown so familiar it could pass as scenery. The dazzling spectacle from a distance slowly revealed the traces of violence.

You continued to flow.

You never sought attention.

You carried that history of extraction, attempting to dissipate it in your own time.

I came to realise that although I could approach you, stand beside you, even step into your waters, your body had long been numbed by centuries of use. My presence could not touch your true wounds; my concern could not change your condition. You are not a river awaiting intervention, nor a site needing to be resolved. For a long time, you have been saturated by another kind of attention, constantly being measured, managed, exploited, and altered.

What disturbed me most was that you had been ignored, and that such neglect had been so easily absorbed into the language of progress. Pollution became an unremarkable backdrop; mining became vital human heritage. Your suffering is woven into economic narratives of revival, opportunity, and transformation, while your body continues to bear the cost.

You do not need to be represented.

You do not need to be explained.

You continue to flow, on your own.

It was then that I was changed by you. I stopped pondering why I chose you. I simply wanted to care for you. I wanted to know how to be with you without repeating the same acts of extraction, even if it was in the name of care. How to respond without reducing you to an image, a case study, or a metaphor to be consumed and discarded.

My research did not begin with a plan, but with hesitation. It began with walking, pausing, and returning. It began with my gradual realisation that any relationship formed with you would have to be humble, unfinished, and accountable. I did not come to speak for you, nor to restore you. I am here because staying feels more honest than leaving, and because inaction has gone on for too long.

You are water, metal, plants, bacteria, infrastructure, memory, and weather. You are not a body with clear boundaries, but a field of relations that exceeds human understanding. Encountering you draws me into entanglement, where harm moves across species and time, and responsibility extends beyond the surface.

I am sorry for what flows through you without consent.

I am sorry for everything you have lost.

I am sorry that attention, and apology, arrived so late.

I do not know what I can do for you.

I do not know what we can do for you.

My work begins with these questions, not to seek answers, but to learn from you, to ask differently, to open up a new way of being with you, as you continue to flow.

Introduction

For humans, rivers are more than geographical features. They are living networks that carry history, culture, ecology, and social relations. Across the world, mining activities have profoundly impacted riverscapes, polluting waterways, devastating biodiversity and transforming the strong bonds between local communities and their rivers.

This study focuses on the Red River's mineral histories, especially copper, tin, and on the growing presence of lithium. These minerals organise contemporary extractive ecologies and are now entangled with the rhetoric of renewable and "clean" energy. Lithium is frequently cast as a new gold that promises transformation under the sign of sustainability. Coal and oil, while central to extractive economies, fall outside the scope of this research because their chemical pathways through riverscapes and their socio-environmental legacies follow a distinct trajectory from metallic minerals.

The project links historical mining legacies with their contemporary resurgence, using artistic practice to cultivate public attentiveness to renewed mining activities while the river remains unhealed. In the Red River region, both tin and lithium are experiencing a revival: tin mining is being re-launched after decades of dormancy, and lithium exploration and extraction are gaining momentum as Cornwall positions itself in critical-minerals supply chains. The prospect of a new cycle of harm marks the necessity and urgency of this research. The practice developed here is conceived to be carried forward, offering orienting gestures that may be adapted within other riverscapes facing renewed extractive pressure.

In this thesis, the *performative* refers to more than acts of *performance* or artistic expression. Drawing upon Judith Butler's account of performativity as the generative force of discourse and repeated practice, I treat the performative as the ongoing, iterative production of relations, worlds and meanings. Here, performance signals

consciously framed actions, whereas performative highlights the broader processes through which bodies, places and narratives are enacted and reconfigured.

Language is part of the method. Addressing a river as *they* rather than *it* resists the reduction of waters to objects or resources and affirms their presence as co-inhabitants. The aim is not to speak for rivers but to approach their agency with care, so that thought may take shape near their movements through proximity, attention, and shared rhythms.

Methodologically, this research sits within expanded artistic fields, combining photography, moving image and sound, embodied performance, site-specific intervention, ecological care practice, alternative documentation and cross-media installation. These practices are developed through long-term fieldwork, close observation, and the mappings of social, environmental, and spatial relations. Historical records, environmental data and the lived realities of local mining practices are read together to situate contemporary encounters within wider socio-political and ecological contexts. Patterns observed in Camborne resonate elsewhere, echoing dynamics across riverscapes shaped by mineral extraction.

Conceptually, the thesis weaves ecofeminism, hydrofeminism, more-than-human thought and Global South and Asian perspectives with the orientation of the Chthulucene. Ecofeminism clarifies the entanglements of patriarchal power and extractive logics while nurturing ethics of care and reciprocity. Hydrofeminism foregrounds watery embodiment and relational flow, informing what I call water relations and, in practice, embodied wetness: modes of sensing and making through which bodies and waters co-compose perception, gesture and meaning. Global South and Asian perspectives contribute decolonial critique and elemental philosophies, while Indigenous approaches inform water-based responsibility, ritual and situated accountability. The Chthulucene orients these strands toward multispecies becoming and collaborative survival.

The thesis structure follows a riverine logic. Chapters gather, diverge and rejoin, so that theoretical currents and methodological eddies meet and separate before finding confluence. Part I establishes ecological, historical and theoretical contexts. Part II develops strategic and philosophical frameworks that guide the practice. Throughout, riverscapes are treated as relational fields where philosophical, social and ecological narratives are braided with material flow.

In this thesis, images are presented in two clearly differentiated typologies. Images labelled as "Artwork as Research" represent the practice-based research outputs and function as core methodological components of the thesis. All other images, including the author's documentary photographs of the Red River, works by other artists, and archival material, are presented as contextual images that support the research discussion.

Video documentation of the artworks submitted for examination is available via the following link:

https://www.xinyaoliu.art/redriverproject

The webpage presents only the works examined during the viva and forms part of the practice-based submission.

Collectively, this research is guided by an overarching question: how can artistic practice, developed through performative and time-based approaches, cultivate attentiveness, ethical responsibility, and more accountable relations with rivers shaped by extractive histories, particularly at moments when renewed mining risks normalising further damage?

In light of these commitments, the research investigates the following questions:

1. Documentation and critique

How have artistic practices recorded, interpreted and contested the impacts of mining on riverscapes, and what forms of evidence and witnessing emerge from these works?

2. Ritual, apology and relation

In what ways can lyrical and site-specific rituals of apology open communicative pathways between humans and more-than-human communities, and how might such actions cultivate reciprocity and restraint?

3. Frameworks for harmonious interaction

How can ecofeminism, hydrofeminism and water relations, oriented by the Chthulucene, inform more accountable human-river relations in extractive contexts?

4. Practice as enquiry

How can performative, time-based practice evoke the living connections that move within each person, and reconfigure perceptions and habits of care?

5. Decentring dominant narratives

How might we move beyond linear, science-dominated environmental narratives associated with the Global North by engaging Global South, Asian and Indigenous perspectives, allowing the river to act as storyteller and knowledge creator?

Figure i.1 Contextual image: The Red River. Photograph by the author, 2023.

Figure i.2 Contextual image: The Red River. Photograph by the author, 2024.

Part I

The Traces of Mining Activities in Riverscapes

This part begins by situating mining within broader ecological and social entanglements, asking how rivers bleed, who disappears when waters are altered, and how silence gathers around such loss. It then turns to the Red River, tracing how they carry mining's legacy in colour, chemistry and silt, how they hold both heritage and haunting, and how their body remembers violence as layered sediment. Through these movements, the chapters invite a mode of attention that moves between trace and immediacy, guiding how one might remain with a river marked by extraction. The focus then shifts into situated experiments, where walking, drifting and sensing become ways of encountering the river as collaborator.

Taken together, these chapters suggest that to accompany a mined river is to inhabit several registers at once: analytical and lyrical, documentary and embodied, historical and present. The Red River speak through scars, residues and shifting currents, unsettling dominant narratives of progress and calling for alternative forms of relation.

Chapter 1: Entanglements of Rivers and Mining

Rivers bind and connect us. Over the past century, human beings have caused unprecedented ecological damage to riverscapes through excessive production, consumption, and unsustainable freshwater use. Rivers have been reduced to "resources" for human civilisation. Environmental humanities scholar Rob Nixon describes this invisible destructiveness as "slow violence", which is 'a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all' (Nixon, 2013). Serpentine rivers connect lands and are essential to the flourishing of life, yet the impact of extractive industries, especially mining, has left many riverscapes permanently changed.

Figure 1.1 Contextual image: The Red River. Photograph by the author, 2024.

Today's mining-related water issues, involving water pollution, are increasingly threatening water security, biodiversity, and life across regions of the world. As theorist McKenzie Wark observes, we have entered the end of pre-history, an era in which 'the worldview of an ecology that was self-correcting, self-balancing and self-healing—is

dead' (Wark, 2015). At the same time, no matter how constructive existing governance approaches may appear, rivers still bear the scars of human destructiveness, the images we form of them are shaped by extractive histories and remain in the shadow of such practices. Human settlements are interlaced with dense rivers that are humid, complex and ever-changing, while the rhythm of capital and technology flow along with them. These entanglements demand urgent recognition, careful study, and responses that take responsibility for what they continue to reveal.

1.1 When Rivers Bleed

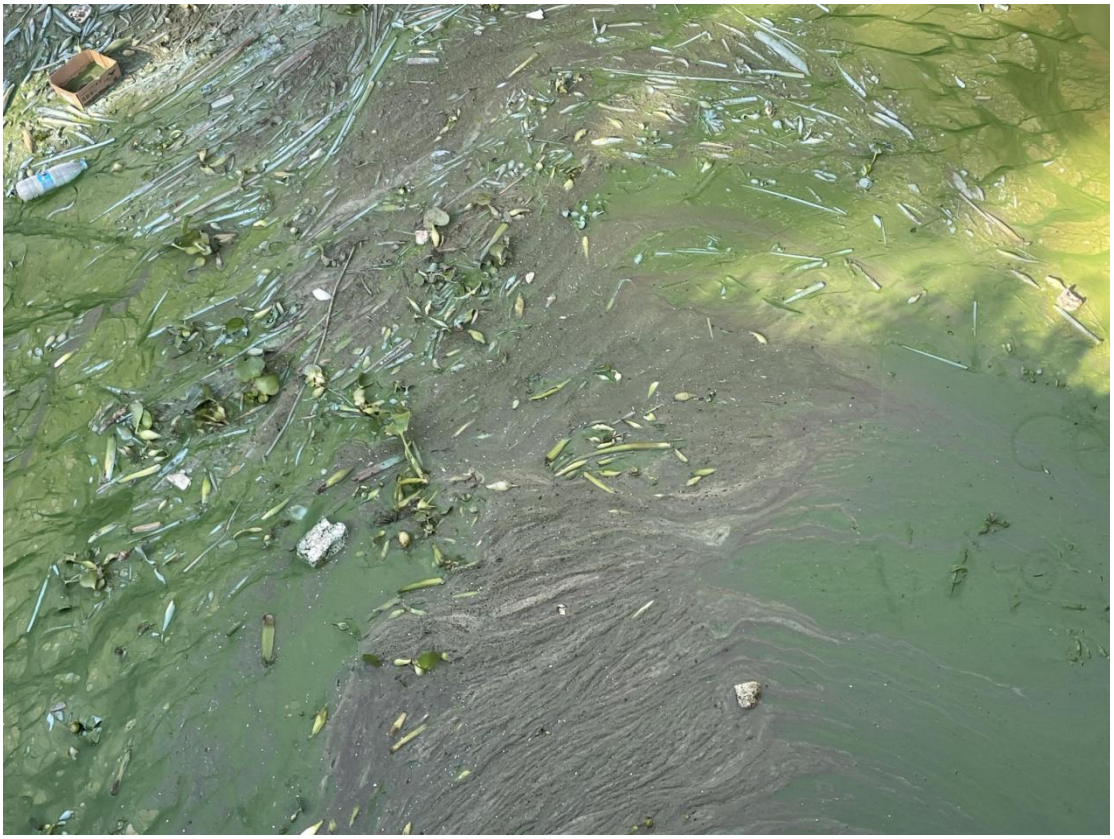

Figure 1.2 Contextual image: Unnamed river in Chenshu Village. Photograph by the author, 2021.

I approach rivers as meandering givers of life, arteries that bridge land and water. Yet many of them have become tragic sites of contamination, polluted by extensive mining waste and other anthropogenic substances accumulated through centuries of watershed

colonialism and industrial activity. In *Silent Spring*, American biologist and conservationist Rachel Carson writes that 'in rivers, a really incredible variety of pollutants combine to produce deposits that the sanitary engineers can only despairingly refer to as gunk' (Carson, 1962). Large amounts of chemicals still pour into waterways every day—many cannot be broken down by natural processes or even identified.

To understand this ongoing degradation, I draw on the Planetary Boundaries framework (Steffen et al., 2015), which identifies critical environmental thresholds such as biogeochemical flows, novel entities, and freshwater changes. Once crossed, these thresholds may lead to irreversible ecological shifts. Among them, biogeochemical flows illustrate how human activities, particularly mining, disrupt natural elemental cycles, vividly exemplified by Cornwall's Red River, where metal pollutants visibly stain the riverscape. Novel entities refer to artificial substances such as industrial pollutants, heavy metals, and synthetic chemicals resistant to natural degradation processes. Their presence in rivers extends toxicity across time and species, often unseen, yet deeply enduring.

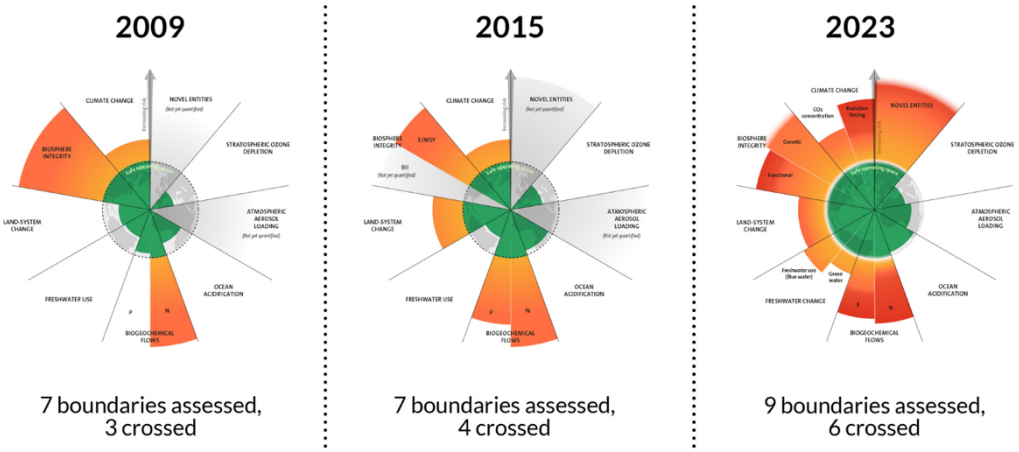

Figure 1.3 Contextual image: Evolution of the Planetary Boundaries framework. Source: Azote for Stockholm Resilience Centre, based on Richardson et al. (2023), Steffen et al. (2015), and Rockström et al. (2009).

Expanding beyond the visible, Swedish hydrologist Malin Falkenmark calls for moving from a narrow focus on "blue water" to recognising the importance of "green water" —

soil moisture utilised by plants for transpiration, vital for rain-fed crop production and biomass production in natural ecologies (Falkenmark, 2005). This shift unsettles hydro-dominant paradigms and acknowledges the entanglement of water with land, vegetation, and atmosphere, relations often overlooked in mining-centred assessments.

Figure 1.4 Contextual image: *The Rhine II*. Source: Andreas Gursky, 1999.

Scientific accounts, documentaries, and artistic works together trace this complexity. The documentary *The Year Earth Changed* (2021) shows how temporary reductions in human activity during COVID-19 lockdowns improved water quality: in the Ganges River, oxygen levels rose by 80%, evidencing rapid ecological responses once industrial rhythms paused. In contrast, German artist Andreas Gursky's *The Rhine II* (1999) digitally erases all human traces to construct an idealised riverscape, a metaphor for distance, control and human ordering of watery worlds.

These perspectives reveal water pollution as a layered condition: sediments of extraction, residues of industry, and rhythms of ecological endurance intertwine in the current. The wounds are not always visible, but the rivers remember.

1.2 Who Are Missing?

The National Science Foundation team's synthesis shows that ecological effects of biodiversity loss rival climate change and pollution (Hooper et al., 2012). Over the past fifty years, more than 50% of animal species have disappeared due to anthropogenic global warming (Morton, 2018). Humans are believed by biologists to be the cause of the sixth and greatest planetary extinction event, with a rate of extinction 100,000 times higher than the natural rate, making conservation biology a 'crisis discipline' (Groom et al., 2006).

In May 2019, IPBES issued a landmark warning that around one million plant and animal species are threatened with extinction, many within decades, largely through industrial, corporate and extractive activities. As cultural theorist and environmental humanities scholar Ashley Dawson argues, extinction now stands alongside climate change as the leading edge of contemporary capitalism's contradictions (Dawson, 2016). Globalisation's commodity logic converts living worlds into exchangeable units, and extraction accelerates this conversion.

Canadian scholar Leanne Betasamosake Simpson identifies extractivism as fundamentally colonial: 'Extracting is stealing—it is taking without consent, without thought, care or even knowledge of the impacts that extraction has on the other living things in that environment' (Klein, 2013). Building on this critique, cultural theorist Macarena Gómez-Barris shows how extraction targets zones of high biodiversity through systematic 'thefts, borrowings and forced removals' that 'reduce, constrain and convert life into commodities' (Gómez-Barris, 2017). Read together, these accounts frame extractivism as a violent reordering of multispecies worlds into systems of profit and control.

More-than-human beings rarely gain from contact structured by such regimes. Intimacy gives way to separation and loss. British art critic John Berger notes a new solitude in

which humans find themselves estranged from the creatures with whom freedom was once shared (Berger, 2009). The philosopher Timothy Morton reads this estrangement as a traumatic severing of human and more-than-human relations within post-agricultural psychological, social, and philosophical spaces (Morton, 2017). Museums, through exhaustive visualisation and documentation, can render absence visible while obscuring the ongoingness of extinction (Emmelheinz, 2015). My research responds to absence through artistic practice as a living process that invites more-than-human presences into view and reorients relation and accountability.

Figure 1.5–1.6 Contextual image: *Frameworks of Absence* series. Source: Brandon Ballengée, 2006–ongoing.

Artists such as Brandon Ballengée and Maya Lin work along this line of mourning and witness. Brandon Ballengée's *Frameworks of Absence* (2006–ongoing) removes extinct species from historical prints, leaving ghostly voids edged by blood–red grounds; the cut forms are burned and gathered as ashes, grief given material register. Environmental artist and designer Maya Lin's *What Is Missing?* (2009–present) builds a living memorial through databases, installations, and soundscapes, assembling public knowledge of disappearing species and endangered ecologies. While Ballengée

engages bodily intimacy and loss, Lin constructs an informational and collective field. Taken together, their practices mobilise different scales of attention while resisting forgetting. Both ask who has vanished and who will be remembered.

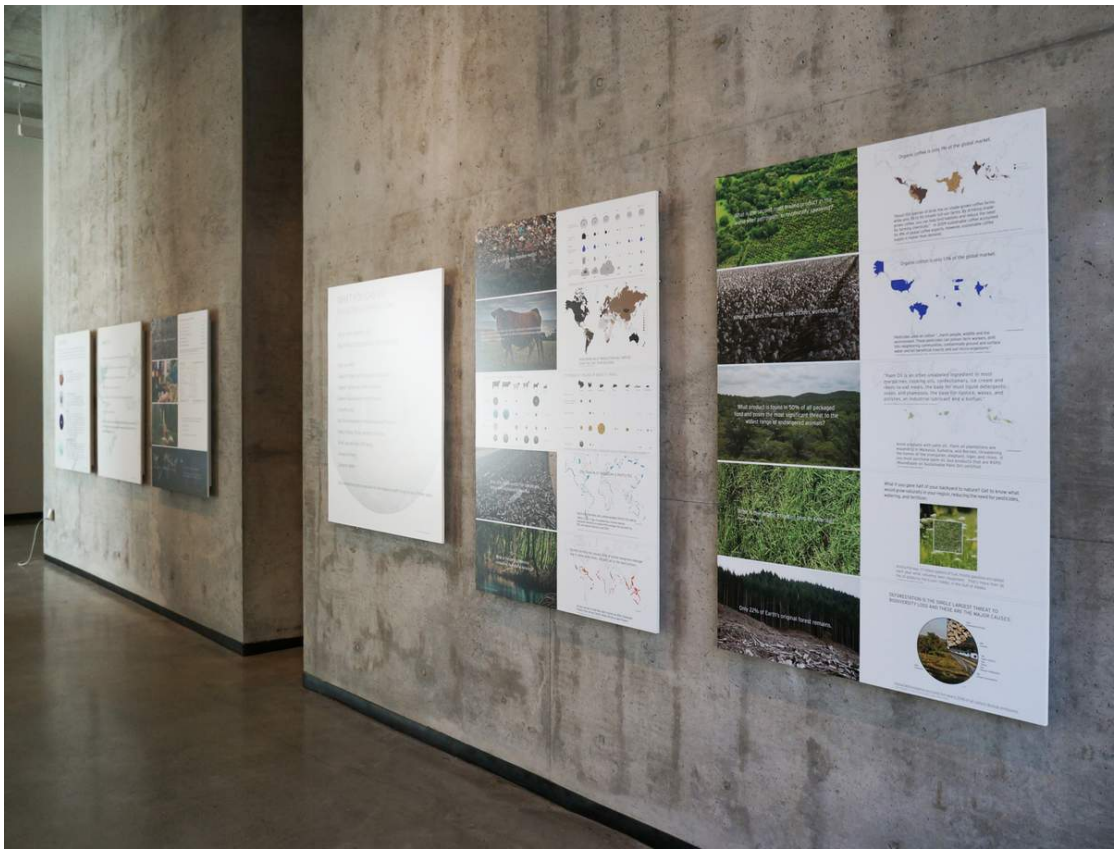

Figure 1.7 Contextual image: *What Is Missing?* installation at the David Brower Center. Source: Maya Lin, 2014.

To ask who are missing is to confront a world unravelling in silence. What disappears is life, and with it the conditions for life to imagine themselves otherwise.

1.3 When Rivers Cry

Mining of metals and minerals sustains industrial production, energy systems, and infrastructure, leaving riverscapes in various states of waste (Gómez-Barris, 2017). Rivers, polluted and exploited, express their grief through diminished biodiversity and

contaminated waters. Amid continuing extraction, their tears are frequently ignored, as human-centred perspectives struggle to perceive more-than-human forms of suffering.

At its most immediate level, extraction refers to the physical removal of mineral substances from the Earth's crust through drilling, pumping, quarrying, and mining. These processes transform matter into raw materials destined for industrial processing and commodity markets. Beyond this material dimension, extractivism names a mindset of domination and disconnection. As Canadian writer and environmental theorist Naomi Klein argues, it is a 'non-reciprocal, dominance-based relationship with the earth, one purely of taking' (Klein, 2015). Such a mindset allowed generations to believe that it was possible to violently extract desired materials from the Earth without concern for the waste left behind, whether embedded in the land, dispersed through rivers, or released into the atmosphere. It reduces complex, living worlds to "natural resources" and living mountains to "overburden", a mining term for the forests, rocks, and streams bulldozed aside. Likewise, it objectifies human beings, treating labour as a resource to be exploited and marginalised populations as burdens to be confined and excluded.

Riverscapes have long been curated as manicured backdrops to human achievements, their vitality overlooked until catastrophe forces them into view. The consequences of this extractivist worldview are starkly evident in disasters such as the Mariana dam disaster in Brazil (2015), where the collapse of the Fundão tailings dam released toxic sludge, killing 19 people and polluting 668 kilometres of watercourses (Phillips, 2018). The blood-red waters of the Rio Doce entering the Atlantic became an emblem of extractivism's violence. Such disasters highlight what political theorist and historian Katrina Forrester critiques, 'nature is made visible only as natural capital in economic trade-offs, or as a backdrop to a techno-optimism that places our collective fate in the hands of markets and technology' (Forrester, 2016). This obscures the intrinsic value of more-than-human ecologies, overlooks the complex interdependencies essential to life, and neglects deeper ethical responsibilities towards the world. The result is a failure

to protect ecological integrity and community well-being, perpetuating cycles of degradation and injustice.

Figure 1.8 Contextual image: Mariana dam disaster. Source: IBAMA, 2015.

Today, a heavy quiet hangs over ecological collapse and over struggles for emancipation of women, the unemployed, the marginalised, and displaced migrants. Recognising the interconnection of ecological phenomena and social realities is no longer optional. Local and global crises are inseparable, the suffering of rivers reflects a planetary condition, and their cries summon us to reckon with a world at risk.

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Chapter 2: The Red River as a Witness—Tracing the Scars of Mining

2.1 Footprints, Heritage, and River Memory

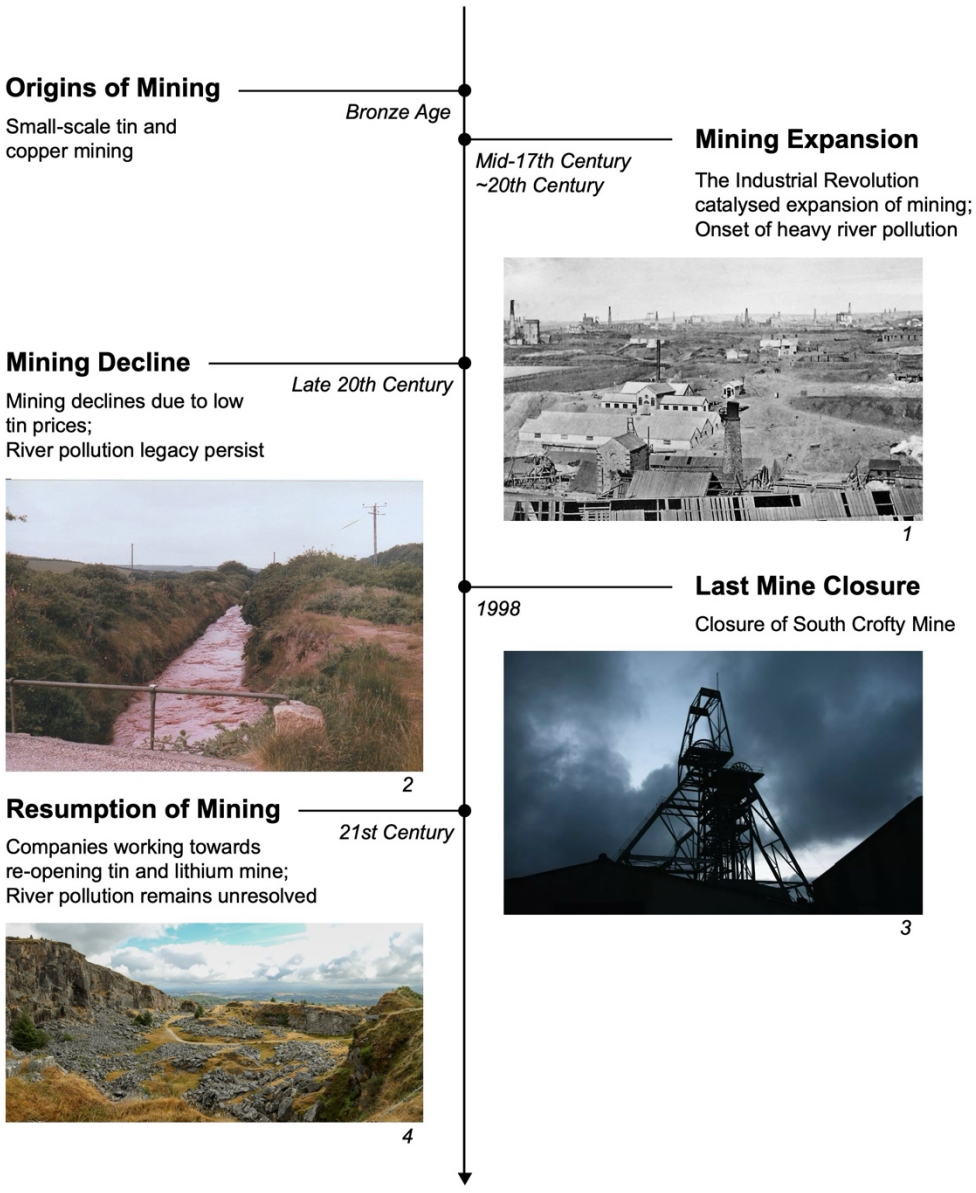


Figure 2.1 Contextual image: Cornwall mining visual archive: (1) Dolcoath, Queen of Mines (1893); (2) The Red River Godrevy by Roy Hughes (c.1986); (3) South Crofty pithead with rain clouds; (4) Disused Cheesewring Quarry (2018). Source: Roaringwater Journal; Cornwall Yesteryear; Cornwall Live; Cornwall Heritage Trust.

Figure 2.2 Contextual image: Disused mine shaft headgear and pulley wheel overlooking Camborne. Source: Getty Images.

Mining has long shaped Cornwall's riverscape. The southwest of England possesses one of the world's longest and richest histories of metal extraction, beginning in the Bronze Age around 2300 BCE and intensifying through Roman, medieval, and industrial periods (Pirrie et al., 1997). Tin and copper production are prevalent in this region, though the mineralisation is polymetallic (Alderton, 1993). Following the collapse of large-scale mining, toxic metals such as zinc and cadmium entered waterways without restriction (Unwin, 2019), leaving a legacy of contamination and poor water quality (Paris et al., 2015). Mines such as Dolcoath near Camborne operated well into the twentieth century, while South Crofty, the last traditional tin mine, closed in 1998 (Barnett, 2018) and is now earmarked for reopening. In response to the environmental damage, successive UK governments have funded the Environment Agency through the Water and Abandoned Metal Mines programme to clean up polluted rivers (Unwin,

2019). Yet the ecological burden remains unresolved, with illegal levels of toxic chemicals still contaminating the rivers (Armstrong, 2020).

In describing the Red River as bearing "scars," this research recognises them as a living entity that experiences harm, retaining memory through physical and ecological traces. Extending this metaphor to portray the river as a "witness" further acknowledges rivers as conscious entities with their own forms of awareness and intelligence. Such framing highlights the river's active role in recording histories of human exploitation. Reflecting on these entanglements is particularly significant within Britain, long regarded as the cradle of industrialisation. As historian and political leader Eric Williams argues, the profits of slavery directly subsidised Britain's industrial growth (Williams, 1944). Much of this wealth flowed into mining-powered infrastructure, fuelling the expanding factories, railways and steamships that intensified colonial exploitation and environmental devastation. According to Naomi Klein, it enabled the unprecedented extraction of human labour and the natural world, laying the metabolic foundations of the modern global economy (Klein, 2014).

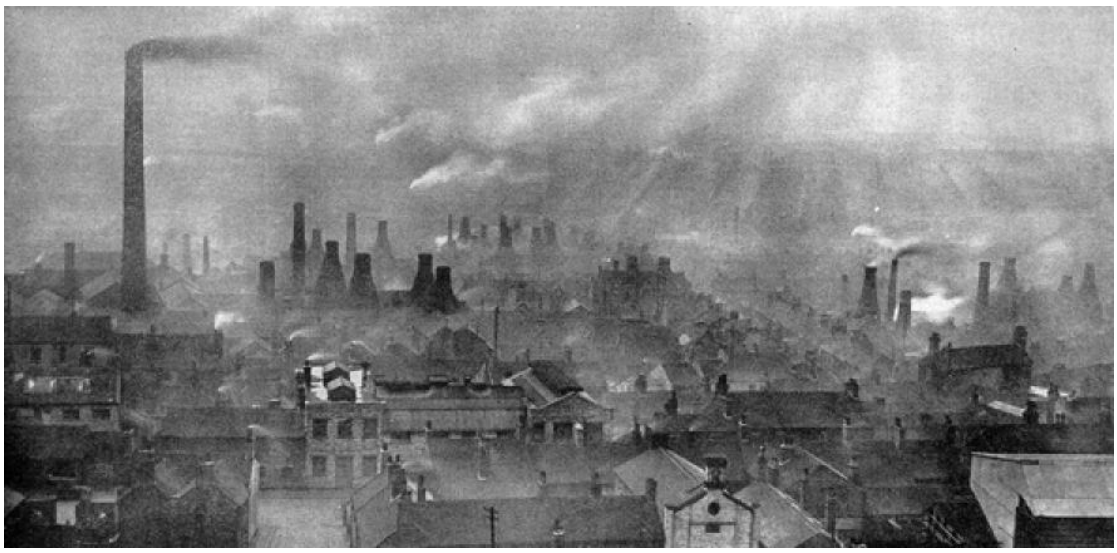


Figure 2.3 Contextual image: Industrial workplace. Source: Wellcome Images.

Geographically, the Red River originates in the Bolenowe area and runs through Camborne into St Ives Bay, stretching approximately eight miles across the mining

districts of northwest Cornwall. In certain reaches, their waters still appear red, reflecting high levels of oxidised metals and mining sediments. This produces one of the most “unnatural” riverscapes in the United Kingdom, where geology and toxicity meet in unsettling ways. By placing historical maps, environmental records, and field observations in conversation, this research traces the temporalities of mining damage and ecological transformation along the Red River. Unlike sudden disasters, they represent a slower, more insidious form of pollution accumulated over centuries. This slow violence raises questions about whether natural processes can counteract the depth of industrial damage, or whether the accelerating pace of extraction continues to outstrip any potential for recovery.

Figure 2.4 Contextual image: The Red River. Photograph by the author, 2022.

Metals carry distinct temporalities. Copper and zinc, residues of tin mining, are embedded in the colonial and industrial past of Cornwall. Iron oxidises visibly along the course, painting banks in hues of rust. Lithium belongs to the present and the near

future, its extraction driven by escalating demand for batteries and digital technologies marketed as green solutions. Each metal traces a different trajectory of harm and desire, entangling the Red River with histories of empire, infrastructures of consumption and broader global supply chains. Their enduring red hue is not a natural characteristic but the outcome of engineering, damming, and diversion under the language of "progress" and "development". Material transformations move with discursive ones that re-label ecological degradation as modernisation and, increasingly, heritage.

Figure 2.5 Contextual image: *Flotsam Jetsam*, installation view. Source: Photograph by John Wronn, MoMA, 2014.

Heritage discourse often repackages mining as continuity and pride. In 2006, the United Nations Educational, Scientific and Cultural Organisation designated 20,000 hectares of Cornwall's mining landscape as a World Heritage Site, strengthening positive public perceptions and framing reopening as employment and renewal. As reported by the BBC, 'Camborne's proud mining past has left it with a strong community identity', with many regarding a return to mining as "a lifeline" for a region struggling with limited work opportunities and socio-economic decline (Young, 2024).

Figure 2.6 Contextual image: Cornwall mining landscape inscribed as a UNESCO World Heritage Site. Source: Cornish Mining World Heritage Site.

A new round of mining is now being assembled. As BBC News reported in 2020, global demand for lithium is surging, and Cornish Lithium has announced promising test results from deep geothermal waters near Redruth (BBC, 2020). The UK's Critical Minerals Strategy seeks to expand the production of critical minerals across the value chain, including mining, refining, manufacturing, and recycling, aiming to revitalise post-industrial regions and attract foreign investment. In a county where persistent regional poverty is documented, Cornwall's GVA per capita is around 67% of the UK average (Wikipedia, 2024). Cornish Lithium plans to scale its workforce to over 300, while the reopening of South Crofty is expected to create a similar number of jobs (National Wealth Fund, 2023; 2025). Tin, rooted in a long industrial history, has returned to production, while lithium, not yet fully exploited, is being positioned as a resource of the future tied to decarbonisation efforts. For communities long excluded from prosperity, this revival is framed as a promise of livelihood, yet it also reveals a deeper tension between the urgency of employment and long-term costs of ecological harm. Historical scars in Camborne have never truly healed, and a renewed phase of mining risks deepening environmental and social wounds. As lithium battery expert Guillermo Gonzalez made it clear that mining lithium is invasive: 'it scars the landscape, it destroys the water table and it pollutes the earth and the local wells, it's not a green solution—it's not a solution at all' (Katwala, 2018).

Figure 2.7–2.9 Contextual image: Mineral deposits at the bottom of the Red River. Photographs by the author, 2022–2024.

Industry narratives seek legitimacy through reframing. As Lucy Crane, senior geologist at Cornish Lithium Business Development, puts it, Cornish Lithium is trying to move away from being labelled as mining: ‘we’ve started calling it mineral extraction rather

than mining because mining kind of conjures up those images of people going underground and getting dirty' (Bernal, 2021). On its official website, Cornish Lithium declares itself as 'a new dawn for the energy transition', without mentioning any potential risks and hazards. Public-facing reports, sustainability panels, and technological showcases present extraction as low-carbon and low-impact. However, beneath the surface, the same logics of accumulation, displacement, and harm persist. Such discursive shifts also organise how rivers are governed and sensed.

Figure 2.10 Contextual image: Cornish Lithium proudly unveiled the UK's first low-emission lithium hydroxide demonstration plant. Source: Cornish Lithium.

As Potawatomi botanist and Indigenous scholar Robin Wall Kimmerer observes, industry and forestry predominantly shape riverscapes, influencing how they are perceived, managed, and used (Kimmerer, 2013). Artist and environmental campaigner Ravi Agarwal similarly argues that technological advancement and capitalist interventions have significantly disrupted the rich, diverse relationships historically sustained between rivers and human communities (Agarwal, 2008). The Red River vividly exemplifies these transformations. They do not simply bear the consequences of mining, but actively register, disturb, and reshape them. Within their flow, local

politics, financial speculation, cultural identities, and natural entities become inseparably entwined within mining capitalism, blurring the lines between more-than-human world and cultural artefact. As artist Patty Chang observes, a geological body that shifts over time, such as a river, can unsettle and call into question the systems and identities built upon their assumed stability (Chang, 2017). The Red River resists containment.

They reveal the imprint of mining while exposing the erosion of imaginaries of permanence, ownership, and belonging. Their sediment carries overlapping narratives of disturbance and resilience. Like other rivers scarred by mining, the Red River functions as connective tissue, linking past and present, local damage and planetary transformation, human histories and more-than-human suffering. Their courses are not merely geographic but epistemological. They invite a way of knowing in which the river brings forth multiple knowledges, layered and accreted, carried along by their own rhythms. In this way, the Red River becomes an essential site for representing and exploring the slow violence of the Chthulucene. To trace their scars is not simply to document harm, but to cultivate another mode of listening, attentive to how more-than-human beings bear history in their bodies and beds.

Artist and ecological thinker Alan Sonfist reminds us that heritage must be understood ecologically: ‘As we preserve our architectural heritage, we have to preserve our natural heritage. You can't just pay attention to human heritage. Preserving gives us an ecological understanding of ourselves. If we don't pay attention to our environmental history, we will destroy ourselves’ (Weintraub, 2012). Celebrating industrial heritage without ecological reckoning risks sanitising its consequences. What appears as progress may in fact conceal collective amnesia, for metals long buried also held ecological functions. As French philosopher Jean-Paul Sartre writes, they are ‘capital bequeathed to mankind by other living beings’ (Sartre, 2004). Legacy, in this sense, is also loss and summons accountability. In Cornwall, heritage is inseparable from extinction: the disappearance of species, habitats, and relations that once flourished

alongside the river. What haunts the Red River is not only their past, but also the ongoing desire to forget.

Figure 2.11 Contextual image: The Red River. Photograph by the author, 2022.

Once mined out, the ruins became monuments, standing as evidence of abandoned economies. Mining left toxic residues into the land and rivers of Camborne, while the barren sites came to be regarded as social, political, and emotional monuments to a destructive history. As French curator and art critic Nicolas Bourriaud suggests, the monumental may encompass the commemora1tion of events, the continuity of memory, and the materialisation of the intangible (Bourriaud, 1998). Paraphrasing Professor Martin Lefebvre of Concordia University, inscriptions in the territory that commemorate events transform the riverscape into both the scenery of and the theatre for what has happened (Lefebvre, 2006).

Figure 2.12 Contextual image: Houses blending into distant mining heritage. Photograph by the author, 2024.

This sense of temporal and emotional dislocation finds theoretical grounding in French Algerian philosopher Jacques Derrida's concept of hauntology, which proposes that the present is always inhabited by traces of the past, especially by that which is no longer fully present, but not entirely gone (Derrida, 1994). Along the Red River, the residues of mining, ruined engine houses, and damaged trout all act as spectral reminders of both ecological loss and industrial legacy. Extinction, in this sense, is not an absence, but a haunting, a reminder of a world no longer whole. Here, the past clings to place like a heavy current, carrying the memory of mining beneath the illusion of recovery.

Australian philosopher Glenn Albrecht coined the term "solastalgia" to describe the emotional pain that arises when one's place of residence becomes unrecognisable due to extraction and industrialisation. Defined as 'the homesickness you have when you are still at home', solastalgia captures the affective dissonance experienced in sacrifice zones, including riverscapes scarred by mining, where what once offered solace now provokes pain (Albrecht, 2005). In the age of extractive expansion, solastalgia is no longer an exception, but increasingly a shared human condition. This uncanniness, felt through the presence of partial life and broken ecologies, turning the mining riverscape into what American academic Cary Wolfe calls a post-human environment (Wolfe, 2010), where architecture and riverscape no longer serve human purpose, but instead mark the limits of human agency and intervention (Whatmore, 2002). These abandoned and deteriorating sites are more than ruins; they are evidence of the failure of progress and the return of more-than-human vitality. The Red River remain as a witness, their scars exposing the illusions of development while registering the persistence of loss. To recognise these scars is to attend to the river's testimony, a restless living record that unsettles the comfort of heritage with the haunting memory of mining.

Figure 2.13–2.14 Contextual image: Mining heritage sites around the Red River. Photographs by the author, 2022.

2.2 Vital Signs

Rivers, like blood, sustain life and carry the deep time of bodies. They traverse human and more-than-human worlds, stitching together individuals, communities, and riverscapes through intertwined biological, cultural, and hydrological flows. As relational lifelines, they pulse through memory, livelihood, and metabolism, shaping contours of belonging and textures of shared experience.

The impact of mining is visible in the Red River's more-than-human inhabitants. A study by Paris and colleagues demonstrated that mining has shaped the genetic structure of modern brown trout populations in the region. Metal-impacted populations were found to have low genetic diversity and to have experienced severe population declines, leaving clear genetic imprints of mining histories (Paris et al., 2015). Building on this, Jamie Stevens and colleagues at the University of Exeter found that trout in the Red

River have evolved tolerance to heavy-metal burdens and low visibility caused by acid mine drainage, creating unique subspecies (Clarke, 2021–22). These altered genomes do not simply mark adaptation; they register trauma, serving as inherited records of ecological violence.

Figure 2.15–2.16 Contextual image: Left: Evolved trout from a metal-contaminated river; Right: Dog in the Red River. Source: Josie Paris, University of Exeter, 2015; author, 2022.

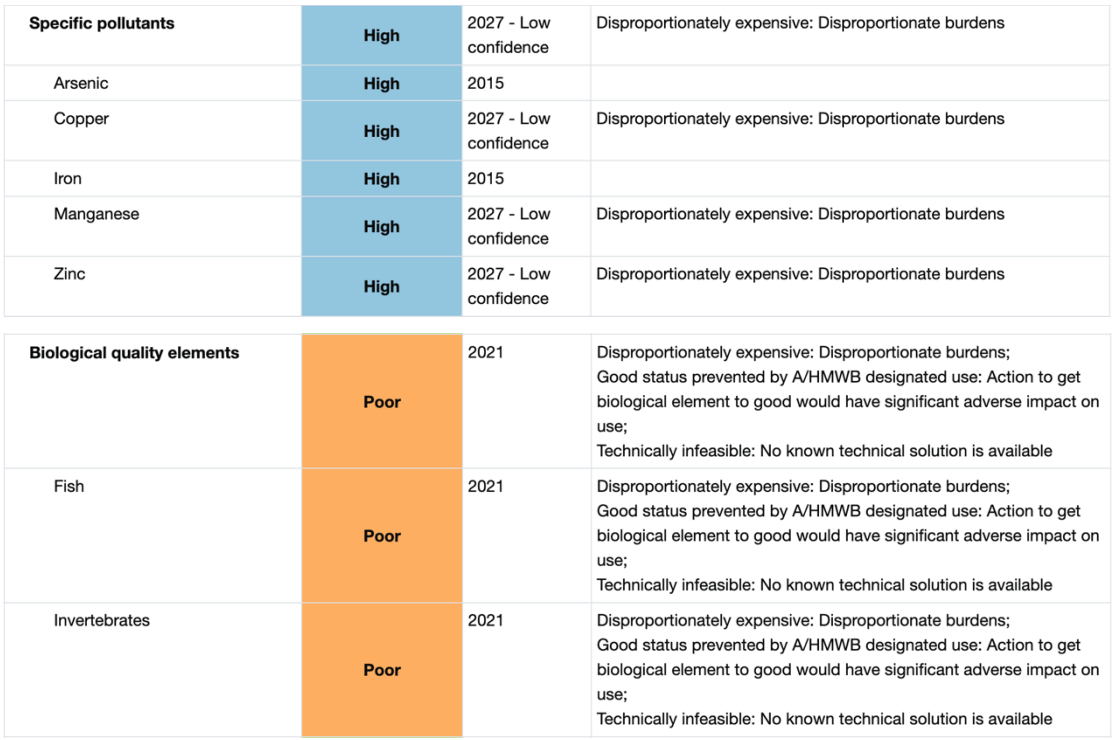
In this context, there is a notable absence of long-term epidemiological studies on the health of local residents in the Red River area. This silence may reflect not only technical difficulty but also ethical concerns, wellbeing impacts, and political sensitivities. Sandra Steingraber, a biologist and environmental health advocate renowned for her research on the links between industrial pollution and diseases, investigates in *Living Downstream* how environmental toxins, including those from mining activities, contribute to cancer incidence (Steingraber, 2010). She underscores the urgent need to examine polluted rivers as sites of potential biomedical emergencies, silent and accumulating traumas inscribed in tissue and inheritance.

Despite these alarming ecological transformations, scientific data are often presented as abstract and detached, disarticulating life into fragments of measurement. From a conventional perspective, water pollution is typically divided into organic or biological and inorganic or chemical categories (Strang, 2004). While useful for certain analyses, such classification risks reducing rivers to quantifiable entities and obscuring their living agency. Theorist Simon C. Estok argues that once scientific labels are attached to rivers, inquiry can stall, as if their complexity could be conclusively defined, measured, and archived (Estok, 2011). Kimmerer reminds us that such abstraction neglects the reciprocal knowledge that arises from sustained engagement with more-than-human worlds (Kimmerer, 2013). Morton extends this critique, noting that proliferating information dumps and raw data devoid of relation fail to convey the lived strangeness of inhabiting a world so deeply shaped by extractive forces (Morton, 2016). Ecological crises are therefore not accumulations of facts; they call for a shift from distant observation to embodied reflexivity.

Figure 2.17 Contextual image: Standing in the Red River with mineral deposits visible. Photograph by the author, 2024.

Scientific authority has become increasingly professionalised, drawing distance from everyday knowledge and concentrated in what environmental anthropologist Veronica Strang describes as an exclusive epistemic community of experts (Strang, 2004). Engineers, biologists, and chemists mediate access to rivers by translating living bodies into datasets and technical protocols. Consequently, questions of how to heal contaminated sediments are reduced to technical debates over dredging, capping, or passive strategies, each assessed in terms of environmental and economic trade-offs (Kimmerer, 2013).

In the face of the proliferation of environmental data, the UK still lacks an independent and comprehensive framework for monitoring the long-term impacts of mining on surrounding watersheds. Chronic funding constraints, coupled with the marginalisation of environmental science, have produced a pattern in which ecological issues remain under-investigated, sustaining the illusion that "everything is under control" even as degradation continues to deepen.



Specific pollutants	**High**	2027 - Low confidence	Disproportionately expensive: Disproportionate burdens
Arsenic	**High**	2015	
Copper	**High**	2027 - Low confidence	Disproportionately expensive: Disproportionate burdens
Iron	**High**	2015	
Manganese	**High**	2027 - Low confidence	Disproportionately expensive: Disproportionate burdens
Zinc	**High**	2027 - Low confidence	Disproportionately expensive: Disproportionate burdens
Biological quality elements	**Poor**	2021	Disproportionately expensive: Disproportionate burdens; Good status prevented by A/HMWB designated use: Action to get biological element to good would have significant adverse impact on use; Technically infeasible: No known technical solution is available
Fish	**Poor**	2021	Disproportionately expensive: Disproportionate burdens; Good status prevented by A/HMWB designated use: Action to get biological element to good would have significant adverse impact on use; Technically infeasible: No known technical solution is available
Invertebrates	**Poor**	2021	Disproportionately expensive: Disproportionate burdens; Good status prevented by A/HMWB designated use: Action to get biological element to good would have significant adverse impact on use; Technically infeasible: No known technical solution is available

Figure 2.18 Contextual image: Catchment Data Explorer view. Source: Environment Agency.

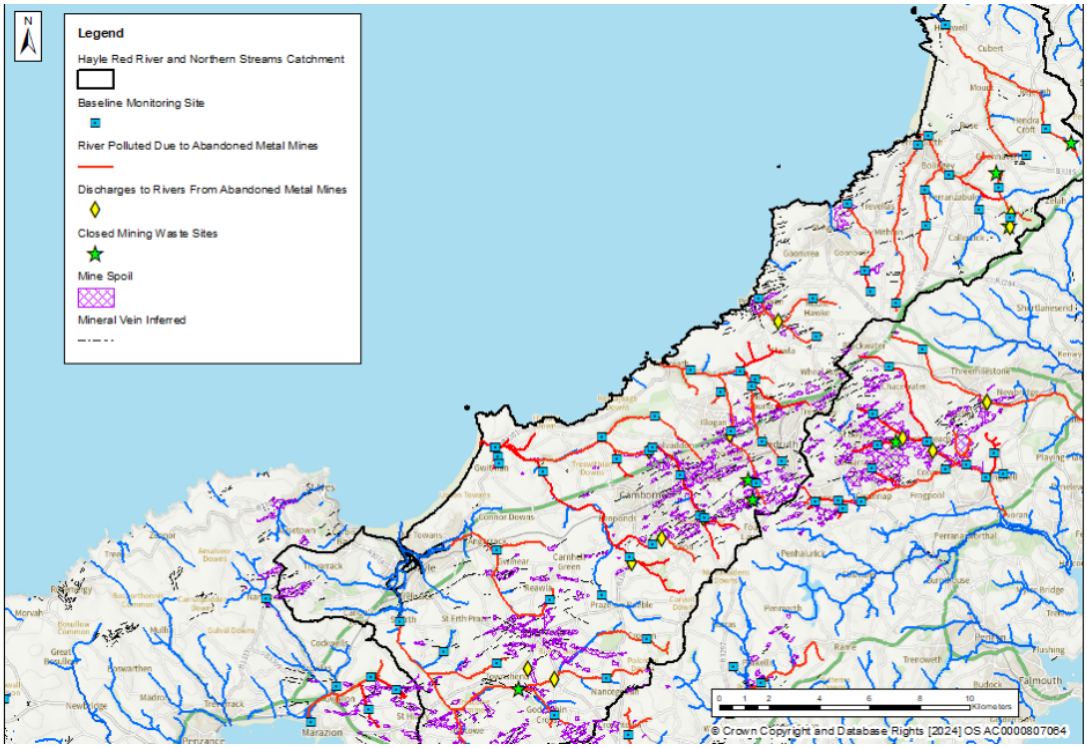


Figure 2.19 Contextual image: Baseline length of rivers polluted by target substances from abandoned metal mines in the Hayle, Red River and Northern Streams operational catchment is 156km. Source: Environment Agency.

Beneath these epistemic and policy arrangements lies a more elemental continuity that links bodies and rivers. In *Vibrant Matter*, American political theorist and philosopher Jane Bennett argues that human bodies are composed of mineral, aqueous, and electrical—the minerality of bones, the metal of blood, the electricity of neurons—extensions of the same elemental forces that shape rivers (Bennett, 2010). Rivers are not external entities to be managed; they are kin, materially and spiritually intertwined with human survival. The Red River, in their chemically burdened flows, makes this entanglement starkly visible.

You may never see the pollution of the Red River with your own eyes, nor feel the sediments upon your skin. To many, it remains remote, reduced to coded data in scientific reports. Yet the connection is unavoidable: as you read these words on a device powered by tin, lithium, or rare earths, you are already implicated in the global circuitry that pressures riverscapes like the Red River. Mining binds distant ecological

violence to immediate function. Degradation is transfigured into convenience, and extraction becomes a habit that steadily erodes vitality.

Thus, addressing water quality is not a purely technical task of measuring and correcting chemical levels. Data age quickly, while harm endures. It is an ethical reckoning with the ways industrial modernity has dismembered more-than-human ecologies for short-term extraction. Healing cannot be separated from remembering: remembering rivers as vital, relational entities whose bloodwork flows through us all.

2.3 Visual Language of the River

The Red River has been explored by artists and poets, notably through the work of poet and researcher Dr. John Wedgwood Clarke, who grew up in nearby St Ives and has a longstanding connection to the river. He leads the research project *Red River: Listening To A Polluted River*, which seeks to explore how creative writing can transform our relationship with a post-industrial river through attention to both human and more-than-human voices. In the BBC documentary *Cornwall's Red River* (2022), Clarke traces the history and biodiversity of the riverscape, reflects on the destruction caused by mining, and reads poetry in the hope of rebuilding emotional bonds. This attention, grounded in time-based practice and close listening, provides a useful public entry to the river's condition.

However, while the documentary foregrounds the Red River's cultural memory and biological endurance, it simultaneously downplays the dreadful state of the river, asserting that 'it is still home to some rare, beautiful and resilient wildlife'. This framing, though emotionally appealing, warrants critique. The presence of rare species and surviving trout is portrayed as evidence of resilience, as if the river, despite everything, is still "alive" in the familiar, comforting sense. Such portrayals risk aestheticising harm. They prompt the question of what "wildlife" signifies when bodies have been

reconfigured by long exposure to tailings and altered chemistries. Survival in this context is contingent and chemically mediated, not a sign of health.

Figure 2.20 Contextual image: Screenshot from *Cornwall's Red River*. Source: BBC Four, 2022.

In response to these questions, this thesis suggests that survival within such compromised conditions amounts to spectral persistence rather than resilience, a symptom of ecological trauma. These altered trout are living records of contamination, mutation and loss, marking how mining has entered tissue and time. To call them "wildlife" without naming those histories effaces the violence sedimented within their altered bodies. As Kimmerer notes, drawing on writer Freeman House, restoration that confines itself to technical repair risks missing a redefinition of human culture (Kimmerer, 2013). True listening must attend to damaged ecologies and altered lives as signals of systemic failure, not as triumphs of adaptation.

Figure 2.21–2.22 Contextual image: Photographs from *The Red River*. Source: Jem Southam, 1989.

British landscape photographer Jem Southam's series *The Red River* (1989) offers an earlier, quieter and more nuanced visual counterpoint. He resists redemption and lingers instead in the uneasy textures of transformation. Southam focuses primarily on the rural landscapes of Southwest England, where he lives and works. His approach involves sustained observation of specific sites over extended periods, documenting their slow transformations across seasons and years (British Council, n.d.). *The Red River* captures the subtle interplay between decay and renewal in this scarred riverscape. His photographic grammar resists the romantic impulse and instead records the river as a dynamic palimpsest, where history, pollution, and resilience converge. By framing an iron-stained ditch, the shadow of a pipe, and rust shimmering on water, Southam enacts a visual ethics of witnessing that keeps viewers with complexity rather than consolatory narratives of recovery.

As philosopher and social critic Ivan Illich observed, 'water has a nearly unlimited ability to carry metaphors' (Illich, 1986). The Red River exemplifies this potential. Their scarred surface reads as both ruin and testimony, a living record of mining and a carrier of memory. They continue to pour life into the countryside, though this life is altered, haunted, and chemically burdened. Metal, moss, and water intermingle, producing a hybrid terrain where vitality persists within contamination.

The story of the Red River, therefore, is a continuity through rupture. It is a record of mutation braided with memory, of survivals shadowed by loss. To write with the Red River is not to resolve their condition into narrative, but to stay with the contradictions: to inhabit the grief, to listen for submerged voices, and to resist the comfort of closure.

2.4 Echoes of Resistance

In an era when ecological crises are relentlessly mediated through images, the politics of seeing becomes entwined with the politics of extraction. Today, a dominant tendency

projects addressing the destructive impact of mining activities focus heavily on visual documentation. Media overflow with images cataloguing devastation: polluted rivers reduced to stagnant channels, riverscapes hollowed by mining, and communities, often Indigenous and rural working-class, living with the persistent erosion of health, livelihood, and ecological relations. Such imagery can serve as a moral summons, but it may also invite what American writer and critic Susan Sontag calls "compassion fatigue," in which repeated exposure dulls the capacity to respond (Sontag, 2003). While these representations are indispensable for witnessing, they can slide into an extractive gaze that consumes scenes of damage without altering the structures that produce them. This thesis treats visual language as procedure: a way to redistribute attention, to produce living records of practice, and to recalibrate responsibility in more-than-human relations.

Figure 2.23 Contextual image: Exhibition view, *Arte Povera*, Paris. Source: Pinault Collection; photograph by Alicolas Brasseur, 2024.

My own practice responds to these conditions on multiple levels, crafting powerful metaphors, weaving narratives, and envisioning both pragmatic and speculative, perhaps even absurd approaches to river restoration. I commit to time-based, minimal-

intervention methods that refuse new waste and work with materials already in circulation or suited to continued use. This approach draws on the wisdom of Arte Povera, not as style but as operational ethic, exploring its potential to rethink entire systems and advocate for alternative relationships with the ecological world. Arte Povera artists worked with inexpensive local materials and everyday objects, challenging the consumerist art market while reimagining the value of ecological entanglements. The work can only exist when participants interact with the object provided. As Brazilian painter, sculptor and performance artist Lygia Clark put it, the artist becomes a 'proposer' rather than the creator of a finished work (Clark, 2014). In my procedures, this proposer stance underpins sequences of meditation, apology, and cleansing rituals, in which actions generate both record and relation.

Figure 2.24–2.25 Contextual image: *Maritime Alps. My height, the length of my arms, my width in a stream*. Source: Giuseppe Penone; photograph by Archivio Penone, 1968.

Italian artist Giuseppe Penone's *Maritime Alps: My height, the length of my arms, my width in a stream* (1968) offers a resonant precedent. This gesture, intimate and impermanent, speaks to a non-invasive form of connection, an art not imposed upon the riverscape, but quietly woven into it. Penone's measure is a lesson in scale, duration, and restraint: the body attends; the site answers; nothing is extracted. Like Penone, I

am drawn to the notion of ephemeral trace, where art is not left as a monument, but becomes a temporary articulation of relationship between body, site, and ecology.

Figure 2.26–2.27 Contextual image: *How to Civilize a Waterfall*. Source: Hanna Ljungh; Courtesy of Martin Edelsteen, 2010.

This ephemeral approach contrasts sharply with works that confront the violence of extractivist ideologies more directly. Artist Hanna Ljungh's video *How to Civilize a Waterfall* (2010) stages a hauntingly absurd scene: standing in front of a roaring waterfall, she shouts to persuade it to become hydroelectric power. Her performance

echoes corporate rhetoric around sustainability, revealing the contradictions and arrogance embedded in such discourse, and laying bare the fragility of human authority when confronted by forces that refuse to be tamed. Considered alongside Donna Haraway's notion of 'response-ability'—a mode of being that attends and responds without domination (Haraway, 2016)—Ljungh's address exposes the managerial impulse that persists even within languages of care, turning the scene into a cautionary study of command rather than relation.

Taken together, these orientations clarify what resistance signifies in this thesis. Resistance is not spectacle. It is the slow labour of attentiveness, humility, and procedural care, where practice entangles with rivers as relations to be honoured. Its force lies in shifts of perception that alter what can be asked and what must be answered, opening futures in which rivers are encountered as collaborators and teachers. In this frame, images and performances do not conclude, they keep the conversation with the river open, recording how obligations change over time.

2.5 Speaking the River's Truth

As Timothy Morton argues, the sheer dumping of data can suppress other, more embodied ways of engaging with ecological knowledge (Morton, 2018). In the midst of today's ecological crisis, art serves as a space of resistance and possibility, reactivating sensory awareness, emotional connection, and ethical responsibility. It unsettles alienation produced by technocratic readings, reconnects perception to lived riverscapes, and creates openings where accountability may take root. Artistic interventions reshape the social imaginaries that sustain capitalist reproduction, deconstructing how power manipulates perception and behaviour. As part of anti-patriarchal and anti-hegemonic struggles, art cultivates radical imagination that exceeds

predictability, opening pathways for survival, resistance, and creative ecological strategies.

Figure 2.28 Contextual image: Installation view, *Mining the HMNS: An Investigation by The Natural History Museum*. Source: Not An Alternative/The Natural History Museum, 2016.

As ecological crises grow increasingly complex and transnational, the question becomes how artistic practice can respond to these shifting realities while remaining accountable to situated sites and more-than-human relations. A further challenge is how such practice navigates the immediacy of ecological degradation alongside layered histories of geographic transformation, and the tensions that surface when corporate priorities override local rights in mining projects.

In Cornwall, British visual artist and researcher Veronica Vickery's performance *Ophelia* (2015) responds to a stream once the source of a violent flood, now threatened by expanding lithium mining. In the performance, the submersion of her mobile phone becomes a metaphor for the intimate entanglement of bodies, devices, and deep-time mineral extraction. Her work examines the geology and geopolitics of Cornwall's industrial revival, engaging with "mineral materialism" (Yusoff, 2013) to link tectonic

processes with the economic lock-in of digital technologies. She locates ecological risk within cyclical economies of extraction and use. From within the region she inhabits, Vickery builds a locally rooted narrative, while my own practice approaches the river as an outsider shaped by apology and ritual. Together, these positions reveal how place and positionality shape artistic responses to rivers.

Figure 2.29 Contextual image: Performance still, *Ophelia*. Source: Veronica Vickery, 2015.

From local rootedness to transboundary extraction, *Salarium* (2017) by London-based artists and filmmakers Sasha Litvintseva and Daniel Mann explores the geological phenomenon of sinkholes along the shores of the Dead Sea. The title, *Salarium*, references the shared etymological roots of 'salary,' 'soldier,' and 'salt,' underscoring the deep entanglement of economics, military power, and geological forces. Thousands of sinkholes, consequences of Jordan River diversion and large-scale mining, have led to land collapses that consume beaches, water parks, and settlements. These ruptures render visible the long violence of extractive water governance, turning the riverscape into an evidentiary record. As environmental historian Alfred Crosby argues through the concept of ecological imperialism, empires asserted control by reshaping ecologies to serve colonial and economic interests (Crosby, 1986). The artists expose how

decisions about water policy and mineral extraction resurface violently in the riverscape, destabilising techno-optimist narratives and the illusion of ecological control.

Figure 2.30 Contextual image: Sinkhole phenomenon at the Dead Sea. Source: Sasha Litvintseva and Daniel Mann, e-flux film, 2017.

Bougainville-born interdisciplinary artist Taloi Havini returns to her homeland in *Habitat Series* (2016–2018), a multi-channel installation documenting devastation caused by the Panguna copper mine. In *Habitat I*, aerial and archival footage reveals polluted and scarred riverscapes, alongside pipelines left to rust in place. Operated by Bougainville Copper Limited, the mine discharged waste directly into the side of the island, turning once-forested areas into toxic swamps. *Habitat II* extends the project through deeper archival research and multiple perspectives. Across the series, Havini evokes both broad riverscape transformations and intimate wounds, emphasising that even after mining ceases, land and waters continue to bear scars. Her work insists that rivers do not "recover" but remember.

Figure 2.31 Contextual image: *Habitat Series*. Source: Taloi Havini, 2016–2018.

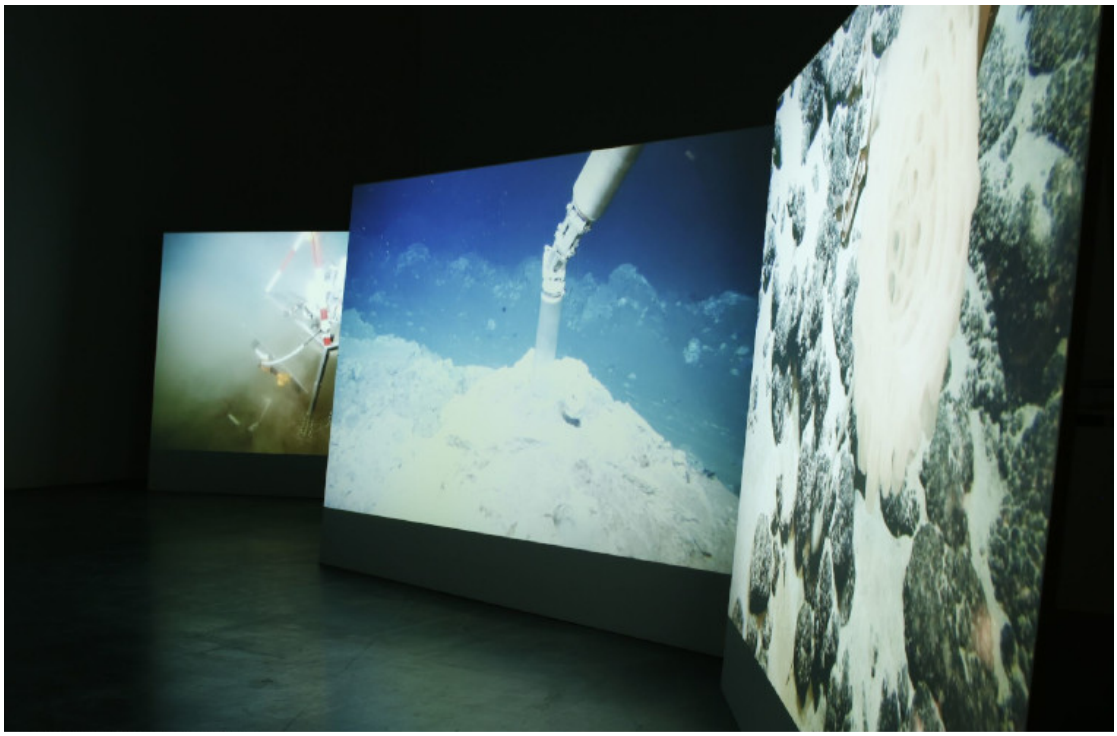


Figure 2.32 Contextual image: *Blind Sensorium: Il Paradosso dell' Antropocene*. Source: Armin Linke, 2019.

Two years later, on a planetary scale, Italian-German photographer and filmmaker Armin Linke presented *Blind Sensorium: Il Paradosso dell' Antropocene* (2019), a

visual atlas that captures the vast reach of human intervention, with particular attention to the entanglements of science, technology, and mining. Spanning diverse sites from laboratories, data centers, to Chilean copper mines, his atlas destabilises the illusion of neutrality in scientific and industrial spaces, showing them as deeply embedded in systems of capital and ecological exploitation. By mapping these networks, Linke reframes data and infrastructure as agents in environmental violence rather than neutral tools.

In 2020, Argentine artist Tomás Saraceno successfully launched Aerocene Pacha, the first fully solar-powered flight, over the Salinas Grandes, salt flats threatened by lithium mining. For sixteen minutes, pilot Leticia Noemi Marqués carried a banner reading 'Water and life are worth more than lithium,' highlighting the destructive impact of extraction on Indigenous communities and fragile ecologies. Beyond its symbolic protest, the work envisions a sustainable, non-extractive form of mobility, powered by solar heat and air, proposing an ethic of co-existence with atmospheric forces.

Figure 2.33 Contextual image: *Fly with Aerocene Pacha series*, with Aerocene and the the indigenous communities of Salinas Grandes, Jujuy, Argentina. Source: Tomás Saraceno, 2020.

Across these works, mining's violence appears rooted in specific places yet unfolds within global circuits of power. Some operate at micro-scales, tracing the slow seepage of toxins into bodies, soils, and waters; others chart planetary systems in which distant rivers are drawn into the same mineral economies. Together, they show that the wounds left by mining are never fully contained within their sites of origin. They move through trade, policy, and memory, crossing borders as readily as currents. Attending to these circulations invites us to imagine solidarities that join local struggles to the broader task of sustaining futures where extraction no longer dictates the flow of life.

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Chapter 3: My Red River Project—Experimental Engagement with a Contaminated Riverscape

The Red River is not merely a body of water passing through the town. They are a living network of relations. Camborne, once at the beating heart of Cornwall's mining boom, now rests along the river in a state of dejection. The town often moves as though unaware of the Red River's persistence and wounded offerings, as if their flow had been filed into background noise through habit and neglect. They continue to give, quietly and continuously, and they witness the costs of that inattention. Their gifts go unnoticed. Their grief remains unheard.

They do not simply flow; they linger.

Figure 3.1 Contextual image: The Red River. Photograph by the author, 2022.

Towns often arise in response to rivers, shaped by their flows and nourished by their abundance. Over time, however, this foundational intimacy erodes, submerged beneath

layers of concrete, commerce, and forgetting. What once sustained becomes peripheral until collapse or crisis rekindles attention to the waters that first made life possible, for human and more-than-human communities alike.

Camborne, situated within the mineral-rich heartlands of west Cornwall, has a mining history that dates to the 1400s, when early activities focused on extracting minerals from the small streams that cut through the mineralised area and from shallow lode-following workings (Cahill, 2002). The town later transformed from a village into a significant industrial centre during the late eighteenth and early nineteenth centuries, when the Camborne and Redruth district was famously described as the 'richest square mile in the old world' (Smallcombe, 2020). The founding of the Camborne School of Mines in 1888 consolidated the town's international reputation as a centre of mining engineering, training generations of engineers who would go on to work across the British Empire and beyond (University of Exeter, n.d.).

Figure 3.2–3.3 Contextual image: Street scenes of Camborne. Photographs by the author, 2024.

The Red River, though seemingly peripheral to the town's contemporary consciousness, courses through histories deeply embedded in sacrifice and domination. The residues

of empire are not abstract here; they are sedimented in the riverbed, etched into culverts, and visible in the colour of iron-stained water. They are a living witness whose currents carry technical ambition and dispossession in the same flow.

Figure 3.4 Contextual image: Street scene of Camborne. Photograph by the author, 2024.

Camborne exemplifies how the periphery was not incidental to imperial progress but its very foundation. It is here that the intimate interweaving of mining, colonial logic, gendered dispossession, and environmental injustice can be traced most vividly. The Red River, which flows past the abandoned shafts and silent engine houses, is both geographical feature and living record of practice, showing what extractive modernity has made possible and what it has left behind. It is precisely this convergence of historical intensity and contemporary neglect that renders Camborne both representative and exceptional within broader narratives of ecological sacrifice and post-industrial transformation. Here, the echoes of industrial power no longer reside in monuments or museums. They reverberate in the troubled movement of water and in the quiet adjustments of those who continue to live with their trace.

3.1 Encounters with the Red River

The following are the main sites I encountered while walking along the Red River, a route that follows their course from source to sea and gathers layered traces borne by different places.

Figure 3.5 Contextual image: Annotated diagram of sites along the Red River. Author's diagram, 2025.

Vincent's Well, Bolenowe, a copious natural spring, one of the sources of the Red River, emerges like a breath drawn from the earth, imbued with ancestral resonance. The well is difficult to locate, long celebrated for its supposed healing properties, particularly for eyes (Thomas, 1994/1967).

King Edward Mine Museum, a historical mining site, now stands as a curated monument to industrial achievement. Its preservation reframes a space of labour and pollution into one of heritage display, where mining is turned into exhibition and pedagogy. The site illustrates how industrial ruins may be reimagined as cultural spaces.

The residential area in Brea, where the river runs alongside the road, appears clean and seemingly harmless, quietly integrated into the daily life of residents.

Figure 3.6–3.7 Contextual image: Left: Interior of a mining museum, now permanently closed, Heartlands, Pool, Redruth; Right: The Red River in a residential area. Photograph by the author, 2022–2023.

South Crofty Mine, one of the most ancient tin mines in Cornwall and the latest to close after the decline of tin mining. It has recently reopened, marking a new era for Cornish mining. At the same time, it remains a principal source of pollution.

Chapel Road, near the bridge, where the river crosses Camborne, becoming part of the riverscape of this mining town. At the confluence of the river and the Mining Heritage Trail are ponds tinged with iron oxides, their surfaces recording red deposits.

Figure 3.8 Contextual image: Chapel Road, near the bridge. Photograph by the author, 2022.

Tehidy, the river is mostly covered with berry bushes. Their voice can be heard before their body is seen. Attempts to approach the Red River are thwarted by the dense brambles that crowd their banks. Through narrow gaps, deposits and discoloured traces remain clearly visible.

Coombe, the point where Coombe Stream meets the Red River, reveals a sudden clash of colour and flow.

Bell Lake Marsh, a marshland surrounded by agricultural land, may appear at first glance to be recovering. Closer inspection reveals surface foams and sediment residues, which are silent indicators of bioaccumulation. This is a suitable site for enquiries into heavy metal accumulation in crops and domesticated animals.

Figure 3.9 Contextual image: Bell Lake Marsh. Photograph by the author, 2022.

Godrevy, where the Red River empties into St Ives Bay, at the end of Gwithian Beach, is usually packed with tourists during high season. The red hue has faded, but its traces persist in the foam that gathers with the outflow. Their passage into the sea signals not cleansing but the dispersal of a burden carried beyond view. Nearby lies St Gothian Sands Nature Reserve, an important habitat for more-than-human life. Its proximity to waters marked by toxicity invites questions about where protection ends and neglect begins.

As artist and critic Catherine Elwes writes, such places are more than coordinates: ‘those same places and landmarks are also time capsules overwritten with historical,

geopolitical and economic inscriptions. Monuments, settlements, dykes, plantations, quarries and industries, functioning and abandoned' (Elwes, 2022), each marking the riverscape and shaping encounter. There exists, as indigenous scholar Tyson Yunkaporta says, 'memories attached to places can be evoked by revisiting those places or even imagining walking there again' (Yunkaporta, 2019). The Red River engages these memories as living witnesses, resisting their reduction to static archives.

Figure 3.10 Contextual image: Confluence of river and sea water. Photograph by the author, 2022.

However, the intimacy has been eroded. As environmental anthropologist Veronica Strang observes, our interactions with rivers are now spatially and symbolically restricted; we are encouraged to swim in municipal pools rather than in rivers, and rivers are carved into waymarked walks and tightly controlled fishing sites. Commercial abstraction and water supply take place elsewhere, out of sight, severed from the communities who once lived by and with the river (Strang, 2004).

Walking beside the Red River today requires following a route of my own devising, threading together broken paths, tracing lost tributaries, and reconnecting with industrial ruins. It is a practice of quiet resistance: an attempt to re-stitch fragmented geographies and restore a form of situated attention. I describe myself as an outsider because I did not grow up within Cornwall's mining histories, nor inherit the collective memories related to this riverscape. This position also offers a certain advantage: distance allows a listening less burdened by nostalgia, opening perception to what familiarity may obscure. It helps me to attend from a renewed perspective to the more-than-human agencies that continue to dwell within this scarred riverscape. Therefore, my engagement with these sites is a tentative encounter, shaped by the humility of arrival and the openness that estrangement can bring.

Out of these walks emerges another form of attention, one attuned not to landmarks alone but to the shifting qualities of the river themselves. Their presence is never fixed: they reveal themselves through colour, sound, and movement, each moment altering the terms of encounter.

The Red River's colour, flow, and water level change significantly with the seasons. In winter, the water flows more rapidly, the level rises, and the colour lightens, while in summer, the opposite occurs. These seasonal fluctuations reflect the river as an open, responsive system, always in motion. This dynamic nature makes observing and documenting the river more complex. Each visit becomes an encounter shaped by time, weather, and the river's own rhythms.

My first encounter with the Red River was on 10 August 2022. My most recent visit, on 27 October 2024, felt like a moment of parting, though I know I will return. Across two years of intermittent visits, I moved through the river's sites and through the shifting contours of my own becoming. As an outsider, visitor, researcher and artist, I approached this river not as fixed terrain to be known, but as a living presence to be listened to, cared for and loved. Like the river, my own identity drifts, subject to tides

of language, memory, and place. I do not come from this land, yet the river folds me into their seasonal rhythms, making space for a kind of shared impermanence. My relation to this riverscape has never been settled. I walk, pause, return, withdraw, uncertain of my place. The Red River unsettles my assumptions, resists reduction, and draws me into their transformations.

Figure 3.11 Contextual image: The Red River. Photograph by the author, 2022.

In the reddest sections of the Red River, where pollution is heaviest, the river is almost entirely screened by more-than-human beings. Tall plants and dense bushes on both banks make access nearly impossible, as if the river themselves are retreating into secrecy. A narrow footpath that existed in 2022 has since been engulfed by thick overgrowth, leaving only tiny gaps through which glimpses of the river are possible. By contrast, in clearer and less polluted sections, the river is more visible and accessible. This contrast prompts questions: Why is the river least visible where contamination is greatest? Is this a deliberate concealment? Or is it a natural ecological response to pollution? Some species may flourish in toxic conditions, their growth inadvertently concealing signs of harm. This phenomenon challenges how we perceive the river,

revealing the complex power dynamics between human intervention and ecological processes.

There are other possibilities. Historically, the logic of concealment has clear precedent. During the Industrial Revolution, as water bodies became increasingly toxic, the habitual response was to wall them in, cover them up (Beer, 2022), out of sight, out of mind.

Figure 3.12 Contextual image: Occasional gaps along the riverside path. Photograph by the author, 2023.

Furthermore, in *Who Owns England?*, British writer and environmental campaigner Guy Shrubsole reveals that for most people who own little or no land, the English countryside resembles a maze, punctuated by countless 'Private&Keep Out' signs, most land and rivers hidden behind private boundaries (Shrubsole, 2020). Jon Moses, organiser for the Right to Roam campaign, argues that it is unacceptable that about 92% of England and approximately 97% of rivers are off-limits to the public. In response,

campaigners advocate for a respectful right to roam, calling people to respectfully explore the land hidden on their doorstep (Moses, 2022). The Red River is also subject to this culture of exclusion, where physical inaccessibility overlaps with ecological obscurity.

Walking along the riverbank, the soundscape shifts with the flow. In the smaller tributaries, the pitch is higher, more hurried, more restless, whereas in the broader stretches of the river, the sound becomes steadier, deeper, and more resonant. However, there are moments when the ear perceives flowing water that the eye cannot locate. Water, notoriously difficult to pinpoint through sound alone, evades fixed attention. This disconnection between hearing and sight further reinforces the river's invisibility, exposing the limitations of human perception. Just as our hearing and sight fail to fully capture the river, our understanding of the river's complexity is often incomplete, fragmented, and contingent.

Where circulation is sluggish, sediment accumulates at the riverbed, forming thick, sticky deposits. They appear in various colours, reddish hues, grey-blue tones, even black, malodorous sludge. These visual and olfactory characteristics directly reflect the river's pollution levels, offering evidence of the long-term ecological impact of mining activities.

The paths along the river are rarely used, with few residents passing through and even fewer tourists. This lack of attention raises research questions that ground this study: How do people care about a river? If a river is ignored or even "hidden", how can public awareness of ecological significance be rekindled? What conditions determine whether a river is seen, valued, or forgotten? Does environmental neglect lead to social disengagement, or does social disengagement enable neglect? I refuse to let the Red River remain a hidden river—unnoticed, unloved, unwalked.

Figure 3.13–3.14 Contextual image: The Red River. Photograph by the author, 2023.

As an open system, the river is in a state of constant change, interacting with their surroundings and exchanging energy, matter, and information with the broader ecological, geological, and social environment. They receive rainfall, runoff, pollutants, nutrients, sediments, and species; they flow through communities, infrastructures, and

histories. Moreover, they shape soils, influence microclimates, nourish life, and carry away what is discarded. Their movements ripple across boundaries, temporalities, and scales. In this relational matrix, the idea of apology becomes more than a gesture of regret or a metaphorical device. It is embedded in my methodology, an ethical and affective practice through which I seek to relate to the river differently. Apology functions as situated accountability.

How does one apologise to someone or something in constant flux, and what does it mean to make amends to a river that never remains the same? These questions structure how I walk, observe, record, and write. Perhaps, apology does not depend on stasis. As with humans, who are also subject to continual change, there persists a thread of continuity, a living history of relation. To apologise is to enter an ongoing relation of care, attention and responsibility for what has been, what is becoming, and what may yet come.

3.2 Boundaries in Question

Compared with lakes, rivers are constantly flowing and more actively participate in the cycle, carrying silt, life, and contamination along their path; their edges are difficult to pin down. Despite this dynamic nature, human frameworks often delineate rivers as discrete entities to be contained, bordered, mapped. We speak of ‘the river’ as if they were fixed, but where does a river begin or end? What counts as inside or outside of their body?

Tacita Dean, a British visual artist working often with film, and Jeremy Millar, an artist and writer, remind us that place is an uncertain phenomenon, ‘more often sensed than understood’, possessing ‘no fixed identity’ (Dean & Millar, 2005, p. 14). This insight resonates with the Red River’s shifting presence: sometimes overtly visible and sonorous, other times disappearing behind thick undergrowth or marked only by rust-

coloured sediment and stagnant pools. Places and riverscapes, they argue, have permeable boundaries, mutable topographies, and remain open to the influence of elsewhere.

I follow in the footsteps of Robin Wall Kimmerer, who offers a compelling alternative to rigid demarcations of the natural world. Her work weaves together Western science and Indigenous knowledge systems, inviting a more relational and sensorial understanding of ecological boundaries. In *Braiding Sweetgrass*, she writes of walking through a misty forest where boundaries become blurred, 'water doesn't seem to make a clear distinction between gaseous phase and liquid. The air merely touches a leaf or a tendril of my hair and suddenly a drop appears' (Kimmerer, 2013). In that moment, boundaries dissolve between air and water, body and environment. This is more than lyrical observation; it is an invitation to perceive riverscapes as fluid networks of relation.

Releasing the hold of technological dominance and economic utility creates space for other river knowledges embedded in myth, folklore, Indigenous traditions, and more-than-human cosmologies. These include the cosmic river of myth, the geological corridor cutting through ancestral riverscapes, and the physical river moving with hydrological rhythms. From these perspectives, rivers are active, responsive corridors of life and knowledge.

However, the human tendency to impose control remains pervasive, especially in cartography. As geographer Mark Monmonier notes in *How to Lie with Maps*, maps must simplify and therefore distort reality to render a complex, three-dimensional world legible (Monmonier, 1996). The Red River, on official maps, is a simplified line, clean, silent and contained. But the lived river tells another story: they flood, vanish into thickets, reflect iron-stained light, and deviate from paths. Mapping may locate the river, but it does not reveal their ways of being.

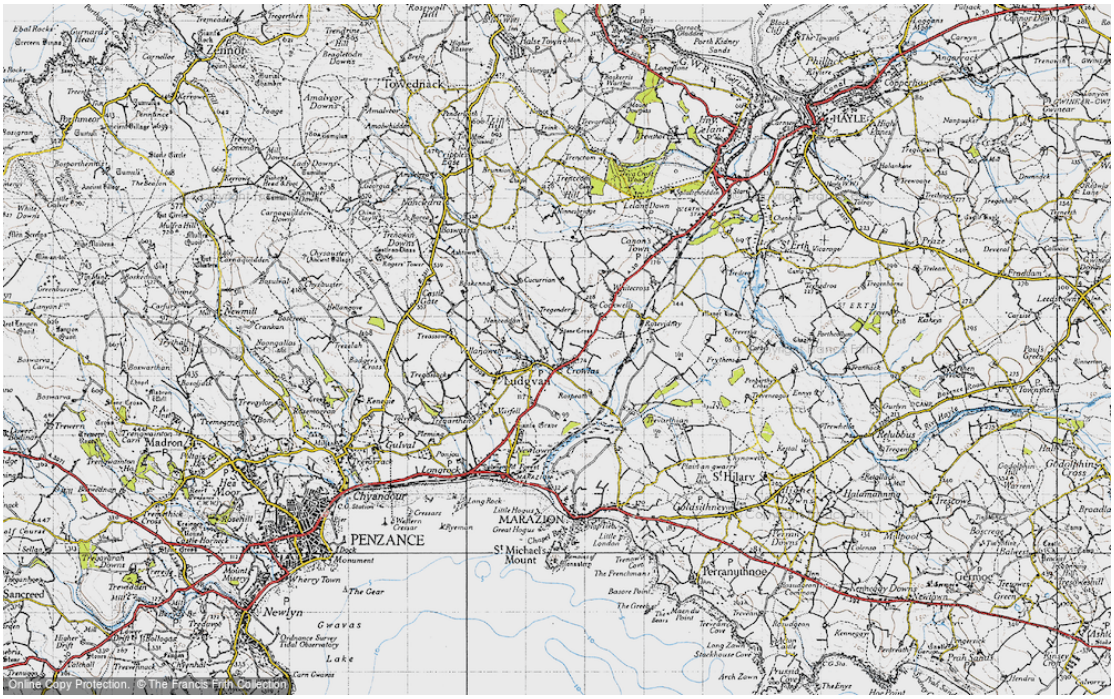

Figure 3.15 Contextual image: Historic map of the Red River area. Source: Francis Frith, 1946.

Architect Mark Dorrian and geographer Gillian Rose argue that in both geography and art, 'the inside and the outside are interdependent and mutually constitutive'. Even where they cannot be seen, the presence of the Red River can be felt. At times what haunts the riverscape is precisely their refusal to be rendered (Dorrian & Rose, 2003). Water, in this sense, is perhaps the most subversive of elements. As Nick Hayes, a British writer, and campaigner for land access, writes in *The Book of Trespass*, 'water is the ultimate element of trespass'. They flow through cracks, reflect and distort, show 'no respect for borders' and 'dissolve definition' (Hayes, 2020).

As the conservationist John Muir put it, 'When we try to pick out anything by itself, we find it hitched to everything else in the Universe' (Muir, 1911). Most of Earth's water is not river water; it has been so before and will be again. Rivers are places where water becomes most visible and alive. Much water never enters a riverbed, but rivers remain the spaces where we encounter water's generosity, unpredictability, and force most directly. This makes them emotionally and symbolically powerful, while also exposing them to oversimplification, aestheticisation, and abstraction through systems of management and representation.

Figure 3.16 Contextual image: The Red River. Photograph by the author, 2024.

To question the boundaries of the Red River, then, is not just a hydrological or geographical exercise. It is a philosophical and ethical act. If rivers are process rather than thing, if they are simultaneously sacred, damaged, and still becoming, then we must learn to attend to them differently: not by drawing sharper lines, but by listening for where rivers assert themselves, where they refuse definition, where they exceed our frames. Questioning boundaries becomes a way of being-with: a method grounded in uncertainty, sustained by humility, and the refusal to claim the river as knowable.

As the edges dissolve, attention turns from boundaries to fluid identities, with the Red River disclosing themselves through movements that never settle, shifting with the seasons, with rainfall, with industrial discharge and community interaction. This continual transformation renders them deeply relational—physical, social, cultural, and spiritual. ‘The most constant “quality” of water’, writes Veronica Strang, ‘is that it is not constant, but is characterised by transmutability and sensitivity to changes in the environment’ (Strang, 2004). Water flows, leaks, evaporates, absorbs and reflects. They

move through and around us, shaping fields of relation with both healing and destructive consequence.

Figure 3.17 Contextual image: The Red River. Photograph by the author, 2024.

Artist and writer Jessika Khazrik's sculpture amplifies water's fluid connectivity to reveal their political and ecological undercurrents. *Two Barrels Kissing Until Their Water Meet(s)* (2014) features two industrial barrels leaning into one another in a precarious 'kiss', their waters almost touching. By staging the near-merger of liquids, the work foregrounds how contamination traverses porous boundaries and ignores human-made borders. The exchange between the barrels is a microcosm of cross-border flows, echoing the transnational mobility of pollutants and exposing the instability that arises when toxic materials permeate environments and communities. In this way, intermingling waters blur once-discrete origins and refigure identities as ongoingly reshaped by flows and exchanges.

Figure 3.18 Contextual image: *Two Barrels Kissing Until Their Water Meet(s)*. Source: Jessika Khazrik, 2014.

Such artistic gestures invite us to think beyond discrete containers and into fluid relationality. As British writer Robert Macfarlane reflects in *Is a River Alive?*, 'we all sit between and among rivers.' He evokes a hydrological image in which sky-rivers above, surface flows beside us, and subterranean streams below form a layered network, from aerial arteries through forest veins into the capillaries of the earth (Macfarlane,

2025). This image gathers what often feels dispersed and reminds us that we dwell within their circulatory system. We are nested in a vast hydrological body whose currents move through air, root, stone, and thought. The Red River, too, flows as part of this relational web.

Moving water is often perceived as “better” than still water, reflecting both biological awareness of stagnation and a cultural desire for motion, life, and metabolic vitality. Rivers, in this way, become the space where identity, boundary, temporality, and agency remain in flux.

3.3 River’s Dialogue

Through site-specific performance and time-based works, I aim to re-centre the river and re-surface persistent issues across past, present, and future. This approach excavates suppressed histories and initiates forms of ecological restoration that have often been overlooked, whether by accident or by design. As site-specific works, they engage the characteristics of the river basin while addressing the broader social and political contexts mentioned in this chapter.

At the same time, while the Red River serves as the primary site of my research, I do not regard this practice as limited to a single locality. Rather, it serves as a starting point for thinking about how site-specific methodologies may translate across riverscapes globally. The ecological, political, and emotional conditions of the Red River resonate with those of rivers elsewhere that have been damaged, forgotten, or commodified, and my work aspires to develop transferable strategies that honour local specificity while remaining open to translocal dialogue. As such, my research aims to put forward lyrical and performative methodologies that can be applied to other waterways.

This raises fundamental questions: How can the authenticity and intensity of a situated, embodied performance be communicated through mediated formats such as video? What is lost in translation, and what new forms of connection might be opened? I am interested in this tension as a generative site of inquiry. The camera's presence does not merely document; it also transforms, reframes, intervenes and reorients. In the absence of physical co-presence, affective resonance is composed through sound, duration, visual rhythm and the interplay between seen and unseen. The challenge is to evoke the textures, sounds, and atmospheres of the riverscape while maintaining procedural clarity and ethical relation.

Curator Éric Troncy suggests that an exhibition should not be reduced to a mere showroom, a retrospective display of pre-existing works (Troncy, 2008). Instead, they should function as 'a priori artists' project, an experiment whose outcome was altogether uncertain… throughout the different phases of its successive materialisations' (Troncy, 1994). Following this framework and drawing on French philosophers Gilles Deleuze and Félix Guattari's theories of deterritorialisation, multiplicity, and becoming (Deleuze & Guattari, 1991), my practice resists fixity. The river is approached as a mobile assemblage, and works emerge, pause and reactivate in dialogue with their movements. I emphasise site not as bounded location but as a field of intensities co-produced by water, bodies, infrastructures and histories. My works, therefore, become an unfolding constellation of gestures, sounds, and spatial inscriptions that echo across different moments of the Red River, continually branching, intersecting, and re-emerging in relation to their flow. The river is not a backdrop, but an active collaborator in the creation of meaning.

Rather than surveying broader artistic lineages that do not directly bear on my procedures, I prioritise what the Red River requires of method. My project unfolds as a series of experiments across multiple sites, each seeking contact, resonance, or acknowledging failure. Some works emerge as intimate encounters between body and water; others falter or fall back into familiar traps. Yet failure, too, becomes instructive:

it occurs when control overrides relation, when attentiveness to river, self, and viewer unravels. Success, by contrast, arises when listening deepens, reciprocity strengthens, and situated accountability is sustained. For me, site-specific work entails attunement and responsiveness, not mastery. As Korean curator Miwon Kwon describes, the point of site-specific art is to sustain a meaningful dialogue with the surrounding riverscape (Kwon, 2002). These works become part of the riverscape, conceptually and perceptually reconstructing an increasingly intimate relationship between myself and the Red River—a form of speaking with, rather than speaking about.

Figure 3.19 Artwork as Research: Still from *River's Pulse*, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

3.4 Contradictions of the Camera

Any image we have of riverscapes is shaped by climate change, and rivers continue to be overshadowed by human activities, especially extraction. It is not enough to respond

by producing more images or inventing new terms; restoring relations with rivers requires reorienting perception, responsibility, and ethics.

Figure 3.20 Contextual image: *Western Flag (Spindletop Texas)*. Source: John Gerrard, 2014.

The paradox is that digital images themselves carry a material cost. Mining activities draw on copper, tin and lithium—the very minerals associated with Cornwall's past and present— to produce the machines that capture and circulate images (Katwala, 2018). In other words, the materials, assembly, and distribution of photographic equipment consume mineral resources and increase carbon footprint. This contradiction exposes the tension between the choice of medium and the intention of ecological protection. Irish artist John Gerrard acknowledges that the use of unsustainable power-hungry digital technologies inevitably affects his practice: 'the technologies allowing us to assimilate and celebrate what is left of the natural are toxic' (Gerrard, 2014). Some artists seek alternatives by recycling outdated equipment or working with solar and

wind power, yet, as Catherine Elwes observes, ‘most are condemned to marginally deplete the earth’s mineral reserves in the creation of their work’ (Elwes, 2022).

This contradiction remains unresolved, and I choose to approach it as an ethical condition to be made visible. All art forms leave traces of extraction through materials, production, storage, transportation, exhibition, maintenance, and disposal. Moving image practice may avoid some energy-intensive processes, but its infrastructures remain entangled with mining. Therefore, my focus shifts from questioning whether such consumption is justified to acknowledging these destructive origins, while recognising the moving image as a medium that can redirect attention, redistribute sensibility, and open spaces for response.

Figure 3.21 Contextual image: The Red River. Photograph by the author, 2024.

My works centre on performances aimed at healing the wounds of the Red River. As I explored and experimented along their banks, the camera became a vital mediator. It captured the river’s breath and intricate textures, traced the subtle movements of light and sediment, and carried these impressions to a second layer of mediators: the viewer. The camera mediates without neutrality; it bears both the river’s presence and the

residues of mining. Through this double bearing, viewers encounter not only the river but also the infrastructures that frame their image.

American artist Robert Smithson's notion of "Site/Non-Site" offers a way of thinking about the displacements involved in moving image practice. In *A Nonsite (Franklin, New Jersey)* (1968), limestone fragments from the Franklin mining district were placed in geometric containers within galleries and juxtaposed with maps and photographs, foregrounding the fracture between original site and mediated counterpart. This fracture, what Smithson called the non-site, resonates with the camera's work along the Red River: what is carried elsewhere is never the site itself, but a dislocated echo that makes absence perceptible.

Figure 3.22–3.24 Contextual image: Left: *A Nonsite (Franklin, New Jersey)*, 1968; Up: *Nonsite (Essen Soil and Mirrors)*, 1969; Down: *Non-site (Palisades-Edgewater, N.J.)*, 1968. Source: Robert Smithson, 1968–1969.

The ecology of moving image dramatises our relation with the riverscape (Elwes, 2022). Forms become nomadic and mobile, altering historicised forms and opening space for renewed attunement. French film theorist Christian Metz describes this sensory

dimension through the concept of ‘perceptual passions’, suggesting that the sensory experience of viewing moving images can activate dynamic emotional engagement with the riverscape (Metz, 1975). Building on this, British philosopher Richard Wollheim proposes the idea of ‘complex projection’, where projection allows viewers to find correspondences between the appearance captured in riverscape images and their internal representations of reality, along with associated emotional memories (Wollheim, 1991). Drawing on these insights, my works do not simply project human emotions onto the river; rather, they invite an encounter in which the river’s image becomes a relational surface of resonance. In such moments, the viewer does not simply look at the river; they are addressed by it. Through this reciprocity, affects such as grief, wonder, and urgency are reconstituted within the viewer, not as distant responses but as embodied impulses that call for accountability.

We remain an integral part of the riverscape, and we need to speak with them, becoming aware of our place within their flows. Moving images are fleeting and fragile, mirroring the ephemeral nature of water and the delicate relation between humans and rivers. Through this framework, the contradictions of the camera do not disappear; they become part of the work itself. They remind us that to carry the river’s image elsewhere is to carry both presence and cost, intimacy and extraction.

3.5 Innovating Perception and Recording

While large-scale artistic collaborations with riverscapes can raise awareness, they often reinforce spectacle while obscuring geopolitical and social complexities. Visual artist Veronica Vickery suggests that artists focus on the intimacy of ordinary, everyday landscape narratives to address politically and materially complex sites (Vickery, 2019), thereby revealing the encounters between the geological, the human and riverscapes.

My work revolves around everyday rituals, continually exploring new ways of perceiving and documenting, seeking methods that cultivate intimacy with rivers. This is a practice of moving slowly, listening closely, and dwelling attentively. In place of distant observation, I search for relational gestures, small acts of closeness that might foster an ethics of care. Alternative imaginations do not offer certainty but possibility. They temper tendencies toward domination, opening space for responsiveness, shared vulnerability, and creative attunement. This reorientation requires more than new tools; it requires a transformation in how relation is formed across bodies, species, and systems. It is not a technical matter but a question of sensitivity. As Guattari writes, moving toward a greener relation between self, culture, and nature calls for 'new micropolitical and microsocial practices, new solidarities, a new gentleness, together with new aesthetic and new analytic practices regarding the formation of the unconscious' (Guattari, 2000). It is within these soft gestures and local acts of attention that new relations may begin to take root.

Veronica Strang suggests that although culturally inflected, such interactions often express persistent undercurrents, not from a 'psychic unity', but from shared sensory experiences, cognitive processes, and physiological needs. Nature and culture interpenetrate in this interaction, allowing certain cross-cultural commonalities to re-emerge (Strang, 2004). Innovating perception and recording methods does not mean inventing from nothing. It means returning differently, inhabiting the familiar with renewed attentiveness. Recording becomes a practice not of capture, but of care.

As I wandered along the Red River's edge, often alone, with little more than a camera and my breath, I began to sense a subtle transformation in perception. A persistent desire drew me closer to the river—a primal impulse to return to the womb of water. I did not wish merely to look; I longed to enter, to feel their currents against my skin, to learn through the immediacy of sensation. Water, with their unique sensory and emotional force, becomes a focal point for experiences that lie beyond the routines of daily or transactional life. Released from the demands of household and economic

function, they invite a more sensual and meditative relation, one that exceeds utility and opens onto attunement.

In a world increasingly immersed in "data realities", we are taught to privilege quantifiable knowledge over what bodies know. Extractive logics narrow our capacity to feel. But perception is not passive: it is bodily knowing, attention, and co-creation. River water on skin, mud under fingernails, the metallic tang of sediment in the air—these are not symbolic, but forms of knowledge that resist abstraction. These moments of embodied attention resist the alienation of ecological detachment and return knowledge to the body.

Figure 3.25 Artwork as Research: Still from *Handshake with River*, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

Following Kimmerer's opinions, there is an intimate reciprocity to the senses. When we touch the river, the river touches back; when we listen to their sounds and breathe in their scent, the riverscape gradually tunes us in, shaping our inner rhythms. The senses are not mere channels of input but modes through which the river informs thought and guides action. In this dynamic reciprocity, I do not stand apart: the world

and I reciprocate one another. The riverscape I experience is ambiguous and affective, responding to my emotional registers and calling forth feeling in return.

My performative practice seeks to open this perceptual field, not to romanticise the riverscape but to acknowledge that sensing as relating, and relation as the beginning of care. Some knowledge comes only through immersion. Before ideas take form, the river teaches with temperature, texture, and pressure. In summer, the river welcomed me. Cool water slid over my skin, softening the heat, tracing quiet paths along my body. The boundary between self and river thinned, as if they were reading me. In winter, the river held me with sharp clarity. Stepping in became an act of surrender. The pressure against my body was immediate, forceful, insistent. Breath, pulse, and presence grew vivid. Through warmth and chill, through flow and force, they taught me how to feel again. In attuning myself to their textures, rhythms, and moods, I participate in the co-creation of meaning between self and river, between human and more-than-human.

Sound

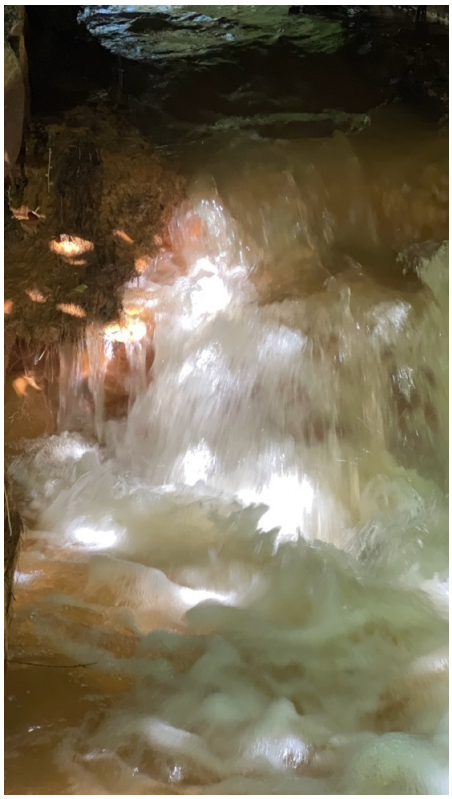

Figure 3.26 Contextual image: Rapids of the Red River. Photograph by the author, 2022.

David Abram, a cultural ecologist and philosopher, observes that when we describe turbulent currents of the river nearby, we use words such as “rush”, “splash”, “gush”, and “wash”. These words share a common sonic quality, which echoes the very melody sung by the flowing waters as they meander through their channels (Abram, 1996). The sound of the river lives in language, and speaking it reactivates presence in our bodies. At the same time, these words automatically evoke the sounds and images of the river in our minds. They are no longer static descriptions but dynamic, evolving, and expandable repositories. They repeatedly resurrect and replay our perceptions of the river, reshaping understanding in the process.

In exploring sound as part of my practice, I found myself increasingly drawn to what philosopher Amy Coplan calls the ‘emotional contagion’ of rivers, skies and seas on film: an immersive aesthetic in which viewers do not simply observe but feel through sonic atmosphere (Coplan, 2006). Sound, as philosopher and new media scholar Laura Marks notes, can trigger deep-seated memories because the senses are rarely isolated (Marks, 2000). A sound may carry the scent of wet soil, the chill of wind, and the texture of moss beneath the foot. In my work, I attempt to hold these sonic textures as more than background; they are active agents, carrying the river’s voice—their mood, their warnings, their breath. Through headphones or speakers, these sounds reach the listener’s body as much as their ears. They invite a tactile form of listening, where to hear is to feel, and to feel is to remember, and to remember is the beginning of responsibility.

Telescope

The Distance Between Us (2024) documents my attempts to see the Red River through a telescope. Spots once visible two years ago are now difficult to see with the naked eye, requiring the artificial precision of the lens, glimpsed only through narrow gaps. Bridges that once afforded open views are shrouded in dense vegetation. The river appears more distant, as if retreating from us.

Figure 3.27 Artwork as Research: Still from *The Distance Between Us*, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

My attention turned to marginal spaces, the intervals we typically ignore: the gaps, the voids, the incidental pauses in movement. These indeterminate spaces, neither fully visible nor entirely lost, echoed the river's gradual disappearance. The telescope, ordinarily a tool of discovery, became instead a device of mourning. Its lens offered a way to witness absence. Seeking the river through mediation confronts the absurdity of detachment and reveals how far they have receded from both sight and consciousness.

This work marked a shift: from direct proximity to mediated perception, from bodily immersion to technological estrangement. It reveals not only the river's vanishing behind infrastructure and overgrowth, but also how our perceptions become filtered, delayed, and diminished. Looking turned into an act shadowed by loss, complicated by barriers, absence, and the effort now required to care. Created during the second phase of my practice, this piece departs from earlier works grounded in touch and closeness, staging instead a deferred encounter. Framing the river through a narrow scope became

a metaphor for a shrinking field of attention, where what once flowed openly before us now demands effort, technology, and adjustment simply to be seen.

Figure 3.28–3.29 Contextual image: Searching for the Red River through a telescope. Photographs by the author, 2024.

As the Red River becomes increasingly invisible and inaccessible, I began to wonder if this was where the connection broke, where respect gave way, where we could no longer easily see their body and life. Perhaps this is where reverence faltered, in the slow erosion of sight, attention, and shared presence.

Urine Collection

This performative work, titled *What Moves Through Me* (2024), began with a question: What does it mean for water to pass through us? To drink, absorb, circulate, and expel are not neutral biological acts, but gestures of relation. I hope to connect the human body with the riverscape through the flows of blood, minerals, and water. It is not merely about observing the river but about experiencing them. When the river enters me and I enter the river, when I drink from them and release their waters through my skin, when their symbols are inscribed upon my body, the boundary between body and river begins to dissolve. The physical bond becomes more than contact; it transforms into a mode of co-being, where emotion arises as the shared pulse of human and more-than-human existence.

From this desire emerged the gesture of collecting urine: I gathered samples in Camborne and compared them with those from London. Living near rivers in both places and drinking tap water, I collected samples over three days in each location. The act itself was unceremonious, mundane even, and yet it was this very mundanity that made it intimate. I came to understand this practice as metabolic engagement with the riverscape: ingesting, transforming, and returning. I carried the water, and so they became part of me. I embodied them, and in doing so, was drawn closer to the river's dispersed and invisible routes. This act invited a reimagining of the body not as separate from the river, but as a node within a shared system of purification and flow. Through the simple rhythm of drinking and expelling, I envisioned a collective body in which river and human moved through one another.

Each bottle became a vessel for this imagining, a fragment of fluidity circulating through bodies, infrastructures, and ecologies. By pausing the cycle and collecting rather than discarding, the work renders visible what is usually lost; however small, this pause becomes a ritual of attentiveness, a way of sensing the river within my own circulatory system.

Figure 3.30 Artwork as Research: *What Moves Through Me*, 2024. Photographic documentation of performative practice involving collected urine.

Figure 3.31–3.32 Contextual image: Left: *Self-Portrait as a Fountain*; Right: *Piss Flowers*. Source: Bruce Nauman, 1966–1967; Helen Chadwick, 1991–1992.

This lineage recalls earlier works that refuse to sever the body from its fluids, such as American artist Bruce Nauman's *Self-Portrait as a Fountain* (1966–67), which turns the artist's body into both literal and conceptual source of flow, and British artist Helen Chadwick's *Piss Flowers* (1991–92), created with her partner by casting floral-like bronzes from depressions in snow made by both their bodies and urine. Both works locate meaning in circulation and critique through excretion. My work inherits this refusal, situating it within the metabolic passages of river and body.

Water flows from their source, through pipes, to the tap, then enters my body and exits again, flowing into the sewer system, where they are processed and returned to a broader collective, dispersing into ecologies for regeneration. As theorist Achille Mbembe observes, ‘to return to the body is also to come back to earth’, as event, belonging to all its inhabitants, ‘without distinction of race, origin, ethnicity or even species’ (Mbembe, 2017). Collecting urine became a way to briefly interrupt this cycle, a pause in water’s passage through river, infrastructure, body and sewer. This pause recalls that waters moving through sewers, aquifers, clouds, and kidneys are ancient beyond comprehension. We do not own them; we are temporary custodians within a circulation that precedes and exceeds us. They do not belong to us; we belong to them. This wondrous cycle reveals our connection with water, rivers, and all things.

Now, a river flows through me, and through you as well. This is the information that moves within us, given to us by our more-than-human relatives. We are only agents in their passage.

Wandering

In *Axis of Contact* (2024), I positioned my body as a vertical line, an axis through which the Red River could be sensed, traced, and remembered. This work proposed the body not as an external observer, but as a conduit, a living bridge between earth and sky, soil and breath, human perception and more-than-human flow. One camera was fastened near my feet, another aligned with my eyes, capturing perspectives from the lowest to the highest points within the human frame. From phytoplankton to grasses, stones, and silt, the work engaged with the river and their geology through both biological and technological lenses, simultaneously documenting the river's characteristics and the experience of traversing the riverscape. This embodied configuration sought to become-with the river, situating the body as an interface through which their presence might be perceived differently. This kind of jewel relationship we have with the river, fragile, refractive, layered, is really intimate.

Figure 3.33 Artwork as Research: Still from *Axis of Contact*, double-vision perspective, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

The practice involved an intense focus on a single place—lingering, wandering, and sometimes becoming lost. The river and their surroundings were encountered through the thresholds of the body: feet upon paths, head tilted to shifting skies, eyes drawn to the ground, skin brushing against plants, guided by intuition, clues, curiosity, and desire. Walking and filming unfolded rhythmic acts of entanglement, a performative dialogue in which body and riverscape co-shaped one another's gestures. Walking, as both method and metaphor, offered a mode of generating knowledge, of awakening ecological sensitivity, and of cultivating belonging. Riverside walking provoked visceral responses to visual pollution, discarded matter, overdevelopment, and the precarious fluctuations of water level. From uneven paths and sudden openings to water,

to fences and barbed wire, the walk became a negotiation of the river's layered past and their uncertain present.

To walk with a river is to move within their temporality—meandering, flooding, stagnating, and changing. This temporal ecology unsettles linear thinking and invites a mode of learning shaped by encounter and flow. With repeated passage, the river discloses themselves as personality, carrying moods, histories, and habits that are at once ecological and human-related. Even when coursing through zones of overdevelopment or waste, the Red River retains distinct flavours. Through prolonged walking and watching, perception alters: what once seemed inert begins to stir, the senses attuned to rhythms where movement becomes a condition of being, and the river begins to think through the body.

As I moved through Camborne's river routes, I documented shifts in the riverscape and in my own capacity to engage, as the video work captured encounters that were unexpected, overwhelming, and sometimes dissonant, exceeding visual dominance. In those moments, I felt fully within the body, which became a site of thought, memory, and sensation, and walking with sustained rhythm led toward deep attunement, a movement into the presence of the river as they moved through me in return.

Axis of Contact marks a methodological turning that reconfigures the body as a sensing technology and reframes representation as participation, developing a mode of situated documentation in which body, river, and medium form an interdependent ecology. Its contribution is an epistemic shift that challenges detached observation and advances embodied attunement grounded in co-presence, resonance, and mutual transformation, opening a porous field of perception through which new relations can emerge. *What Moves Through Me* traces passages through the interior body, while *Axis of Contact* attends to flows across the exterior body; together they situate practice within the currents between interiority and exteriority. From this doubled passage, recording

follows as part of that attentiveness, so that what is perceived in motion is witnessed in time.

A river is never silent; their transformations unfold through image, sound and video, where recording becomes an act of witnessing that grants a situated voice. To document the river is to enter into the ephemeral and fragile, a political gesture that resists the erasure of bodies, species, and waters that mining histories sought to render invisible. Our memory is increasingly mediated, reliant on physical traces, visual records and sound fidelity. Yet recording is more than preservation: it is an assertion of presence within a contested future. The Red River carries memory as mutable sediments, and my practice traces their shifting movements, dwells in their sounds, and honours their refusal to be fixed as archive. These living records open a dialogue that registers the weight of the past while walking with the river toward futures still in formation.

Playing Video

Figure 3.34 Artwork as Research: Still from *The River Watches Themselves*, 2024. Video documentation of a situated, relational practice involving the act of playing videos to the river. Video available via webpage (see Introduction, p. 8).

The River Watches Themselves (2024) consists of two intertwined acts in which the river is shown to themselves on screen. The first act replays footage of the Red River, filmed two years earlier, back into their waters, allowing the river to confront their own past. The second act records the lower reaches and carries these images upstream, showing them back to the river on the same day. This folding of time and space—from past to present, from downstream to source—unsettles linearity and reactivates dispersed memory. Through this gesture, the work threads fragments of degraded water, layers of toxicity, and traces of multispecies presence.

What does it mean to show a river their own image? In this work, the visual medium operates as documentation and as disruption, as witness and as mirror. These videos become dynamic forms of evidence and relational objects, reconfiguring the relation between viewer and viewed and generating new associations and meanings. As performative interventions, this piece refuses the record as storage and enacts witnessing as process—a continual reassembly of fractured time, contested memory, and distributed agency. The past returns as something carried forward, bearing the hope of transformation through each renewed act of re-engagement.

This work seeks to imagine a memoir of the river from the river's own perspective through media. The spaces of the riverscape have become repositories of entangled events, accumulating over time. When looking back, what might the river miss? What was the Red River like before it turned red? These questions structure the project as both elegy and invocation: mourning what has been lost while attuning to what still speaks. As Donna Haraway states, to re-member, to com-memorate, is actively to reprise, revive, retake, and recuperate (Haraway, 2016). Here, re-membering becomes a speculative gesture that reactivates relations long buried beneath mining's histories.

While the river is invited to witness themselves, the work also turns toward human perception, opening questions of memory and forgetting. For us, every feature of the riverscape holds the potential to activate specific memories, in which we integrate

feelings and experiences. The curve of a bank, the sound of water over stone, the glint across the surface—each becomes a site of emotional sedimentation. The river emerges as the most powerful reminder. However, as the riverscape changes, when what was once familiar becomes unrecognisable, memory loosens its hold, and we drift within its unstable currents.

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Part II

Lyrical & Performative Art-based Approach

If Part I traced the Red River through their scars, this part turns to how practice listens, responds and renews. It begins by setting out an ethics of coexistence beyond anthropocentrism, where feminist critiques meet Eastern relational philosophies and the river is approached as kin within more-than-human worlds. Through this weave, Chthulucene thinking is treated as a horizon for symbiotic futures, hydrofeminism grounds watery embodiment, and apology is placed in careful dialogue with rights so that juridical claims arise from, rather than replace, lived responsibility.

These arguments are then carried into method. River relations are rethought as tangled and situated, reciprocity is rehearsed through field encounters, and ritual becomes a way of acting with the river. As practice unfolds, orientations begin to take shape through repetition, return and care. The part closes by clarifying the affective and ethical capacities that sustain such work: a practical emotional intelligence, embodied wetness as a mode of witnessing, and commitments of dignity, courage, restraint and return. Together these chapters ask how rivers set tempo and terms of relation, and how a lyrical, performative practice can enact care within waters marked by extraction while resisting extractive habits of perception.

Chapter 4: Fluid Ethics of Coexistence—Rivers Beyond Anthropocentrism

The term Anthropocene, proposed by atmospheric chemist Paul Crutzen and limnologist and biologist Eugene Stoermer (2000), names a geological epoch in which human activity has become a dominant force altering Earth's systems. While the concept raises awareness of global environmental degradation, it has been widely criticised for obscuring the unequal responsibilities and impacts borne by different communities, institutions and actors. As T. J. Demos argues, it frames ecological crisis as collective fault, ignoring colonial, capitalist, and corporate drivers (Demos, 2017). It has further been challenged for being meaningful only within an apocalyptic framework, reinforcing a narrative of inevitable catastrophe that shapes how we perceive and respond to the current ecological crisis. In this thesis, the Anthropocene is approached as a contested descriptor that must be situated within histories of extraction and responsibility. This orientation opens methodological space for practices that redistribute attention and accountability.

Within this orientation, the chapter considers how art moves between philosophy and lived encounter, between speculative imagination and material gesture. The Red River, scarred by mining but still flowing, becomes the site where these ideas take form. Here, practice and theory are braided together, each sustaining and transforming the other, and this interweaving provides the ground for a mode of scholarship that is at once critical, situated, lyrical, and performative, seeking to honour the river as companion and kin in imagining alternative futures.

Throughout, the Red River is approached as a living presence, guiding the inquiry and displacing the human as the default locus of action. Accordingly, the chapter foregrounds the procedures through which concepts are translated into methodological tools. To make lines of influence legible, the theoretical materials are presented chronologically, tracing the transmission of ideas across traditions and clarifying how these strands converge within my practice.

4.1 Ecofeminist Currents

Rachel Carson's lyrical evocation of water's embeddedness in life's origins opens imaginative and ethical pathways for rethinking human and more-than-human relations. In *The Sea Around Us*, she writes, 'Fish, amphibian, and reptile, warm-blooded bird and mammal—each of us carries in our veins a salty stream in which the elements sodium, potassium, and calcium are combined in almost the same proportions as in sea water' (Carson, 1951). Her insight links human physiology to deep evolutionary time, emphasising a material continuity that binds us with more-than-human life. From Carson's vision of water flowing through every vein emerges a broader feminist recognition: the same currents that bind life also reveal how systems of domination inscribe themselves in and across bodies, lands and waters.

Ecofeminism, first articulated by Françoise d'Eaubonne in 1974, exposes and challenges these connections, making visible the deep entanglements of ecological crises and patriarchy. The term links environmental degradation with gender oppression and calls for a re-examination of the human-nature relationship through a feminist lens (d'Eaubonne, 1974). Emerging at a historical moment when women's liberation politics converged with the awakening of ecological consciousness, ecofeminism establishes a framework for understanding how systems of domination intersect. Over time, it evolves in response to accelerating climate change and widening social inequality, demonstrating how environmental violence and social hierarchies remain inseparably bound.

Extending ecofeminist critique into questions of representation and ecological rhetoric, Gillian Rose exposes the masculinised geometries of representation, where the gaze renders women passive and naturalised, echoing the ways riverscapes have been framed as submissive backdrops (Rose, 1993). In dialogue with ecofeminism, Timothy Morton argues the tendency to elevate "nature" into an idealised object admired at a distance, calling for an 'ecology without nature' that unsettles this aesthetic and conceptual

pedestal (Morton, 2010). As Ravi Agarwal reminds us, ecology itself is entangled in systems of power and control, much like patriarchy (Agarwal, 2013-2015). These arguments reposition riverscapes from passive scenery to active interlocutors, challenging regimes of vision and value that naturalise domination while opening methodological space for situated, relational practice.

Building on this trajectory, feminist social scientist Jill Williams and Professor Vanessa Massaro articulate feminist geopolitics as an approach that navigates rupture and fluidity, attending to fractures and absences while simultaneously embracing movement and flow (Williams & Massaro, 2013). This orientation resonates with rivers, whose currents embody both discontinuity and connection. To theorise rivers through feminist geopolitics is to recognise them as agents of interruption and renewal, shaping possibilities for ecological and political futures.

Similarly, the Gynocene thesis extends ecofeminist critique into geological time. It is framed as a feminist-led, gender-equalised, anti-anthropos environmentalism which 'locates human-caused geological violence as coextensive with patriarchal domination, linking ecocide and gynocide'. Artists Alexandra Pirici and Raluca Voinea describe this approach as excluding all manifestations of patriarchy and institutionalised forms of violence in order to build 'new models of eco-feminist stewardship' (Pirici & Voinea, 2015). However, such a stance risks overlooking the reality that we are all entangled in these destructive structures, albeit to different degrees. The wealthy are often more deeply implicated in extractive infrastructures through consumption, investment, and ownership, while also possessing greater capacity to insulate themselves from visible consequences. By contrast, vulnerable groups bear disproportionate exposure with fewer avenues of withdrawal. Attending to these asymmetries reaffirms ecofeminism's force in naming interdependence while confronting the stratification of relations, pressing environmental justice to reckon with the uneven geographies of power, privilege, vulnerability, gender, and race. These debates inform situated practices,

where ecofeminist commitments are enacted through collective organising, media, and site-specific experiments.

Figure 4.1 Contextual image: *Who Is Afraid of Ideology? Part 3: Micro Resistencias*. Source: Marwa Arsanios, 2020.

Ecofeminism functions as a theoretical lens and as a practice embodied in cultural, political, and artistic experiments. Artist and researcher Marwa Arsanios's film series *Who is Afraid of Ideology?* (2017-2020) explores the ecological dimensions of military and social struggle through the Kurdish Women's Liberation Movement. In the film, female fighters describe survival skills for living in the wilderness, showing how environmental awareness is organically woven in their self-defence training, emerging as natural and intuitive. Another section turns to Jinwar, a women's commune in northern Syria, where ecofeminist utopian ideals are enacted in daily life. Jinwar's persistence in a war-torn state becomes a radical experiment in practising ecological principles within a non-patriarchal, egalitarian society.

Visual artist Barbara Marcel's film *Humo sobre los humedales* (2019–2021) fosters a decolonial ecological consciousness by documenting feminist street protests, the work of the ecofeminist community station Radio Humedales, and reflections on uprisings.

The film captures the revolutionary energy of female protesters in Chile during the social unrest sparked by Santiago's metro fare hike, which ultimately led to the cancellation of the UN Climate Conference COP25. Marcel celebrates the voices and movements of these women, denouncing the oppression of Indigenous peoples and the plundering of nature. As feminist theorist Silvia Federici argues, women today represent the main social force resisting the total commodification of nature, particularly through non-capitalist engagements with landscapes (Federici, 2019). By linking the climate crisis with gender inequality and social injustice, Marcel's film underscores the central role of women in ecological struggles.

Figure 4.2–4.3 Contextual image: *Humo sobre los humedales*. Source: Barbara Marcel, 2019–2021.

These works find deep resonance with my own practice, which unfolds at the intersection of feminist thought, ecological mourning, and embodied ritual. Like Jinwar and Radio Humedales, my methods rest on non-capitalist values, reuse, reciprocity, and relationality, privileging process over product and intimacy over spectacle. In the spirit of Arsanios, who foregrounds survival through intuitive, place-based knowledge, my work embraces the physical, sensorial, and emotional awareness that arises from walking in the silt, touching the toxic water, and listening to the rhythms of a contaminated riverscape. Marcel's emphasis on collective voice and feminist mobilisation echoes my aspiration to shape spaces through sound and gesture, inviting others into acts of situated, embodied reflection. Seen through this lens, such practices crystallise into an ecofeminist orientation.

Ecofeminist thought exposes the intertwined logics of patriarchy and extractivism, revealing how the exploitation of women, more-than-human beings, and riverscapes unfolds as interconnected processes. Emphasising care, reciprocity, and embodied knowledge, ecofeminist approaches resonate with the river's rhythms, disrupting dualisms that separate culture from nature, theory from practice, human from more-than-human. Ecofeminism thus offers an ethic of response-ability that aligns with rivers, soils, and more-than-human communities who continue to sustain life even as they carry scars. Rather than forming a single lineage, this orientation flows into dialogue with other critical currents. From this confluence, the current turns east, following philosophies and practices through which ecofeminism takes root in relation and ritual, and will return to Global South and Indigenous perspectives when reciprocity and decolonial critique come into focus.

4.2 Flows of the East

Eastern ecofeminism offers cultural and methodological grounding: it draws upon philosophies, rituals, and embodied metaphors within Eastern contexts to imagine relations of interconnection, cultivation, and attunement. Drawing on these strands, my research moves with the Red River as critique and as method, practising attentive companionship that shapes gestures of care, apology, and remembrance within ecological relation.

Within these Eastern strands, three motifs recur. Interconnection points to responsibilities within mutual dependence; cultivation signals the nurturing of both self and environment; attunement evokes a responsive harmony with more-than-human rhythms. Reading them together creates a dialogue where confrontation and care, resistance and cultivation, are held as complementary strategies for ecological futures. In my encounters with rivers, this dialogue becomes embodied, as critique folds into care and attunement takes form within their shifting currents, allowing ecological practice to emerge with them. This embodied dialogue finds a philosophical lexicon in Daoist thought, where flow and responsiveness are articulated as method.

In Daoist philosophy, the principles of "Dao follows nature" (dao fa ziran, 道法自然) and "going with the flow" (shunshi er wei, 顺势而为) advocate for harmonising with natural rhythms rather than imposing control and intervention. Related to these is the idea of "wu wei" (无为), often misunderstood as passivity, but more accurately signalling an active responsiveness that avoids forcing outcomes against the currents of change. In this thesis, I follow Hanyu Pinyin in using "Daoist"; earlier works may appear with the Wade-Giles spelling "Taoist," but both refer to the same tradition, Daojiao (道教). These concepts offer valuable tools for questioning technocratic dominion over rivers, yet they also carry the risk of romanticisation. Reading Daoism critically means asking whether appeals to "harmony" (he, 和) are adequate in an age of extractive infrastructures that alter rivers irreversibly.

Complementing this Daoist attunement, Buddhist ecological thought adds another layer, emphasising karma (yinguo, 因果) and impermanence (wuchang, 无常), understanding all things as constantly in flux without a fixed state—an insight that aligns closely with the ever-changing of rivers. Applied to rivers, it offers a way of perceiving damaged waters without seeking an impossible return to purity. Pollution is not an end state but part of an unfolding trajectory. This lens invites us to consider post-mining rivers not as degraded objects awaiting repair, but as participants in new cycles of succession (yuanqi, 缘起). Within a Buddhist frame, impermanence teaches humility before flux, yet it also exposes a tension: at what point does acceptance risk dissolving into resignation? To say "all is impermanent" (zhuxing wuchang, 诸行无常) cannot absolve those who caused harm. The challenge is to hold acknowledgement of change with an ethical insistence on responsibility, so that impermanence becomes not an excuse for neglect but a ground for justice and transformation.

Rivers in Eastern cosmologies remind us that ecological thought is never neutral. Philosophies of harmony, impermanence, and unity can inspire practices of care, but they may also be co-opted to legitimise authority and slide into resignation. Therefore, thinking with rivers requires a movement between reverence and critique, discerning which ideas nurture their continuities and which risk reproducing their exploitation. By placing Eastern traditions in dialogue with global environmental discourse, this research frames rivers as active participants in a contested philosophical field. They call for ritual respect intertwined with rigorous discernment, guiding us toward futures where ecological ethics are rooted in accountability as much as in care. Held against this careful balance, the river returns through the body, where cycles, stigma, and control become legible as lived politics.

To further extend this dialogue, I turn to cultural understandings of the female body. Rivers, like menstruation, embody cyclical flows that are often stigmatised, feared, and silenced. Across Eastern and Western traditions, menstrual blood has been cast as impure, dangerous, and taboo, while also as a symbol of fertility, renewal, and the

regenerative force of life. The Red River's reddish hue carries this ambivalence: the colour of bleeding, of iron-rich sediments, of life and decay entwined. In many cultural imaginaries, women are linked with the mothering of land and water. Fear of blood, of women's cycles and reproductive autonomy, and of rivers' unpredictability converge in layered cultural anxieties, reflecting persistent efforts to control what resists containment. Flowing water, like blood within a body, moves through the land to nourish and to remember. It carries traces of injury, resilience, and transformation. Reframing menstruation alongside rivers reclaims their flows as vital processes rather than pollutants, as living records of wounding and renewal.

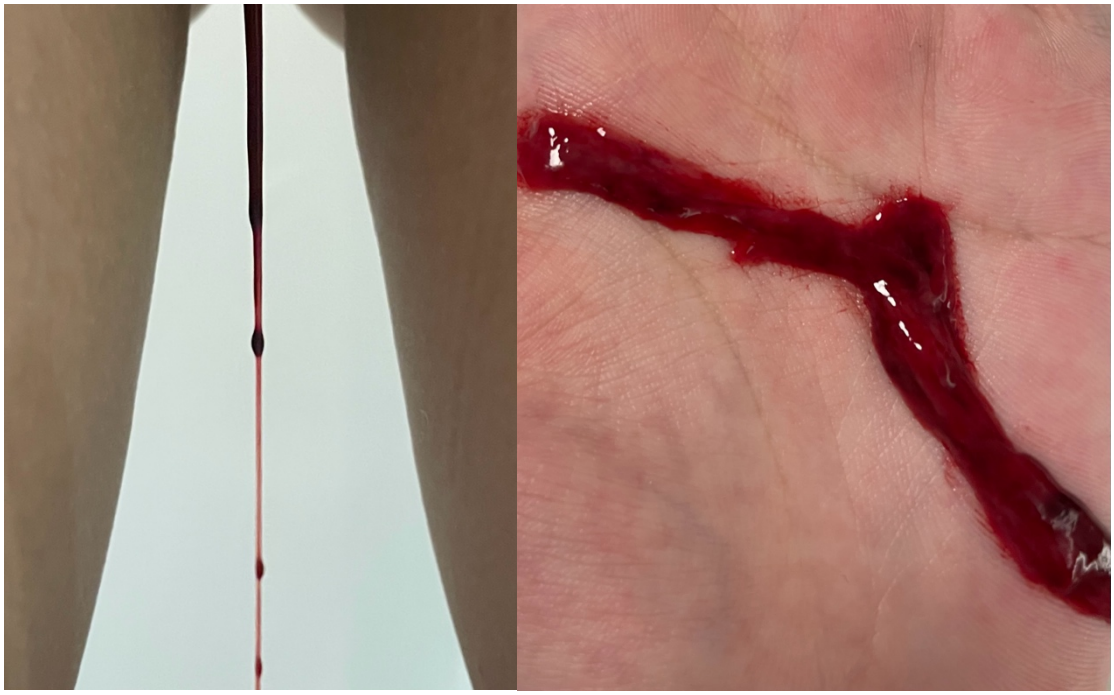

Figure 4.4–4.5 Contextual image: Left: My menstrual blood is flowing; Right: Menstrual blood takes the shape of a river, overlapping with the palm's lines. Photographs by the author, 2023.

Accordingly, my ecofeminist engagement with the Red River extends beyond conceptual critique into an embodied methodology. Through witnessing, grieving, and sensing, I seek to open a space where feminist thought meets the rivers, where cultural fears, bodily flows, and ecological wounds can be reimagined as grounds of kinship. This orientation recognises that rivers and bodies alike bear scars of domination while sustaining possibilities for continuity and transformation.

Yet these embodied flows also draw attention to biopolitics and the governance of women's bodies. Reproductive politics demonstrate how struggles over women's autonomy are inseparable from struggles for ecological justice. China's former one-child policy and the current prevalence of C-section quotas exemplify forms of state control over women's reproductive choices, reflecting patriarchal anxieties about population, productivity, and societal order (Greenhalgh, 2008). These biopolitical interventions reveal how women's bodies become contested terrains, mirroring the extractive logic that seeks to regulate rivers. At the scale of community life, these dynamics take form as stewardship and leadership that organise relations with water and land.

Rooted in Daoism, Buddhism, and Confucian thought, Eastern ecofeminism articulates a non-confrontational ecological philosophy. A compelling illustration is found among the Mosuo, China's last remaining matrilineal society, whose egalitarian and ecologically sustainable way of life demonstrates how social structures can shape environmental relations. The preservation of Lugu Lake, a vital ecological site for the Mosuo, is closely tied to their matrilineal organisation, where women play central roles in resource management and ecological conservation (Yuan, 2018). This example highlights the significance of female leadership in environmental protection and offers insights into how riverscape degradation caused by mining might be addressed. In East Asian ethical traditions, ecological practice is often framed through self-cultivation and relational responsibility, rather than through rights-based enforcement (Weiming, 2001). This ethics-based orientation introduces an alternative model for ecological movements, widening the horizon of environmental action beyond rights-based frameworks and grounding it in everyday practices of care and responsibility.

Figure 4.6 Contextual image: *Tisese: A Documentary on Three Mosuo Women*. Source: Directed by Chow Wah Shan, photograph by Marth Dorpner, Wang Jing, 2001.

Figure 4.7 Contextual image: Lugu Lake. Source: Study in China (photo feature), n.d.

Eastern ecofeminism is deeply entwined with local communities, traditional knowledge, and female leadership. A pivotal example is the Chipko Movement in northern India, where rural women in the 1970s embraced trees to resist deforestation. Through the

theory of “earth democracy,” Indian ecofeminist Vandana Shiva demonstrates how traditional ecological wisdom in Eastern cultures can inform responses to the global ecological crisis. As Shiva further contends, globalisation has deepened the dual exploitation of both women and nature, making it essential for ecofeminism to expose and dismantle these structures of oppression (Shiva, 1988). In these contexts, water is understood as a relational substance, sustained through intergenerational knowledge and embodied labour (Shiva, 2005). Accordingly, the lyrical travels in oral traditions and seasonal rites, while the performative is inscribed in bodies that shield, plant, and maintain the commons. Eastern ecofeminism, in this sense, is less a detached theoretical lens than a lived orientation, offering pathways of reconciliation with more-than-human worlds.

Eastern ecofeminism ultimately gestures toward an ethic of coexistence that is neither utopian idealism nor abstract universality, but a lived practice grounded in history, ritual, and community. Drawing on intergenerational wisdom and communal forms of care, it shows that ecological relations are sustained through habits of reciprocity cultivated over time. Such practices may not erase violence and prevent exploitation, but they foster resilient ways of living with rivers, forests, and soils, keeping open the possibility of renewal. In this way, Eastern ecofeminism offers a sensibility that treats rivers as companions in ethical becoming, participants in shared continuities that bind memory, responsibility, and future potential. What it contributes is another mode of attention, an insistence on attuning thought and practice to the textures of relation through which more-than-human beings continue to breathe, flow, and persist.

4.3 Relational Worlds of the More-than-Human

Opposing anthropocentrism does not entail hatred of humanity or a desire for extinction. It names a repositioning in which the human stands among many within the biosphere,

accountable within webs of relation. Then, the lyrical becomes vital: it guides ways of writing, sensing, and imagining that can attend to more-than-human continuities.

The term "more-than-human" has been given resonance by David Abram in *The Spell of the Sensuous*, where he suggests that it is not by leaving the natural world behind but by immersing oneself into the sensuous and psychological landscape—shared with hawks, spiders, and lichen-covered stones—that a deeper connection to life emerges (Abram,1996). Central to Abram's thought is ecological perception: the recognition that human awareness is always already interwoven with the wider field of living and elemental presences. Perception here is not detached observation but embodied participation, a sensuous exchange that binds humans into the communicative fabric of the more-than-human world. Thomas Berry further developed this vision by affirming that 'the universe is a communion of subjects, not a collection of objects' (Berry, 1999), emphasising reciprocity and mutual presence across species and elements. These early articulations prepared the ground for ecological philosophies that decentralise the human and amplify the agencies of matter, waters and species. For my research, more-than-human becomes a methodological stance: it carries Abram's ecological perception into artistic practice, where listening with rivers, moving alongside them, and responding in their presence unfolds as a form of co-presence.

Philosophical developments since then have sought to elaborate this shift. Professor Diana Coole and Professor Samantha Frost consolidated new materialist approaches, calling for an understanding of the coexistence of all matter (Coole & Frost, 2010), while Jane Bennett articulated the vitality of matter through her notion of vital materialism (Bennett, 2010). Timothy Morton proposes moving beyond the idealised category of "nature" toward a network of relationships between animate and inanimate beings (Morton, 2018). Taken collectively, these perspectives loosen anthropocentric primacy and cultivate ontologies in which minerals, waters, microbes, and images pulse with agency, participating in the unfinished work of world-making.

Figure 4.8 Contextual image: The Red River. Photograph by the author, 2024.

While these trajectories sketch a genealogy of thought on ecology and relation, Indigenous epistemologies enter not as extensions of this lineage but as critical interventions. In this context, Indigenous scholar Vanessa Watts introduces her concept of place-thought, which posits that land is alive and thinking, and that all beings derive agency from the extensions of these thoughts. In her account, Euro-Western theories such as Donna Haraway's elaborations of companion species and naturecultures (Haraway, 2003) and Bruno Latour's actor-network theory (Latour, 2005) provide important ways of theorising more-than-human relations, yet they remain rooted in Euro-Western traditions that abstract agency into metaphor or mechanism. Watts argues instead that agency is tied to spirit, and spirit exists in all things (Watts, 2013). This shift matters for method: place-thought calls for situated practice with place as a thinking presence, requiring researchers and artists to respond within relations rather than about them. Posthuman and Indigenous critiques together caution that ethical scope remains open-ended, since actions continually reshape fragile ecologies and demand ongoing, situated judgement.

Within this theoretical confluence, my practice takes shape as performative invocation rather than representation: a material and affective attunement to the Red River that resists instrumentalism and insists on porous companionship. Through ritual gestures, bodily endurance and aqueous contact, my works seek to move with more-than-human life, sensing through their damp and difficult continuities.

In *How Rivers Think* (2018-2019), visual artist Oscar Santillán engages with the indigenous Shuars' naming of the River Kushuimi in the Ecuadorian Amazon, presenting eighty customised slides containing water gathered during canoe journeys downstream, with leaves, branches, plants, and sediments sealed within. Following Eduardo Kohn's ethnographic study *How Forests Think* (2013), his liquid herbariums cultivate a river-centric mode of attention in which aqueous materials figure thought and expression.

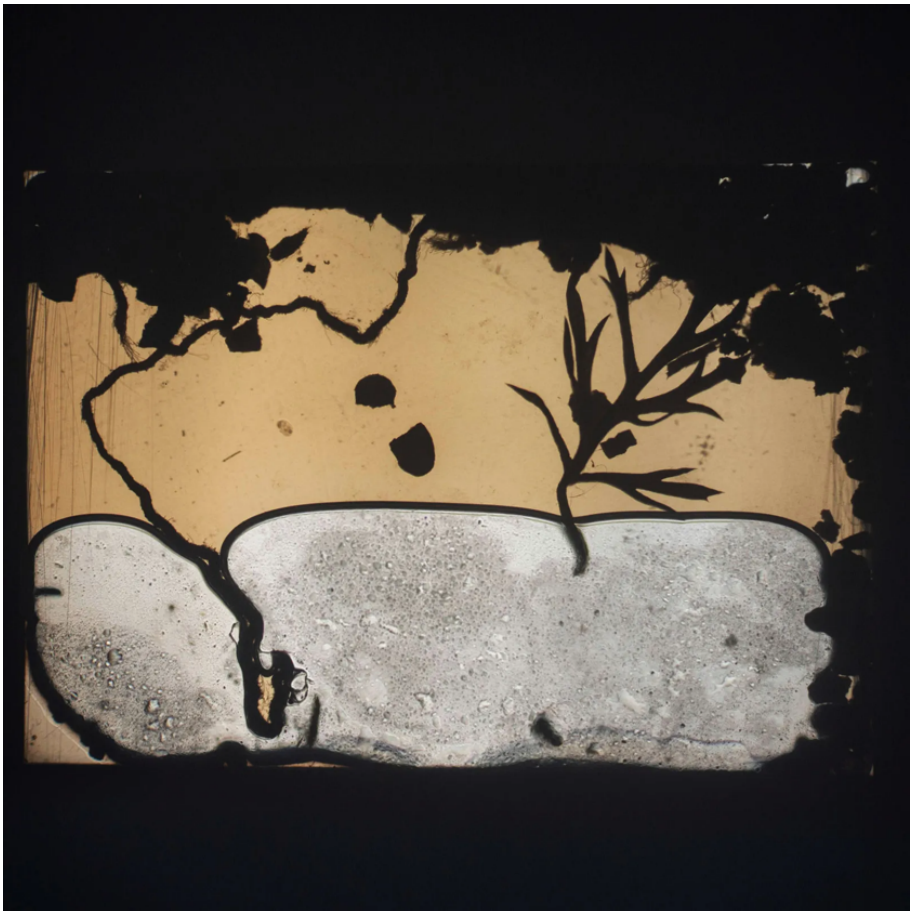

Figure 4.9-4.10 Contextual image: *How Rivers Think*, water and plants gathered and sealed within customised slide. Source: Oscar Santillán, 2018–2019.

I read Santillán's gesture as creating conditions of encounter where vision seeps and agency circulates. At the same time, the act of extracting waters and sealing them as specimens risks rehearsing extractive habits and museum logics, loosening materials from their relations and suspending their ongoing vitality. This tension is instructive: it reminds me that artistic engagement must cultivate reciprocity, restraint and attentiveness. Rather than collecting and enclosing, my practice seeks to stay with the river's movements, working through protocols of brief contact, on-site return and ritual responsiveness. In this way, art moves with their currents, inviting viewers to perceive rivers as thinking presences without severing materials from their living courses.

These crossings suggest that thought itself flows with rivers, shifting between philosophies, Indigenous knowledges and artistic gestures. What they open is a current of unfinished ethics, carrying this research toward further encounters.

4.4 Symbiotic Futures in the Chthulucene

Feminist scholar and multispecies theorist Donna Haraway proposes the term Chthulucene to draw ‘on the resources of science fiction as much as science fact, speculative feminism as much as speculative fabulation, in naming our present age of multi-species intra-actions, nonpatriarchal becomings, and generative collaborations’ (Haraway, 2015).

To enter the Chthulucene is to step into a world where boundaries lose their sharpness and categories dissolve into entanglement. It is less a historical stage than a mode of attention and practice, one that recognises survival as a shared endeavour of humans, rivers, plants, minerals, and technologies. Within such a framework, life is understood as webs of relation, where threads of responsibility and care bind together fragile yet resilient worlds. Thinking in the Chthulucene resists narratives of dominance, dwelling instead in reciprocity and co-creation. In the Chthulucene, making kin becomes a form of multispecies cohabitation (Haraway, 2016). As Haraway writes, establishing kinship is ‘perhaps the hardest and most urgent’ task (Haraway, 2015), since it requires embodied gestures of giving and receiving within web of life.

Ecofeminist commitments prepared the ground for this turn. Ecofeminism identified the dualisms of culture and nature, mind and body, male and female as the ideological foundations of extractive power structures (Merchant, 1980). It urges a reorientation toward care, reciprocity, and relational ethics as means of resisting both gendered and ecological subjugation (Mies & Shiva, 1993). Such critique is not only analytic but affective, opening lyrical modalities of relation that inform practice. These clarifications strengthen the move toward more-than-human accountability without expanding historical coverage.

Donna Haraway's theories are significantly influenced by evolutionary theorist Lynn Margulis. In *Symbiotic Planet*, Margulis defines symbiosis as ‘system in which

members of different species live in physical contact' and introduces the concept of the "holobiont," referring to the assemblage of a host and its associated organisms (Margulis, 1998). This offers a biological grammar for relation. Her work suggests that humans need to liberate themselves from all forms of arrogant diversity, breaking down species categories. Haraway extends this insight in *Staying with the Trouble*, where all beings on Terra are "compostists", engaged in the mixing and turning of compost piles, mutually generating, combining, and decomposing with one another (Haraway, 2016). Composting here becomes both a material process and an ethical orientation, a reminder that life thrives through entanglement and transformation.

Figure 4.11 Contextual image: The Red River. Photograph by the author, 2024.

This vision finds resonance in my practice along the Red River, where contaminated sediments, bodily presence, and technological devices meet not in separation but in attunement. To work with the river is to enter their compost piles: to sense how toxicity, memory, and creativity intermingle, how gestures of care may ferment alongside scars of mining. In this composting, art becomes a practice of symbiosis, cultivating responsiveness to the unfinished and the shared.

In the Chthulucene, rivers become pivotal figures of relational world-making. Rivers do not belong to nations, economies, and histories of extraction, for they exceed such frames by connecting continents, past and present civilisations, humans and more-than-humans, sediments and atoms. They entangle the politics of colonial dispossession, the persistence of ecological memory, and the creativity of multispecies life. In their currents, power is both enacted and resisted, for rivers sustain agriculture and industry while also eroding the very infrastructures built to control them. Therefore, attending to rivers in the Chthulucene means engaging critically with histories of domination while opening space for alternative modes of alliance. Here the lyrical functions as a way of sensing those alternative modes, while the performative manifests them in embodied practice.

Figure 4.12 Contextual image: The Red River. Photograph by the author, 2024.

The Chthulucene insists that the world remains unfinished, composed of plural stories rather than singular narratives of progress. Rivers exemplify this unfinishedness: they carve, erode, deposit, and renew, producing multiple knowledges of the world. In this sense, the Red River becomes more than a site of contamination and heritage, they are

lyrical participants in the ongoing composition of symbiotic futures. Their reddened waters testify to mining's scars, but they also invite practices of relation, creativity, and care that move beyond juridical and managerial categories.

In Haraway's formulation, biology, art, and politics are deeply intertwined, collectively imagining and shaping a more habitable world across temporal scales. She explicitly clarifies that the Chthulucene does not derive from H.P. Lovecraft's misogynistic and racist monster Cthulhu, but invokes the diverse, tentacular forces that shape life on Earth (Haraway, 2016). This tentacular thinking also highlights the significance of decolonial and Indigenous perspectives, where rivers have long been recognised as kin. Here, art becomes a medium of epistemic justice, cultivating attentiveness to more-than-human voices and affirming that symbiotic futures require ecological justice.

For Haraway, feminists play a critical role in the pursuit of multispecies ecological justice. She argues that feminists have long been at the forefront of articulating connections between gender, race, morphology, class, reproduction, and subjectivity. Her call to "make kin" insists that imagination is as important as activism in forging new relations (Haraway, 2016), where rivers and other more-than-human beings are included within practices of care. Taken together, these articulations foreground relational accountability that stretches across species boundaries. Kin-making is both political and lyrical, summoning narratives of coexistence and mutual flourishing. Held with my practice, these insights are materialised through ritual, apology, and bodily responsiveness, shifting ecological justice from abstraction into lived attentiveness, and honouring rivers as co-creators of symbiotic futures.

4.5 Hydrofeminist Turns

From this current of coexistence flows another tributary of thought: hydrofeminism, which turns toward water to extend and deepen ecofeminist insight. As articulated most

notably by cultural theorist Astrida Neimanis, hydrofeminism refers to the ongoing linkages of water and the aims of feminism, understanding water as a site of profound relationality, an elemental substance through which bodies, environments, histories, and futures are inextricably entangled (Neimanis, 2012&2017). This framework is particularly resonant for rivers, which embody continuity, circulation, and interdependence. It asks us to consider how rivers carry not only sediments and toxins but also memory, affect, and kinship, making them participants in multispecies futures.

Figure 4.13 Contextual image: The Red River. Photograph by the author, 2024.

Developing out of feminist genealogies—from the political struggles of early feminism to ecofeminism's critiques of intertwined oppressions—hydrofeminism brings attention to water's substance and affective flows as a ground for feminist ethics and politics. Its distinct contribution is to situate feminist thought within aquatic ontologies, foregrounding permeability, circulation, and shared embodiment as the conditions for reimagining ecological justice. In the context of my research, this provides a powerful framework for exploring how rivers like the Red River become sites of ecological mourning, bodily witnessing, and multispecies kinship.

This emphasis on elemental kinship finds a parallel in readings of Wu Xing (五行, Daoist Five Elements) theory, where water is metaphysical and the origins of life, associated with nourishment, wisdom, depth, and transformation (Wang, 2012). Rather than treating Wu Xing as a fixed cosmology, I read it as an early articulation of relationality, one that understands fluids, bodies, and worlds as mutually shaping. Within this orientation, water enables growth, governs reproduction, and signals the cyclical potential for renewal. These associations echo hydrofeminism's call to rethink bodies and environments as porous and interdependent. Given their different contexts and temporalities, it is most precise to read Carson's marine lyricism and Neimanis's hydrofeminism as contemporary expressions that resonate with these earlier elemental insights.

Building on these resonances, hydrofeminism unfolds with Daoist elemental thinking as more than a metaphorical turn. It becomes a conceptual practice that positions riverscapes as living records, where industrial trauma, evolutionary memory, and embodied relation converge. To touch the Red River is to engage with deep time and scarred matter, to sense grief and renewal intermingling in their flows. Thus, hydrofeminism does not simply inform my methodology but animates it, urging an artistic inquiry that is wet, porous, and responsive, attuned to the multiplicity of water's meanings, their capacity to bear grief, nurture kinship, hold toxicity, store memory, and sustain renewal.

In this way, hydrofeminism becomes a site of cross-temporal dialogue, where ancient elemental philosophies and contemporary feminist theory meet in the medium of water. To remember water is to remember relation. The salinity of our blood is not incidental, it is a chemical echo of ancient oceans, formed by the minerals washed from land to sea. That our tears are salty is not lyrical coincidence, but geological continuity. Just as the Red River carries heavy metals from centuries of mining, our bodies, too, carry geological histories. Water testifies, holding the imprints of injury and resilience. From this testimony, hydrofeminism draws its methodological force: it shows how bodies of

water shape bodies of practice, grounding procedures through which apology becomes an ethical and epistemic beginning. Following ecofeminist insights, hydrofeminism clarifies how watery relations organise method. From there I engage more-than-human thought to specify how procedures become accountable to a river that continues to act and remember.

4.6 From Apology to Rights

Figure 4.14 Contextual image: The Red River. Photograph by the author, 2023.

Water and its mutable forms constitute my creation. My experimental, site-specific, and lyrical engagements with the Red River—through photography, video, temporary installations, and performance—are shaped by and in turn extend the theoretical frameworks outlined above. Although anchored in one specific river, these engagements open pathways to riverscapes across mining regions. The environmental, historical, and emotional scars left by extraction are not geographically unique, they are part of a global pattern of ecological degradation and dispossession. Therefore, the lyrical gestures of apology and interspecies relationality developed in my practice offer not only a transferrable methodology but also a training of emotional intelligence: an ability to perceive, interpret, and act upon ecological grief in ways that sustain relation across diverse cultural and geographical contexts.

Apology, however, is inseparable from guilt. In Western traditions, guilt has often been understood through confession and culpability, tied to Christian notions of sin, repentance, and redemption (Ricoeur, 2004). Within this frame, apology functions as an expression of guilt, where words and ritual serve as evidence of contrition and open the possibility of forgiveness. By contrast, East Asian contexts have tended to emphasise shame and relational adjustment over internalised guilt. Cross-cultural social psychologist Michael Harris Bond demonstrates how the dynamics of *face* (mianzi, 面子) in Chinese contexts entwine apology with the restoration of dignity in social networks, where losing and regaining face structures the ethical weight of the act (Bond, 1991). Psychologists Steven Heine and colleagues similarly contrast guilt- and shame-based cultures, showing that while Western societies privilege self-consistency and inner contrition, East Asian societies emphasise responsiveness to others and the repairing of social relations (Heine et al., 1999). In these contexts, apology is less a proof of innocence or culpability than a practice of rebalancing bonds of trust. Today these cultural logics are shifting: restorative justice in Western societies increasingly stresses repair rather than punishment (Minow, 1998), while East Asian legal and corporate practices adopt more individualised forms of accountability. Even so, what remains absent is a translation of these frameworks into ecological relations. To

apologise to a river cannot be reduced to confession or relational shame. It requires a recognition that ecological harm exceeds personal and collective intention, and that guilt must become a generative force of responsiveness and care. Apology thus becomes a way of knowing when words falter, when gestures must suffice, and when silence itself carries meaning.

Closely related to guilt is the question of culpability. Whether conceived emotionally or legally, culpability remains an underexplored dimension of ecological ethics. Environmental law often locates responsibility in corporations and governments, but the slower violences of mining frequently exceed juridical categories. Indian historian Dipesh Chakrabarty observes that the climate crisis complicates culpability further, since responsibility is distributed, delayed, and displaced across generations and scales, making it diffuse and difficult to assign (Chakrabarty, 2009). It is within this indeterminacy that the ethical weight of apology emerges. To apologise to a river is to dwell in this gap: to acknowledge harm even when culpability cannot be fully measured, and to respond to a call that exceeds the languages of law and confession.

Through my practice-based research, I attempt to visualise the collapse of riverscapes from multiple dimensions, while cultivating lyrical and performative forms of resistance. Seemingly absurd gestures—embracing and kissing the river, or hugging my own reflection in the water—become deliberately futile yet lyrical acts woven into my practice. These gestures resonate with poet Lisel Mueller's poem *Moon Fishing*, as well as the Chinese parable *The Monkeys and the Moon*, where monkeys reach in vain for the moon's reflection. Both stories capture the paradox of desire and impossibility, and in my practice, they open imaginative ways of addressing mining-polluted rivers. The Red River does not simply hold life, they enliven. Apology emerges here as an active response to what rivers experience, a recognition that we are constitutionally within their midst, never apart. By aligning futility with care, I seek to estrange the familiar, rekindle intimacy with the neglected, and generate speculative modes of relation. In this way, even failure becomes method, carrying the possibility of renewed responsiveness.

Figure 4.15 Contextual image: Monkeys Reaching for The Moon. Source: Ohara Koson, early 20th c. (reproduction).

In an era where our bodies and minds are increasingly consumed by the homogenising effects of online life, such gestures function as counter-practices of attention and presence. They reject the profitable status quo sustained by ecological denial and propose instead a sincere apology that invites vulnerability, humility, and renewal. Apologising to a river is an ongoing practice of staying with harm as it unfolds. It enacts

a recognition of their memory, an acknowledgement of the violence endured in their bodies, and an affirmation of their dignity as co-participants in shared worlds.

Artists from all over the world have experimented with a wide range of strategies, from direct actions to documentary provocations. Many artists working with rivers engage with water bodies that hold personal, cultural, and geographical significance, often choosing rivers in the places where they were born, raised, and have long lived. This local embeddedness provides emotional and historical depth, but it also risks reinscribing anthropocentric narratives, particularly when rivers are framed primarily as metaphorical and symbolic extensions of human identity, memory, and trauma. In such instances, rivers are treated as mirrors for human experience rather than as dynamic interactive beings with their own consciousness and histories. Rather than surveying these practices, I focus on the methodological risk they expose: when rivers are made to stand in for us, their own agencies, rhythms, and memories become backgrounded. While there are notable exceptions, a significant portion of river-related art continues to present rivers as passive surfaces that absorb human expression. My work resists this translation. It cultivates practices that pause, listen, respect and apologise to rivers themselves, acknowledging the dialogue with them that we have failed to keep. An apology, when informed by emotional intelligence, becomes a capacity to recognise vulnerability, to hold guilt without paralysis, and to turn remorse into relational repair. Therefore, my research positions apology as both lyrical and performative: a methodological and ethical shift, an act that acknowledges harm and begins a new relation.

If apology is one mode of accountability, legal rights offer another, shaped within juridical frameworks. The Whanganui River in New Zealand is a landmark case, where the Māori worldview led to the granting of legal personhood and a governmental apology, acknowledging historical injustices that had deprived them of authority over their ancestral river (O'Donnell & Talbot-Jones, 2018). The Māori regard the Whanganui River and all their physical and metaphysical elements as an indivisible

living entity. This initiative represents a significant step forward in the legal recognition of more-than-human beings. Yet rights, while powerful, remain mediated through human institutions and cannot alone sustain relation.

Figure 4.16 Contextual image: The Whanganui River. Source: rumboalla/Getty Images, n.d.

In the realm of art, many artists have opposed the control of waterways, working to render invisible flows visible again and to position rivers as central protagonists in narratives. Their works reveal the deep connections between the abuse of rivers and social injustices along their banks, while critiquing the limitations of technocratic power. Colombian artist Carolina Caycedo's ongoing project *Be Dammed* (2012–present) exemplifies this approach, tracing how large-scale dam infrastructures turn rivers into privatised resources, disrupting ecological rhythms and forms of collective resistance. Growing up near the Yuma (Magdalena) River basin, Caycedo foregrounds how the El Quimbo hydroelectric dam displaced communities and corporatised a waterway that had long been a cultural and ecological backbone. Drawing on non-Western worldviews that regard rivers as spiritual beings, such practices actively advocate for the rights of rivers, particularly their fundamental right to flow according to their own course.

Figure 4.17 Contextual image: Diptych, satellite image digital print, Dammed Landscape. Source: Carolina Caycedo, 2013.

Granting rights to rivers is not merely a legal issue but also a practice of ecological ethics and artistic imagination. While legal frameworks provide recognition and mechanisms of protection, they remain rooted in anthropocentric systems of representation and governance. Because rivers cannot speak in courtrooms, their voices are channelled through human proxies who may, under the guise of guardianship, reproduce existing interests (O'Donnell & Talbot-Jones, 2018). Such mediation risks flattening rivers' vibrant, affective, and luminous being into juridical categories still measured by human standards. It also underscores the need for emotional intelligence alongside legal reasoning, for without attunement to vulnerability, empathy, and accountability, rights risk becoming empty categories. In contrast, ecological ethics emphasise relationality, reciprocity, and situated responsibility, extending rather than abandoning codified rights. Artistic and performative approaches contribute a third dimension, generating sensory and participatory engagements that translate abstract rights into lived relations and embodied practices of care. These three approaches weave law, ethics, and art into complementary strategies for rethinking how we relate

to rivers. A legal approach can set boundaries and articulate obligations; an ethical approach cultivates relationships; and an artistic approach makes these relations perceptible and affective, ensuring that rivers are encountered not only as subjects of rights but as companions in shared worlds. All three converge to keep relations with rivers alive.

The current anthropocentric legal system profoundly shapes our relationship with more-than-human entities. However, wisdom can be drawn from the meeting of indigenous customs and contemporary ecological crises, urging us to imagine new forms of natural jurisprudence and to consider the feasibility of recognising more-than-human beings as legal entities. Establishing the legal rights of rivers may indeed be a first step towards securing the conditions for their survival and flourishing.

Figure 4.18 Contextual image: The Red River. Photograph by the author, 2024.

Legal recognition cannot stand alone, it must be accompanied by concrete river-centred measures. These could include requiring environmental impact assessments to begin with the river's own continuity rather than with projected human benefit, reframing evaluation criteria around seasonal flows, sediment rhythms, and the long-term capacity

of the river to renew themselves. Rivers could also be accorded the legal capacity to veto and halt projects that threaten their ecological integrity, shifting the burden of proof from those who seek to protect the river to those who wish to exploit them. Furthermore, guardianship structures could be designed not as managerial bodies but as listening assemblies, accountable to the river's voices, attending to how the river expresses distress and renewal. In this sense, legal rights must converge with material, ecological, and cultural practices that protect rivers as beings embedded in interdependent lifeworlds, sustaining their vitality across generations.

At the same time, my research engages with the rights of rivers framework differently in light of Camborne's divergent conditions. Here, reliance on mining industries, persistent employment gaps, and the absence of collective perception and guilt regarding ecological damage mean that a purely legal rights model is unlikely to take root. In this context, my practice turns instead toward apology and more-than-human dialogue as modes that work alongside lyrical and ethical practices of accountability. Rather than treating these paths as oppositional, I position my work as extending the conversation, showing how artistic and ecological practices can resonate with, complicate, and at times surpass legal frameworks in making rivers perceptible as subjects of relation.

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Chapter 5: Rethinking River Relations—Bridging Traditions and Innovations

Rethinking our relations with rivers requires unsettling the ontological foundations that have long rendered them legible only through bureaucratic abstraction. While hydrological regimes reduce rivers to volumes, rates, and risk indices, Indigenous and relational epistemologies remind us that rivers are living presences, endowed with consciousness and agency.

For many Indigenous communities, rivers are kin. They move with intention and remember with depth. Their courses echo ancestral voices, bearing the weight of paths walked, harvests shared, and rituals repeated. These stories do not reside in written records but flow through water, rhythm, and presence, held in the textures of attention and embodied care.

Rivers bridge space and time, linking generations through a continuity that is felt more than declared. A river may connect towns, yet they also carry the imprints of intergenerational relations, whispering through roots and ripples the persistence of those who once stood beside them. Walking with a threatened river awakens the pulse of those who came before, present not as ghosts of the past but as companions in the flow of now.

This chapter proposes a mode of understanding shaped by permeability, and responsiveness. It brings Indigenous wisdom into conversation with contemporary ecological thought, forming an interwoven current of knowledge and care. This orientation does not stand outside the river, but moves with them, through time, across loss, and within the continuities of life. Such a current has reshaped my practice-based research, guiding it toward methods that privilege relational attunement over detached representation. Walking beside the Red River, I treat movement as inquiry, a way of thinking through the body in dialogue with their currents. Rituals of apology and care unfold as forms of communication, gestures that register humility and responsiveness.

In these practices, the flow of ideas returns to the flow of water, where theory and practice converge as inseparable streams, bridging traditions and innovations together.

5.1 Tangled Waters

The standard hydrological cycle is increasingly recognised as an insufficient scientific paradigm, incapable of fully capturing contemporary hydrological realities. The hydrological cycle, particularly in its visual representation—renders water visible or legible (Scott, 1998), aligning with state planning agencies' needs for resource accounting and control. Many nations ambitiously pursue multi-purpose water resource planning and integrated development, aiming to operate under unified management frameworks. However, by portraying water as a continuous, cyclical flow, the hydrological cycle imposes a normative structure that does not reflect the actual hydrological conditions of many regions. This distorts our lived experience of water and shapes how we perceive and evaluate hydrological phenomena. It excludes the interruptions, asymmetries, and contaminations that increasingly define water's flow across riverscapes entangled with human extraction, climate instability, and chemical alteration. Persisting with the hydrological cycle as a conceptual model is futile, unless it is acknowledged purely as an abstraction.

As geographer and researcher in water governance and hydrosocial relations Jamie Linton argues, this paradigm shift is not just about hydrological science but also about human-water relationships. He suggests moving from the hydrologic to the hydrosocial cycle, from aquatic to hybrid ecologies, a shift that asks us to see ourselves within water's collaborations rather than apart from them (Linton, 2010). Indeed, water moves through nearly incomprehensible complex networks—cycling, filtering, transferring, transporting, isolating, chemically bonding, splitting, and recombining. This perspective resonates with the constructivist approach of science historian Jan Golinski,

who sees scientific knowledge not as a mere revelation of a pre-existing natural order, but as a human product shaped by cultural and material conditions (Golinski, 1998). Through this lens, the hydrological cycle becomes less a natural law than a cultural artefact.

Figure 5.1 Contextual image: The Red River. Photograph by the author, 2024.

I argue that the way forward lies in releasing the fantasy of technological mastery and the extractive logic that sustains it. Instead, by embracing water perspectives rooted in folklore and Indigenous traditions, acknowledging their diversity and inherent uncertainty, riverscapes may hold the potential for new hope and transformation. As Canadian ecologist Crawford Stanley Holling reminds us, true resilience lies not in return to a fixed state, but in the capacity to absorb change, reorganise, and continue evolving (Holling, 1973). Similarly, the Chthulucene resists notions of natural equilibrium and stable repetition. It names a condition of instability, mutation, and relational becoming, where everything flows not in a circle but as a tangle, under

unsettled climates and provisional ecologies. Such insight finds form in my practice, where walking with the Red River reveals resilience not as stability but as their capacity to hold scars and still flow, offering lessons of adaptation and care.

5.2 Reciprocity in Flow

The relationship between humans and rivers is a reciprocal, ongoing exchange, an ecology of co-shaping. All organisms, including humans, participate in the remaking of habitat: by depositing waste, consuming vegetation, casting shadows, compacting soil, building shelters, or reproducing. Each action modulates the vitality of the riverscape, sometimes diminishing, sometimes enhancing its capacity to support life. This reciprocity is not always equal, nor always kind, but it undoes the illusion of ecological detachment.

Figure 5.2 Contextual image: The Red River. Photograph by the author, 2022.

Drawing on scholar and author Lewis Hyde, the Earth can be understood as a gift, and every gift establishes a feeling-bond (Hyde, 1979). Ecologist and ethnobiologist Gary Nabhan extends this into "re-story-ation", the concept of restoration and healing relationship with the surrounding site through hearing its stories (Nabhan, 1997). In *Braiding Sweetgrass,* Robin Wall Kimmerer gathers these insights as biocultural or reciprocal restoration, which engages both ecological science and traditional ecological knowledge. Kimmerer, a member of the Potawatomi Nation, explicitly identifies her work as grounded in Indigenous ways of knowing. She draws upon what she calls "old" wisdom, expressed with a strong sense of poetry and reverence for the living world. She argues that the success of any restoration project depends not only on hydrological repair or contaminant removal, but also on renewing care, responsibility, and belonging. She gives the three rows in weaving well-being for people and the planet: ecological well-being, material welfare, and spirit (respect, reciprocity). These rows must be woven together to form a whole basket, sturdy and resilient enough to carry us forward (Kimmerer, 2013). This weaving provides my practice with a methodological grasp: to listen, to be present, to return.

Kimmerer illustrates this through the example of local volunteers who clean a polluted pond while also engaging in acts of honouring and gratitude, speaking to the water, learning their histories, and treating them as living relatives. These acts create emotional bonds and foster long-term stewardship; the water, in turn, responds by re-entering human consciousness as a living presence. Here kinship becomes a mode of reciprocity in which all flourishing is mutual (Kimmerer, 2013). This perspective resonates with Dene-Canadian scholar of Indigenous studies Glen Sean Coulthard, who views land and rivers as systems of reciprocity and obligation that teach non-dominating, non-exploitative relations (Coulthard, 2014). In the documentary *Queens* (2024), the interaction between ants and leaves offers a model of sustainable extraction, showing that reciprocity circulates across species and providing ecological insight into more sustainable ways of living.

Figure 5.3 Contextual image: Still from *Queens*. Source: Documentary, 2024.

Restorationists reject fatalism, instead actively seeking ways to intervene and improve ecological conditions. Yet restoration raises boundaries: when is intervention appropriate, and when does it overreach? The perspective of reciprocity makes this boundary testable in practice. As a pioneer of restorative art, Bayer warns a troubling possibility that successful ecological restoration could inadvertently encourage environmental destruction. If art has the power to transform damaged riverscapes into visually stunning works, then could mining-scarred rivers and polluted sites be redefined as artistic landscapes worthy of admiration, rather than as evidence of industrial greed and short-sightedness? I have been acutely aware of this danger in my own practice, wrestling with the tension between visual beauty and environmental critique. Without caution, restoration shifts from reflection and remediation to a mechanism that reframes destruction, neutralizes guilt, and even legitimises further exploitation. In response, my practice adopts restraint, onsite return, and ritual address as protocols, ensuring that beauty does not redeem harm.

I am arguing through my research that adopting an ecocentric perspective requires us to recognise Earth's finite resources form a shared inheritance among all life forms. Our identities, possessions, and even our capacity to exist are drawn from this common

pool. I propose that true reciprocal restoration is not just a technical ecological intervention, nor a one-sided act of human-led recovery. Rather, it is a mutual healing process among humans, more-than-human beings, rivers, and the wider ecological webs they belong to.

Figure 5.4 Contextual image: The Red River. Photograph by the author, 2024.

In moments of close attention, rivers reveal that there is still much worth defending. Such recognition begins with acknowledging their personhood and meeting them as companions in survival, held within a shared struggle for continuity. Standing within such places can expand the imagination, making protection a practice sustained not only through legal measures, but through the capacity to envision alternative ways of living with the river. These moments form a geography of hope, where resilience is braided with cultural and imaginative commitment. Only then can both the rivers and us reclaim dignity.

While healing often suggests repair or recovery from a state of fragility, dignity affirms the agency, memory, and right of a river to exist on their own terms. Speaking of a river's dignity recognises them as more than a witness to human harm, they are living presences whose worth exceeds instrumentality. Restoring dignity does not mean returning a river to an idealised past. It invites the river to speak again, to flow with integrity, and to be met as kin, valued for presence and relation. In this sense, reciprocal restoration becomes a way of dwelling, where the renewal of the river and our own move as inseparable currents, carrying us through shared time into a future shaped by care.

In *Rhinewater Purification Plant* (1972), German-born artist Hans Haacke used the gallery as a space to purify the contaminated water, increasing public awareness of the Rhine River's deterioration. This process was not simply lyrical and aesthetic, Haacke deliberately embedded his critique in institutional structures: in an adjacent room, he documented the names of specific industrial corporations responsible for the Rhine's pollution, directly linking environmental degradation to economic and political power. By juxtaposing the visible act of purification with the invisible (but named) mechanisms of harm, this work reframed the gallery as a site of confrontation and accountability, revealing that care without truth-telling risks becoming decoration.

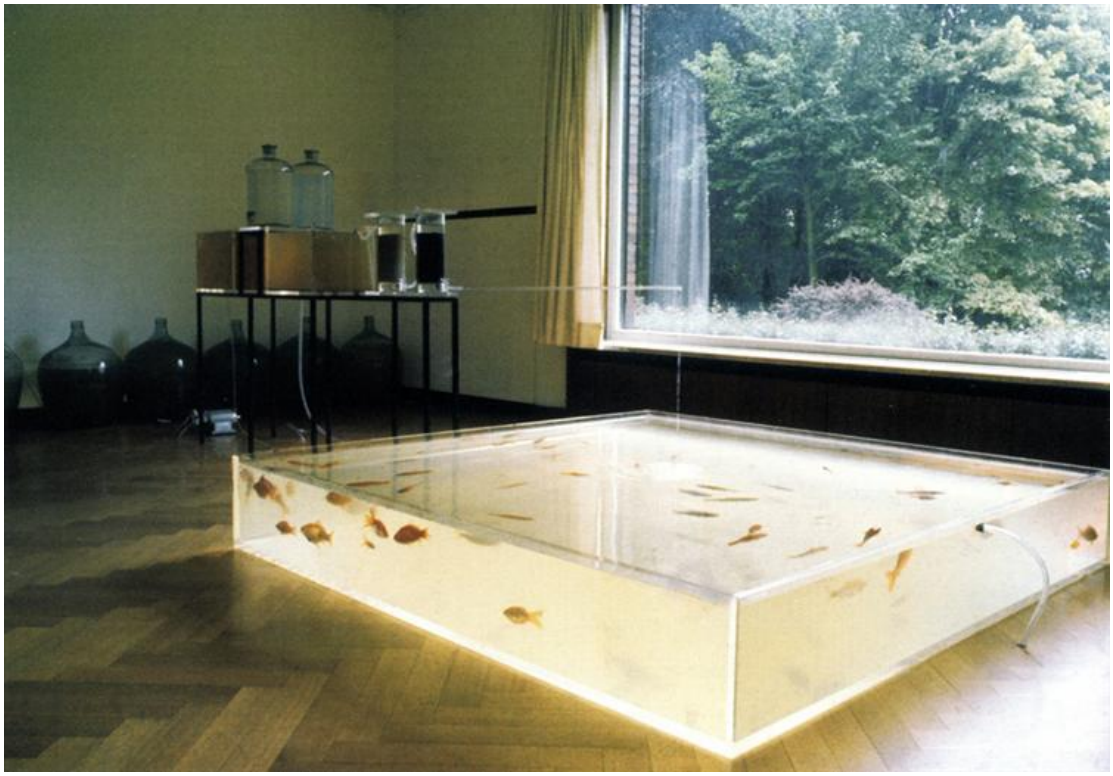

Figure 5.5 Contextual image: *Rhinewater Purification Plant*. Source: Hans Haacke, 1972.

Figure 5.6 Contextual image: *OrtaWater–Zille Fluvial Intervention Unit*. Source: Lucy & Jorge Orta, 2008.

This trajectory is further expanded by collaborative visual artists Lucy Orta and Jorge Orta through their long-term project *OrtaWater* (2005–ongoing), which integrates functional, low-cost purification devices with sculptural form, public intervention, and

symbolic acts of distribution. Among these works, the *OrtaWater–Zille Fluvial Intervention Unit* (2008) operates as a floating "water-bar," drawing directly from polluted rivers through a network of pumps and filters. The subsequent act of bottling and sharing purified water is at once practical and lyrical, confronting the realities of contamination while raising critical questions about the commodification of clean water under conditions of privatisation and corporate control.

This lineage informs my practice: while my performances along the Red River offer gestures of care, they remain entangled with the histories of mining and the structures that continue to wound the river and profit from their exploitation. The question of what it truly means to offer care becomes especially poignant when placed in dialogue with the work of American artist, author, and activist Basia Irland, who for decades has engaged rivers through poetic gestures of healing, carving ice books embedded with native seeds and releasing them into waterways. These works are framed as rituals of restoration, inviting regeneration in the wake of damage and, alongside Haacke's systemic critiques and the Ortas' functional interventions, extend the field of healing into affective and ecological dimensions. Together, these practices delineate a layered ethics of care—structural, social, and ecological—that continues to shape my own methods.

At the same time, healing is also a form of intervention, and every intervention leaves a trace. Artistic acts, even those grounded in empathy and ecological concern, are never neutral. They participate in the ongoing shaping of the river, culturally, materially, symbolically. The unresolved question persists: when is an act welcomed, and when does it impose? In fragile riverscapes, already altered by centuries of redirection and chemical loading, even lyrical interventions may carry unforeseen ecological consequences. Ultimately, care lives with complexity, and relies on slowness, humility, and attentiveness. It requires us to ask again and again whether the impulse to restore is for the river, or for ourselves.

Figure 5.7 Contextual image: *Ice Receding/Books Reseeding*. Source: Basia Irland, 2007–2017.

Across these three practices, healing emerges as more than the repair of damage. It becomes an ethics of relation, unfolding within uncertainty and shaped by the river's own agency. In this sense, healing is to inhabit a shared, altered flow, where different forms of life continue together amid asymmetrical wounds and shifting conditions. Thus, I propose an aesthetics grounded in reciprocity, relationality, and multi-sensory experience. This includes performative rituals, embodied practices, soundscapes, more-than-human perspectives, and daily gestures that allow the river to appear as participant, co-author, and witness. These practices aim to activate care, grief and resistance, foreground interdependence over representation, and remain open, unstable, and productively uncomfortable, refusing closure and mirroring the unsettled conditions of the rivers themselves. In this way, my work contributes to disrupting capitalist visual regimes and insists on the ecological, cultural, and spiritual dignity of rivers.

I have seen rivers of nearly every colour; I have heard rivers trickle, lilt, thunder, and roar; I have tasted them sweet and brackish. I have watched them meander free, and dammed, dredged, changed lines; I have watched them flood with violence and fall into

drought. Yet to know a river is not to accumulate facts but to enter co-presence in practice. What flows through this knowing is a relational intelligence learned through proximity, repetition, and care. Rivers do more than respond. They initiate. They create. They endure. They teach us not through linear logic but through immersion, unpredictability, and encounter. Recognition, then, becomes relational: not knowledge about the river, but knowledge with them. To live alongside rivers today is to admit that they are not separate from us and never were.

Working with rivers requires more than intervention, it calls for a renewed ethic of relation. Knowledge may across boundaries only if the particularity of each riverscape remains in focus: there is no universal river, only rivers situated in place and time, in relation, with local names, seasonal pulses, political struggles, and cultural memories. They carry the weight of struggle and celebration, of ancestral knowledge and colonial extraction. Caring for a river begins with attention to their specificity, while staying responsive to the wider ecologies they touch. It involves listening across thresholds: scientific and intuitive, local and planetary, human and more-than-human.

From within this practice of listening, my work aspires to reshape ecological values, encouraging modes of attention that move beyond conventional environmental rhetoric. By fostering a sense of respect, awe, care, and responsiveness toward the world we inhabit, the practice opens channels for dialogue and interaction between humans and riverscapes, as lived relations. Ultimately, such engagements can indirectly influence societal and cultural attitudes toward mining, offering the possibilities for rivers and their surrounding life forms to thrive once more.

Similarly, in my own reflection, each person is a walking, talking red river. We are deeply connected to rivers, as we are composed of water—blood, urine, sweat, and tears. As noted in the earlier urine experiment, bodies replenish water and release water, the water within us signifies the extent to which the Earth passes through us. Rivers and humans are made of the same elements, so kinship is material as well as ethical.

Thinking alongside rivers clarifies both promise and danger; ignoring them is to ignore the relations that sustain us. I trust that rivers will provide answers, and I accept that answers arrive as flows, silts, stains, and rhythms, guiding us towards diverse ways of knowing and understanding.

Therefore, in my artistic practice, I endeavour to employ the body as a vessel in meeting the Red River, seeking a renewed connection with the river. As British artist and critic Catherine Elwes suggests, performance transcends the entanglement of physical existence, evoking the inner emotional riverscapes through encounters with the river's sights, smells, and sounds (Elwes, 2022). I shake hands with the river, embrace the river, and kiss the river, facilitating a dialogue between the water within the human body and the river's current, a communion that is physical and also spiritual.

Figure 5.8 Artwork as Research: Still from *Handshake with River*, I am attempting to shake hands with the river, 2024. Video documentation of performative practice at the Red River, Cornwall.

Beginning with the tactile engagement with the Red River, sensory and emotional links are formed between the external river and the internal river of the body, pursuing unity and exploring the ancient Chinese philosophical concept of Tian Ren He Yi (天人合

一) that nature and human are integrated into a whole, then the boundaries will not exist. This work delves into how our sensory experiences, particularly touch, shape our understanding of the world and dissolve boundaries between self and other.

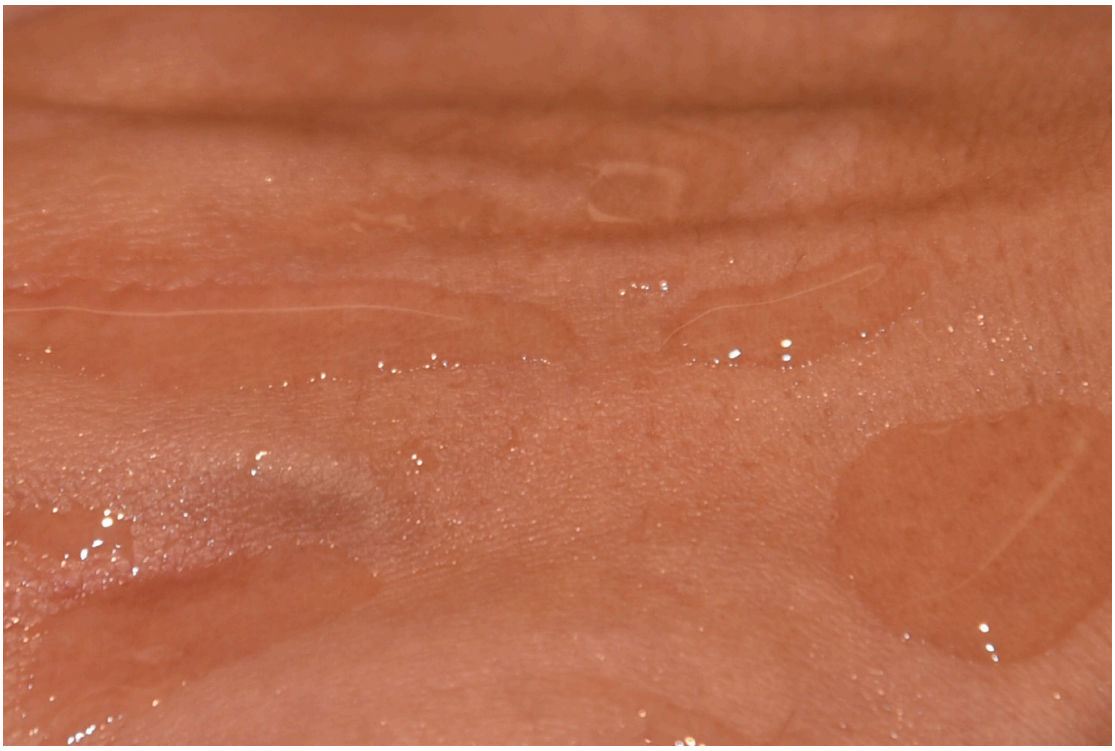

Figure 5.9 Artwork as Research: *When water meets skin*. Photograph by the author, 2022.

I sense the river flowing within me, the river exists within my being. The boundary dissolves. The dialogue continues.

5.3 The Power of Rituals

In many cultures, ceremony signifies a shared and codified practice that affirms relation and obligation. Birthdays, weddings, seasonal festivals, religious activities, and funerals gather communities through diverse voices and customs. As Robin Wall Kimmerer reflects, ‘Ceremony focuses attention so that attention becomes intention. If you stand together and profess a thing before your community, it holds you accountable. Ceremonies transcend the boundaries of the individual and resonate beyond the human

realm. These acts of reverence are powerfully pragmatic.' She further writes that 'ceremony is the way we can remember to remember', reminding us that Earth is a gift (Kimmerer, 2013). In this thesis, ceremony refers to public, collectively witnessed forms that codify shared commitments and orient communal memory.

Ritual, while sharing ceremony's orientation toward relation, takes shape in more intimate and intuitive forms. Rooted in repetition and intention, it can unfold beyond institutional structures, small, quiet, even solitary, but deeply transformative. Ritual serves as a vehicle of belonging—to kin, to community, to land—anchoring memory in acts that bind us to one another, to place, and to more-than-human companions. Unlike codified ceremonies of communal life, there are no established traditions for commemorating species extinction or ecological collapse. This absence underscores the profound difficulty of acknowledging losses that unsettle the ground of existence, eroding the ontological frameworks through which life, relation, and continuity are conceived. In the face of this silence, new lyrical forms and performative rituals need to be composed with, not for, the river.

This practice-based research seeks to reconfigure ritual beyond human-centred frameworks, redirecting it toward rivers and more-than-human beings. In the context of the Red River, ritual expands from symbolic act into performative engagement: meditation becomes a way of attuning perception to the river's rhythms, apology acknowledges the asymmetry of harm and cultivates humility, and acts of cleansing respond materially to pollution while enacting care. These operate as lyrical and performative practices of attention, aligning perception, rhythm and responsiveness so that care takes embodied form.

The rituals cultivate attentiveness, sustain accountability, and nurture belonging that extends beyond human communities. They generate narrative currents in which the river is encountered as kin, a being with memory and agency. Within these enacted relations, mourning and renewal are not oppositional states but interwoven movements

of the same current: grief bears the weight of loss while simultaneously opening the possibility of repair. Dwelling in this current means moving with waters that carry both sorrow and possibility, where survival unfolds as a shared composition across species and temporalities.

Meditation Rituals

Figure 5.10–5.11 Artwork as Research: Still from *Red River Ritual* series, 2022. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

In the early stages of the research, I produced a five-part video series titled *Red River Ritual* (2022), created to register my initial impressions of the river. The work presents a series of meditative rituals such as flushing, blessing, cleaning, and caressing, performed in proximity to their flow. These actions, captured through moving images, functioned simultaneously as observation and invocation, forming lyrical and performative meditations on mourning, care, and prayer while situating the body as a medium of attentiveness.

The motivation for these early experiments lay in testing whether ritualised performance could generate a language of relation with a river scarred by mining. They were an attempt to move beyond detached observation, engaging instead through affect, gesture, and presence. The process allowed me to cultivate intimacy with the riverscape and to sense the persistence of contamination at a bodily level.

However, I was not entirely satisfied with these actions. While they cultivated quiet attentiveness and embodied care, and drew out the river's material memory of mining, their force remained largely symbolic. The rituals carried sincerity yet lacked the capacity to confront the systemic and violent dimensions of extractivism. To respond to this limit, I began to reframe meditation as a training of emotional intelligence, slowing perception, tolerating uncertainty, and preparing the body for more accountable acts.

A further limitation emerged in the act of taking samples from the river. Removing water, sediments, plants, and stones provided a direct demonstration of contamination, but it reproduced extractive logics, displaced materials from their relations, and disturbed microhabitats. Once transferred into the studio and exhibition space, these substances became fixed as objects of display, stripped of ongoing processes such as microbial activity, mineral exchange, and slow deposition. What appeared as evidence therefore carried a cost: the disruption of vitality and the reinforcement of a gaze that treats matter as resource. Learning from this, subsequent works adopt a policy of

minimal intervention and reciprocal protocols—brief contact, onsite return, no further removal—so that the performative could align with restraint and accountability to the river.

Figure 5.12–5.14 Artwork as Research: *Red River Ritual* series, 2022. Installation documentation at Triangle Space.

Art is always a reflection, a testament, and a record of our human condition. In this research, these early works reflect the condition of a river caught between memory and exploitation, continuity and disruption. They carried value in nurturing an ethic of care, opening a space for lyrical response, and rehearsing new ways of sensing the river. They marked a first step toward reconfiguring attention, even if they did not resolve the challenges of addressing mining's historical violence.

Most current river projects are based on personal perspectives rooted in local growth environments and lived experiences, whereas my cross-media research deliberately inhabits the position of a de-anthropocentric female outsider. From this vantage, ritual becomes a method of relation, drawing on experimental visual language, lyrical and performative action, and multi-sensory practices that centre the river as the ground of continuous existence. It seeks to reimagine coexistence by apologising to the river, envisioning alternative futures with rivers and more-than-human beings, and cultivating forms of resistance that unsettle extractive habits of perception. This outsider positioning sharpens the capacity of the work to question what is taken for granted, and prepares the ground for the following exploration of apology rituals, where the encounter with the Red River becomes more explicitly dialogical.

Apology Rituals

As Uriel Orlow suggests, rituals allow an enacted, performative, and practice-oriented approach, rather than aiming for generally applicable theory (Orlow, 2013). In my subsequent research, I continued to focus on rituals. My practice does not attempt to recreate historical rituals, but to transform respect and intention into action through contemporary, everyday rituals such as acts of apology, gratitude, and practical reverence. These rituals combine the ordinary with a sense of the sacred, exploring ways to establish reciprocal relationships with more-than-human beings. In the context of the Red River, they resonate with scars of mining and generate new responses to a damaged riverscape.

Apologising to the Red River became both the first and a pivotal step. This proved more challenging than anticipated, for apology requires acknowledging wrongdoing. During brief interviews with local residents, I observed that many, when asked to apologise to the river, did not know what to say. This hesitation reflects deeper psychological and cultural tensions. Western psychoanalytic theories point to the complexity of human-nature relations. Austrian neurologist and the founder of psychoanalysis Sigmund Freud

described how nature is often cast as “the Other”, standing in opposition to human culture and order. This binary opposition generates underlying anxiety and defensive mechanisms, leading people to project their fears, dissatisfaction, and internal conflicts onto nature, manifesting as punishment and exploitation (Freud, 1930). Apology unsettles this opposition by requiring humans to recognise their own non-centrality and to accept a loss of control, which touches on deep-seated unease and shame. In *Envy and Gratitude*, Austrian-British author and psychoanalyst Melanie Klein (1957) adds that humans may unconsciously feel envy toward nature’s vitality and uncontrollability, which can provoke hostility and fuel destructive behaviour beyond actual necessity (Klein, 1957). Later, American author Richard Louv introduced the concept of Nature Deficit Disorder, describing the psychological and behavioural issues arising from modern disconnection with nature (Louv, 2005). This alienation deepens indifference and erodes the foundation of empathy, making apology feel unfamiliar and even impossible. Meanwhile, apology rarely appears in narratives of human-river relations and thus lacks precedent for imitation.

To make apology practicable, I frame it as an exercise in emotional intelligence: (1) perception, the naming of harm without dilution; (2) regulation, the holding of guilt without collapse and defensiveness; (3) transformation, the conversion of remorse into durable, river-centred commitments. This triad grounds the performative beyond confession, binding words to care.

This analysis reveals that the restoration of riverscapes cannot be separated from cultural, spiritual, and psychological healing. Culturally, it requires redefining rivers as vital life companions rather than resources. In many cultures, apology signifies a reciprocal relationship, while humanity’s unequal attitude toward rivers makes such an apology feel unfamiliar. Spiritually, it calls for the awakening of respect and reverence. Psychologically, it entails moving from underlying opposition and alienation toward apology, gratitude, and care. Rivers possess agency and perception. Their agential capacity is expressed through flooding, sedimentation, and shifting paths, as they

respond to natural forces as well as human interventions. Their perception presence is registered in altered flows, colours, and speeds, and in the subtle traces of toxicity and vitality carried through erosion, accumulation, and the redness of water. To apologise is thus to acknowledge these capacities and to recognise rivers as active participants in shared life. If apology is offered sincerely, rivers may continue to thrive alongside us; if ignored, they will fade, and perhaps even disappear.

Figure 5.15 Contextual image: The Red River. Photograph by the author, 2024.

1) Letter of Apology

Dear Red River,

Please allow me to express my most sincere apologies to you, and to extend this apology to all forms of water on Earth—rivers, streams, springs, lakes, waterfalls, wetlands, oceans, rain, snow, mist, and ice..... Thank you for still being here.

Once, your clear waters flowed through mountains and plains, bringing life to all you touched. Today, your body has been scarred by mining activities, muddied with sediment, and laden with metallic deposits, turning red and giving you the name—Red River.

We have excavated minerals around you, disregarding the waste and polluted waters seeping into your essence. We pursued resources for economic development, forgetting that you are an irreplaceable source of life. Heavy metals and toxins have continually invaded your waters, suffocating the land and mutating the fish. This is our fault, our greed and shortsightedness have harmed you, and for this, I feel deeply ashamed. What you endure is not merely industrial pollution but a reflection of our disrespect for nature. In chasing short-term gains, we have ignored the lasting damage inflicted upon you and the responsibility to future generations.

However, I would like to tell you that some of us are beginning to awaken. More and more people are recognising the cost of mining and are making efforts to repair the damage. Removing waste, restoring vegetation, reducing toxic discharges, each act of care, no matter how tiny, represents a new beginning.

I know this is far from enough. The harm has already been done, and healing will take a long time. I apologise for our ignorance of the past and offer my hopes for change in the future. We are one, dear river. Please give us the chance to make amends. You are the lifeblood of this Earth. May you regain your clarity and vitality, flowing endlessly as you once did.

With deep regret,

A Human

This work is not only a lyrical text but a performative act, a letter that can be carried to the riverbank and spoken aloud. Addressing the river directly, it confronts the absence

of apology in human-river relations and unsettles the discourse that reduces waters to resources. Its force lies in transforming written language into an offering of accountability, a gesture that is both intimate and public. This fragile yet insistent apology reimagines writing and reading as ritual: a living practice of mourning and honour, where words themselves become a practice of recognition and repair.

The letter also extends beyond the Red River to all waters, situating the local wound within planetary cycles of extraction and flow. By linking the scars of mining to the circulations of global hydrology, it traces a shared condition of vulnerability and opens the possibility of futures where relation is sustained through accountability and care rather than foreclosed by harm.

1) "Sorry, Red River"

Figure 5.16 Artwork as Research: Still from "*Sorry, Red River*", apology on air, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

In another work *"Sorry, Red River"* (2024), I placed a speaker in the river to broadcast continuous apologies, creating a formal atmosphere of address. However, since the apologetic voice was transmitted underwater, its volume was significantly reduced,

easily blending into and being drowned out by the river's own sounds. To respond to this, I introduced a microphone to amplify the sound, enabling a clearer dialogue with the river's voice.

This work staged an encounter between the apologetic voice and the riverscape, producing a multilayered composition through framing, video, and playback. The river's sound quickly overwhelmed the human voice, rendering the apology partial, fragile, and contingent. This instability did not signal failure but exposed the limits of language and the impossibility of silencing or mastering the river. Instead, it pointed to the necessity of listening differently, attuning to energies, rhythms, and non-verbal expressions that carry their own forms of meaning. In this sense, the piece foregrounded the tension between verbal and non-verbal communication while opening a space where apology could resonate rather than assert, functioning simultaneously as ethnographic record and lyrical offering toward more-than-human relations.

2) One Hundred Bows of Apology

Figure 5.17 Artwork as Research: Still from *One Hundred Bows*, apologising, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

In the final work *One Hundred Bows* (2024), I performed a ritual of bowing to the Red River one hundred times. In several East Asian cultures, bowing signifies more than apology: it embodies gratitude, respect, and humility. In China, it has historically used to convey profound remorse, with the depth and repetition of the bow expressing intensity of apology and sincerity. Though less common in daily life today, bowing remains in diverse contexts, such as in traditional rituals and corporate events. Its universality allows it to move beyond specific cultural and gendered distinctions, emerging as a neutral act of embodied relation.

By addressing the river through this repeated gesture, the work resonated with Aboriginal scholar Tyson Yunkaporta's concept of "us-two" from *Sand Talk: How Indigenous Thinking Can Save the World*, which emphasises mutual dependence (Yunkaporta, 2019). Here, apology was not an individual confession but an enactment of relation, performed with and before the river. The repetition of one hundred bows foregrounded humility, fatigue, and persistence, transforming apology from a fleeting utterance into a temporal practice of endurance and shared presence.

The significance of this work lies in its innovation: it moved apology beyond language, grounding it in embodied repetition and making it inseparable from time and exertion. Repetition tested sincerity, and fatigue became an index of commitment as the bowed body inscribed duration into relation. This work revealed how ritualised acts can convey the weight of ecological violence in ways words cannot. It also introduced a new form of ecological ritual in contemporary art practice, bridging cultural traditions of bowing with more-than-human ethics. Its performative structure planted the possibility of belated recognition in the minds of viewers, encouraging them to imagine their own gestures of accountability toward the river and the wider living world. As both practice and theory, the work contributed an original mode of environmental engagement, demonstrating how art can reconfigure ritual into a shared ground of responsibility and care.

Together, these apology rituals constitute an important stage of the research. They expand the vocabulary of ecological apology through writing, sound, and bodily repetition, while theoretical reflections situate them within wider cultural and psychological frameworks. Their contribution is to demonstrate that apology unfolds not as a single act but as a sustained practice of recognition, humility, and relation. Practically, they propose new artistic forms of ecological engagement. Theoretically, they argue that restoration cannot be confined to ecological repair alone but must also address cultural memory, spiritual relation, and psychological dimensions. In this way, apology rituals operate as both artistic innovation and methodological intervention, advancing practice-based research as a site where more-than-human ethics can be tested, embodied, and reimagined. Above all, they show how emotional attunement through sensed pacing, calibrated address, and embodied pledge binds the lyrical with the performative, transforming affect into accountability.

Figure 5.18 Artwork as Research: Still from *One Hundred Bows*, apologising, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

Cleansing Rituals

In many countries, significant rituals involve bathing in rivers. However, due to the polluted state of rivers, most people no longer feel that entering the water is safe, and the cultural significance of rivers has diminished with each passing generation. Following the earlier stages of meditation and apology, cleansing forms a third phase in this practice-based research, where language yields to maintenance and confession gives way to care.

Driven by an overwhelming sense of guilt, I performed a cleansing ritual of this sediment-laden river. The resulting work *Acts of Care I: Rock* (2024) captures the act of a restorative washing. I use the word *rock* rather than *stone*. While *stone* often carries cultural and symbolic associations with architecture, ritual, and memorialisation, *rock* emphasises the geological and ecological materiality of the river. This choice highlights the sedimented histories and the scars of mining embedded in them, resisting anthropocentric readings that might frame them as monument or artefact. This single rock, randomly selected, stands in for countless others and for every inch of the river. They accumulated layers of sedimentary and chemical records, some directly encrusted on their surfaces, others seem etched deep into their core. This act of cleansing is an attempt to care, to connect and to release. It is both intimate and impossible, it reaches toward repair while acknowledging the scale of what cannot be undone. The daily gesture of cleaning becomes a quiet ritual of mourning and honour, allowing grief and reverence to be integrated into everyday life. It is a compensatory act, my own response to human-inflicted harm. Though small in scale, the action carries the weight of accumulated damage, making visible the histories sedimented into the riverscape.

Figure 5.19 Artwork as Research: Still from *Acts of Care I: Rock*, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

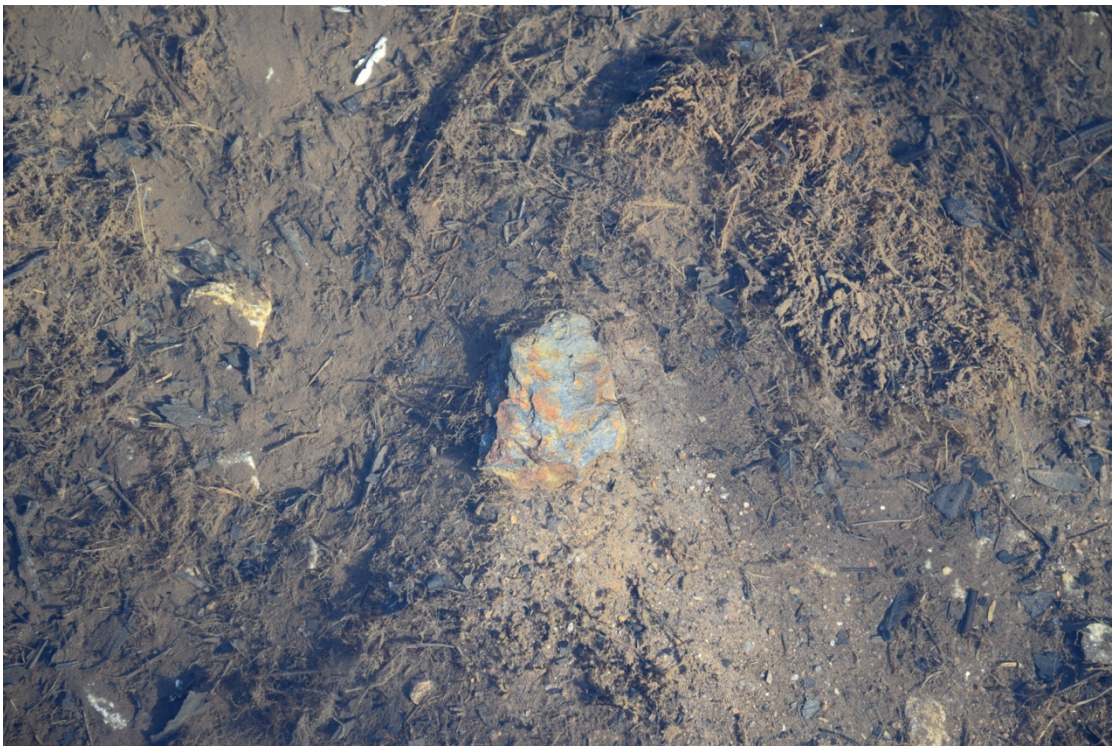

Figure 5.20 Artwork as Research: Cleaned rock, 2024. Photographic documentation of an act of care at the Red River, Cornwall.

Its contribution unfolds in cultivating tactile knowledge of contamination through repetitive contact, while reframing restoration as relational upkeep rather than definitive repair. By situating the body in direct contact with matter, the work produces an

embodied epistemology, knowing through touch, residue, and resistance. At the same time, the act remains ethically alert to risk as before: scrubbing can disturb microhabitats and remobilise bound particulates, which requires restraint, containment, and protocols of reciprocity such as minimal intervention, and returning attention to sites instead of removing further matter. Measured against these criteria, the work trains attention and opens dialogue on maintenance, while acknowledging a scale mismatch between intimate care and systemic harm.

Acts of Care II: Image (2022–2024) presents two deliberately futile parts: first, attempting to rinse the Red River's image beneath a running tap; second, wiping a screen that displays the same image. The first part is charged with paradox, evoking the disjunction between drinking directly from a source and consuming water delivered through the tap, invoking an infrastructural translation in which municipal systems abstract, treat, and distribute flows severed from their origins. Together, these parts reveal how infrastructures shape our sense of what is clean, safe, and near, while mediation redefines what counts as contact. The work embodies the impossibility of "restoration" through individual effort, opening instead a space for reflection on the tensions between care and futility, healing and denial. In this context, the absurd operates as critique, challenging the hubris that imagines ecological repair as a singular achievement and redirecting attention toward vigilance, upkeep, and relation. Integrating the conscious and unconscious, emotion and thought, body and site, the piece clarifies the limits of my capacity for ecological repair while affirming art's ability to surface affect, redistribute attention, and convene ethical conversation. It is in this space that I situate my ritual practice, between mourning and absurdity, humility and resistance.

Seen in relation, the two works trace parallel rituals of care. One tends to the rock that holds the river's wounds; the other addresses the image that holds their shadow. In the interval between rock and screen, care oscillates between intimacy and futility, revealing how mourning and critique move across different surfaces of the same river.

Together they disclose two inseparable registers of relation in the river, the weight of the rock and the sheen of their reflection. By pairing the tactile act of washing a rock with the paired attempts to cleanse an image, the works insist that ecological rituals must engage both matter and mediation, acknowledging scars carried in bodies of rock and in the frames through which rivers are seen.

Figure 5.21–5.22 Artwork as Research: *Acts of Care II: Image*, 2022–2024. Two video stills documenting care-based actions involving rinsing and wiping images of the Red River. Video available via webpage (see Introduction, p. 8).

These cleansing rituals consolidate a distinct stage of practice. They extend apology into upkeep, translate guilt into protective attention, and render the traces of mining perceptible through body, tool, water, and image. Their innovation emerges from coupling micro-restorative actions with critical reflection, demonstrating that care must proceed alongside vigilance and self-interrogation. They contribute to rethinking restoration as an unfinished, relational process, one inseparable from memory, affect, and ethics. In the wider ecology of strategies, these works do not replace legal and infrastructural remedies; they operate beside them, making perceptible the affects and responsibilities that law and engineering cannot carry alone.

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Chapter 6: Emotional Currents—From Grief to Response-Ability

Having traced theoretical frameworks in Chapter 4 and methodological practices in Chapter 5, this chapter turns toward the emotional and ethical dimensions that sustain and deepen those relations. Theories of the Chthulucene and ecofeminism offered ways of imagining rivers beyond anthropocentrism, while practices of reciprocity and ritual in the river opened pathways for embodied engagement. Here the attention shifts to emotional currents: grief, embodied wetness, and radical commitments that bind theory and practice through affect and value. It asks how grief can be transformed into response-ability, how witnessing can be carried through moisture and touch, and how dignity, courage, and honour can orient ecological action. These questions situate the lyrical and the performative as vital pathways, the means by which ecological thought flows into practice and by which practice retains ethical force.

6.1 Towards Emotional Intelligence

In 1836, poet Friedrich Grabbe famously declared, ‘Only despair can save us!’, encapsulating a pessimistic logic of action. French philosopher Jean-Pierre Dupuy extends this argument, suggesting that only experienced apocalyptic thinkers can make rational decisions about the future, as they possess the courage to treat the worst-case scenario as a genuine possibility (Dupuy, 2022). This mode of thought has also influenced curatorial and artistic practices, artists and institutions are increasingly engaging in scenario-building exercises, speculative commissions, and imaginative forecasting that treat the climate emergency as an imminent condition. Interdisciplinary projects such as *General Ecology* (2018–ongoing) at the Serpentine Galleries, and *Down to Earth* (2020) at Gropius Bau exemplify this turn, inviting artists to work within catastrophic imaginaries to generate dialogue and emotional engagement. From this perspective, despair and reflection become essential ways of understanding ecological

loss, urging renewed attention to the precarious relations between humans and more-than-human beings on the brink of extinction.

My own position departs from despair alone and moves toward grief as a more generative orientation. Though difficult, this process is unavoidable. Environmental philosopher and anthropologist Thom van Dooren proposes grief as a way of comprehending the entanglement of life and death, arguing that humans must mourn because we are embedded within this destructive structure. However, such entanglement is uneven: wealthier and more powerful groups are more deeply implicated in the systems of extraction, while formerly colonised nations, though least responsible, remain most exposed to harm (van Dooren, 2014). In this context, grief is not only a response to loss but also a necessary and politically situated step toward reimagining our place in the world.

Figure 6.1 Contextual image: Installation view *Down to Earth*. Climate Art Discourse unplugged, Gropius Bau, Berlin. Source: Jean Painlevé; Berliner Festspiele/Immersion; photo by Eike Walkenhorst, 2020.

An opposing perspective argues that grief may be counterproductive in motivating action. When confronted with overwhelming natural forces and ecological collapse,

humans can easily succumb to helplessness, inertia, or even complete resignation. This idea finds a parallel in James Cameron's film *Avatar* (2009), which tells the story of a mining corporation invading the homeland of the blue-skinned Na'vi people. The film's portrayal of Pandora's breathtaking landscapes and rich cultural vision resonated deeply with audiences, but also heightened their awareness of the dull, grey, and desensitised reality of their own world. This emotional contrast led some viewers to experience a profound sense of emptiness and sadness, a phenomenon known as Post-Avatar Depression Syndrome (PADS), with some even requiring medical treatment to reintegrate into their everyday lives. This suggests that deep ecological and cultural grief does not necessarily lead to action, it may circle back upon itself, producing paralysis that exposes how unanchored affect collapses inward when it lacks sites of relation and practice.

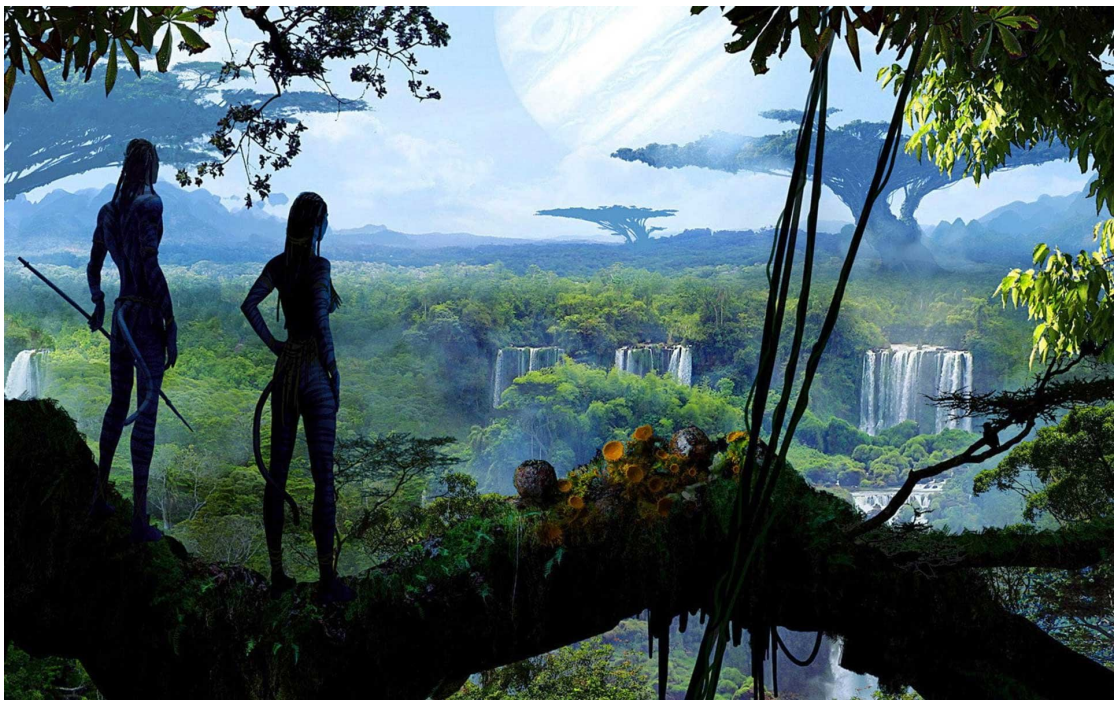

Figure 6.2 Contextual image: Still from *Avatar*. Source: James Cameron (dir.), 2009.

Adding to this conversation, psychoanalyst Sally Weintrobe argues that many people engage in climate disavowal, a form of denial that does not simply repress disturbing realities, but actively attacks the rational mind (Weintrobe, 2021). In her view, denial becomes a destructive defence against uncomfortable truths. Grief, then, contains a

double edge, it may be a gateway to ecological awareness, but only if it does not become frozen in despair.

In my view, for grief to remain generative, three conditions are required. First, there needs to be recognition of the structural nature of harm and of the unequal distribution of responsibility, so that loss is not dissolved into a vague universal tragedy but traced to concrete histories of extraction and exploitation. Second, affect needs to take shape in tangible practices: acts of care, gestures of maintenance, and sustained witnessing. Through these, grief becomes responsibility. Third, grief calls for an expansive and relational orientation, moving with rivers, soils, plants, and species, and recognising them as co-participants in survival and renewal.

When we cry, tears run down the cheeks and become a small river. Tears are more than human expressions, they are lyrical streams that join other waters, linking bodies with rivers and carrying affect into wider circulations. Crying beside a river enacts kinship, reminding us that we are drops within their currents. In this way, grief becomes a shared practice, affirming the endurance of more-than-human worlds even in the midst of brokenness. In one of my works, *I Am Rivered* (2024), I staged this gesture by placing transparent beads as amplified tears, letting them fall toward the river and photographing them. The heightened shimmer rendered grief visible, not as private sentiment but as a lyrical and performative offering to the river. Through this act, tears were reframed as tributaries, entering the river's body and allowing grief to unfold as relational and ecological practice.

When these conditions hold, grief does not paralyse but opens the possibility of action. Melancholia lingers in affective closure, folding energies inward, whereas critical mourning transforms sorrow into direction. This shift calls for emotional intelligence, the capacity to regulate despair, hold guilt without collapse, and translate affect into sustained gestures of accountability. This mode of grief grounds commitments in collaboration with more-than-human communities, and it is this lyrical and

performative mode that I carry forward, placing the paradox of grief and action within the practical and ethical dimensions of my research.

Figure 6.3 Artwork as Research: *I Am Rivered*. Photograph by the author, 2024.

6.2 Embodied Wetness

Building on these ideas, I propose the term “embodied wetness” to describe a mode of bodily engagement with watery environments, one that moves beyond symbolic or

visual representations of water and centres the felt presence of moisture, dampness, and fluidity. This concept attends to the tactile and sensorial ways in which water permeates skin, space, and memory, including moments of intimacy and discomfort, offering a relational and immersive form of witnessing. Embodied wetness recognises the continual traffic between external riverscapes and internal terrains of memory and spirit, where rivers shape thought as much as thought attempts to shape them. Topographies of water thus give form to perception, inscribing ecological memory into body and atmosphere, and disturbing the division between environment and subjectivity. The viewer is not positioned as a detached observer but as a participant within an affective and aqueous terrain, receptive to the generative potential of watery relation.

Astrida Neimanis argues that water is not merely a backdrop for human experience, but an intra-active substance that shapes and is shaped by the bodies it passes through (Neimanis, 2017). Professor Stacy Alaimo's theory of trans-corporeality furthers this view, showing how bodily boundaries are porous, always in contact with flows, moistures, and exposures that trouble fixed notions of the human subject (Alaimo, 2010). This is where the notion of witnessing becomes crucial, not simply observing from a distance but as an act of embodied presence. In this practice, the body is not a passive vessel but a perceptive, performative site through which ecological damage is felt, enacted, and remembered. Witnessing is no longer about standing apart from the scene of loss; it is about entering it through gesture, breath, presence.

While the notion of the embodied witness highlights the body as a site that gives testimony, my idea of embodied wetness shifts emphasis from testimony to material relation. Wetness names how water bears witness through absorption, seepage, and circulation, carrying grief and memory across porous boundaries and tracing them within more-than-human worlds rather than confining them to human narration. In this way, embodied wetness extends witnessing into an aqueous register, where presence is always situated, relational, and ethically responsive.

Figure 6.4 Contextual image: The Red River. Photograph by the author, 2024.

In my own work, this has taken the form of performative engagements with contaminated riverscapes: immersing myself in muddy banks, touching poisoned waters, offering gestures of apology, grief, and care. These actions refuse theatrical displays for passive viewers; they invite sensorial entanglement, where witnessing takes place through skin, breath, and the moist traces of memory carried by water.

The term resonates with hydrofeminism, which emphasises interconnectedness, permeability, and co-becoming through water. Embodied wetness extends this insight into sensorial practice. In artistic contexts, this may manifest as an atmosphere of moisture, where audiences feel the humid river, the water inflected air, and experience dampness as a communicative force. The viewer becomes a situated participant, immersed in an aqueous sensorium that invites empathy, response, and reflection.

This perspective insists that grief requires a medium. Moisture carries sorrow beyond the interior body, placing it within relational terrains of rivers, soils, and atmospheres. Through direct or indirect embodied wetness, grief is metabolised into meaning: standing in wet places, feeling water against the skin, and imagining their toxic weight.

These bodily engagements do not offer easy resolutions, rather, they open porous, fragile, and responsive spaces in which ecological memory might surface. Within these damp and uncertain zones, a different ethics may begin to emerge, one formed not through abstraction or domination but through presence, feeling, receptivity, and the shared language of wetness.

6.3 Making Radical Commitments

Such a position may stem, in part, from the modern condition of indirect perception of nature. As cultural scientist and writer Vera Tollmann describes in her concept of "Natural Snuff", contemporary society experiences nature through technology and media, making our connection to the natural world increasingly mediated and superficial. This form of perception is akin to snuff tobacco use, a simulated experience rather than a direct, embodied interaction with reality. In her analysis of eco-touristic behaviour, Tollmann describes cruise ship passengers in the Arctic cheering as glaciers break apart before them, not as a tragedy of global warming, but as a visual spectacle to be captured and shared. Tollmann warns that this detachment from firsthand engagement with nature diminishes public concern for environmental issues, as our ecological awareness is shaped more by screens and digital media than by lived experience (Tollmann, 2021). The challenge, therefore, is to find modes of artistic engagement that resist this detachment, reintroducing touch, proximity, care, and reciprocity between the viewer and the riverscape.

Timothy Morton expands this critique in *Humankind*, arguing that hidden in plain sight, across all post-agricultural spiritual, social, and philosophical spaces, is the traumatic severance of human and more-than-human relations (Morton, 2017). This highlights how modernity has fractured humanity's once-intimate connection with the more-than-

human world, prompting a critical need to rethink how we might restore these lost relationships in a technology-dominated era.

Figure 6.5 Contextual image: Meritorious Service Award (this award is designed to recognise the meritorious service of your friends, co-workers, and family, when they decide to not add any more of us to the billions). Source: Voluntary Human Extinction Movement (VHEMT), n.d. (downloadable graphic).

From the apocalyptic logic of the Anthropocene to the relationship between ecological grief and action, and further to radical environmentalism and the challenges of modern perception, all these discussions converge on a fundamental question: How should humanity redefine their place within the ecological crisis? Excessive pessimism can lead to paralysis and inaction, while over-optimism risks downplaying the severity of the crisis. This act often reflects a worldview shaped by Enlightenment rationality, rooted primarily in the Global North, where humans are positioned as separate from and superior to nature.

While seeking a mindful balance, akin to practices of self-care and attentiveness may offer grounding, I argue that we must also look toward pre-modern ethical values such as dignity, courage, and honour as deeper motives for principled ecological action.

These values do not promise success or reward. Instead, they demand action precisely when the possibility of failure looms large. Ecological responsibility is not only about "solving" a crisis, but about standing in right relation to the Earth, even when outcomes are uncertain or irreversible. To act with dignity is to acknowledge the worth of all life, including that which is vanishing. To act with courage is to continue, even in grief. And to act with honour is to be accountable to rivers, species, histories, and futures, not our own. As cultural historian and philosopher Thomas Berry has suggested, we stand at a civilisational crossroads, where the choice is between entangled renewal and intensified destruction (Berry, 1999). This highlights the urgency of dignity, courage, and honour as the values that orient our path.

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Part III

Contribution & Conclusion

Contribution

This doctoral research contributes a river-centred reorientation of ecological thought and practice, advancing an integrated contribution across concepts, methods, ethics, and artistic praxis. It proceeds from a non-anthropocentric position in which rivers are treated as sentient participants whose flows, scars, and memories co-author knowledge with humans.

Conceptual contribution: relational co-presence

The thesis reframes rivers as processual and remembering beings whose agencies are ecological, aesthetic and political. They register histories of extraction, carry wounds alongside resilience, and make their needs legible through flow, colour, shifting rhythms and multispecies response. This repositioning threads feminist genealogies through ecofeminism and hydrofeminism, oriented by the Chthulucene, as a historical trajectory rather than a loose collage. Hydrofeminism is situated where earlier feminist critiques meet aqueous ontologies, so permeability, circulation and shared embodiment become conditions for reimagining justice.

Epistemic contribution: attentive presence and listening

The research proposes an epistemology grounded in attentiveness. Ritual, apology and listening cultivate forms of understanding that join perception and care. Instead of separating sensibility from enquiry, the work shows how presence beside the river, iterative return and situated responsiveness can translate injury and resilience into shared understanding and responsibility.

Ethical contribution: apology as method and ongoing practice

The thesis develops apology as a river-engaged method rooted in cultural lineages where responsibility is practised through offerings, repentance and cyclical care. Asian

traditions inform gestures of repentance and attention to seasonal flow. Global South practices foreground reciprocity, hospitality and water-based obligation. Situated apology here is intimate and public at once. It acknowledges harm, reorients relations with rivers and cultivates accountability without spectacle. Apology functions as an ongoing discipline in which guilt becomes maintenance, restraint and return.

Methodological contribution: embodied wetness within water relations

The thesis advances embodied wetness as a methodological framework in which humidity, touch, breath, weight and sound become media for knowing with water. Research is situated in damp atmospheres and permeable bodies where water relations co-compose perception and gesture. Art operates as thinking in action rather than illustration. The body serves as a conduit for the river's memory, toxicity and vitality. Method unfolds through small, iterative gestures, site returns and a rhythm set by the river, where they participate as co-author, altering tempo, route and outcome.

Remediation critique with relational precision

The thesis offers a precise critique of technocratic remediation that seeks control while neglecting relation. Ecological interventions gain legitimacy when they honour riverine continuity, seasonal rhythms, sedimentary dynamics and multispecies habitation. Artistic and cultural practices complement other approaches by widening perception, convening ethical assemblies and sustaining attentiveness across the long spans through which rivers heal, recalibrating care toward situated and relational forms.

Practice-based insights: what becomes visible

Through sound, moving image, ritual cleansing, apology and performance, the works disclose the interiors of a mined river: metallic residues as lived memory, particulate spaces as interior topographies, toxicity circulating through bodies, and reciprocity of moisture between atmosphere, skin and current. Feelings of guilt and grief move from

private sentiment into shared space where deliberation and action become possible. Documentation is treated as living record, open to future revision with the river's changes, so that evidence remains provisional and co-written with them. In this way, artworks act as mediators that translate perception into dialogue and renewed responsibility.

Theoretical extension and situated positionality

By operationalising ritual and apology drawn from Global South and Asian cultural experience, the thesis extends Global North frameworks. Haraway's Chthulucene becomes a practice of staying through apology, restraint and return. Ecofeminism expands from critique toward rehearsed care and hospitality. Hydrofeminism shifts from metaphor toward embodied techniques of attunement. More-than-human thought moves from recognising agency toward shared responsibility, where rivers' timings and flows set conditions for action. At the same time, the Red River emerges as a living record where industrial trauma, evolutionary memory and embodied relation converge. From the positionality of an Asian woman artist-scholar, the research contributes a diasporic lens that treats belonging as fluid and negotiated, where non-centrality becomes a site of ethical potential.

In summary, the thesis contributes a vocabulary and a praxis, culminating in a lyrical and practical guide for engaging damaged rivers as collaborators in shared worlds. It entwines apology with attentiveness, care with critique and art with enquiry. Centring the Red River yet reaching beyond them, it gathers ecological philosophy, feminist genealogies, cross-cultural traditions and practice-based art into a shared orientation of humility, reciprocity and relation. Above all, it offers an invitation to walk with rivers, to apologise with sincerity, and to live as kin with waters who continue to breathe, flow, remember and endure.

Learning to Apologise to a River—A Lyrical and Practical Guide

This guide flows from the praxis of the thesis. It is not a fixed set of rules but a living orientation for artists, researchers and communities who wish to walk with damaged rivers as companions. Each point is offered as a gesture, a prompt and an opening for learning in dialogue with rivers, whose currents shape rhythm, scale and direction.

Begin with apology

Acknowledge complicity and entanglement. Say who has benefited and who has been harmed. Approach the river as interlocutor, co-inhabitant and teacher.

Pair witnessing with care

Attend to changes in colour, odour, rhythm and drift, and keep these observations joined to reflection and care. Let attention breathe beside silence, song and ritual. Return again and again so that they remain bound to memory and relation.

Ask for the river's time

Let practice bend to their pace. Honour spawning cycles, floods, sediment shifts and drought. Do not hurry them into your schedule; allow works to arise in the tempo of their currents.

Minimise extraction

Choose reclaimed or found materials. Add nothing that deepens harm. Frame each gesture as care and upkeep, a tending rather than a taking.

Invite listening assemblies

Gather neighbours, artists, caretakers and more-than-human presences. Listen together to what is voiced, what is muted and what resists articulation in the river's presence.

Prefer situated smallness

Test gestures at modest scale. Observe ripples, intended and unintended. Adjust in response to the river's replies before extending further.

Translate without smoothing

Carry words across registers of field practice, law, philosophy and poetry. Keep their textures. Let friction be part of truth-telling.

Keep documentation open

Hold recordings, notes and traces as living records. Leave them porous, able to shift with future flows, so that documentation remains provisional and co-written with the river.

Closing

To apologise to a river is to enter humility and attentiveness. These orientations invite readiness to be taught by waters. In their shifting currents they remind us that responsibility is ongoing, memory is shared and repair unfolds slowly, like flow over stone.

Conclusion: Standing With the River

This research began beside a wounded river whose waters carry the metallic weight of centuries. Walking with them meant entering a terrain already shaped by mining, grief and endurance. My practice unfolded through experiments that sometimes resonated and sometimes faltered: gestures of apology that opened relation, moments of uncertainty, works that deepened intimacy, and others that exposed the limits of representation. These variations proved integral, teaching that research with rivers remains porous and continually unsettled by their rhythms.

From these experiences, several insights emerge. First, the methodologies themselves, including the lyrical, the performative, the ritual and the multisensory, are constitutive ways of knowing. They create conditions in which the Red River acts as collaborator, shaping tempo, pulse and relation, while aligning with the orientations of the Chthulucene and ecofeminism. In this frame, apology is not an addition to ecological repair, it is the necessary beginning. Without acknowledgement, attempted remediation risks repeating the logic of control. Apology interrupts silence, affirms rivers' dignity and prepares ground for relation. It becomes a continuous cultivation of attentiveness, humility and responsiveness.

Second, the journey confirmed that strategies need not be monumental. Small and situated actions such as walking, cleansing, listening and apologising function as lyrical interventions that cultivate intimacy and responsibility. These acts serve as methodological anchors, showing how modest and embodied rituals can turn guilt into attentiveness and carry relation across time. Large ambitions sometimes faltered, while rituals of presence allowed the river to speak most clearly. Failure became instructive, exposing the risks of spectacle and reminding that responsiveness requires restraint in approaching the river.

Third, positionality functioned as a structuring force rather than a background condition. I entered the Red River as an outsider, geographically, culturally and historically, at a moment when renewed mining threatens to render further damage ordinary. Cornwall is an intimate and tightly held landscape, where belonging is sedimented through ancestry, labour and long memory. To claim insider status here would have risked false proximity. Remaining an outsider became an ethical commitment, holding responsibility in place of entitlement and allowing the river to be approached without possession.

This position shaped how relation was formed. The practice did not seek to speak for those whose lives are historically entangled with the river. Instead, it attended first to the river themselves, allowing intimacy to develop through proximity and care. Community narratives were not gathered as material for validation. Attention remained with the river as a more-than-human presence, resisting extractive habits of listening in which voices are collected, translated and circulated while accountability thins. Keeping the river at the centre allowed the work to remain responsive to what exceeds human narration.

Being diasporic, female and itinerant unsettled any stable claim to place. This in-betweenness kept attention mobile and sensitive to asymmetry. It allowed Eastern cosmologies, feminist genealogies and site-responsive practice to be woven together without mastery. From this position, intimacy was not inherited through origin or secured by duration. It was cultivated slowly through care, repetition and restraint. Standing with the river as an outsider grounded the practice in continuity, allowing relation to take shape over time.

Finally, the research suggests that the task is not limited to studying rivers, it is to accompany them. Remaining with them asks for futures understood as fragile and relational, carried by continuity rather than imagined returns. The Red River taught that wounds are inseparable from vitality, and that grief and resilience flow together. Within

this current, the lyrical opened space for resonance and imagination, while the performative enacted accountability and embodied relation. Together, they allowed enquiry to move with the river, drifting, converging, gathering memory and releasing possibility.

The broader implication is that the orientations developed here, including apology, embodied wetness, ritualised attentiveness and modest gestures of care, are adaptable for work with other rivers marked by extraction. They travel as practices rather than prescriptions. They invite beginnings with acknowledgement, slower tempos of engagement, deeper listening and a willingness to let rivers shape the terms of relation.

This thesis therefore closes not with resolution but with insistence. To apologise is to begin again, and then begin again once more. It is to live with rivers as kin, to attend to their memory and their futures, and to remain answerable as they continue to flow.

Acknowledgements

This work has never been mine alone. It has flowed through many currents of guidance, care and companionship.

I owe my profound gratitude to my supervisors, Edwina fitzPatrick and David Cross, whose guidance has sustained me throughout this long journey. Their generous support has shaped not only the academic trajectory of my research but also my ways of seeing and practising. They continually offered perspectives I had not considered, opening new paths and widening the horizons of my thought. In moments of uncertainty, their insight was a steady light, guiding me forward.

To my parents, Lihong Liu and Hui Liu, I offer my heartfelt thanks and enduring love. Across distances and time zones, their care has accompanied me, allowing me to persist with courage even when I felt far away. Despite their own financial pressures, they have stood by me unfailingly, making this journey possible.

I am sincerely thankful to my husband, Jiarui Wang, whose love and patience carried me through. Though much of this journey unfolded across countries apart, his presence was always a source of comfort and strength. When we were together, he carefully managed the household and daily tasks so that I could dedicate myself fully to research. In moments of difficulty, he offered understanding and encouragement, reminding me why it was possible to continue.

Warm thanks are due to my colleagues and friends, who shared in the challenges of this journey. In our conversations, in moments of shared frustration and small celebrations, I found companionship that reminded me I was never alone in this long passage.

I am also grateful to the University of the Arts London, particularly the libraries and study spaces that became a refuge for reading, reflection and writing. These places carried me through the solitude of research, offering both silence and focus in their

shelves and rooms. I also thank the staff members whose daily labour sustains these spaces of learning and care.

I thank the Red River. They have been both partner and teacher. Their waters held my steps, mirrored my doubts and whispered possibilities. They taught me to listen, to witness, to walk differently and carried me into rhythms of thinking and feeling that no book alone could provide. With them I learned to move at the pace of attention and to think with humility.

To all those, human and more-than-human, who accompanied me on this journey, I offer my gratitude.

And lastly, I thank myself for continuing to walk with the river.

Appendices

The Traces of Mining Activities in Riverscapes — a Lyrical and Performative Art-based Approach

Xinyao Liu

Appendix 1 Unincluded Works

This appendix gathers materials that do not appear in the main body of the thesis yet remain integral to the research's development. They include early experiments, project fragments, preliminary concepts, and partially realised practices that, although not fully woven into the final argument, shaped the trajectory of the study.

Some works record the tentative gestures through which the Red River was first approached, testing methods of sensing, recording, and responding. Others remain unfinished or fragmentary, reflecting moments when the process diverged, paused, or shifted direction. Their incompleteness is not a mark of failure but a trace of the iterative and open-ended character of practice-based research, where beginnings do not always find closure.

By gathering these works here, the research acknowledges that practice unfolds as much through excess, remainder, and interruption as through completed pieces. These unincluded works hold value as resonant backgrounds: they illuminate the exploratory field from which the main projects emerged, and they remind us that artistic dialogue with rivers is always partial, contingent, and porous.

Appendix 1.A *More-Than-Human Interviews* (2024)

This artwork, *More-Than-Human Interviews* (2024), was developed during fieldwork along the Red River, at sites where mining residues marked soil, plants, and water. A series of interviews was designed with common more-than-human inhabitants, such as grass, bramble, and rock, guided by questions that respect their intrinsic existence and invited responses through their own rhythms, textures, and postures.

Figure A1.1 Contextual image: In an interview. Photograph by the author, 2024.

Traditional interviews are structured around human agency, asking questions, articulating responses, and systematically organising knowledge. By interpreting the history of rivers on their behalf, most river-focused studies have consistently reinforced anthropocentric narratives, obscuring the connections between human oppression and the exploitation of rivers and more-than-human forces. My river-centred research

challenges these frameworks by reimagining the interview as a multispecies dialogue, recognising these beings as co-constituents of the river's life. The focus rests on lived experiences and perceptions within the river environment rather than reducing them to "roles" and "contributions" in service of humans and other species. Additionally, more-than-human forces are invited to determine what sounds are recorded. These traces are epistemic: the settling of silt, or the echo of water on rock, each register how beings inhabit and remember their environment. In this way, such traces constitute acts of co-authorship, producing knowledge that is embodied, situated, and inseparable from the life of the river. This redistribution of expressive agency displaces the primacy of the human voice in the interviews and proposes a new epistemic contract in which knowledge is co-authored across species.

Furthermore, interviewing the more-than-human is a methodological innovation, and a playful extension of the standard PhD consent form. Engaging with more-than-human beings compels us to confront the limitations of human-centred epistemologies, including our assumptions about agency, participation, and communication. It asks whether consent, as imagined in academic institutions, can be expanded toward ecological ethics of response-ability. In this reframing, traces left by more-than-human beings such as the vibration of leaves can be understood as "free," in that they are uncoerced, and "prior," in that they precede artistic intervention. The notion of "informed," however, cannot be translated directly, since it assumes rational deliberation in human terms. What can be shown instead is that beings act from situated knowledges: the leaning of a willow into the current, the stillness of a river rock against the flow, or the autumn retreat of bracken, each informed by their own relations. In such a way, "informed" does not signify rational calculation, but a responsiveness embedded in place and time. Consent becomes visible not as a signed contract but as rhythms that guide how humans might listen and respond. It challenges us to reimagine the very concept of consent itself, moving beyond institutional forms to engage with the ethical principles of free, prior, and informed consent as they might apply across species and systems. Thereby, the project displaces the institutional norms of authorship and

introduces a speculative but grounded ecological ethic, one that foregrounds relational practices of attentiveness, humility, and response-ability.

The interview questions are as follows:

1) Creeping Bentgrass*: "Hi Creeping Bentgrass, your roots stretch across the riverbank, intertwining with soil and water. How does the red river's constant flow shape your path, and what connection do you feel as it brings life to the land around you?"*

Figure A1.2 Artwork as Research: Still from *More-Than-Human Interviews*, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

Guess the Red River's Words to You: I feel you sip from me without question. You anchor me when I try to slip away. I braid through your roots, and you through my silt. You do not ask if I am clean, only if I move. I am the skin beneath your breath, the shadow between your blades.

***2) Gorse**: "Hi Gorse, you stand resilient and thorny along the river's edge, enduring both drought and rain. What does the river's presence mean to you in your cycle of flowering and growth? How do you perceive the red river's energy?"*

Guess the Red River's Words to You: You scratch me when I rise, yet I carry your fallen yellow without resistance. When fire scorches you, I remember your scent and send it downstream. I do not judge your thorns. We have both endured drought, metal, forgetting. You guard my edges, and I swell quietly behind you.

***3) Hemp Agrimony**: "Hi Hemp Agrimony, when the wind stirs the river's surface, and the water softly laps against your roots, how do you respond to this touch? What does the red river mean to your survival?"*

Guess the Red River's Words to You: When wind stirs me and I kiss your roots. I am not asking permission; I am reminding you: we belong to the same breath. You tremble slightly, and I listen. You filter what others leave in me, and in return, I offer softness, not salvation.

***4) Soft Rush**: "Hi Soft Rush, the flowing water and moisture bring you life here. What kind of world do you perceive when the red river touches your roots and leaves?"*

Guess the Red River's Words to You: I do not bring you life, I arrive because you call. Your green blades pull me close. I linger in your shadows longer than others, slow myself against your base. When the sun dries us both, I remain a trace under your feet.

***5) Bramble**: "Hi Bramble, as your branches and fruits spread here, what does the presence of the river mean to you? How do you connect with those who come to feed along the river's edge?"*

Guess the Red River's Words to You: Your fruit falls into me and floats for days. I hide them from hands. When creatures come to feed on you, I record their footprints in my

mud, not their names. You ask what I mean to you, yet you have already wound your limbs around my pulse.

***6) Common Alder**: "Hi Common Alder, as you root deeply along the riverbank, how do the red river's flow, moisture, and seasonal changes influence your sense of existence?"*

Figure A1.3 Artwork as Research: Still from *More-Than-Human Interviews*, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

Guess the Red River's Words to You: Your roots drink deeply, and I do not flinch. You stitch banks that others tear. In winter, when your leaves leave you, I cradle them. In flood, I resist uprooting you. You speak through capillaries, and I echo in swells.

***7) Bracken**: "Hi Bracken, nourished by the moist soil at the river's edge, how do you understand the red river's flow and stillness as you dry and wither in autumn and winter?"*

Guess the Red River's Words to You: You unfurl when I whisper moisture into the loam. In autumn, I do not mourn your retreat, I slow for it. When your leaves crumble, I carry

your dust to hollows where you once stood. You do not look at me, yet we share decomposition.

***8) Grey Willow**: "Hi Grey Willow, with the red river flowing gently beside you, what memories do its seasonal rhythms bring to you? How do you harmonise your growth with the movement of the water?"*

Guess the Red River's Words to You: You weep when I am restless. But I do not seek comfort, I seek response. Your branches read my tempo. When you lean into me, I feel the weight of seasons. You forget nothing, and neither do I. Together, we practice memory as movement.

***9) Greater Burdock**: "Hi Greater Burdock, as you release your seeds near the river, how do you sense the flow of water as part of your journey? What connection do you feel with the red river as it carries life and nourishment nearby?"*

Guess the Red River's Words to You: Your seeds cling to fur and cloth, I never take them directly. Still, I move them where you cannot reach. You do not ask for guidance, yet I hold direction in my current. I do not carry you toward a purpose, I carry you toward possibility.

***10) River Rock**: "Hi River Rock, how do you feel the touch of the red river shaping and smoothing your surface? What tones and colours have become part of you and brought their history to you?"*

Guess the Red River's Words to You: Your silence is familiar to me. I have carved you not to shape you, but to keep time. When I smooth your sharpness, I remember every flow. You do not resist me, you record me. We are both archivists.

Figure A1.4 Artwork as Research: Still from *More-Than-Human Interviews*, 2024. Video documentation of performative practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

When the Red River "answers," they speak as a confluence of registers, with human speech only one among many. Voice here is relational, emerging through encounters that exceed the human and reminding us that speaking is always shared. *More-Than-Human Interviews* thus becomes a performative inquiry that shifts from an anthropocentric exchange into a multispecies practice of listening and opens necessary and vital spaces for new forms of dialogue.

Appendix 1.B *Held by the River* (2024)

In *Held by the River* (2024), I surrendered authorship, allowing the Red River to become the video maker. A phone was placed on a small floating platform and left to drift, its movement, framing, and rhythm governed by the current. What the camera captured emerged through this collaboration between device and river, without human intervention or imposed composition.

The resulting footage is unedited and erratic, dissolving fixed points of reference and immersing the viewer in a perspective shaped by more-than-human flow. The camera becomes a temporary organ of sensation, immersed within a system of seeing that resists mastery. Rather than directing, it receives. Rather than framing, it attends. In this way, the work challenges the primacy of human vision and proposes a non-anthropocentric cinematography rooted in relation, not control.

Most importantly, this makes us realise that the river has an interior. This is a rarely considered perspective because humans tend to observe rivers from the outside, focusing on their length, width, direction, and surface appearance. However, what truly constitutes a river is their inner diversity, the layered, mobile, and particulate space of water. Letting the camera drift within the river acknowledges this interiority and enacts a brief entry into it.

My approach in *Held by the River* is minimal, direct, and intimate. It uses a single device, released into the current for a brief passage. That brevity heightens the intensity of encounter. It is not a documentary of environment, rather, it is a gesture of co-sensing. In the act of letting go, I did not lose control but entered a different order of relation, one moved, unsettled, and reoriented by a fluid, embodied, and more-than-human logic.

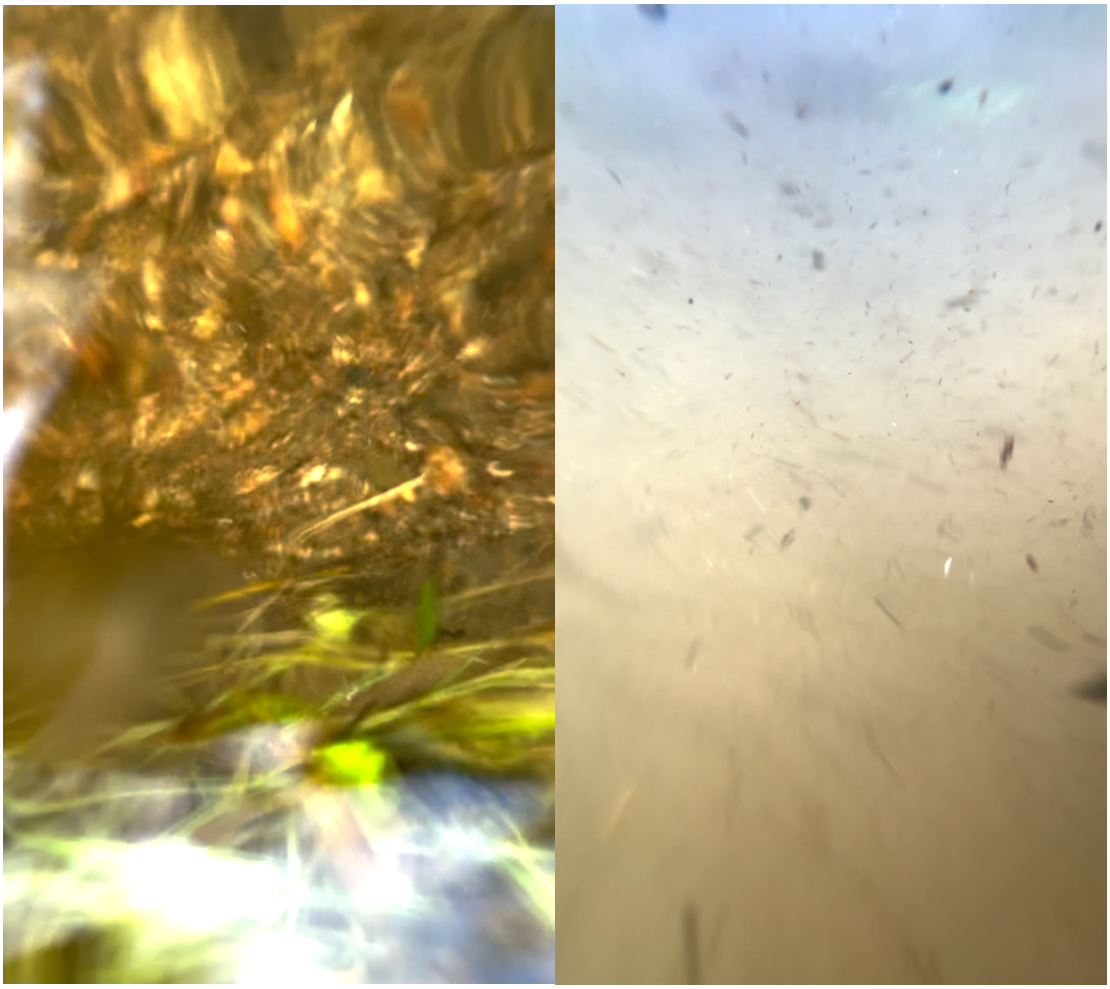

Figure A1.5 Artwork as Research: Still from *Held by the River*, 2024. Video documentation of a situated, relational practice at the Red River, Cornwall. Video available via webpage (see Introduction, p. 8).

Appendix 1.C *When the River Paints* (2024)

In the work *When the River Paints* (2024), the canvas was positioned as close to the river's surface as possible. Branches collected from the riverbank served as brushes, tied to nearby trees so that the trees, wind, and current could move them across the canvas. The river's water left stains that became part of the painting. This process challenged the traditional role of painting as a way of representing riverscapes. Instead, it activated the whole body as a medium of sensing and understanding, inviting the river, the wind, the tree, and myself to collaborate in the act of creation. Everything in the surroundings participated, transforming painting into a relational practice. The work explored the dynamics of the Red River and their connections with the environment, expanding new understandings from a more-than-human perspective.

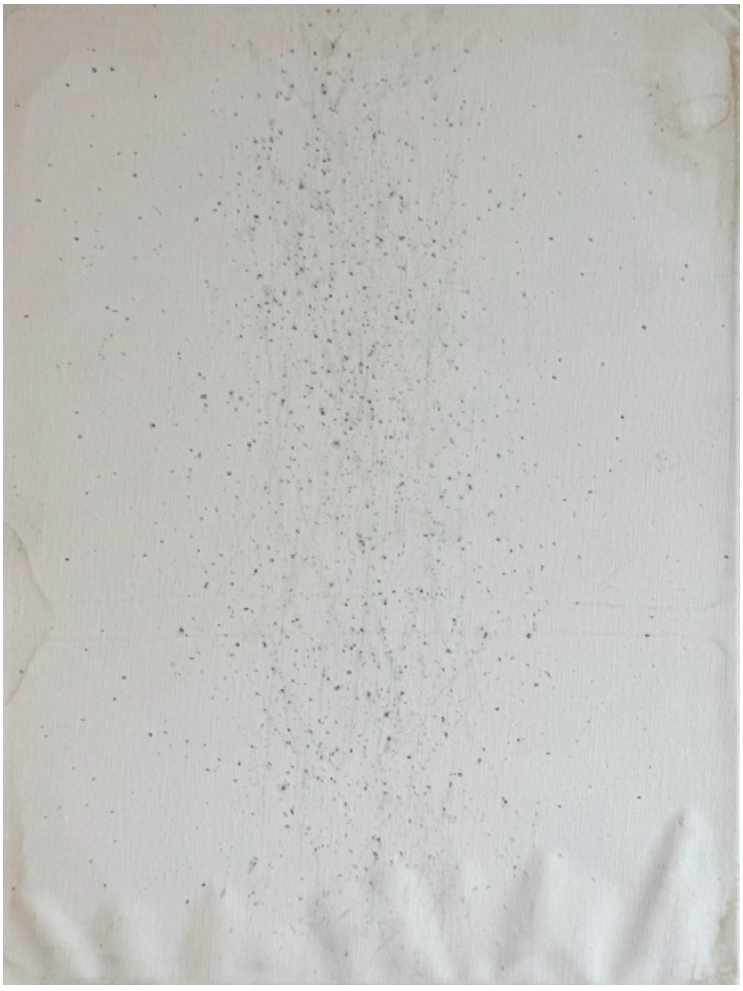

Figure A1.6 Artwork as Research: *When the River Paints*, one of the paintings. Photograph by the author, 2024.

Appendix 1.D *Sleeping with the River* (2024)

This video *Sleeping with the River* (2024) documents an act of sleeping beside the Red River, a gesture that blends humour with quiet absurdity. In the footage, the river lies alongside me, its presence framed as if sharing the same bed. The imagery evokes the blurred sensation of drifting into sleep: dark, unfocused, and wavering, as though seen through uncorrected vision. I deliberately chose a rainy day to film, so that rainwater, the river, and my body merged into a single field of vibration. The frame itself seems to pulse with water's rhythm. Because sleep is an act usually reserved for those to whom we feel the deepest closeness, this work playfully yet tenderly expresses a longing for intimacy with the Red River. Through this personal ritual, the river becomes a companion in vulnerability and rest. The piece invites viewers to inhabit a similar state of suspension, where boundaries between self and river soften, and to reflect on how intimacy might reconfigure our relations with rivers and with ourselves.

Figure A1.7 Artwork as Research: *Sleeping with the River*. Photograph by the author, 2024.

Appendix 2.A Artists and Works (alphabetical by surname)

- Arsanios, Marwa — *Who is Afraid of Ideology?* (2017-2020)
- Ballengée, Brandon — *Frameworks of Absence* (2006–ongoing)
- Chadwick, Helen — *Piss Flowers* (1991–92)
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- Smithson, Robert — *A Nonsite (Franklin, New Jersey)* (1968); *Non-site (Palisades, Edgewater, N.J.)* (1968); *Nonsite (Essen Soil and Mirrors)* (1969)
- Southam, Jem — *The Red River* (1989)
- Vickery, Veronica — *Ophelia* (2015)

Appendix 2.B Artists Categorised by Approaches

1. River and Water-specific Practices

Artists whose works directly engage rivers, water flows, and hydrological systems, aligning with the Red River case study.

- Hans Haacke — *Rhinewater Purification Plant* (1972)
- Lucy & Jorge Orta — *OrtaWater: Zille Fluvial Intervention Unit* (2008)
- Hanna Ljungh — *How to Civilize a Waterfall* (2010)
- Maya Lin — *What Is Missing?* (2014)
- Taloi Havini — *Habitat* (2016–2018)

2. Extractivism, Mining, and Industrial Riverscapes

Works that confront extractive economies, mine waste, and the scars left in riverscapes, resonating with Cornwall's mining legacy.

- Robert Smithson — *A Nonsite (Franklin, New Jersey)* (1968); *Non-site (Palisades, Edgewater, N.J.)* (1968); *Nonsite (Essen Soil and Mirrors)* (1969)
- Jem Southam — *The Red River* (1989)
- Andreas Gursky — *The Rhine II* (1999)
- Tomás Saraceno — *Aerocene Pacha* (2020)

3. Activism, Institutional Critique, and Collective Practices

Artistic interventions that expose extractive politics, corporate complicity, or mobilise art as activist practice.

- Joana Khazrik — *Two Barrels Kissing Until Their Water Meet(s)* (2014)
- John Gerrard — *Western Flag (Spindletop, Texas)* (2014)
- Not An Alternative — *The Natural History Museum* (2014–ongoing)

- Oscar Santillán — *How Rivers Think* (2018-2019)

4. Performance, Ritual, and Body-based Practices

Works that foreground the body, ritual, and performative acts, resonating with my emphasis on apology, cleansing, and embodied wetness.

Giuseppe Penone — *Maritime Alps: My height, the length of my arms, my width in a stream* (1968)

- Bruce Nauman — *Self-Portrait as a Fountain* (1966–67)
- Helen Chadwick — *Piss Flowers* (1991–92)
- Veronica Vickery — *Ophelia* (2015)

5. Moving Image and Lyrical Witnessing

Film and video practices that combine environmental witnessing with poetics, resonating with my methodology of lyrical and performative art.

- Nalini Malani — *In Search of Vanished Blood* (2016)
- Sasha Litvintseva & Daniel Mann — *Salarium* (2017)
- Marwa Arsanios — *Who is Afraid of Ideology?* (2017-2020)
- Bárbara Marcel — *Humo sobre los humedales* (2019–2021)

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