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The Imminence of Trees:

Rhizomatic narrative encounters with indigenous and invasive socioecologies, water, food and livelihoods in Cape Town

Thesis submitted for the degree of Doctor of Philosophy
International Development
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Declaration

I declare that this thesis has been composed by myself, Grace O'Donovan, and that it embodies the work of my own research. Where indicated, I have acknowledged the contribution and publications of others included in my thesis. I further acknowledge that this work has not been submitted for any other degree or professional qualification.

Grace D. O'Donovan

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Abstract

The current crises of our time call for nuanced and novel ways of thinking about their interconnections, complexities, and contradictions to afford viable paths 'through the wilderness'. In the Western Cape, experiences of inequality are intricately related to contextual political, economic, social and ecological oppressions that perpetuate South Africa's ongoing historical apartheid and (post)colonial legacies, and which are increasingly exacerbated by climate change. This (post)critical, postqualitative research is transdisciplinary in nature and method, and brings together political ecology, posthumanism, indigeneity, and decoloniality, amongst other philosophies and cosmologies to address an entanglement of socioecological development challenges, while embracing a heartful, artsbased methodology of *critical rhizomatic narrative*. The inquiry beckons to an aesthetic, affective and ontological language-of-landscape in approaching the socioecological and climate challenges of the Anthropocene, against the violences of universalist and Euromodernist thought, frameworks, and research. The inquiry seeks to reveal how interrelated complexities and contradictions of a socioecological, material, spatial, cosmological, economic and political nature play out in the 'everyday/night lives' of residents. These stories speak to experiences of crisis-and-resistance in the Anthropocene in relation to invasive species, water, food, medicinal plants, conservation, informal economies, education, and urban gardening. The inquiry engages themes of forests, trees, the ocean, and indigenous southern African storytelling to find rhizomatic pathways to the possibilities of justice, radical hope, and a viable future for all ecological life.

Lay-Abstract

The current crises of our time call for nuanced and novel ways of thinking about their connections and complexities to afford a path 'through the wilderness'. In the Western Cape, experiences of inequality are intricately related to contextual political, economic, social and ecological oppressions that perpetuate South Africa's ongoing historical legacies, and which are increasingly exacerbated by climate change. This research is transdisciplinary in nature and method, and brings together political ecology, posthumanism, indigeneity, and decoloniality to address an entanglement of socioecological development challenges, while embracing an artsbased and narrative methodology, of *critical rhizomatic narrative*. It seeks to reveal how these complexities play out in the 'everyday/night lives' of residents. Their stories speak to experiences of crisis-and-resistance in the Anthropocene in relation to invasive species, water, food, medicinal plants, informal economies, conservation, education and urban gardening. The inquiry engages themes of forests, trees, the ocean, and of indigenous southern African storytelling to find pathways to the possibilities of justice, hope, and a viable future for all ecological life.

Dedication

This thesis is lovingly dedicated to my family – my mother, Dalene, and my father, Terryl – for their unconditional love and unwavering support throughout this journey, the many winding journeys that have come before, and on the paths that I will take in the future. Thank you for the privilege to have been able to call many lands in this world home and for the adventures we have shared, but most of all, for the gift of my birthplace, South Africa, a country whose call will always be heard in my soul. You taught me how to love this world with great care, gentle curiosity and hope, and that the most beautiful things in life can be found in a story.

This thesis is also dedicated to my partner, who has supported me throughout, held the foundations strong, and providing unfailing encouragement; and to my best friend, who has stood by my side throughout this journey and many others, and who kept me company on video calls, often simply working together in silence on the other side of the world, during the many long hours spent writing. It is dedicated to my late grandparents, who have guided me, and guide me still, with every step I take.

Perhaps, above all, this thesis is dedicated to my human and more-than-human companions I have been so privileged to meet:

To Buhlebendalo, Rosheda, Fatima, Elizabeth, Caleb, and Melumzi, and the many others: we have held hands, soil, leaves, roots, and water together, and I am indebted to you for sharing your immense wisdoms. Thank you for your time and your humanity towards me.

To my more-than-human companions, in many ways, this thesis felt like writing a love letter to our ecological world that you so humbly share with me, and so I thank you for being my most constant companions as I walked across these lands, as you told me your stories and welcomed me home. Your beauty, complexity and spirit are truly inexpressible, though I will endeavour to spend the rest of my years trying. I hope that the future affords us the opportunity to walk many more paths together in this world, and that I will be able to spend my life forever becoming with the liveliness of your being. With you, I hope to always remember:

What we care for, we will grow to resemble. And what we resemble will hold us, when we are us no longer.

The Overstory
Richard Powers (2018, p.499)

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It's not easy to know how to make a life, much less avert planetary destruction.
Luckily there is still company, human and not human.

The Mushroom at the End of the World
Anna Tsing (2017, p.282)

The tree is saying things, in words before words.

…

It says: Sun and water are questions endlessly worth answering.
It says: A good answer must be reinvented many times, from scratch.

…

A chorus of living wood sings to the woman: If your mind were only a slightly greener thing, we'd drown you in meaning.

The pine she leans against says: Listen, there's something you need to hear.

The Overstory
Richard Powers (2018, p.1)



Finding the path in the Cederberg, Western Cape

Kuboshwe ukubuyela ekhaya

Before returning to my homeland, whenever I've looked for peace of mind, to find solace in the chaos of our world, I'd go to the woods. The quietude in these living lands would still my thoughts. Soothed by the protective boughs, I'd find myself paying close attention to the gentle crackling of twigs and murmurs of moss underfoot, feeling the wind whisper through leaves. These tree-beings cast shadows amidst the mottled light that dances across the forest bed, their stalwart trunks holding space for me amidst their steady guardianship.

The geographies of my life have almost always held space between mountains and sea, and often forests in between. In British Columbia, Canada, I'd walk amongst the white pines, the cedars, the maple trees, and the sub-alpine Douglas Firs with their primordial leaves, and I always found homeliness in their steadfast solemnity within sentry landscapes. Yet, in giving presence to temporality and placiality of writing, these grand forests of British Columbia were burning (when first I wrote this) in the 2023 wildfires (Farrell, 2023), and (when I returned to this writing) the dark-dense forests burned in Jasper National Park in Alberta province in late July 2024 (BBC, 2024), bringing eco-grief (Green, 2020) to the pleasure-of-place in visceral remembering. In Scotland, where I've also abided, the golden autumnal foliage of its many deciduous countrysides would leave me mournfully-appreciative of their mercurial beauty.

Born, as my mother oft-tells, under the glow outside the window of pastel pink-and-violet hues of a rising sun cresting the Helderberg near Cape Town in the 1990's, my early understanding of *home* was shaped by the interminable beauty of this land of South Africa. Amongst my earliest memories are those of sitting perched upon my father's hip under our resident Eurika lemon tree, with twittery visitations of the Cape White Eyes above whilst being fed morsels of *boerewors*, hot from the *braai*; the trilling sounds of night crickets and chirping calls of bobbing Cape Wagtails under London Plane trees of the suburbs; racing without inhibition in child-freedom-bliss amongst the indigenous vegetation and Natal Wild Banana trees of Kirstenbosch National Botanical Gardens, amused by the skittish Guinea Fowl; my mother waking me in the night to look out the window and introduce me, with wondrous excitement, to the thunderous cracks and electrifying lightning that oft-characterise this Cape of Storms, luminating the mulberry tree outside in monochromatic abstraction.

Now, 25 years since I last resided in Cape Town, I walk the familiar dusty trails of Newlands Forest that shadow the slopes of Table Mountain, their sentry invasive pines and Bluegums and black charred *Proteaceae* amidst the dancing bells of *Ericaceae*. The lofty canopies above conjure images of multitemporal spaces, their/our belonging a contested state, and I am lost in speculative imaginings[a] of leaves and bark that transverse epochs and geomythologies[b]. The heady scents of woody Southern Afrotemporate forest and musky Peninsula Granite fynbos remind me of my earnest description of my first home to others, as an 'all sensory experience'.

But this is not enough.

---

[a] In the dystopian narratives of catastrophic futures that now abound in Anthropocene, 'speculative imaginaries' provide possibilities for (re)imagining urban futures towards an "experimental approach to political ecology, new forms of theorising, and the making of a politics of possibility to open spaces for alternative futures" (Rusca et al, 2018, p.3).

[b] While ancient stories of the Earth have been dismissed as fictional, 'geomythologies' reflect a return to the ways these tales have long offered deep cosmological insight into the ecologies of our world, with lessons of resistance to be learned from disturbance and 'catastrophe' (Burbery, 2021).

How does one describe the ache that burns when one holds a Pied Kalossie (*Ixia monadelpha*) the size of your fingertips as it stands alone and defiant amidst a small patch of urban land, deftly attempting to capture a photograph one hopes will cherish its memory?

How does one describe the smell of receding smoke from a recent fire, as the air clears and the sky shines bright anew over the blue-green hues of Table Mountain, and when the tenacity of hope makes the morning fragrance alight with the scents of bitter fynbos[c]?

How does one begin to speak of the yellow Acacia flowers that bloom in seemingly-inexorable seasonal beauty from invasive thickets on the verges of the Cape Flats, their reflection awash with yellow over the shirts and trousers drying on the fence that borders Khayelitsha?

How does one begin to tell an anxious story of the spring wildflowers, the kaleidoscopic blankets of Cape Snow (*Syncarpha vestita Asteracae*) and Elandsvy (*Carpobrotus acinaciformis*) that bloom earlier and earlier each year from calcareous sand in the dwindling, highly-threatened Swartland Shale Renosterveld lowlands (SANBI, 2018)?

Perhaps I should correct myself… I should describe this home as a 'cosmological experience' instead.

The textu(r)al (Swanson, 2009) souvenirs of heartbreak and hope arise so placially, and I'm reminded of the word '*suadade*': the Portuguese expression for painful, melancholic yearning for a beloved which has been absent, a profound nostalgia for something you've loved, now gone, and the incompleteness and grief that comes with longing to be reunited.

Suadade describes the feeling that children in their thousands felt as 13th century Portuguese sailors left their families at home to voyage to the Cape, those left behind wondering if they would ever return to their homeland (Wieczorek, 2023). There is bitter irony and paradox in this lyricism, a word for those who would soon colonise areas[d] around this land, and with the coming of foreign tides, those here who would soon experience their own grief for what would soon be gone.

In the pressing exigencies of climate change, perhaps it is *suadade* that blows through the trees of our souls, tendrils reaching to grasp and hold close that which is being lost. Nevertheless, it is what I have felt each time after leaving South Africa, and throughout each stretch of time in-between living in Canada and latterly Scotland.

Now, being present as I engage in this doctoral inquiry, I realise I've been pulled through the temporal/spatial/material roots/routes of this research and my homeland, at last to walk amongst my southern African sylvan sisters and brothers – we are together of this soil… I have been (in *isiXhosa*) *kuboshwe ukubuyela ekhaya*…

I was always bound to come home.

---

[c] The 'fynbos biome' comprises the majority of the Cape Floral Kingdom, one of six global floral kingdoms and the only one to be contained within a single country. One of the most biodiverse biomes in the world (68% of plant species worldwide can be found within this area) with some of the highest levels of endemicity, more than a third of all South Africa's plants thrive in the Cape Floristic Region, an area that accounts for only 6% of the country's land (Low and Rebello, 1996).

[d] These were the 'voyages of discovery' led by the Portuguese, along with their colonisation of Angola and Mozambique, dividing linguistic and indigenous groups from each other (O'Collins and Burns, 2013).

An invitation to the reader: (un)mapping the forest

Reading this research/writing as one would a landscape, or as one would journey through a forest, reveals how our topographies are deeply-complex, web-like spaces (Simard, 2021), with borders and entangled root systems tra(ns)versing in enmeshment.

To afford a path through the wilderness of this (post)critical, postqualitative, artsbased inquiry,
an invitation as to *how* the landscape might be read is provided here
to guide the way…

This inquiry is based on the understanding that 'crises', even as they are constitutive of development itself (Nederveen Pieterse, 2010), are experienced in deeply-visceral, unequal ways by those whose ways-of-being-and-knowing historically have been silenced by Western/Northern narratives, and whose lack of meaningful representation enact violences of evisceration of their lived experiences. But, it is not only crises that are invisibilised, for 'hidden' resistances in everyday lives are continuously reshaping/subverting/working/mobilising/exchanging/complexifying the fluid multiplicities of life in the Anthropocene. These contingencies shape-and-are-shaped by the lives of the more-than-human too. I do not claim that Scientific data that 'evidence' climate change and socioeconomic inequalities are of less import, rather that many productions of knowledge upon which we rely to mitigate human-induced disturbance are oft-still situated within Euromodernist modalities, tending to reinforce deep inequities through siloed, universalist discourses, and even 'epistemologies of ignorance' (Alcoff, 2007; Firestein, 2012). By centring the same Western-humanist ontologies (Hartman and Degeorges, 2019) responsible for our past-present-future crises, embodiments of other ways-of-knowing/feeling/thinking about socioecologically-situated fragilities/possibilities are being further invisiblised.

If crises are embodied 'experiential happenings/gatherings' (Tsing, 2015), and not just isolated objects of 'knowing', which 'disembodies' them through a subject/object divide (Ghosh, 2016), then thinking about our crises as ontologically/semiotically/textu(r)ally *felt* (Gonzalez-Hidalgo and Zografos, 2019), rather than calculated/measured/modelled (Mbembe, 2000), might change our responses to them. This change may offer a pragmatic pathway to 'critical hope' (Bozalek et al, 2013) or 'radical hope' (Lear, 2006), away from psycho-catastrophism.

Embodied thinking, through ethico-onto-epistemological perspectives (Barad, 2007), embrace the turn to affect (Clough, 2007). In my own research here, I seek to contribute to socially-just praxes through 'emotional geographies' that explore,

> the complex interrelations of discursive practices, the human body, social and cultural forces, and individually-experienced but historically situated emotions and affects. (Bozalek and Zembylas, 2016, p.194)

For many humans and more-than-humans, precarities trigger resistances, oft-unseen in Western, humanist, 'truth-seeking' scholarship, yet in affectively (bio)diverse lives of 'ordinary' people, and in world-making (Savransky, 2022) activities of the more-than-human, we may recognise tendrils-of-possibility away from impending socioecological decay.

To begin envisioning hopeful possibilities for alternative futures,
we can no longer only privilege
the *effect* of crises, without their *affect* too.

Yet, this inquiry also draws on work recognised as the 'ethical turn' (Goodman and Seversen, 2016), 'literary turn' (Hammersley, 2024), and 'decolonial turn' (Thambinathan and Kinsella, 2021), amongst other scholarship in which content/commitments/modalities of research work together interrelatedly towards justice. To these 'e/affects', this posthumanist/decolonial inquiry, engaging artsbased/narrative/geopoetic practice in political ecology, envisions this writing as one would a forest. It is guided by the following affordances:

- This research encounters **three** main stories, a choice I explain in ***Finding the Path***, but whose storied journeys are partly-reflective of African circular ontologies (Ramose, 2002), which counter linear-progressivist logic. The situated geospatial setting of each story moves circularly across the topographies of Cape Town, and their movements gesture towards the circular-cosmologies of indigenous rhythms and journeys.

  The first story, ***Something about Water***, begins in Newlands Forest on the Eastern slopes of Table Mountain, where my own journey began upon my return to South Africa, and includes journeys to Philippi (Cape Flats).

  The second story, ***A Lesson from Spekboom***, is situated in Mitchell's Plain (Cape Flats), which lies on Cape Town's urban periphery, facing the East of Table Mountain at the heart of the city.

  The third story, and my first fieldwork undertaking, ***The Tides That Bind***, is in Hout Bay on the Atlantic Seaboard. The circular geographic pattern thus returns the inquiry to the slopes of the mountain's south-west/back-table.

- In keeping with 'the socioecological', I draw on an artsbased methodology of *critical rhizomatic narrative* (Swanson, 2004; 2008), the would-be '**endnotes**' serving entirely as '**Rhizomatic Conversations**' with the storied-matter. This methodology is described under ***Ways of Telling***. I make use of the *Microsoft Endnote* formatting function here to enact the Rhizomatic Conversations. In assessing different methodological approaches, I felt that a conventional social science research approach would not serve the subject matter of the inquiry well, the complexity I attempt to grasp, the indigeneity so closely enfolded herein, the need for reflexivity and dialogism, and the ethical attention to the human and more-than-human participants. I felt there was a greater likelihood of objectifications/essentialisms/deficits/universalisms/reality-fixing discourses emerging than in a (post)critical, postqualitative, artsbased approach. Rhizomatic thinking and narrativity, beyond conventionalism, draws on conceptions of *the rhizome*, which "ceaselessly establishes connections between semiotic chains, organisations of power, and circumstances relative to the arts, sciences and social struggles" (Deleuze and Guattari, 1980, p.7). It serves as intentional transgression of rules of form, decolonising and disrupting canalising structures. Because of the complexly-entangled subject matter, a rhizomatic narrative approach 'performs' that rhizomatic-complexity in novel, 'feeling' and aesthetic ways. Here, the subject focus *and* modality are dialogic and mutually-responsive. The 'rhizomes' in the narratives represent the unfettered multiplicity of possible rhizomatic conversations that burgeon forth from the nested matters I attempt to disentangle. Nevertheless, writing is always

provisional and finitely-performed, and the 'rhizomatic conversations' reflect the practical recognition that there are only so many rhizomatic paths that can be chosen to follow. Another reason for this constraint is that we reside *inside* the complexity we wish to understand holistically, and so the rhizomatic writing reflects my (impossible) efforts to seek threads-of-possibility inside the impossibility of that imperative. Each Rhizomatic Conversation forms the *articulation-point* at which the rhizome threads-out from the story, while potentially intersecting with other rhizomatic conversations *across* the stories, as if in a concentrated thematic node/nexus.

- In disrupting 'the form', I make use of creative visual devices, such as using:
  different *fonts*,
  (counter-conventionally) *right-adjusting* poignant or poetic sentences/paragraphs, *italicising* certain extracts,
  using *three dots* (…) for pause and emphasis to enhance the lyricism of the language, while *playing with writing form* on the page for visual effect,
  using *hyphens/dashes/slashes* to signal the gathering/blurriness/bleeding of meanings, and visibilising and corrupting dichotomies/contradictions.

  The reader is *invited* into this creative dimension, and the *intention* is to evoke/provoke an aesthetic response.

- '*Moments of articulation*' is a creative, critical device of *critical rhizomatic narrative* that I've found useful in engaging more-deeply with those entangled/dilemmatic/fraught encounters that reveal oft-embodied/relational/ethical contradictions. To disentangle threads of development from the structures in which they are enmeshed is a momentous, seemingly-impossible task, but their *sticking-points* are often reflected in embodied encounters, where the particular/general, situated/universal, personal/structural *touch* in tension with each other.

- Interwoven with *critical rhizomatic narrative* are 'mycelial interludes', inspired by Tsing (2015). They reflect my fascination with entanglements in making planetary infrastructures through mycomythologies[a], speculative imaginaries/materialisms, and mycelial mappings. They reflect these affective 'infrastructures' through visual/photographic engagement with each story. In this narrative research/writing, arboreal/water discourses, rhizomatic conversations and mycelial interludes collide to enact a posthuman, 'forest-making/world-making' (Savransky, 2022) understanding towards resisting the world-ending invasions that haunt Western Cape landscapes. Together, they perform *counter-narratives* to universalising-narratives, embracing cosmological alternatives by engaging 'the indigenous', 'the socioecological', and 'the situated-political', while animating (post)critical artsbased, postqualitative and decolonial methodological approaches to research.

- This text does not take on a 'solutionist' approach (Turok et al, 2021; Morozov, 2013). Instead, it grapples with complexity/incommensurability/ambiguity around assemblages of intersecting, 'knotted' 'development' challenges, holding ambiguities and irreconcilable conundrums in play.

[a] Mycomythologies relate to fungal intelligence, fungi-worlding and mycorrhizae entangled theories and narratives (Gruss, 2024)

- My own experiences of early childhood in South Africa and having left-and-returned, and the inescapable deep love for the country of my birth are aspects of my identity-and-writing I cannot circumvent. Instead, I have readily embraced this calling and shared these pieces of my identity (Denzin, 1989) and soul in this inquiry with all my being and heart. I am part of the *vibrant matter* (Bennett, 2010) caught up in this inquiry as children -of-its-soils. These tales cannot be told in detached/objective/emotionally-neutral ways without *affect*, which otherwise (as oft-counter-argued), would undermine the research's robustness and authenticity. In resistance to a disembodied social science writing style, I embrace (post)critical '*sentimentality*' to affectively engage the many complexities revealed in this journey. I attempt this purposively to repel oppressive research and writing systems, which I see as allied with the impositional systems that have been 'invasive' to this land. Thus, I use the pronoun 'I', which allows me to bring my own relational narratives/dialogic responses/reflexive positioning into the inquiry with the purpose of lending the inquiry-writing greater credibility. As I also include poetic responses to the narratives by way of 'poetic inquiry' (Faulkner, 2019), this approach also invites the use of the first person. This modality accords with my partial imbrication of biographical interpretive inquiry (Denzin, 1989), in offering ethicality, relationality, aesthetics, and authenticity to the research. I also bring awareness of the critiques of positionality (Gani and Khan, 2024), as there is no desire here to enter the fray on 'standpoint epistemologies' (Lather, 1988). There is no assertion to greater truth or moral superiority through the reflexivity and biographical element. Instead, it seeks to be *invitational*, offering greater authenticity and heartfulness, and it enacts/performs the 'dialogical' *relationality* with *the reader*, a relationality that this thesis seeks to achieve through the three **m's**: mode, method, and 'morality' (ethics) of the thesis, but to do so with *Ubuntu* (Lefa, 2015) and humility.

- Before I open the curtain to companioning-with-the-forest, I introduce Pelias's (2004) research principles constituted as '*methodologies of the heart*'. I situate my own work within these aspirations and potential contributions, exemplifying how such alternative vision and methodological novelty has *legitimacy, purpose, and legacy*. To this 'affect', in scoping the field, Pelias (2004, p.12) categorises research undertaken with different *emphases* of 'methodology of the heart' as:

  Evocative: wherein language does "its hardest work, finding its most telling voices", so that writers and readers "take notice not just of its points, but also of its aesthetic presentation"… "it relies on the figurative and rests on form. It avoids the cliché, the familiar. It depends upon the creative and finds its force in the imaginative".

  Multifaceted: which "turns and twists, stands to all sides, considers it, looks under and over, searches from top to bottom, ponders, it walks around, looks into, and tunnels through before it acknowledges that it can never see it all. It never stops trying, even though it may elect to speak from one stance at any given moment, even though it knows that to speak is always to be located in history, to always be positioned and partisan".

  Reflexive: where "it comes back around, points to itself in order to say this is where it stands, at least at this moment, with these qualifiers and with these questions. It hopes to make the declarative duck, to shake the seemingly unshakeable, and to feel the answer squirm. It lives for maybe".

Empathetic: which "connects person to person in the belief in a shared and complex world. It welcomes identification, the witnessing of commonality, as well as separation, the claim of difference. Both require a taking in, knowing and a feeling".

Useful: in the hopes that it "reaches towards an audience. It cares. It wants to make a difference when speaking to members of the scholarly community and to those under study. It enters the ongoing discussion only after it has done its work. It knows what has been said. It works on behalf of social justice. It is a cultural labourer".

This research fits with each of these aforementioned intentions, with their noted emphases, and thus can be deemed a '*methodology of the heart*'. The '*usefulness*' of this thesis, however, is one category to which I aspire but am acutely aware that such usefulness can only be held in the thesis as a *potentiality*, and that what one *does* with the thesis and understandings gained post-completion, and what one seeks to become, is what (vibrantly) matters. *A thesis cannot be claimed to be liberatory.* It might only be able to *point us to that aspiring path*.



Genus Ficus in the Cederberg, Western Cape

(Un)structuring the Landscape

This section explains the ***'structure'*** of this artsbased doctoral thesis on 'international development' challenges of a political ecology nature in the research context of the Western Cape of South Africa, as much as it is – *simultaneously* – committed to ***'unstructuring'*** a conventional social science thesis in 'development studies'.

As an *alternative methodological approach*, with renewed philosophical *starting-points*, it is an otherwise way-of-being *with* research. As mentioned in ***An Invitation to the Reader***, it offers a way to *walk-through-the-woods* of this research with a new language, an authentic openness, a heartfulness, and a relational aesthetic disposition and spirituality of/for doing research.

All the substantive elements of a conventional social science doctoral thesis are *present* and *recognisable* throughout, but perform as fully-imbricated and intertwined, as shadows and ghosts, and as pathways of light and possibility, while I also continually provide *signposting* so as not to lose the way. The creative, decolonial, postcritical, postqualitative ways of theorising/writing as method(ology)/rhizomatic-narratives are already *well established* in the wider academic field, but are absent from international development studies, which needs decolonising - *politically, theoretically* and *methodologically* (St Pierre, 2019). This makes this mindbodily-doctoral-thesis *evocative* while also intentionally being *provocative*. This is because, as I will offer in many resting-places along the paths of this landscaped research journey, international studies research needs decolonising its content and mode-of-engagement; in what it tries to say by authentic listening; in its relationalities and its *own* ways-of-being; in what it constitutes as research(able) and worthy of researching this way.

One of the most important contributions this thesis makes in a variety of intersectional ways, is its novel methodology; its aesthetics and decolonial ethicality; its (more-than-)humanising authenticity; the depth-and-extent of its *transdisciplinarity*, and *mindbodiness*; its affect and care. Importantly, this approach honours *indigenous ways-of-knowing-and-being* in the world with a thesis attuned to these voices, ecologies, heartfulness and spiritedness. Therefore, in lieu of having a conventional 'structure' (for example, *introduction, literature review, methodology, analysis, conclusion*), all these elements are mapped-unmapped-remapped onto the thesis in the sections throughout each of the following **three** 'phases', which represent a 'walk-into/through/coming-to-a-pause' in the forest. This approach is in keeping with a South African indigenous ethico-onto-epistemological/socioecological journeying – one which is not de/reterritorialised through cartographic 'borders'.

PHASE ONE: Into the *ihlathi lesiXhosa*

This first phase invites the reader to '***enter'*** the forest.

Climbing the tree corresponds loosely with a conventional 'introduction'. It explicates the need for creative, decolonial, postcritical and postqualitative approaches that are oft-absent from international development and political ecology/economy studies, and thus introduces the reader to the *ihlathi lesiXhosa* (the 'Xhosa forest'). The *ihlathi lesiXhosa* ideates a unique, holistic cosmology, qualitatively-different from externalised Western conceptions of forests, offering an alter-humanist/posthuman/indigenous way-of-being/thinking about crises-and-resistance in the Anthropocene, in South Africa, and in light of climate change.

Finding the path gestures towards a 'literature review', foregrounding the path-to-come through an explanation of the approach taken in each section and phase. It outlines what can be expected throughout the forested-journey, and the theoretical and ontological offerings I carry with me and weave throughout this *transdisciplinary* inquiry.

Ways of Telling explains my embrace of '*critical rhizomatic narrative*' as methodological approach and offers the *semiotics* that should be used in 'reading-the-landscape' of this inquiry. It also offers my *ethically-committed*, *(post)critical*, and *reflexive* ways-of-doing research, as well as my *contribution to the field*. The 'fieldwork' is also described here, under the sub-section: *Walking with*.

Viscous Histories goes some way towards offering an account of South Africa's histories pertinent to the reading of this thesis. While multiple historical approaches collide and disperse in this thesis, the current that flows through this historicisation is based on the *politics of water*, in keeping with the socioecological context.

Spectral Pasts offers a significant theoretical contribution to this research in the form of (eco)hauntologies, which invites the reader to 'converse with the ghosts' of South Africa's enduring post(-)apartheid legacies in its metaphorical/sociomaterial 'hyphen' and through the haunting spectres of the country's *invasive socioecologies*.

PHASE TWO: Three Stories

Having entered the forest, we find ourselves in the '***heart-of-the-woods'***.

Something About Water, ***A Lesson from Spekboom***, and ***The Tides that Bind*** form the **three stories**, and constitute the 'empirical' and 'analytical' elements or 'sections' of this inquiry. Through animation of '*rhizomatic conversations*' (in place of *endnotes*) that arise through '*moments of articulation'*, conversing with *Footnotes* as additional explanatory roots/routes in the conversations, these stories weave through narratives of invasive socioecologies, the politics of water-and-food, conservation, medicinal plants, urban gardening, and illicit economies, drawing on theoretical contributions of posthumanism, decoloniality, and indigenous knowledges/cosmologies.

PHASE THREE: Turning towards the light

This phase comes to a resting-place in the middle of the woods, stopping for reflection, looking around-and-behind, rather than ahead, and opens the circular journey again at its close.

A beginning without end loosely aligns with a 'conclusion'. It gestures towards the resistance and 'radical hope' (Lear, 2006) that can be found by learning from the 'tropism' of plants; and offers a way of *gathering* the complexities that tra(ns)verse the *rhizomatic conversations* of each story, illustrating their interconnectedness. It also offers a '*quiet concluding*' that seeks to work against the '*catastrophism'* present in our everyday crises, if we pay attention to the voices-of-landscape.

– Into the *ihlathi lesiXhosa* –



Climbing the tree

How *does* one begin to tell a story, to describe a world in which every character, human, non-human and more-than-human, is *protagonist*, and in which humans are only one kind of participant?

This is the question that Tsing (2015) poses in her seminal contribution to political ecology by tracing matsutake mushroom supply chains in Japan, and which gives rise to such an urgent challenge that I can seek to grapple with it only in small part in my own writing. The entangled complexities and nuances I grasp at offer an enmeshed web-of-a-web of subject matter.

How *does* one begin to conceive of the ungraspable complexities of our world, to hold them as filaments, even for a moment, before they shift or break and are (re)made again as fractals, like the multiply self-similar rippling tides on the rocky shoreline… before the southeasterly wind blows through the Cape, and viscous canopies shift into new shimmering rhythms?

How *does* one pause with the stillness of the veld[a], as the setting sun casts its prognosticating shadows over the dust that swirls amidst the thickets and Aloes; to tell a story as porous and precarious as the few remaining *Conophytums* that cling to their northern soils before they are stolen, poached in the night?

How *does* one stop to *articulate a moment*, before the waters dry once more, and the earth lets out its mournful sigh?

And, how *does* one tell a tale that is haunted by the ones who have come before, and the ones that will come hereafter… like the opening-and-closing of a Resurrection Plant as it breathes new life in arid soils with the coming of rain after a long drought?

The landscapes of South Africa remind us that stories have always been birthed from the soils in which they are rooted and rhizomed, and that the land itself has always spoken with the language-of-story. There is much to learn from the tales it has to tell. Perhaps, it is the language-of-land itself that enacts a form of resistance through a perpetual evasion of humanist translation. Perhaps, Tsing's challenge is a question we will forever pursue. Of South African landscape-language, Hutchings (1997, p.52) writes,

> it is very difficult to transplant a language, if only because the consciousness of its original soil is ineradicably present in the language.

Bakhtin (1990) similarly reminds us that words carry the haunting vestiges of the many places they have lived in, been borrowed from, been appropriated from, been used within… that we cannot divest the words of those filamental fabrics of place… Words carry soils.

But, in searching for my beginning in storying this inquiry, in this land I call home, looking to articulate many moments that have yet evaded many *kinds* of articulation, I am reminded of the *isiXhosa* proverb…

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[a] The veld or veldt are the wide, open plains and plateaus of South Africa's rural landscapes.

Ndingema nasemthini nokuba kusesibondeni[b].

I would climb a tree even if it has no branches.

…

To walk consc(ient)iously through a forest, even a damaged one, is to tell a story of the Earth, to perform a cosmology, and to story its human and more-than-human inhabitants (Tsing, 2015)…

One day, a Breede River Yellowwood (*Podocarpus elongatus*) was struck by a gale force wind and carved in two. Rooted in Kirstenbosch National Botanic Gardens, Cape Town, it was known as the 'Magic Tree', with a crown that draped down to the soils below, forming a shady sanctuary for children (Boehi and M'Afrika Xaba, 2021). I was one to climb its smooth and weathered boughs. Now, the tree lay bent on the ground, its canopy broken, with its roots exposed to the air. It was not endemic to Cape Town. It preferred the sandy soils and riparian banks that traverse the Western Cape, into the Bokkeveld Mountains, but it remained on this land, being nearly as old as the Gardens themselves.

The Magic Tree saw the evolution of this land, a garden built in 1913 (Boehi and M'Afrika Xaba, 2021), shaped by centuries of indigenous life, the European settler occupation of the Cape in the 1600s and 1700s, and the monocultural plantation farming and colonial mindset that arrived with it.

The Tree witnessed the construction of botanical gardens built by descendants of enslaved 'labour', the politics of 'botanical diplomacy' presented by the apartheid state to engender 'political neutrality' in local, 'national' spaces (Boehi and M'Afrika Xaba, 2021) and the *ex situ* conservation of botanical species that would initially exclude indigenous peoples and their knowledges from the stories-of-the-land, but which with new decolonial consciousness today is purposefully being included (albeit unevenly) in many provincial gardens, national parks, and museums. The Tree has seen the many attempts at rewriting the land.

The Tree saw the Wild Almond Hedge grow, planted on the garden edge to prevent the *Khoi* peoples from taking livestock from land secured for white settlers (Boehi and M'Afrika Xaba, 2021).

The Tree saw the dirt fall from the hands of the residents of Protea Village, the indigenous peoples who built the gardens and were removed to the city peripheries during apartheid resettlement.

The Tree saw the indigenous expeditioners, never to be named and recognised, who collected local plants whose discovery was credited to white botanists.

The Tree saw the exclusion of 'value', and the indigenous plants used for medicinal purposes by indigenous peoples go forgotten and 'uncategorised'[c] until later reintroduced under the

[b] African proverb – from the *isiXhosa* (Dold, 2006)

[c] I acknowledge, however, that the act of categorisation was also part of the colonial project. One of the colonial strategies of containment was the widespread auditing and censes operations as a means to 'manage' and control people, under the veil of progress and development (Metz, 1990). 'Categorising' was also subject to whose

banner of 'Useful Plants' (Boehi and M'Afrika Xaba, 2021), yet these people were still separated from the rest of the land of which they always had been part.

And, the Magic Tree saw the creeping growth of Pines along the garden edge, the plantation invasions during colonisation that leave their indigenous neighbours to thirst and burn.

Those who visited the Magic Tree would play and stroke the smooth, grey-brown bark, sheltered beneath the silvery-green of its glaucous foliage. Now, it lay uprooted and exposed, with no more shelter left to provide. Its visitors thought not of what the Magic Tree had seen, and they spoke not of the land from which its roots had been torn. They saw only the scars of its great disturbance, this wind that bifurcated its homely boughs, and they mourned the memories of childhood joy that were formed when it was whole. And I mourned too, for the childly worlds I once imagined in its earthly arms.

But, the Tree had a secret it was beginning to tell…

… that wind was *needed* to disperse its pollen, just like the fynbos that needs fire to break-open dormant shells.

… that the Breede River Yellowwood is the only species of its name to resprout epicormic[d] buds from its trunk when its canopy is broken (Moll, 2006).

… that its homeliness in the disturbance of unstable riparian banks has made seeds that lie dormant when the tree is whole burgeon new life once its canopy is broken and its trunk is exposed to the sun.

The people cried and lamented a tree in crisis. They wept for its loss in gardens of such majesty. But the Tree spoke with a voice that carried crises and disturbance of many kinds in its soils, its roots trellised towards the sun above in courage and radical hope (Lear, 2006), a form of hope for a future 'goodness', one beyond our ability to know and understand what that is or might be… and it spoke, not of death and disturbance and destruction, but of life.

…

One day, nearby Kirstenbosch National Botanic Gardens, on lands that would later become Newlands Forest, the Wynberg Conebush (*Leucadendron Grandiflorum*) whispered its last breath and became extinct. Topographies of human settlement in the shape of homogenous vineyards in the earliest colonial farms eventually saw this gentle flower of the *Proteacae* family, known as the Mountain Rose, fade into-and-then-out-of memory (Goldblatt and Manning, 2000).

Vineyards bleed into Pine plantations across the land, monocultures upon monocultures… Southern Afromontane woods grow fewer and fewer. Mycelia reel at the invasions of new

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universalising sense-making was dominant in the making of such 'common-sense' categories. In *isiXhosa*, there are often a variety of names for the same bird, but other species that show biological/genus differences are put under the same term. The rationalisation for the Xhosa was not the same as for the 'Western white scientists', because the way they used those terms reflected their culture, not for the purpose of scientific regulation and documentation. They were for very different purposes - one for scientific 'advancement' and 'conservation', the other for a way of life and for cultural stories.

[d] The growth of a shoot or bud from the trunk or limb of plants (Connor, 2006)

trellises in their understory. Indigenous neighbours scratch at the bark of parched throats. Elsewhere across the city, taps gush a little less.

One day, a fire erupts, and the forest edge begins to burn. The indigenous trees cry out for shelter, but the Pines are silent. Tourists and beach-goers lazily watch as emergency helicopters dip their buckets into the Atlantic before flying across the skyline to disgorge ocean water over their canopies to attempt to suppress the blaze. And, in the morning, when the mist rises above the many edges of Table Mountain, and the sun's glow begins to paint the dawn with pink-satined skies, the forest sighs…

The smoke from the ashes of those who lie in earthly graves whisper and dissipate across the cement of city skyline.

… One day, the scarred remains of indigenous trees saw new shoots once more. Small Pine saplings emerged triumphantly. They greeted their ancestors and rose anew. They grew and grew, providing shade and shelter for the people who came from the city to walk amidst their gro/aves. And, the people rejoiced for these patches-of-green that made them feel peace.

The people thought not of the Wynberg Conebush that had once endured. They thought not of the bodies that had been resettled and exploited in the plantation of these Pines. They thought not of those who thirst across the city. And, they thought not of the roots and stems that had been lost in the fires. They saw only new Pine needles on the floor, new green, only shelter, only shade, and they felt grateful. They walked the paths once more. They had not noticed the mournful ghosts of the indigenous tree that once grew *there* and *there,* and still *there*… And, in woods so ancient and so few now, they did not think of why the forest was called 'new lands'[e].

…

Semiotics of life run as currents, thread into trellises, and weave between roots of disturbance and hope that often go unseen and unheard by those who have lost the language-of-landscape. Many cannot listen to the voices, read the landscape, or hear the stories that the trees, or the soil, tell of the past before they became the present, nor do they hear the way they whisper of future tales. Western cartographies have reappropriated (Leonard et al, 2023) languages that reveal cosmologies-and-cosmogonies of the world that extend beyond the inattentive eye (Spirn, 1998). Maps/policies/frameworks don't speak of those who were resettled as they built botanic gardens, or planted indigenous trees, nor of those who shared roots with the Wynberg Conebush through histories of human disturbance. The tree has become objectified, and cities are built on language-silencing narratives of modernist progressivism and presentism.

…

[e] The area of Newlands Forest was once a migration path for the *Khoi* peoples, until the arrival of the Dutch and Jan van Riebeeck in the late 1600's saw these indigenous, ancient woods cleared to build infrastructure for the Cape Colony (Pooley, 2009). Indigenous trees teetered on extinction, and Pines and Eucalyptus were imported for logging, the last of which still remain today. These lands are elders of the present day and carry primordial histories, yet these tales and ontologies are often erased by enduring colonial-era names and normativities, which, by continuing their invasions through common parlance, go uncritiqued and unconsidered. These lands are anything but 'new' (Pooley, 2009).

The Magic Tree was a playground of my childhood, and its boughs a vessel for imagination and wonder. Indeed, Kirstenbosch National Botanic Gardens have had especial significance in my life… my first outing into the outside world after I was born, a place of many birthdays in my early childhood, and many days in adulthood spent looking down at the city below the blue/green hues of vegetation as the Gardens slope against Table Mountain. Back then, I knew not of what the Tree had seen, nor of the language it spoke…

But, by the time I returned in my adulthood and paid homage to the shoots emerging from its bifurcated body, suspended between world-ending and world-building[f], I had begun to listen to the voices-of-my-roots, even as without my *own rootedness*. Listening to the stories of other landscapes in which I also had found homeliness had attuned me to the multiplicities of voices, stories, and landscapes that had many things to say…

Moving again, changing course, upending,
desperately seeking purchase…
my roots exposed to the air each time my feet
found 'new lands',
I would turn to the language-of-landscape to
find home.

Today, as I think of these experiences, I am reminded of Heidegger who called language the 'house of being', a place in which building a home, dwelling within its landscapes, and being itself become who 'I am' (Spirn, 1998). As Spirn (1998, p.11) writes:

> humans are storytelling animals, thinking in metaphors steeped in landscape: putting down roots means commitment, uprooting a traumatic event. Like a living tree rooted in place, language is rooted in landscape.

In the Anthropocene[g] (Crutzen, 2002), the inability to listen to, or read the landscape, has become a critical threat. The stories landscapes tell have sociomaterial/embodied consequences,

> for the pragmatic and the imaginative aspects of landscape language have always coexisted. Relearning the language that holds life in place is an urgent task. (Spirn, 1998, p.11)

Trees are more than for industrial utility, or bodies tasked with mitigating climate change, as they are also more than arboreal imaginaries. They are agents in a 'metaphysics of mixture' (Coccia, 2019) that speak with tree-texts, and tell stories of our worlds.

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[f] The concepts of world-building/ending are threaded throughout this inquiry, but they are employed here in reference to the socioecological 'earth-worlding' that arises through multiple co-constituting worlds. It speaks to forms of crisis (world-ending) and resistance (world-building) in the exigencies of the Anthropocene. Gill (2021, p.2) summarises: "the earth-world signifies here the co-productive relationship between Indigenous and Black worlding, in the form of socioecological practice and knowledge, and non-human earth-system properties such as soil fertility and mineral deposits". My references here are thus not intended to reproduce a world-building 'coloniality of being' (Wynter, 2003) wherein Euro-Western survival is constructed through 'earth-worlds' forged by racial capitalism, sovereignty and exploitation, rather that these very oppressions speak to forms of 'world-ending'.

[g] As Crutzen (2002) defines it, the Anthropocene is our geological epoch defined by unerring human-induced disturbance and the multiplicities of complex crises.

Landscape has existed long before language itself, and the mountains, sun, sea, moon, deserts and forests all had stories that would guide paths before paths. Learning to speak it, read it, and imagine it became a story of life itself. As Spirn (1998, p.15) reminds us:

> Landscape has all the features of language. It contains the equivalent of words and parts of speech – patterns of shape, structure, material, formation and function. Some languages, like landscape, can only be spoken by those who found the words and remember their meaning; others, are universal.

Trees tell of history, water, food and life (Kohn, 2013). They signal warning and they mulch/munch the ingredients needed in which to thrive. They offer shade, wellbeing and peace, and provide dwellings for humans and non-humans[h], but this is not their singular 'purpose'. Their ghosts tell stories of history. Circular rings map narratives of wars, droughts and floods upon the land, and times of survival. They speak with each other through vernacular landscapes and ancient vowels that shape-and-are-shaped by landscape morphologies and evolutionary disturbance… Humans do this too: collecting water, making gardens, growing food, using their hands to weave new stories-of-place, putting down new roots, shaping-landscapes and shaping-language and the ability to speak it in turn. Landscapes-form-landscapes, in layered and temporal ways, and space-forms-place. Spirn (1998, p.18) tells us:

> The context of life is a woven fabric of dialogues, enduring and ephemeral… all living things share the same space, all make landscape, and all landscapes, wild or domesticated, have coauthors, all are phenomena of nature and culture.

Prevailing Western/Northern narratives of the Anthropocene tell of relentless, savage, drought-inducing violences upon the E/earth. Universalist histories of industrialisation and urbanisation have depoliticised and dehistoricised planetary narratives (Nederveen Pieterse, 2013). Together, as a strategic act, under the banner of 'development' formulated by a logic of 'progress', these narratives dispense with the past as if it were refuse (Harvey, 2009), and speak with an immediacy that silences the language-of-landscape. Soils dry, cities flood, and the voices-of-landscape become distant imperceptible echoes. Language is washed away, blown away in the dust, and dissipated in the smog. Language is turned off in taps, burned away, and broken down into transplanted bodies. Language is bottled, canned, rerouted and diverted to shores where they find no purchase, leaving behind roots exposed to the air. Through Western humanist narratives that centralise the *Anthropos*[i] (Zalasiewicz et al, 2008), global frameworks speak through bordered, technocratic, administrative rationalisms (Dryzec, 2013) that hold steadfast to an anthropocentric dominion of humans over nature, a desperation to conquer, extract and dominate…

Landscapes become harmscapes (Holley et al, 2020).

Human-centric rhetoric paves over stories-of-landscape, eradicating their filaments in flattening homogenisation of complexities that undergird and overarch our world. We can no

[h] The term 'non-human' refers to lifeforms that are 'not humans'. While I incorporate this terminology in various places throughout, recognising its widespread usage in the social sciences and humanities, I seek to do so in places that trouble its (negative) inherent dichotomy. This thesis commits strongly to the posthuman ethos and reflexive understanding undergirding a move towards usage of the 'more-than-human' instead, acknowledging that "there are always *more than* (just) human actors and agencies involved in the production of landscapes and communities" (Price and Chao, 2023, p.180).

[i] Anthropos means 'human' in ancient Greek.

longer see the ghosts that make the present and future, only (economic) growth, progress and modernity (Mignolo, 2011). Complexity has been forced underground, to weave its threads unseen like mycelia in the understory. We have lost the language to hear/see/speak with tree-texts (Nitzke and Braunbeck, 2022). Now, each crisis appears fragmented, making visible only individual stems above ground, never interconnected, never seeing the rhizome's bulb as the earthly narrator of multiple stories that speak with interconnected languages.

Paying attention and listening is a process of sense-making/meaning-making (Chester et al, 2023) by all human/more-than-human organisms that together weave stories of complex threads of human-induced and natural disturbance. Yet, for generations and with growing fervour, these landscapes have been telling stories of a world in catalytic crisis, but the language to listen to their stories of warning-and-hope, to the differences between natural and unnatural disturbance, to Heidegger's 'houses of being' (Krell, 1993), has been silenced by the deafening invasions that have sought to extract voice from their soils/souls. The silence-gaps remind us that these narratives have inculcated the *same* humanism responsible for the material realities of crisis as simultaneously its salvation from socio-geological/ecological decay (Mellamphy and Vangeest, 2024).

… Carbon credits are purchased to sponsor tree-planting in precarious savanna grassland biomes with their own fragile ecosystems (Veldman et al, 2015) to assuage climate guilt in the Global North…
… National frameworks impose fishing restrictions to protect dwindling sea-life that affect livelihoods of the urban poor (Naess, 1993) and historical fishing communities…
… The state's burden of food insecurity is transferred onto food insecure individuals through the construction of urban gardens and neoliberalisation (Kanosvamhira, 2023)…

The human-centrism of the Anthropocene, our time in which human disturbance has outranked other global effects (Tsing, 2015), has glossed over "the material violences, temporal scalings, and incommensurable worldings that figure a 'shadow' behind the shine of its current popularity" (Ashton, 2023, p.6). These entangled, complex socio-eco-materialities now loom large as spectral realities in the face of global crisis and precarity, and increasingly haunt the human effort to "establish humanity as central, foundational, and of ultimate consequence in the world" (Ivakiv, 2018, p.15).

For Ashton (2023), these 'shadows' (ecologies)
are represented by the differential effects
the climate crisis has on humans and more-than-humans,
between humans, between humans and non-humans, and everything in-between,
and which undercuts the universalising pan-human climate discourses
that have come to the fore in light of global heating.
These are the realities that have been made invisible by the Western humanism of the Anthropocene,
the spectres that reveal the Anthropocene's inherent contradiction:
that reality has been shadowed by its humanity,
while at the same time,
"maintaining the centrality of the humanity that is haunted by it" (Ivakiv, 2018, p.15).

In the Anthropocene, the semiotics of landscape is everywhere. Recognising the increasing tempo of socioecological precarities and crises as they manifest in global temperature extremities, drought, wildfires, landlessness, migrations, food-and-water insecurity and

unsustainability on both micro-and-macro scales, to name a few, Ashton (2023) suggests that to engage with (and write about) these subjects from a position firmly-situated within the human-centrism of the Anthropocene is to participate in an impossible search for human-induced ecological and moral redemption, one which,

> relies on figurations of terrorists and aliens via anti-blackness, territorial displacements and new frontier continuities of settler colonialism, and technoscience advancements rooted in capitalism, militarism and imperialism, that instead of devastating humanity will somehow now save it triumphantly. (p.iii)

The contradictions are manifest everywhere…
the (Western/Northern) forest-of-contradiction,
is an investment in contradiction veiled as modernist scientific certainty…

Crisis narratives, spoken with the voices of Western humanism, seek to lay claim to truths about the past/present/future, and they shape responses to crises in political/economic/social/ecological spaces (Hay, 2016). As Nederveen Pieterse (2010) reminds us, ahistorical and universalist development *is* crisis, and crisis *is* development. Western humanist discourse is upheld by the transcendence of "their animal roots through the intellection and instrumentalization of non-human others" (p.3). Of great import is the way these are not relegated to the 'non-human' alone, as anthropocentrism also operates in strategic alliance with ideologies and discourses of colonialism/neoliberalism/capitalism (Youatt, 2017) in ways that also create/maintain/perpetuate crises for humans made subaltern through racialised and class-based 'Othering' (Gamal and Swanson, 2018). As Mellamphy and Vangeest (2024, p.4) note:

> human capacity for reason, autonomy, impartiality, and universality [is used] to justify mastery, stewardship, and management of non-humans [and non-Western humans] who lack them.

In *Braiding Sweetgrass*, Robin Wall Kimmerer (2013) speaks of the way Western Science has acted to erase Potawatomi indigenous languages-of-their-landscapes as: "Science can be a language of distance which reduces a being to its working parts; it is a language of objects" (p.49). And, as indigenous 'language of animacy' (p.57) teeters on extinction similarly to biodiversity, Kimmerer demands an urgent re-pedagogising of how the language-of-landscape is taught, albeit that we need to question what it means 'to teach' (Biesta, 2017) in the process.

We are jarred into an ethical response, by appealing to our human sensibilities:

> When we tell them the tree is not a *who*, but an *it*, we make that maple an object; we put a barrier between us, absolving ourselves of moral responsibility and opening the door to exploitation. Saying *it* makes a living land into 'natural resources'. If a maple is an *it*, we can take up the chain saw. If a maple is a *her*, we think twice. (Kimmerer, 2020, p.183)

… In this sense, "killing a *who* demands something different than killing an *it"* (p.183).

Kimmerer suggests a reclamation of a type of anthropomorphism, which traditionally has been heavily criticised for its "illegitimate boundary crossing" (Wankhammer, 2017, p.59). This reclamation enacts an alternate resistance to anthropocentrism by asking us to consider "how

disrespectful it would be to assume that humans should be the *only* species to be counted as 'persons'" (Nitzke and Braunbeck, 2022, p.348) as a worldview that may "dislodge the dogmatic separation between human and non-human worlds" (Wankhammer, 2017, p.59).

Thinking about 'who' gets to re-teach the language-of-landscape, walking this journey through the woods of this research, I am continually reminded that the land always has been our first teacher (Styres, 2011), and that finding a path through the complexities of the crises we face today makes urgent the need to imagine perspectives beyond-the-human, and of how all perspectives interact (Kohn, 2013) through the pluralism (Bignall, 2022) of landscapes.

For far too long, Western humanisms have invisibilised lives of the everyday, the ordinary lives of those who have long spoken with the earth, the sea, the roots, the bark, the sun and the moon.

For far too long, hegemonic frameworks have subjugated lives who are affected most by the crises of climate change, yet contribute to it the least (Ngcamu, 2023), to normativities of the 'disproportionately-disadvantaged'. Yet even this terminology enacts a violence through its normative 'framing' (Butler, 2009) that categorises the *effects* of climate change as being devoid of deeply-embodied and experiential stories of threat and resistance as well as hope.

For too long, scientism has been entrusted with asserting the answers to a world in crisis, while missing the very language-of-landscape this discourse purports to understand. Could it be, perhaps, that landscapes are full of unforeseen dangers and uncertainties, whereas the way Science is characterised/caricatured is as establishing 'solutions', its 'evidence-base' a 'lure of certainty' veiling its many ambiguities, conundrums, incompletenesses, even 'ignor-ances' that often drive its many pursuits (Firestein, 2012)? Is it because Science casts a 'gaze' on the world, outside its disciplinary boundaries, 'recontextualising' it on its own terms (Bernstein, 2000), eschewing its (ethical) responsibilities to other languages-of-possibility/being?

For too long, the landscape has been a projection of scientistic truths that miss the deeply-embodied, experiential *affect* woven across temporal spatialities into the stories-of-landscape. Yet, for many indigenous peoples, landscapes have always shaped the beginning-and-end of a story and of a life, landscapes that have been deracinated by Anthropocene crises. Would it be too 'fetishising' and (reverse) 'saviourist' to ask whether these languages-of-landscape might afford radical hope, even at the 'end-of-times'?

Grappling with the socioecological swerves of today requires alter-humanist counter-narratives that embrace the language-of-landscape in how we think/listen/write/speak about crisis, and resistance. Political ecology, the interdisciplinary field that explores power relations embedded in ecological change (Robbins, 2011; Lawhon, 2014) has sought to respond to this call, delving into the complexities underlying multispecies co-existence through ecocritical narratives and "possibilities for worlds that can fight back against the Eurocene" (Grove, 2019, p.xiii). Contributions of posthumanism also enact a paradigm shift (Ferrando, 2019) that challenge human-centric axiologies (Chernilo, 2017) through ecologically-entangled (Connolly, 2013) ways-of-being. Without disbanding the *Anthropos* altogether, at a time when responsible, human action is needed most, these narratives may help us "engender imaginaries of *not this*, as in refusal of present systems and subjectivities; *not yet*, as in what might be to come; and *what if*, as in generative possibilities" (Ashton, 2023, p.9).

Tsing et al (2019, p.187) remind us that,

> the multidimensional crises of our times call for an anthropology [that] takes landscapes as its starting point and that attunes itself to the structural synchronicities between ecology, capital, and the human and more-than-human histories through which uneven landscapes are made and remade.

This postqualitative research (St. Pierre, 2019) with its creative/emergent/rhizomatic-narrative methodology attempts variously to disentangle the assemblages of interconnected political/economic/social/ecological stresses that underscore apparently-intractable forms of inequality and their violences within the research context of the Western Cape. Political ecology (Lawhon, 2014; Bryant, 2005; Zimmerer and Bassett, 2003) predominantly informs the ethico-philosophical orientation to this *transdisciplinary* inquiry, and the research draws its theoretical approaches from sociomaterialism (Edwards and Fenwick, 2014), critical post-humanism (Braidotti, 2016), indigenous knowledges (Masenya, 2022), decoloniality (Mbembe, 2015), spatialities/temporalities (Simonsen, 2017), eco-feminisms (Salleh, 1992) and landscape translanguaging (Gorter, 2015; Phipps, 2006). Concomitantly, this research highlights complexity/intersections/interconnections/enmeshments/interrelationships, both interdiscursive and intersubjective, rather than as a focus on 'fixed objects' as distinctive, passive entities that are independent of agency, voice, or ecological life (Braidotti, 2016).

As there is an increasing *political, ethical,* and *methodological* realisation in the development arena that solving intractable 'problems' of inequality cannot be viewed in atomised and compartmentalised ways, this inquiry is attuned to the arguments made possible within (post)critical, socioecological approaches to 'complex matters' (as double entendre). This inquiry specifically brings together the complex development interconnections between the politics of water, food and poverty in the Western Cape, spotlighted by the recent 'water crisis' and 'Day Zero' discourses in Cape Town (Preiser, 2017). With the legacy of apartheid ever-present, competing political discourses complexify inequality, poverty and disaffection within this context, fuelling conditions for the development of shadow economies. But, what also is revealed are the agentifying possibilities that lie in the liminalities and gaps within-and-between intersectional oppressions and development conundrums.

…

The urgency now incumbent upon us to re-learn the language-of-landscape
draws me back to Tsing's (2015) earlier challenge,
and my grapplings with the responsibilities of seeking to tell the tales of this research.
I cannot claim to know all there is to know about a landscape,
as I cannot claim to fully understand its language.
I am human,
and I have left and returned to these lands,
and my language will always carry the voices of many soils.

The challenge before me is to 'make visible' the affect, language and experiences
of the human and more-than-human
in ways that do not undermine the structural matters
that tether them to their situated realities,
nor enact a violence on their embodiments-of-feeling
in ways that conventional scholarship might do
in silencing the language-of-landscape once more.

The 'visibilisation' of their complex entanglements also has not been an exercise in 'truth-seeking' in the Western, humanist sense, but rather an attempt to grasp at *feeling*, in the way the tips of the Aloe turn red under the rainless glare of a noonday sun, or the way the Resurrection Plant unfurls its leaves at the touch of rain.

Just like the stories of the Magic Tree, in attempting to disentangle the threads of my writing, I knew that the encounters and contradictions I encountered would require a delicate balance…

between –

world-ending… in a world dominated by the Sixth Extinction, climate change, colonisation, capitalism, invasions, hauntings, and systemic ruin…

and world-building… through collaborative encounters, multispecies coexistence, companion protagonists, contaminations, possibilities, 'transformation' and 'radical hope'…

between –

ecological allegories… invasive ecologies, resurrection, resistance, compost societies, oceanic feeling, and eco-hauntologies…

and situated realities… extreme weather events, flooding, drought, fire, hunger, poverty, precarious livelihoods, contested spatialities/temporalities, and systemic inequality…

between –

my human positionality… myself as 'other'…

and all the more-than-human actors and landscapes I engage with…
those who have been subjugated as the 'radical Other'…

between –

my personal lived experiences as a 'South African' who has left and returned…

and those who have not been afforded the privileges of choice to leave or remain…

between –

complexities and grittiness…

between –

promise and ruin…

… none of which are actual dichotomies, but instead are deeply-interrelated and intertwined holisms in tension-within.

My listening-and-seeing was alerted to the complexities, contradictions, assemblages and grittiness in encounter(s) with forests today. Each balance, each rhythm, each encounter in the 'woods' of this research is a grappling with the kinds of contradictions and mutualisms I face in writing (about) them. Each one was not really a 'balance' between things at all, but an *in-betweenness*, a liminality (Aoki, 2005), the 'grey matter' (Ewing, 2022) between gaps, the sliding-shift between ontologies as they are made-and-remade….

Multiply-contending narratives of the forest now co-exist as multispecies worlds. Each definition, and the way it is narrativised, has varying implications across disciplines/ecologies/social-spaces/policy-contexts. Today, forests, in all their forms, are at the intersection of competing threats/challenges/complexities/possibilities. In South Africa, forests have been decimated by histories of colonialism, yet plantation economies continue to operate in complex circuities. Their multiple ontologies mean that they are simultaneously,

> a source of timber products, an ecosystem composed of trees along with myriad forms of biological diversity, a home for indigenous people, a repository for carbon storage, a source of multiple ecosystem services, and as social-ecological systems, or as all of the above. (Chazdon, 2016, p.539)

But, even these ontological-multiplicities are mostly situated within a specific humanist interpretation of what Western humans have come to 'know' as its qualifying characteristics, and therefore of what constitutes its 'value' through what we choose-to-see: tree-cover/canopies/bark/soil/stones/lichen/moss/roots/seeds/flora/fauna. This myopic humanism speaks to the heart of the Anthropocene through a 'modern human conceit' (Tsing, 2015) ideated through 'human progress'.

Such literal configurations of forests bring teleological counterparts to mind, like Tsing's (2019, p.186) 'patchy Anthropocene', the "uneven conditions of more-than-human livability in landscapes increasingly dominated by industrial forms". Colonial cartographic images of canopies would denote the presence of forests (indigenous or plantation), and through modern satellite technologies and '21st century' drones, the same vertical-view of 'forested' land mirrors similar homogeneity: indigenous forests replaced by monoculture plantations are still classified, and seen from above, as forests. Yet, climate change, urbanisation, hegemonic paradigms of extraction, fire, and the politics of invasion increasingly create 'gaps' in the canopy cover, and 'identifiable' forest patches

become patchier – and patchier – and patchier.

In South Africa, universalist aspirations of industrialisation that produced the dualistic, colonial, liberal and productivist world order (Charbonnier, 2017), enacted through homogenising settler paradigms of conquest and material/symbolic violences of capital, have depended on 'disturbing' these landscapes, altering them and rearranging them in the making of imperial 'scapes' in/of the Anthropocene. The tangible loss of these forests across temporal spatialities demonstrates 'topographies of difference' and the morphological patterns by which humans and non-humans have been rearranged (Tsing, 2015) throughout histories.[j]

[j] Much of these disturbances find roots/routes in the 'radical Othering' of nature and indigeneity (human and non-human) through Enlightenment-driven domination over nature as a dark, infinite 'unknowability' (Zembylas, 2005). The idea that culture 'deforms' human naturalness, and that the 'natural world' needed to be preserved from this deformation, was taken up through 19th century Romantics that denigrated 'natural civilisation' as alien-and-dark (Black), an "ulcer on the earth's face" (Komarek, 2008), where the forest (the periphery/'non-Being')

Disturbances created through conquests of empire over the 'Other' have fuelled the geological moment of the Anthropocene[k]. Its continual disturbances have created further disturbances in assemblages, and disturbances-become-functions-of-other-disturbances. In the materialities of the Western/Northern hegemonic world order, these disturbances are (fast-and-slow) violences, and systems of oppression, invasion, and alienation beget further embedded, complex violences that haunt past/present/future cosmologies-of-being (Christian and Dowler, 2019).

Through disturbances… gaps appear…

… gaps that…

alienate, separate, divide.

In Cape Town… – centre – – periphery –

… global hegemonic spatialities/paradigms beget socio-economic inequality gaps, in a country with the highest Gini coefficient in the world (World Bank, 2022).

Gaps are perpetuated through development discourses, and *gaps* are hauntologies of the metaphysics of both 'presence'-and-'absence' (Fanon, 1952).

As Tsing (2015, p.18) insightfully writes:

> This is a story we need to know. Industrial transformation turned out to be a bubble of promise followed by lost livelihoods and damaged landscapes. And yet, such documents are not enough. If we end the story with decay, we abandon all hope – or turn our attention to other sites of promise and ruin, promise and ruin.

What exists and has always existed beyond Western human-centric discourse, is that forests also are deeply communicable-communities that capture speculative imaginaries[l] across many

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became the site of "radical alterity against which the city was defined" (Braidotti and Hlavajova, 2018, p.163) (the centre/'Being'). Bifurcations of European modernity's nature/culture divide were envisioned through the Roman city, the space of the social, including culture, politics, law and history (Braidotti and Hlavajova, 2018), and forest – the periphery, the *terra nullius*, the "realm of anarchy, shadows and the inhuman, the frontier space of the ordained social-religious world of the city" (p.163). With 'being' constructed at the centre, and 'non-being' in the forest, settler paradigms of conquest have echoed the divide, where the construction of the European world order has defined itself through centre (old, conquering powers of Europe), and periphery (new, non-European world)… In this sense, periphery politics through 'radical Othering' are dominated by the 'alien' and 'abject Blackness' (Northover, 2012), notably, biotic flora, indigenous peoples, the female other, propped up by Cartesian dualisms.

[k] The geological moment of the Anthropocene is a seemingly calculable entity of time that represents the uneven criticality of mass-scale human-impacted disturbance within our Planetary Boundaries, and which goes by many names: Global Warming (Santos, 2021), Climate Catastrophe (Estrada, 2022), the Sixth Extinction (Kolbert, 2014), the Great Collapse (Granberg and Glover, 2023), amongst others.

[l] In the dystopian narratives of catastrophic futures that now abound in the Anthropocene, 'speculative imaginaries' provide possibilities for (re)imagining urban futures towards an "experimental approach to political ecology, new forms of theorising, and the making of a politics of possibility to open spaces for alternative futures" (Rusca et al, 2018, p.3).

different *kinds* of landscape languages. I follow the many who have recognised the connections trees make (Haskell, 2017), their highly social behaviour that transcends human language (Simard, 2021), their indigenous animism (Kohn, 2013) that extends the semiotics of life across human and more-than-human relations, their role in making kin in a *compost society* (Haraway, 2016), and their metaphorical capacity to speak in *arboreal imaginaries*[m] in the same way that Powers (2018) speaks of canopies as the Earth's (hi)story-of-life. These ways-of-seeing afford thinking *with* the forest (Howard, 2021) as active agents in world-making parables.

Thinking/speaking/listening/reading/writing *with* arboreal discourse is a timely practice[n] that re-engages the language-of-landscape to reveal the affective experiences/resistances of crises today that have been invisibilised through hegemonic frameworks, especially in a context that is not only no-longer forested, but also at the forefront of *multiply-interconnected* complex crises. Arboreal discourse, which seeks to further political ecology studies by decentring the *Anthropos* within 'forest' assemblages, contributes to an 'ecopoetics of reenchantment' (Meillon, 2021) that asks whether,

> our better understanding of trees, resulting from findings across all fields of knowledge, and our recognition of their world-building capacity (Coccia, 2019), intelligence (plant science), self (Kohn, 2013), and spirit (Kimmerer, 2013) become the basis for our acknowledgement of their agency, value, and self-worth? Might such a reshaping of the human attitude towards trees reshape the human-arboreal relationship and thus the future of the planet? (Nitzke and Braunbeck, 2022, p.342)

Trees and the forests-they-make are both bioregions-of-discourse (Eberly, 2000) and biomes-of-resistance. In gaps, there is also light… Heliotropic plants grow and shift in response to the sun. The edge effect between light and dark produces gaps in the canopies.

Gaps interrupt… … and gaps resist.

> Gaps allow pioneer (indigenous) species to (re)make new assemblages in the forest. Bacteria and mycelia in the soil attach to root nodes, and lichen crawls up the trunks of arboreal neighbours.
>
> Gaps can be closed through circularity, can (re)open in the in-betweens, in language, and in the *hyphens*. There are gaps between the past(-)present(-)future. There are gaps between-and-within the *post(-)apartheid* condition.
>
> Gaps form in research that awaits new methodologies, and they give space-and-possibility to trouble normative, closed ways-of-thinking/speaking/knowing.
>
> Gaps can form *'shady ecologies'* through edge-effects, in which "multiple possibilities exist within the bounded space and in the possibility of border crossing" (Helfenbein, 2010,

[m] 'Arboreal imaginaries' open up relationalities of human-tree relationships, so as to "make visible and analyse in which ways, at which points (sometimes literally), and through which discourses and shared histories humans and trees connect, or are imagined to connect and interact" (Nitzke and Braunbeck, 2022, p.341).

[n] Thinking with forests, and nature more broadly, is a deeply indigenous practice in itself, that also finds alliances in posthumanism. Forests and indigenous peoples share roots and routes, and Afri-ontologies have long spoken 'with' nature in forms of eco-communitarianism (Samuel and Leonard, 2018), guided by an environmental ethical approach based on collectivism, spiritual 'togetherness' with the more-than-human, and interconnected social, physical, cultural, and cognitive embodiments.

> p.307), and such are "spaces that speak, spaces that leak, and spaces themselves are possibilities" (p.307).

Transversing the complex relationalities between world-building (Zigon, 2018) and world-ending for both traditional forests and arboreal discourse are the hydro-epistemologies, hydro-poetics and hydro-imaginaries (Hofmeyr et al, 2022) that ebb-and-flow throughout the language-of-landscape and our 'shady ecologies'. Water, or its absence, undergirds the survivalist conditions for the state of all beings, and is the critical ecology upon which the forest and the world turns. As a complex hydro-imaginary/linguistic-metaphor/spiritual-cosmology/sociomateriality/topography, landscapes and language are built around geographic and discursive 'water maps' (Hofmeyr et al, 2022), that transcend spatial temporalities, histories, ways-of-being/knowing/doing of everyday life. In a country whose arboreal imaginaries are shaped by the currents (or lack) of water, South Africa's *hydroscapes* are deeply-threaded throughout the complexities and mutualisms that inform the tendrilled roots/routes of forests. Water undergirds the very survival of forests, and its cosmological significance forms its own rivers and currents. It is heterogenous and fluid… it is transported through roots and veins and leaves and hands and branches and souls as it flows through-and-between them. Within the world-building/ending circularities and rhizomes of the forest, water is the constant companion and protagonist of this writing.

The tensions between the centre-periphery/city-forest spatialities at play in Cape Town's spatially-unequal setting further undergirds the way urban political ecologists seek to 'excavate' accumulations of capitalist power (Lawhon et al, 2014) towards potentially emancipatory politics, and water is "not studied for its own sake, but as an analytical entry point to examine the operation of power through urban ecology" (Lawhon et al, 2014, p.502). In this research, water is both sociomateriality and cosmology, as it also is the current that winds through social critiques of the urban space (also undergirding the attendant politics-of-food) of this research locale.

My thoughts flow/wander as I write about things to come…

> I begin to think of Newlands Forest, this patch of woodland in suburban Cape Town that has become a refuge for me in this time of my return, a place of promise-and-ruin, and the contradictions-and-complexities-and-assemblages I witness with each visit.
>
> I begin to think about the ghosts of the Southern Afrotemperate forests that once endured in this landscape… the importance of forest transition zones (ecotones)… the edges of world-(re)making… the salvage growths that lie in the peripheries, geographic and geomythological…
>
> I think of the worlds being built and (re)made in the racially-segregated communities of the Cape Flats…
>
> … of the colonial-and-apartheid ghosts (human and more-than-human) who have not yet been laid to rest…
>
> … of Buhlenbandalo, a young invasive clearer who plucks water-hungry invasive Bluegums, his favourite tree, from the soil in the rain…

> … of Fatima as she works to save rainwater under the moonlight in her small garden on the Cape Flats…
>
> … of Melumzi and his tears that were swept down the slopes of the Sentinel to shores of broken abalone shells below…
>
> … of Rosheda as she sewed a petition into the lining of Nelson Mandela's jacket, with the intent of establishing the rights of informal traders on contested land in central Cape Town, a jacket whose owner would come to change the course of history…
>
> … of my own garden-allotment situated in the central district of Oranjezicht[o], with the marks of its colonial Dutch history still present, and the heterogeneity of companion multispeciesm…
>
> … of the invisibilised bodies of chickens, and the many roots/routes they traverse…
>
> … and of the impossibly-delicate, critically-endangered plants I held between my fingertips.

Most of my encounters were through conversations that were had on foot, walking alongside participants amidst the land/hydroscape we were discussing, conversations that would often blow away in the wind, be drowned by the much-needed rains of a water-scarce region, be caught in the leaves, indigenous and invasive, or be put down and picked up again on further journeys together.

Many of the images I photographically-captured revealed narratives told through *hands*, and the textu(r)ality of the flesh, hands that would point, highlight, embrace, grasp, work, clench, reassure and resist… like roots, branches and mycelia through their epidermal tissues. The stories shared with me are as much a part of

> the earth, air, fire, water,
> space, flesh, and cosmologies around us
> as they are to my own writing and my thoughts…

And so, looking for the language with which to begin telling the tales of the landscape of this research, "I went to the woods…" (Thoreau, 1854).

…

The *ihlathi lesiXhosa* is a story-of-the-forest, which is not a forest at all by Western conception. It asks that we take what we know of forests, and hold them close, but walk a path alongside it ancient-and-new. It asks that we take what we know of landscape and listen to voices that have always spoken with the trees and the E/earth. It asks that we listen to the lives of 'ordinary people', those who have been shadowed by the spectres of humanist narratives and the violences they have produced, yet who have also resisted, persisted, and have always nurtured 'radical hope' in their soils/souls.

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[o] Oranjezicht (meaning 'orange view' in Old Dutch), is a neighbourhood within central Cape Town, high on the slopes of Table Mountain. Its name was derived from its old farm-building, where vegetables were sold. The buildings and a slave bell still remain (Young, 2024).

The *ihlathi lesiXhosa* is the 'Xhosa forest' (Cocks and Vetter, 2011), which is a thicket vegetation, true to the topography of many of the biomes of this land. But it is also more, with cultural significance that connects mountains, sea, trees, and everything-in-between. The winds that blow across its multiscapes (Gregorini and Maxwell, 2020) carry the seeds of stories as sun-moves-into-day and moon-moves-into-night, of more ways-of-being/knowing than we can possibly conceive. The 'canopies' of this land are as diverse as its languages/ontologies/epistemologies.

While the heartland of this vegetation is found in the Eastern Cape, it also extends into the Western Cape. Although Cocks and Vetter's (2011) research focuses on the relationalities of the Eastern Cape *amaXhosa* with the *ihlathi lesiXhosa*, these spiritual and cosmological ways-of-being transverse the topographies of South Africa's landscapes. In this sense, I draw on the *ihlathi lesiXhosa* as *metaphor* within this research, using it in its spiritual context.

To the *amaXhosa*, the *ihlathi lesiXhosa* is a regenerative place… despite human disturbances, whether they be through medicinal harvesting, or urban commercial firewood collecting (*ukutheza*), the 'forest' is a place that the ancestors (*izinyanya*) will heal (Cocks and Vetter, 2011). There is healing to be found even in the woodlands deracinated by colonial plantations (*ihlathi lesilungu*)… invasion and resistance are both present, especially here.

The *ihlathi lesiXhosa* carries its spectres on the wind, its spiritual messenger (*izithunywa*)… At its core, 'cool air' blows through the trees with spiritual wellbeing (*impilo*). At its edges (ecotones), lies the city, the village, where gusts run hot with negative energy (Cocks and Vetter, 2011). Those who know only of the heat, become 'culturally-impoverished'. In the *ihlathi lesiXhosa*, it is only here where animals, like the chicken offered in traditional rituals to appease the ancestors, can be found…

The *ihlathi lesiXhosa* is a place of protection… *uThixo ulihlathi lam*… 'God is my forest'. But she is also Mother, the *ihlathi lokuzimela*, the 'forest of hiding' (Cocks and Vetter, 2011). She is her family's source of protection-and-livelihood.

The *ihlathi lesiXhosa* is a forest, which is not a forest but cosmological place, a place of resistance, and a place of deeply-indigenous ethico-onto-epistemologies, like that of the southern African indigenous lived philosophy of *Ubuntu* (Swanson, 2007; Lefa, 2015), a way-of-being I engage with in various moments throughout this writing. It places humans and more-than-humans as always-already companion protagonists (Haraway, 2003) of its stories in a multispecies world.

It is where my stories begin, in the *ihlathi lesiXhosa*, knowing that anywhere/everywhere is a 'forest', and that the many types of worlds within our planetary boundaries form '**forests-of-contradiction'**. The Western Cape is no longer forested because of histories of plantation colonialism and colonial extractivism, and it too, is an *ihlathi lesiXhosa*-of-contradiction.

The *ihlathi lesiXhosa* gathers assemblages of transformation/precarity/disturbance/contradiction. There is life and possibility to be found within and outside and across these edges and their complexities.

Finding the path

Choosing pathways through the woods is a perilous task, for they spear out in a myriad of directions, each giving way to a multiplicity-of-illusory-possibilities, while veiling potential dangers. The labyrinthian complexities of the Anthropocene make exploring their entangled matter a difficult undertaking, and you can hear faint whispers where shadowy figures lurk ominously beyond the trees, closing in on the path ahead, or deceptively erasing the trodden trail behind while obscuring the voices that might help guide the way…

Yet, the vexatious crises-of-our-time make finding a way through the quagmire of catalytic effects a crucial endeavour, walking any viable path so long as it is journeyed responsibly and with care for all, looking both forwards-and-behind and to the company at-our-side, taking time to feel the brush of branches as we go, the zephyr that caresses the skin, and speaking *with* those (ancestral others) who have always been part-of-the-soils. It is about remembering that our ability to sense the connections that bind-us-with-the-Earth and its ability to sense us in turn, are what make-us-who-we-are.

This is the time for every artist in every genre to do what he or she does
loudly and consistently.
It doesn't matter to me what your position is.
You've got to keep asserting the complexity and the originality of life,
and the multiplicity of it, and the facets of it.
This is about being a complex human being in the world, not about finding a villain.
This is no time for anything else than the best you've got.

Toni Morrison (2003)

The path I have chosen to take in this research winds through and transverses the edges of the *ihlathi lesiXhosa* (Cocks and Vetter, 2011), a forest replete with contradiction/complexity/precarity/resistance. My wider research locale is predominantly the Western Cape of South Africa, a place of five distinct biomes (Cowling, 2015). Yet, this is precisely why traversing the paths of the *ihlathi lesiXhosa*, and all the wider *ihlathi lesiXhosas* that exist within the world that have faced similar oppressions, becomes a pressing task. While it may seem that there is no time left to 'find a villain', (as Morrison warns against at any event), finding viable alternatives and a realisable, critical hope (Bozalek, 2014) demands justice, and recognition of the injustices that have silenced the complex ways-of-being of othered humans and more-than-humans, and have prevented these from being recognised as beings with voices at all. As Geertz (1995, p.4) writes, "change, apparently, is not a parade that can be watched as it passes".

…

Into the ihlathi lesiXhosa offers an invitation to enter the 'forest' of this inquiry, being both the traditional concept of the forest, as well as its indigenous, cosmological temporal spatiality and signifier for posthuman and indigenous ways-of-being in the Anthropocene.

Its mixed indigenous and colonial histories bring to the fore spatialities of speculative sociomaterialities (Michael, 2016; Ross, 2017), which hold multiple possibilities for worlds (Rusca et al, 2023), in the same way that the canopies of the *ihlathi lesiXhosa* transverse different biomes and ecosystems, as an act-of-resistance to world-ending crises-of-the-Anthropocene.

The unboundedness of the *ihlathi lesiXhosa* even within its own bounded-sociomaterialities collide with the incalculabilities and unthinkabilities (Campbell et al, 2018) of climate change and its attendant crises through posthumanism and ecosocial materialisms (Barad, 2003). Their competing and mutualistic philosophical and empirical complexities also offer sources of *radical hope* (Lear, 2008) and resistance in a world battling not-only narratives of disenchantment, but material crises in the forms of flooding/drought/fire/landlessness/poverty/systemic inequality, amongst others. Conceptual philosophies also trigger critical thought processes underpinning the spatial/temporal/relational inequalities that pervade urban and ecological sociomaterial realities (Rusca et al, 2023), opening new ways of understanding vulnerability in nuanced ways, ways that have been largely invisibilised through hegemonic technoscientistic frameworks upheld by Enlightenment libertarian individualisms that have led us to the excesses-of-capitalism today.

Thinking *with* the forest-of-contradiction in sociomaterial and allegorical ways through 'sylvan rhetorics' (Jones, 2019), arboreal discourse and 'shady ecologies' of canopy gaps aligns with the socioecological justice approach I take in communion with decoloniality and (post)critical posthumanism. The sociomaterialities and inhabitants of the *ihlathi lesiXhosa* are as threatened by invasions of colonialism/Euromodernism/capitalism, and their attendant racialisms, prejudices and extinctions as traditional forests are today through histories of plunder, extractivism, white-settler-occupation, urbanisation, industrialisation and modernity, and indeed invasive species. They both also face the nebulous, yet devastating effects of catalytic climate change in multivarious/complex/coalescing/competing ways. Yet, they also offer possibilities for resistance, mutualism, cooperation, and multispecies coexistence (Simard, 2021) through 'oceanic feeling' (Parsons, 1999) and compostism (Haraway, 2020), amongst other philosophical offerings. These threats are faced within their own situated 'forests' as well as between each other in deeply-imbricated relationalities. Indigenous ethico-onto-epistemologies remind us that the deep moral and spiritual relationalities that transverse complex relations with the human and the more-than-human make up everyday life, and they offer a mutual coexistensive, or affirmative, ecosophy (Bateson, 1972) towards resistance and kinship under the weight of the Anthropocene.

Thinking of these relationalities as taking place in a 'compost society', (Haraway, 2016) similarly offers a turn towards a regenerative politics that moves away from the Western patriarchal antispecies approach, and instead offers a type of *worlding,* which invites a togetherness-of/in-resistance, resilience and multispecies coexistence in a multispecies world made up of *vibrant matter* (Bennett, 2010). Drawing on Haraway's (2003) *Companion Species Manifesto,* the *ihlathi lesiXhosa* and the traditional forest are both 'companion protagonists' of this research, and I and the readers of this writing-in-relation are together with this storied-matter and with-the-world.

The *ihlathi lesiXhosa*, as the 'woods of this research', holds a mirror to many of the complex crises produced through Euromodernist and scientistic knowledge forms, but it takes this further, by asking what other effects have not yet been made visible by these epistemological modalities, and what other ways-of-seeing, thinking about/with, and experiencing socioeconomic/ecological precarities have been suppressed. The *ihlathi lesiXhosa* likewise animates the question as to what the *affective* consequences might be of these crises on the lives of ordinary humans and more-than-humans in Global South contexts, whose complex and nuanced lived experiences of interconnected-forms-of-precarity it represents, along with the triumphs/resistances/ingenuities/agentifying-possibilities for alternative ways-of-being in the world, have gone largely unrepresented (in-their-own-voices) thus far in global North-led frameworks and conventional Euro-dominated scholarship.

The spectacular forms of crisis brought into being by the Anthropocene have fuelled an apocalyptic narrative to which crises are responded from particular paradigmatic vantagepoints (de Leon and Gotangco, 2012), bolstered by an acceleration of short-term fixes that have not served to ameliorate the crisis, nor permit pause for thoughtful consideration of alternatives. No other approach is deemed convincing, and the 'trust in numbers' and the 'pursuit of objectivity' (Porter, 1995), of the fetish-of-the-calculable (Mbembe, 2000), has bolted the perceived 'solidness' of the 'hard sciences' and their paradigmatic objectivist research approaches to every cause needing an urgent, preferably-singular 'solution'.

Yet, in many indigenous cosmologies, numbers can co-exist as referents to the 'incalculable'. The number 'three' is a powerful symbol in African indigenous/cosmological numerologies (Mokhoatsana, 2022). It gestures to the more-than-human and resists Western/positivist rationalisms and binaries through sociocultural, temporal associations:

The birth-life-death cycle, for all beings on Earth…

The mind-body-soul, which *isangomas* transverse through their spiritual healing practices (Thornton, 2009)…

The past-present-future, in temporality itself…

The three leaves of spekboom Fatima gave me for luck as an act of Islamic *sunnah* in ***A Lesson from Spekboom***…

My encounters with **threes** throughout this research foster a 'temporal/spatial/cosmological turn' away from the fetish-of-the-calculable and the 'pursuit of objectivity', towards a deeply relational, deliberated, careful, considered way of thinking, despite our catalytic climate emergencies that whip us into a frenzy of multiply-rehearsed, repeated actions, or render us incapacitated. These complications/contradictions/alternative and nuanced ways of thinking move away from unidirectional approaches towards one that transverses the interstitial and multidirectional roots/routes of complex lived experience, both in the spectacular and the mundane.

To this 'end', my choice to narrativise this research with **three** main stories is a deliberate and conscious one, even as the themes and matters broached in them are multiply intertwined, and which acts as an *alternative decolonial turn* towards a different kind of 'trust in numbers' that elucidates a complexifying-of-the-(in)calculable. Three is also *transgressive*, as it breaks the binaries, dualisms and Cartesians of Enlightenment/Euromodernist think.

Finding the Path, from the 'outside-in', elucidates the socioecological, sociomaterial and sociospatial/placial conceptual and philosophical orientations and their contributions to political ecology/economy scholarship through decolonial and posthuman theorisations, and it foregrounds the path to come.

Deploying conceptual ways-of-thinking about the crises-of-the-Anthropocene contribute to the critical research field of *political ecology* I draw on. A transdisciplinary field that engages social science, anthropology, geography, international development studies, and others, it seeks to understand how the structural effects of global capital, and the power relations mediating it, are implicated in the socioecological circumstances we find ourselves in (Lawhon, 2014; Blaikie

and Brookfield, 1987; Robbins, 2011; Bryant, 2005; Zimmerer and Bassett, 2003). Attendant to political ecology, are relations of political economy, which offer further debates on the interconnectedness of class division, capital accumulation, and ecosystem degradation (Lawhon, 2014; Klein, 2014; Harvey, 2014; Foster, 2002). Political ecology acts as a critical response to dominant development discourses, unrelenting capitalist violences, and racialised hegemonies of Eurocentric human disturbance that have shifted the blame of catastrophes of their own making onto the Malthusian idea that socioecological degradation has arisen as a result of population growth (Roberts, 2023) and increased resource use, rather than through accumulations of invasive, insidious and violent global North-led structural destruction over generations. Attempting to dismantle prevailing discourses of modern capital that are responsible for creating, maintaining and exacerbating socioeconomic inequalities and socioecological decay worldwide, *political ecology scholarship* also engages questions of "whose use of, claims to, and/or perceptions of the environment prevail, and why?" (Karlsson, 2015, p.530).

These questions have guided my motivation to converse with these subjects in the *ihlathi lesiXhosa* through a critical and decolonial posthuman approach. Conceptual tropes from posthumanism help animate an ontological break from anthropomorphic and humanist perspectives of the world that centralise Western/Northern human language/thought/ways-of-knowing (Nayar, 2014). Posthumanist contributions disrupt biological and social hierarchies (Pepperell, 1995) as resistance to the monolithic and grand narratives of Western humanist thought. It achieves this by lending ecocritical ways-of-thinking *with* our world as a set of complex systems and networks, where humans and nature are deeply-interconnected (Tarr and White, 2018).

Posthumanism is deeply transdisciplinary, imbricating feminist literatures, ecocriticisms, speculative sociomaterialisms, science fictions, and other areas of scholarship, which do not offer a view-of-the-world as anti-humanist (Tarr and White, 2018), but rather re-envision how *becoming with* (Haraway, 2020) the world opens up socially-just praxes that care-for-and-*feel* different (as) ways-of-being. In this way, it fosters recognition that humans are not the only species making worlds (Tsing, 2015) or experiencing human-induced crises. The posthuman approach deployed here is also critical in a situated-context with situated-knowledges (Haraway, 1988) where indigenous/alternative cosmological ways-of-being have tended to *think with* and *become with* the world around us (Kimmerer, 2013), and through which we may come to view power not only as limiting but also as potentially affirmative (Braidotti, 2013). Here, terminology of the posthuman, 'more-than-human', recognises species, ecosystems and ecological spaces that hold power and agency (Panelli, 2010), as well as spatialities/temporalities/cosmologies/sociomaterialities/socioecological-embodiments (Todd, 2016). Inclusive of humans, the 'more-than' decentres the Western humanisms that would otherwise continue to subjugate them in positions of alterity as 'non-humans' and as 'radical Others' (Isherwood and Harris, 2013), instead of validating their deeply, vibrating-with-life, indigenous and relational ontologies through kinship with all living and non-living subjects (Curry, 2011).

In this posthumanist-oriented research, I follow an 'ecosophical' approach along the lines of Bateson (1972)'s transversal relations that produce the assemblages within-and-through the way we live. For Braidotti and Hlavajova (2018, p.131), this is viewed as:

> [a] wholly other form of ecosophy, in which one does not start from *oppositions* between mind and body, man and animal, man and nature, nature and culture, technology and

> earth, but instead from *relations*, [which] allow us to analyse the crises of today in a completely different way, if only because the role of ecological thinking as such now changes from critical (oppositional) to affirmative (mutual coexistensive):… it searches for ways to be interwoven with the movements and the swerves of today.

In their intertwining relations, this means that to worry about the conservation of natural vegetation (fynbos) in the Western Cape, for example, is also to worry about water-and-food sovereignty, indigenous knowledge and networks of historical and globalising practices of conservation in local contexts. Crucially, this ecosophy brings to light ecological and posthuman approaches to how we interpret and respond to meanings of 'crisis', which provides a consistent undercurrent throughout this research, especially in relation to climate change. As Guattari stated in the 1990's:

> Now more than ever, nature cannot be separated from culture; in order to comprehend the interactions between ecosystems, the mechanosphere and the social and individual Universes of reference, we must learn to think 'transversally'. (2000, p.29)

Understanding, then, that life is a "vortex of shared precariousness and unchosen proximities" (Cohen, 2015, p.107), a posthuman, transversal approach to demystifying current crises within the Anthropocene becomes appropriate. Thus, an eco-ontological neologism is used. Combining *ontology* as the "philosophical study of the nature of being and becoming" (Braidotti and Hlavajova, 2018, p.123) and *ecology* as the "science that analyses interactions between organisms and their environment" (p.123), we follow Bateson's (1972) view of the collective consciousness of nature as 'mind'. As a result, this research seeks to address how "in our present state of hyperglobalisation, the complexity of interconnected processes has reached critical limits in which human indecisiveness can no longer be checked by human action" (Braidotti and Hlavajova, 2018, p.123). It follows ontology's practical application through Latour and Stengers' 'ecology of practice', which,

> aims at the construction of new 'practical identities' for practices, that is, new possibilities for them to be present, or in other words, to connect… it thus does not approach practices as they are, but as they may become. (Stengers, 2005, p.186)

This 'ecology of practice' becomes imbricated with political ecology, where political, economic and social stresses are understood to interact with the ecological. The politicising of ecology brings into play dimensions of the physical, social and the cognitive (Oosterling, 2015).

Critical posthumanist thought helps to negotiate the "pressing contemporary question of what it means to be human under the conditions of globalisation, technoscience, late capitalism and climate change" (Braidotti and Hlavajova, 2018, p.94). Thus, 'post' in posthumanism signals "awareness that neither humanism nor the human can in fact be overcome in any straightforward *dialectical* or historical fashion" (p.94) and the 'critical' within 'critical posthumanism' illuminates a "complicated and non-dialectical relationship between human and post/non-human" (p.94). Consequently, I look to problematise the implications for 'the ecological' in light of recent shifts towards 'post-anthropocentrism', where humans come to "argue themselves out of the picture precisely at a time when climate change caused by the impact of human civilisation calls for urgent and responsible, *human* action" (p.94).

The 'critical' also values humanist methodologies that embrace transdisciplinary alliances with the sciences and critical studies, such as Latour's (1993) Actor-Network-Theory (ANT) or new

feminist materialism (Braidotti and Hlavajova, 2018), in emerging 'post-humanities' that need to engage with all (oft-contested) dimensions of a humanities-science alliance. Flashpoints emerge in posthumanist explorations of the tensions between the Western biosecurity model and indigenous approaches to local conservation practices. As Braidotti and Hlavajova (2018, p.96) suggest, these efforts,

> create new encounters and test new hypotheses that may lead to greater political and ethical awareness of the place of the human, the non-human and their environments (especially in connection with pressing issues like climate change, depletion of natural resources, the destruction of biodiversity, global migration flows, terrorism and insecurity, biopolitics, etc).

Specific to this research, then, is an understanding of critical posthumanism that situates post-anthropocentricism within a wider perspective (Braidotti, 2013) and that contends with 'new' realities of the present day, our current forms of 'crisis' and 'resilience'.

The undergirding context within which these conceptual tropes can come to be understood lies within the tensions between Eurocentric anthropocentrism and its response, *decolonial theory*. Posthumanism and some threads of decolonial theory may both share a view of 'beyond the human', but tensions arise in posthumanism's Eurocentric epistemological-political gendered humanism and feminisms (Braidotti, 2013), while the anthropomorphism is certainly not absent from some strands of the decolonial. Decoloniality, which works at the interface between global and local, situates itself in arguments against racialisation as the centre of human construction (Braidotti, 2013), which is reflected in postcolonial scholarship, such as Sylvia Wynter's (2003) material biocentric and racialised violences, thus intersecting with posthumanism. Where posthumanism looks to value embodiment "as [an] ontological site of interrogation" (p.98), 'decolonial posthumanism' here can be viewed as an important nexus-of-tensions within this inquiry, both as one of its complex assemblages/rhizomes as well as a contextual undercurrent for the research's specific post(-)apartheid South African setting. The socio-political context for this research, where, for example, it contends with Western views as in the case of indigenous approaches to conservation, must acknowledge,

> a historical enunciation represented by spatiotemporal positioning among other racialised assemblages, and as aesthetic markers, like Afrofuturism that serve as new potentialities of subjective understanding. (Wynter, 2003, p.18)

Emancipatory identity politics and indigenous ethico-onto-epistemologies might add extra filaments of 'vibrant matter' that serve as extended relations within the wider field of political ecology.

Decoloniality is one of many discourses that contribute to this inquiry's understanding of ecocriticism, and which underscores eco-socio-materialist and critical posthumanist orientations. By viewing the non/more-than-human as material actor, this inquiry attempts to support eco-pedagogies in understanding 'ways-of-being' and in what we can (re)/(un)/learn from these perspectives. Lorimer (2013, p.62) similarly explores a 'more-than-human' methodology in three strands:

> 1) advocating for an examination of the "forms and processes [that] have agency, challenging the ontologies of humanism to draw attention to the diverse objects,

> organisms, forces and materialities that populate the world and cross between porous bodies";
> 2) rethinking "what forms of intelligence, truth and expertise count" by looking at "issues of embodiment, performance, skill and affect, understood as relational and distributed forces and competencies"; and
> 3) "appreciating non-human agencies and diverse intelligences" by focusing on "relational and/or affirmative ethics and politics that are open to difference… and the excessive and unpredictable nature of life".

The strata-and-flows of an ecocritical view invite consideration of the intertwinement of "feminist approaches and nature writing analyses, animal humanities and biosemiotics, environmental justice and postcolonial studies, petrocritism and 'toxic discourse'" (Braidotti and Hlavajova, 2018, p.112). As Opperman (2016, p.24) alerts us: "With their intersecting stories and theories, posthumanism and ecocriticism have something in common: they introduce changes in the way materiality, agency and nature are conceived".

Understanding how these multiple perspectives become a "performative metaphor that allows for otherwise unlikely encounters and unsuspected sources of interaction, experience, and knowledge" (Braidotti, 2013, p.38) provides a significant thread throughout this inquiry/writing. It also seeks to explore *material* ecocriticism in this way by acknowledging the "onto-epistemologies of the new materialisms, [taking] material relationships as its objects of enquiry" (Iovino and Opperman, 2012, p.75). This invites an understanding *of*, and engagement *with*, the narratives as 'storied matter', embracing the many ways in which these storied engagements may reveal the "entanglements of bodily and discursive relationships that constitute our life, both socially and biologically" (Braidotti and Hlavajova, 2018, p.113). This is expressed by Alaimo (2015, p.300) in the terms:

> Toxic bodies, polluted ecosystems and the various 'landscapes of risk' in their multiple aspects become, in this sense, corporeal texts which express the material forces and discursive practices at work in a society's naturalcultural dynamics… Ecocriticism investigates matter not only *in* texts but also *as* a text, contending 'with the vexing sites where figures, narratives, concepts, and histories bear the marks of their worldly entanglements'.

The socioecological approach I have taken in this inquiry has attempted to engage tensions between posthumanism and decolonial thought towards understanding the ways in which the destruction, production and coproduction of nature (Robbins, 2012) is complexly-interrelated with the realm of the social (Bassett and Peimer, 2015).

Ways of Telling engages '*critical rhizomatic narrative*' as my chosen methodological approach, as well as the semiotics of the language-of-landscape that shapes it. It explains my particular embrace of this methodology as the teller of these tales, reading/writing/conversing/listening/walking with landscape and its human and more-than-human inhabitants.

Drawing on conceptual tropes from *sociomaterialism* and *political ecology* to animate a storying of the inquiry permits a way of grasping at the accumulations and assemblages of complex entanglements I encountered in the field, offering novel ways of coming to nuanced understandings. Ecological allegories likewise offer nuanced pathways alongside 'the posthuman' and 'the decolonial' to think *with*, converse *with* and write *with* the (vibrant) matters

of this research. As Clandinin (2020, p.8), who brought *narrative inquiry* as an artsbased research methodology to the international qualitative research field, writes, "it matters what metaphor we each use to shape our lives. And it matters what metaphor we choose to use to represent our lives."

The *ihlathi lesiXhosa* is both cosmological/cosmogenic spatiality and sociomaterial reality as it is *metaphor*, as are the invasion socioecologies, hauntologies, and their resistances that are in play throughout the narrativity. As Lakoff and Johnson (1980, p.3) remind us, "metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature". The socioecological metaphors I use to tell the tales of this inquiry follow in the footsteps of scholars like Clandinin (2020, p.10), who embark on a,

> metaphor of journeying with narrative ideas – that is, thinking narratively over time, place, and relationships – [which offer] possibilities of seeing interruptions, delays, short and long visits, detours, places to linger, and new places to visit… into pathways, side journeys, and unmapped landscapes.

Journeying with metaphor not only offers insight into the experiential affect/effect of crisis, but it offers resistance to the deficit views that abound within the Anthropocene, to also afford hope, through companion species (Haraway, 2003), sympoiesis, indigenous cosmologies, oceanic feeling (Parsons, 1999), and through the relationalities of ordinary day/night lives (Smith, 1989).

Viscous Histories explores the sociomaterial crises that can be read through *invasive socioecologies*, as well as the assemblages/contaminations/accumulations/embodied experiences that relate to the politics of water, food and livelihoods. Invasive species, such as Pines and Acacias, draw on limited water sources in a country that is home to drylands ecologies and is already prone to material drought, now exacerbated by climate change, contributing to increasingly catastrophic water crises that have 'developed' thus over generations in insidious and often invisibilised ways. Cape Town's water crisis in 2017/18, dubbed 'Day Zero', brought the country's complex history with water, its colonial histories through legacies of invasive species, and their interrelated impacts on fire regimes, biodiversity, livelihoods, urban spatialities, and growing informality to the fore. The politics of water in this inquiry is threaded throughout seemingly-disparate threads in tenuous ways. It reveals intertwined precarities and deep sociomaterial/socioecological enmeshments that arise through differential-and-relational experiences of crisis. The multiplicities of interrelated meanings/materials/capacities undergirded by the politics of water within this research become socionatural assemblages (Deleuze and Guattari, 1987), which, through their social, discursive, and more-than-human accumulations across temporal spatialities (Ranganathan, 2015), "defy tidy descriptions" (Karvonen, 2011, p.5).

In its contextual setting, to discern the affective materialities of ghosts in ***Spectral Pasts*** and invasive socioecologies, reading languages of history becomes a critical practice in understanding the way pasts are mapped onto presents and futures, and how we might come to appreciate a 'history of the present' (Foucault, 1984). Considerable scholarship detailing the historiographies of South Africa co-exist, like companion protagonists of the country's stories, each contributing to literature on its complex challenges. The nation's battles with high rates of Gender-Based Violence (GBV) have been interrogated through feminist literatures (Morrell and Clowes, 2017), and its deeply-divisive racialised histories have been told through political

economy (Kunnie, 2000), Marxism (Wolpe, 1988), development (Tapscott, 1997), and governance studies (Farshak, 2015). Others have traced its stories through the history of water (Anderson et al, 2010), its biodiversity (Rebelo et al, 2011), food stories (Joubert, 2018), indigenous knowledges and traditions of medicinal plant harvesting (Petersen et al, 2012), its ecosystem disturbances through invasive species (van Wilgen et al, 2012), and the effects these have on socioeconomic inequalities through socioecologies today (Slingsby and Botha, 2018). Still others have privileged the *ways* in which these histories are written, through decoloniality (Mbembe, 2015), indigenous ethico-onto-epistemologies (Seroto, 2011), and posthuman sociomaterialities (Leibowitz and Naidoo, 2017) for socially-just praxes. This scholarship is not exhaustive, and each gives rise to hauntings that emerge from South Africa's complex histories through different languages and readings of landscape. While all these histories collide and disperse like fractals throughout this inquiry/writing, they are more complexly-disentangled through a reading of the legacies of water crises as a bio/necropolitical current that flows throughout the stories, in keeping with the socioecological emphases that undergird my contribution to political ecology.

Spectral Pasts takes the tensions between posthumanism and decoloniality a step further by imbricating theoretical tropes from hauntologies. Here, we come to see the ways in which these interrelations are informed by spectral accretions (Waterton and Saul, 2020) of historical legacies that haunt socioecological connections, their temporal and spatial (un)boundedness, landscapes, languages and livelihoods today. 'Conversing with ghosts' (Paphitis, 2020) awakens us to the knowledge that ontologically-(bio)diverse hauntings not only shape present-and-future crises through the 'incompleteness' of historical oppressions, but that hauntings represent indigenous, ancestral beings that offer cosmological ways-of-being, ones that afford alternative relationalities and critical hope. Hauntologies offer one of many theoretical contributions that are intertwined with complexity theory, ANT, feminist materialisms, and other theoretical domains.

Writing-and-conversing (with) itself is a sociomaterial practice. Its use in this inquiry/writing reveals the way "space, poverty and nature – among others – begin to be seen through the lens of a discursive materialism 'where ideas, matter, discourse, and power are intertwined in ways that virtually defy dissection'" (Escobar, 1996, p.326), in much the same way as hauntologies traverse past/present/future.

The intersection between hauntologies and socioecologically-invasive assemblages is critically-envisioned throughout this inquiry in the sociomaterial use of the 'hyphen' (Fine, 1989). In the 'ecotonal' (the socioecological threshold) hyphen, haunting/ed relationalities elucidate the 'incompleteness' of historical legacies in post(-)apartheid and post(-)colonial South Africa, where these entanglements gather through a transversality of their metaphorical and material spatialities, and which demonstrate their unboundedness in the liminalities between eras and counter-'cenes' to the Anthropocene.

In the inquiry's relational-narrativity, hauntologies are made to interlocute with the socioecological and sociomaterial towards their posthuman and decolonial inheritances. At the same time, they are threaded to an overarching 'canopy' of invasive socioecology (Neely, 2010), as a conceptual materiality throughout that informs the voices of/in the stories and invites the reader to engage with them from particular ethico-onto-epistemological/ ecological/philosophical/deontological (dis)positions.

Discourses of invasive ecology often garnered significant criticism for perpetuating normative value-subjects of what is deemed 'good' and 'bad', as 'native' or 'non-native', with terminologies of 'invasion' that have been used in reference to immigrants (Staszak, 2008) in a hyper-mobile world of climate refugeeship and global pandemics. Scholars such as Inglis (2020) suggest that equivalating human and non-human matter as 'non-native' denies senses of belonging, and that invasive ecologies become sources of blame for human-induced violence.

Pivotal to my own argumentation, however, is that while these viewpoints are merited for their pursuit of socioecological justice, Eurocentred modernist discourses of this kind tend to perpetuate an uncritical, essentialist and colonial-informed scholarship that performatively and deterministically reaffirms the violences they seek to thwart, by continuing to construct indigenous humans and more-than-humans as 'non-native' others. Instead, hauntologies and sociomaterialities of Euromodernism, capitalism, and universalist hegemonic thought arising mainly from the global North, alongside historical legacies of colonialism/apartheid, can come to be seen as the ones invading the lived experiences of ordinary people and the more-than-human in spectacularly-and-mundanely violent ways (Lee and Pratt, 2012). It is these modernist invasives that propel the catalytic effects of climate change, and its interrelated forms of destruction, through fast-and-slow violences (Nixon, 2011). The course of invasion transmogrifies through and tautologically 'invades', and haunts, the lived experiences of those with which I engage in this inquiry and the *ihlathi lesiXhosa*.

Something About Water, as the first story of this inquiry, begins in Newlands Forest. It tells the tale of Buhlenbendalo (a pseudonym, meaning 'land of natural beauty' in *isiXhosa*), a young invasive species clearer employed by the Working for Water (WfW) Programme, who I accompanied on one of their invasive clearing expeditions. It explores the complex interrelationships between the politics of water, invasive socioecologies, medicinal plants, conservation, and plantation economies/ecologies, alongside other companion protagonists and rhizomatic journeys I undertake in this story.

A Lesson from Spekboom tells the second story, of Fatima (also a pseudonym) in Mitchell's Plain on the Cape Flats, who toils to save water to nurture her urban garden seedlings, and whose eco-grief following the Cape Town water crisis 2017/18 has had traumatic significance for her and her family. It explores the way temporal crises of water-and-drought, and their interrelated threads of food-and-livelihoods, intersect in human and more-than-human assemblages in her garden.

The Tides That Bind is the third and final (partially-fictionalised) story in Hout Bay, which engages with the lived experiences of the pseudonymised composite characters: Melumzi as he speaks of his friend, Lwandle, who was a former abalone poacher. Their embodied resistances and experiences of structural and systemic inequalities and oppressions echo in reverberations across the shores of the Cape. It explores pedagogies of the land, illicit economies, and the intersecting crises that converge on historically-disenfranchised local/indigenous peoples in South Africa.

Turning towards the light: a beginning without end brings this inquiry-writing to a temporary/contingent close, drawing on a personal story. It draws on the 'tropism' of plants, and offers a reminder of radical hope, and the small resistances that can be found living as companion species in the everyday if we turn our 'shady ecologies' to the light.

Ways of Telling

With critical rhizomatic narrative

Nederveen Pieterse (2010), in "plea[ing] for the indigenization of sociological theory", wrote that "this follows on from the critique of universalism and seeks to be a remedy for intellectual dependence and imperialism in social science" (p. 30). Conventional social science research is thus replete with exclusions and pitfalls of imperialism, making the choice for an appropriate methodology for this inquiry crucial. The ethical responsibilities incumbent on me in storytelling with humans and more-than-humans towards just ends has thus led me to the affordances of *critical rhizomatic narrative* as methodological approach (Swanson, 2004; 2008), with its feature of '*rhizomatic conversations*' emerging from with/in each story, but also dialoguing-rhizomatically across the stories, coalescing in nested arguments. This artsbased methodology was birthed from narrative inquiry (Clandinin and Connelly, 2004; Clandinin, 2019), but serves as a deeper, (post)critical and postqualitative extension of it. I was inspired to embrace this approach because of its promise of possibilities for deeper reflexivity, criticality and postcriticality, its affect and heartfulness, its literary-and-poetic writing modalities, its breath-and-pause, how it might lend itself to translanguaging with other indigenous languages and ways-of-knowing/being, and its (post)'humanising' relationalities, linked to the way it offers embrace of indigeneity and decoloniality with a deep sense of 'feeling' and relational-ethicality, while forging solidarities. It is an emergent, postqualitative inquiry (St Pierre, 2021), as a direct-response-to-and-divergence-from 'traditionalist Western humanist research methodologies'. It seeks to engage the reader in invitational, novel, and literary/poetic ways as an inter/intrapersonal dialogue with (the-person-of) the reader, (including the self) and importantly with thoughtful consideration, care and soulfulness. Through conversational relationality, I have curated textured sentences composed of phrases of ideas, where the thoughts, perspectives and voices of other scholars are invited to dialogue with the multiple interlocutors with which this thesis engages in all its fullness and enduring entanglements. These ideals I hope to achieve through the embrace of this 'methodology of the heart' (Pelias, 2004). In keeping with my socioecological orientations to the 'woods of this research', this methodology offers teleological significance in its complex arboreal filaments, branching roots, and interconnected fungal networks. My embrace of *critical rhizomatic narrative* thus contributes to its extension and enrichment in my particular employment of critical posthumanism, but also in indigeneity, translanguaging, and transdisciplinarity.

These ways-of-telling seek to "desist from serving the interests of both positivist/modernist and some post-modern orientations that would concern themselves with empiricist tenets of justification, 'truth' and form, above evocation, empathy, illumination, self-understanding, resonance, and the revisioning of ways of being and living in the world" (Swanson, 2004, p.36). In a teleological sense, this particular reflexive/rhizomatic approach reflects the socioecological commitments by thinking/writing/conversing/becoming *with* the rhizome in all its pluralisms. It renders a (re)orientation towards reading the language-of-landscape, towards pluralist/non-linear engagement with Anthropocenic crises of water, food and livelihoods, as well as radical hope for resistance in the tenuous 'forest-making' socioecologies in which rhizomes, mycelia, and arboreal beings participate.

In keeping with my ethical responsibilities to each story, *critical rhizomatic narrative* (re)orients narrative inquiry by making linkages between the socioecological experiences of those I engaged with, with the structural violences that underscore those experiences, and which emerge in my **'Rhizomatic Conversations'** (that jump out of the stories in rhizomatic ways

via '*moments of articulation*' and otherwise vexed nodes of possible theoretical/critical/philosophical discussion). *Critical rhizomatic narrative* also goes some way to asking: "how do we extricate ourselves?" (Fanon, 1986, p.3) from enduring coloniality and Euromodernism. It offers a way forward/backwards/sideways for journeying between the past/present/future simultaneously and in their departures, forging solidarities with the lived experiences and agential ontologies of those I encountered, while challenging their contextual and situated oppressions. It also allows for pause, to listen for the untold stories and silences between gaps, to afford *reflexivity/reflectivity* on the lived meanings on which I draw as storyteller. Here, *critical rhizomatic narrative* takes narrative inquiry a step further, by attending to its limitations through means of critical and reflexive engagement with agential relationalities, a deeper sense of lived experiences and the storied nature of things. Following Swanson (2004), as Gamal (2022, p.87) writes of *critical rhizomatic narrative*,

> it seeks to articulate the complexity of particular narrative moments by grappling with the dilemma, controversies and the ethical conundrums that are played out in human experiences.

In this way, it "embraces creative textual forms that produce pluralised meanings that breathe life and feeling into storied human experiences" (Swanson, 2004, p.36). It also forges alliances with artsbased methodologies that disrupt equilibriums (Barone and Eisner, 2012, p.16) by pursing an "interrogative disposition that… promotes a level of dislocation, disturbance, [and] disruptiveness".

One of its most useful offerings that extend beyond narrative inquiry is the narrative-device, '*moments of articulation*' (Swanson, 2004; 2008). These moments form the pause, where contingencies and contradictions require me, as researcher/writer, to pay attention to the possible ethico-onto-epistemological conundrums that might surface in narrative engagements. Such embodied, ethical dilemmas perform *dimensionality* within the research, which affords a critically-attentive disposition to the pluralism of voices in polyphonic assemblage (Tsing, 2015). We are reminded of the wider forest and *ihlathi lesiXhosa* to which rhizomes are connected within the narrative landscape, where we journey rhizomatically *with* the narrative rhizome as it probes multiple roots/routes in its interactions/intra-actions (Barad, 2007) with invasions in/of the soil/soul towards a resistance in its interconnectedness with more-than-human companions. This affords the opportunity to theorise/analyse everyday lived experiences, through reflection/reflexivity, and contemplativeness, and connect these to the personal/social/political/ethical dimensions of these experiences (Swanson, 2004; Gamal, 2022; Stroebel, 2022).

The political charge of *critical rhizomatic narrative* lies in its situated context of research in the 'everyday', which is especially pertinent to my own inquiry with 'ordinary lives', while also paying attention to the way events are expressed (Gamal, 2022), as well as their structural power relations. This inquiry 'filaments' or threads moments of the global with the local (glocally), the universal with the particular, the philosophical and imaginative with the grittiness of daily lives at those moments where they meet/articulate. '*Moments of articulation'* give rise to affective, embodied encounters (Swanson, 2004; 2008) within the narrativity, and pay attention to the inequalities-and-injustices that undergird them. As Fagan (2013, p.69) writes, "the ethical is always already political", and in this sense, this methodology's political charge and ethical sensibilities are imbricated. The structural tethers that may often be missed in narrative inquiry demand deeper engagement through these ethico-onto-epistemological entanglements, and its decolonial orientations through *moments of articulation, rhizomatic conversations,* and *reflexive narrativity*

resist the "monolithic and overwhelmingly conventionalised cannon of ideas that govern research writing" (Banks, 2008, p.157). Similarly to the way indigenous oralities/literatures are often judged (from the podium of an abstract/objectivist/decontextualised 'universal') for their lack of 'scientific validity' against the criteria of Eurocentric representalist ontologies, this approach offers a decolonial resistance to research that "assumes the possibility and desirability of objectivity… that prescribes textual uniformity… and positions scholarly writing as a distinctive non-literary mode of expression" (p.157). Thus, ethically-fraught and dilemmatic contingencies are articulated in ways that navigate the inquiry's complexities, tensions, and limitations, while ethically-considering what-and-how this is done (and in relation to whom). Thus, it draws on decoloniality without being fully-situated within it. Critical to my own work are the hauntings of coloniality in the present/future, which renders a situatedness of 'postcolonialism' obsolete in its 'pastness'. As a result, *critical rhizomatic narrative* draws on decoloniality to articulate the ways these oppressions endure in knowledges and power, yet these liminalities also afford possibilities for hope and resistance. This methodological approach is not situated within a "practice of negativity" (Noyes, 2012, p.17) as a "replacement ontological principle to affirmation" (p.17), but rather encourages a 'thinking/becoming-with' entanglements and engagements within situated contexts.

This creative/literary/narrative methodology thus affords "the possibility of flagrantly resisting formulation" (Swanson, 2004, p.36), and draws on multiple philosophical/theoretical traditions, against the violence of essentialisms and the humanist centrality of the liberal-bounded-subject (Gamal, 2022). Here, *critical rhizomatic narrative* counters these violences through its relational, multiple subjectivities. Braidotti (2013, p.49) also writes that the relational subject is "constituted in and by multiplicity… a subject that works across differences and is also internally differentiated, but still grounded and accountable", which counters the displaced nomadology of Deleuze and Guattari (1988).

Lastly, *critical rhizomatic narrative* attends to *silences* and the 'untold'. These are of especial significance in my writing, which I have envisioned through the socioecological allegories of 'canopy gaps', as both spaces of shadow-and-light, silence-and-voice, invisibility-and-visibility. Swanson (2004, p.9) interrogates these silences through the "many slippery forms and interpretations of silence while simultaneously acknowledging its agency in selecting the very interpretation that would, by definition, maintain its illusiveness and indeterminateness while establishing its power". As such, a silence, or gap, might be "its own mask of the simplistic and essential", while also being generative in "permit[ting] fertile moments to foster new thought" (p.10). These silences "simultaneously *evade* accountability and definition" (p.10), which this thesis seeks to disrupt. Silence, nevertheless, evades fixed definition, like the currents of invasion that run throughout this research. But, in its resistances, listening/conversing/paying attention to these gaps affords a way of revealing its "hiding places… within and between discourse… becoming attuned to its multiple modes of operation" (p.11), which requires reflexivity in attending to "its recursive nature in the production of narratives on reality as encountered in the fieldwork/research writing process" (Swanson, 2004 in Gamal, 2022, p.91).

Critical to my own writing is the critical attention to how silence can be attributed to voices that sound/speak-like human bodies, "where the body is merely an empty or abstract entity representative of the voice" (Swanson, 2004, p.11), yet this also throws into question the voice of the more-than-human, and the anthropomorphic tendencies to 'speak for' or attribute purpose and voice to the 'radical Other', human or more-than-human. It also allows for the projection of human-centric outcomes by an assumed alignment in shared purpose between humans and the more-than-human, although it should be noted that the agential ontologies in

indigenous oralities/literatures often *do* assume a shared purpose with the more-than-human through ancient reciprocities. While anthropomorphic voices are highly criticised for these projected assumptions, I am reminded that to assume that the more-than-human is voiceless, simply because it may not be heard in the resonant gendered or otherwise human-signified body, is to deny it any voice at all (Kimmerer, 2013). Rather, *voice* is part of the "material and discursive knots and intensities of the assemblage" (Mazzie and Jackson, 2017, p.1090), and "emerges from relations among objects, spaces, affects, bodies, discourses, texts, and theory in dynamically shifting arrangements and re-arrangements" (Mayes, 2019, p.1192).

While Gamal (2022) writes that the ethereal and disembodied utterance is subject to reappropriation by the researcher, opening up opportunities for colonial epistemologies to invade through power-and-privilege of the white academic voice (Bhattacharya, 2022), I return to the need for critical reflexivity to avoid centralising my own "authority and voice to make such claims" (p.181).

As story(ing) and storytelling with pluralist possibilities and liminal limitations

Storytelling, within and between its rhizomatic filaments, is, by nature, a journey…

The turn towards multimodal inquiry-forms (Campano et al, 2020) reflects a growing dissatisfaction with the conventional hermeneutics that centre the Eurocentric liberal humanist subject and simplify textu(r)al complexities. The portrayal of unfolding events in linked chains has become a hallmark of epistemological foundationalists, yet for many scholars that might draw on indigenous or cosmological philosophies and storying/story-telling (Tordzro, 2018), decolonial (Smith, 1999) and postqualitative methodologies (St. Pierre, 2005), the (post)critical (Latour, 2004), and other artsbased methodologies, such as poetic inquiry (Butler-Kisber, 2020; Faulkner, 2019), performative inquiry (Fels and Belliveau, 2007), or inquiries shaped by 'the new materialisms' (Ringrose et al, 2019), or multilingualism/translanguaging with the arts (Phipps, 2019), or rhizo-linguistic narrativity (Stroebel, 2022), principally towards justice-oriented ends, time is not always linear, and is often contingent on divergent spatialities/materialities (Rosiek and Snyder, 2018), sociocultural, indigenous, cosmological and/or sensate relationalities (Lavis and Abbotts, 2020; Smith, 1999), or otherwise alternative ways-of-being/knowing/feeling *with* inquiry.

… As elephants migrate across the biomes of the African continent, retracing familiar paths in circular and rhythmical movements, feeling and responding to the presence of other elephants many miles away through the sensors on their feet (Focht, 2023), paying homage to their deceased in ritualised grieving (Lokhandwala and Sen, 2022)… their past/present/future are shaped by slow, ontological journeys guided by deep genetic connectivity and knowledge (Ishida et al., 2016) through transboundary[a] (Star and Griesemer, 1989) ecological corridors.

Like stories, they "change shape over time and have purposes of their own" (p.5), and which transverse the complexities of lifeworlds in situ and in relation to/with the Anthropocene, as elephants do their own ecosystems in an-other worldly temporal cadence.

[a] Boundary objects are considered matter that embodies our implicit and explicit knowledges (Boland & Tensaki, 1995) that are produced at the intersection of technoscientific and political worlds to mediate the exchange of differential types of knowledge and action (White et al, 2010). My emphasis on *trans*boundary emphasises a transversality of its spatial and temporal agency, moving between past-present-future knowledges, possibilities, accumulations and 'contaminations', as well as its political *eco*logy alliances with the human, non-human and the more-than-human, and the multiple ecologies with which it is interrelated.

… Just like the Magic Tree, the tree's narrative journey is interrupted, made anew, and dispersed in the (re)making of its past/present/future, and which has shaped my own journeys built around its branches. As Marder (2023) sees it, time – as in the temporality of storied journeys – belongs to a vegetive world as a practice of *com crescere*, or growing *with*[b].

In telling these relational/shared tales, I am conscious that the 'chronological journey' is also symptomatic of the settler paradigm, marked by the practice of Eurocentric archival history-writing and the assumed-linear progression from past-to-future through an assumption of progress (Tsing, 2015), a method of learning to divide the world, in appreciation of the maxim that 'the barbarian' rules by force, while the 'cultivated conqueror' *teaches* (Willinsky, 1998). In this mode, there have been many grand narrative journeys of conquest and colonisation, different historical waves of globalisation, and a nomadic capitalism (Bradburd, 1984).

> *Yet, journeys also have been a way of life and being for many indigenous peoples, such as the transhumant pastoral Cape Khoi, and in the movement of the more-than-human as day becomes night and as matter, beyond the presentism of the human eye, shifts imperceptibly like the slow unfolding of brecciation*[c].

Narrative journeys present both a conundrum and aesthetic space-for-resistance, especially in posthuman and decolonial engagements with these forms of inquiry, which complicate their telling(s) across temporal spatialities[d]. The 'nomadic journey' has been highly critiqued for its positioning of indigeneity as a disordered or irrational state of flux (Braidotti and Bignall, 2019), which means that journeying without critical consciousness of both the deterritorialising and reterritorialising aspects of narrative methodology, as non-chronological storytelling practice, belies a "nomadic frontier so vast and encompassing that it leaves no exit through which those imprisoned beneath could come out and reclaim the meaning of their history and identity" (Ghambou, 2020, p.71). Herein lies one of the dangers of narrative, where it might, as Swanson (2004, p.46) notes,

> fail to address the structural and material conditions in which people experience their lives. These conditions are embedded in the lived landscape of experience and can be obscured or made to be invisible through the aesthetic mode of narrative construction.

Yet, "stories that remind us of who and what we were/are, by giving us (back) our collective memories, shape our constantly (co)emerging identities and the possibilities of who we can be" (Swanson, 2004, p.46).

Conundrums are not new to the landscape-of-narrative, and storytelling is replete with the pitfalls of subject/object divides, dualisms, temporal/spatial nomadisms, and "narrative smoothing" (Connelly and Clandinin, 1990), which requires that attention be paid to stories

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[b] As Barad (2007, p.ix) writes, "time and space, like matter and meaning, come into existence, are iteratively reconfigured through each intra-action, thereby making it impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future".

[c] Brecciation occurs through rock formations, either through slow sedimentation or large-scale impact events. They form conglomerations of large fragments that become fixed together in a web-like matrix (Bartolini, 2021).

[d] In Deleuze and Guatarri's (1993) idea of nomadology, modes of subjectivity and terrorologies emerge as deterritorialising discourses. Yet, such displacement suggests a 'failure of nativism' (Ghambou, 2020), where "nomadism is expected to rescue the postmodern West from its crisis just as the related tropes of exile and wandering were employed by Western writers and critics to counter the ills of modernism" (Kaplan, 1996, p.26).

untold as well as told (Swanson, 2004). Nevertheless, narrative's contribution to social science lies in the view of humans, and indeed more-than-human agents, as 'storied' matter (Riessman, 2008), and that stories are critical to meaning-making and interpretive ways-of-knowing, as well as to identity-and-belonging.

Critical rhizomatic narrative surfaces crucial considerations around ethics/power/reflexivity/positionality of actors/researcher (Hollingsworth and Dybdahl, 2007).

… Despite the widespread destruction of ecosystems and biomes across the African continent through climate change, urbanisation and human-induced disturbance,
elephants still find familiar corridors or make new ones to guide their way.

In my own journey, even as we relocated as a family to different locales across the world, my upbringing and family homelife exposed me to 'the justices', especially racial and socioecological, which became deeply embedded in my psyche, and, through these influences, I invariably found my own familiar pathways home and through the 'forest' once more. As Heilbrun (1988, p.37) writes:

> What matters is that lives do not serve as models; only stories do that. And it is a hard thing to make up stories to live by. We can only retell and live by the stories we have read or heard. We live our lives through texts. They may be read, or chanted, or come to us, like the murmurings of our mothers, telling us what conventions demand. Whatever their form or medium, these stories have formed us all; they are what we must use to make new fictions, new narratives.

As an unfolding inquiry, those that are woven into this narrative and conceptual research, as well as myself as the (re)teller of tales, are in quivering relationality between construction-and-reconstruction of these stories.

I have walked alongside the stories,
through the forest,
through mycelial paths of possibility,
interlocuting with the protagonists of the storied research,
and the shadows that form between their lives and the stories,
as well as the spectres of the research itself,
as much I am able to recognise and visibilise them, where possible,
within this research journey.
In this way, through reflexive narrativity,
I walk with the shadowy figures of research and the stories that emerge,
seeking out the liminalities and phantoms of research
rather than hiding from them.

The Anthropocene complexities I address make critical reflexive/rhizomatic narrative an intentional/attentional entanglement with many 'others', conversations, ways-of-being/knowing/thinking/feeling, and complex relationalities. Such a research approach might be described otherwise as a deliberative act/action of being-in-the-world with (multiple) others in ways that are with care/thought/belief/conviction/ethic/humility/consideration… and indeed love.

Critically, however, against a 'truth-seeking' humanist orientation towards scholarship, reflective of conventional and instrumental approaches, Anthropocene perplexities cannot be 'disposed of', as they are the deeply affective lived experiences of the human and more-than-human agents. Resolution of doubt and disposal of the perplexing interconnectedness of their relationalities implies a 'calculability' and 'knowability' and a finality of these embodiments. But, the very nature of these 'otherwise' ethico-onto-epistemologies defies the kind of 'settlement' that rings of colonial occupation, in both a deterritorialization-and-reterritorialization, and Western claims to universalist knowledge.

The purpose in embracing *critical rhizomatic narrative* is not to uncomplicate complexity, but rather to *negotiate* it in ways that address the systemic injustices that create and perpetuate the inequalities that are enmeshed with it, while visibilising the resistances that have defied its calculabilities (Mbembe, 2000). This inquiry is not an exercise in 'finding material' to undo these complexities, nor is it chronological/linear, but rather tells the stories of human beings and the beings of the more-than-human, whose complex lived experiences of crisis-and-resistance cannot only be the 'subjects of inquiry', as a disembodied search for knowledge. The human and more-than-human 'people' have histories/legacies/ancestries that have existed long before this research, exist alongside and *with* it and with each other, as well as independently of this inquiry, and will exist long hereafter.

Therein, in their unknowabilities, lies resistance.

While narrative methodologies might have emancipatory potential, without explicating the connections to the structural conditions tethered to them, there can be no transformative possibilities through narrative alone. Artsbased inquiry through storying invites the reader into conversation with it, offering the potential for dialogic avenues and companionable journeys. I have turned to this inquiry in similar fashion, drawing on wide theoretical literatures, literary contributions, poetics, and stories to inspire the reader to enter into dialogue with it (Bakhtin, 1981).

Yet, there are also many risks in the ways stories might be told. As Connelly and Clandinin (1990, p.10) offer,

> it is too easy to become committed to the whole, the narrative plot, and to one's own role in the inquiry and to lose sight of the various fine lines that one treads in the writing of a narrative.

Like other methodologies, in considering the accountabilities of narrative research, power relations need to be considered in how they may influence the narrativising, and what is made visible or veiled. These relations also demand cognisance of the selectivities, visibilities and gaps in their situated context that are privileged by researcher/writer based on their socialisation and lived experiences. While it may not be possible to 'eliminate' power relations entirely, given that power is everywhere between-and-within research matter(s) (Bhattacharya, 2022), an alertness to its presence and operations in this research, and in my engagements with those I have encountered in this journey, is necessary. I have tried to pay attention to this throughout this journey, especially since I have engaged with many people who are living socioeconomically precarious lives.

Instead of reifying 'problem-solving' as a more-standard/conventional social scientific research objective, such an approach rather seeks "contingent evolutionary aspirations of resolve,

commitment, transformation, transcendence, renewal and insight [that] might hold more profound importance" (Swanson, 2004, p.49).

With the more-than-human

Critical to this research is the way unfolding inquiries are not the subject of conversations with humans or of the human experience alone, but also the more-than-human. New materialisms (Coole and Frost, 2010), new feminist materialisms (Alaimo and Hekman, 2008), posthumanisms (Braidotti, 2013), and postqualitative research (Lather and St. Pierre, 2013) question the ontologically passivity that epistemological foundationalists and anti-foundationalists suggest, where representations of the world either await our construction, or that reality is constructed through selective representation (Rosiek and Snyder, 2018), even as we attempt to undo and grapple with the impossibility/inevitability of these affects/effects. Yet, the idea that "the things of this world are simultaneously real, constituted *in part* by our activity, and also protean in a way that responds to our inquiry practices and evades any effort to capture them in a single representation" (p.1), reflects longstanding indigenous oral/literary traditions, which can foreground posthuman and decolonial inquiries. In this respect, these conundrums refer to 'agency', which asserts that "the world does not simply passively await our social processes of representation, it *responds* to our inquiry" (p.2).

While ecosophical (Bateson, 1972) researchers that value agential relationalities believe that agents/agency emerge(s) within the research itself and do(es) not exist 'elsewhere', and that 'interactions' alone fail to encapsulate all the ways in which the researcher and 'object of study' have been shaped by one another prior to the inquiry, I draw on these arguments cautiously. The people and ecologies (as together ecologically-vibrant-matter) in this inquiry are not 'subjects of inquiry', as they have agency and exist independently of this research – before, during, and long thereafter. My role as the teller-of-tales also is not one of 'liberator' who claims to liberate through these stories. Stories in themselves cannot liberate as they do not possess the agency in-and-of-themselves to alter structures. It is my hope, instead, in sharing my humanity, heart and solidarity commitments, to be but a small contributor to a wider collective of emancipatory efforts by helping to create the conditions for small, perhaps infinitesimal, signs or gestures of justice and radical hope to emerge through the stories, my interactions, and relational efforts. But, in-and-of-themselves, the stories might be 'emancipatory' without being able to effect emancipation (albeit an apparent-contradiction), nor can they create agency where it did not exist before…

… It is what we do with what we (come to) know, what we do with the stories and the encounters and relationalities and being-in-the-world-with-others… that matters (in every sense of the word).

While I am, in many ways, the main protagonist
in the relational construction of research narratives,
I do not feel I own them.
They are relational in their 'inbetweenness' (Aoki, 2005),
and there can be no absolute 'owner' or autonomous agential creator.
The stories emerge from a relational engagement with others,
both with humans and the more-than-human,
and it is my hope
that the observations, experiences, thoughts and feelings I share
may provoke a response
in ways that recognise my own humanity in the gesture of sharing them.

As such, I assume the challenge of responsibility to receive with humanity and humility the stories shared with me through my encounters with ecological others,
even as I recognise that these received narrative gifts too might be shaped by the life stories I share.

In attuning to the responsibilities of story-telling, while we may not be able to claim absolute 'truthfulness' of their representation (Barone, 2009), we are advised to remember that, "even when no one is visiting the story, it is living… it's a living part of its living context" (Westcott and Garroutte, 2013, p.68), and that "their very possibility influences the present – gives the present its form" (Rosiek and Snyder, 2018, p.9).

With reflexivity

Critical rhizomatic narrative does not 'deploy' reflexivity as a methodological tool, rather it *is*, by nature, reflexive and relational (Swanson, 2004), and I have engaged with reflexivity throughout the stories to foreground its importance. For Olmes-Vega et al (2022, p.241), *reflexivity* is a,

> set of continuous, collaborative, and multifaceted practices through which researchers self-consciously critique, appraise, and evaluate how their subjectivity and context influence the research processes.

Without reflexivity, we are unable to attend to unequal power relations and potential ethical concerns, which may serve to further perpetuate inequalities. I am also conscious of its critiques, where it is "often claimed as a methodological virtue and a source of superior insights, perspicacity or awareness" (Lynch, 2000, p.26).

Amongst the wide-ranging critiques of reflexivity, I respond to Pillow's (2003) identification of *confessionalism*, *the pursuit of truth*, and *transcendence of subjectivity*. Of the first confessionalist approach, Pillow's (2003) critiques are of especial note in in my writing, which inherently seeks to avoid binaries between the researcher/'the researched' (an extractivist term I reject) through confessionalism in an essentialist and solipsistic way, and which "invokes the Cartesian belief in a unified, essential self that is capable of being reflected on and is knowable" (p.181). *Critical rhizomatic narrative* seeks to avoid the instrumentalist "ghostly 'positivist' account that seeks origins in scientific warrants" (Stronach et al, 2007, p.179), through which a reflexive account may "hopefully address (although not resolve) the ambiguities in terms of the complexities they inform with respect to social relations of power, and consequently advocate… towards social agendas" (p.186).

Barad's (2007) intra-actions offer reflexive engagement with the already-partially constituted subjectivities between the researcher and the inquiry. In this sense, "practices systematically form the objects of which they speak" (Foucault, 1972, p.54), which points to the important role of reflexivity in narrative in attending to reality-fixing and world-making practices, but reflexivity is also important in attending to what might be "real and present to the researcher" (Gemignani, 2017, p.54). These concerns require us to pay attention to the "games of truth and disciplinary power", and "what those particular constructions allow for in the specific historical, scientific (or disciplinary), and power based contexts of the inquiry" (p.54).

Here, *critical rhizomatic narrative* is both relational-and-reflexive. Positionality cannot be accounted for by merely mentioning an awareness of it, as reflexivity itself is replete with ontologies (Gamal, 2022). Doing so creates a process of externalisation for the researcher, where "the content of a reflexive analysis appears as an external reality, which researchers can observe, analyse and represent" (Gemignani, 2017, p.195). Instead, reflexivity *is* inquiry, and as Swanson (2004, p.25) reminds us,

> commitment to this reflexive engagement is achieved via self-inscription through the descriptive, representational writing process and attending to the prevailing relations of power within shifting social contexts.

It is only through reflexivity of this nature that we may contribute, in small part, towards potentially-emancipatory inquiry, as the "decolonising research strategies are less about the struggle for method and more about the spaces that make decolonising research possible" (Zavala, 2013, p.55).

With (post)criticality

The 'critical' in *critical rhizomatic narrative* reflects an exploration of the *un*known, the *un*told, and the *in*visible, but it is not enough just to critique. Instead, we need to offer something in return, for which this narrative approach holds possibilities. Latour describes critique in ways that present its equal responsibility to seeking viable alternatives, of constructing possible options for something better:

> The critic is not the one who debunks, but the one who assembles. The critic is not the one who lifts the rugs from under the feet of the naïve believers, but the one who offers the participants arenas in which to gather. The critic is not the one who alternates haphazardly between antifetishism and positivism like the drunk iconoclast drawn by Goya, but the one for whom, if something is constructed, then it means it is fragile and thus in great need of care and caution (Latour, 2004, p.246).

For Felski (2015), critique can be described as "a spirit of sceptical questioning or outright condemnation" (p.3), asking, "what intellectual and imaginative alternatives does critique overshadow, obscure, or overrule? And what are the costs of such ubiquitous criticality?" (p.5). These questions are relevant to my writing/inquiry, as I wish to foreground *affirmative* critique in the "emergence of the possible" (Rebughini, 2017, p.9). Here, we can find "possible alternatives by transforming critique into a set of embodied practices, in material and situated dimensions, for changing the world" (Rebughini, 2017, p.4). Critique-and-criticality in *critical rhizomatic narrative* stands "in contrast to the understanding of critique as a disembodied exercise which seeks to unmake and undermine its object" (Gamal, 2022, p.98), but instead becomes Levinas' (1998) 'face-to-face encounter with the Other', that 'calls us forth' within those encounters (Walkington et al, 2020). Here, Latour (2004) calls for a postcritical response to critique, and an ethical move away from deconstruction-to-reconstruction in our analyses/narratives/encounters with others. Thus, my methodological approach embraces the *postcritical* as well as the *critical* in the way I engage narratively.

With affect

The intimate textu(r)ality afforded through embodied ways of thinking about crisis-and-resistance through *critical rhizomatic narrative with* critical inquiries and ethico-onto-epistemologies

seeks out the "differentiated capacities to affect and be affected" (Anderson, 2014, p.11), not in a psychological internality/externality, but towards mediations between the "psychic and the social, and between the individual and the collective" (Ahmed, 2004, p.119). Affect influences the attention to ethical-and-political dimensions located in subject/object entanglements (Ghosh, 2016), towards the semiotics and textu(r)alities of lived experience (Gonzalez-Hidalgo and Zografos, 2019). The affective turn (Clough, 2007) has become an antidote to the oft-stoic, *un*feeling rigour of scientistic truth-seeking pursuits, which, even indirectly, reinforce a subject/object divide through their dismissal of the (s's): *sensate, sentimentality* and *subjectivity*. Yet, lives of the everyday, of the 'ordinary', are a continual thinking/becoming/feeling with affect, through various convergences-and-departures of experience, and which are very much embodied-relationalities.

In opposition to dismissal of affect as 'unworthy' of measurement against truth-seeking Eurocentric representalist ontologies, the embrace of *critical rhizomatic narrative* to grapple with mutualistic/differential experiences of crises-and-resistance requires attunement to affect, as "it is through emotions, or how we respond to objects and others, that surfaces or boundaries are made: the 'I' and the 'we' are shaped by, and even take the shape of, contact with others" (Hall, 2011, p.10).

While affect, or 'emotional geography' (Bondi, 2005, p.3), seeks to locate emotion in terms of its "socio-*spatial* dimension and articulation rather than as entirely interiorised subjective mental states", it has thus far received greater attention in cultural and feminist geographies (Bondi, 2005; Sharp, 2009) than in political ecology. Yet, even in one of political ecology's most significant tenets on resource struggle, affect mediates social relations and ultimately shapes landscapes (Sultana, 2015). The decolonial dimension, reflexivity and artsbased narrativity of this methodology allows for an exploration of "affective life [that] is simultaneously mediated in the sense that it reflects and expresses relations, and mediating in that affects, structures of feelings and atmospheres are always imbricated with other processes" (Anderson, 2014, p.165).

Each of the **three stories** engage with affective entanglements regarding experiences of crises-and-resistance in respect of invasive socioecologies/hauntologies, water, food, and livelihoods. Yet, it is also through my own reflexive engagements with affect that I am able to converse with the stories *rhizomatically*, and with critical awareness of the contingencies of such inquiry. As such, I also am in "the centre of the sense-making process with all the concomitant emotional and spiritual interconnections with the context that this necessitates" (Swanson, 2004, p.199). The affective literary and poetic form also has other affects/effects, in that it seeks 'to move' arguments, conversations, hearts and souls, in all the different senses this implies.

With ethicality

As with reflexivity, criticality and affect, *ethicality* is a critical component of *critical rhizomatic narrative*. I have discussed ethics/ethicality throughout this inquiry. *Critical rhizomatic narrative* is inherently shaped by its embodied ethical dilemmas and their realisations (through '*moments of articulation*'), requiring deeper consideration of the conundrums, opening the undulating landscape of the story to increased dimensionality-and-depth. Its ethical approach undergirds its *reflexivity*, eschewing a confessionalist approach for a commitment to the relationalities that are not extractivist or objectifying. It also serves the purpose of the (post)critical dimension, seeking to 'do justice' *with* the affect of lived experiences through its embrace of aesthetic, poetic, and philosophical forms, and through an ethico-political approach to the structural power relations and precarities that undergird them.

Ethical responsibilities with humans and more-than-humans, as Rosiek and Snyder (2018) offer, ask not whether a story is true, but "what are we and our stories becoming together?", and, "what is our responsibility to the story?" (p.3). This informs the purposes of my inquiry/writing, which is to tell these tales responsibly by writing affectively of the lived experiences of crisis-and-resistance. As an ethical consciousness for being-with humans and being-with more-than-humans, my encounters and responsibility shape-and-are-shaped-by, and become-together, stories of affect.

These co-constitutions and contingencies become entanglements that find commonality with (post)*critical rhizomatic narrative* methodology's pursuit of reflexive-and-relational stories, both told and untold (Swanson, 2004). Barad (2007, p.393) writes that,

> Ethics is… not about right response to a radically exterior/ised other, but about responsibility and accountability for the lively relationalities of becoming of which we are a part.

Further ethical contingencies present in this research arise through considerations of researching with vulnerable companions. My ***ethical clearance*** for this inquiry permitted me to obtain permission from 'participants' to conduct semi/un-structured interviews, conduct walking-interviews in 'the field', record our conversations with their permission, to store those recordings safely, and obtain permission for taking photographs. None of my companions were children, and all gave orally-recorded consent prior to conversing with me. After each recorded conversation, I downloaded these recorded interviews and kept them encrypted and securely-stored in a locked University-based computer folder, which only I could access.

Further, to afford ethical responsibility to my companions, Buhlebendalo, Fatima, Elizabeth, Caleb, Melumzi and Lwandle are pseudonyms I have given to protect their identities. Rosheda Muller, in ***Something About Water***, permitted me to use her real name as a formidable activist in her field, whose unique contribution to the story I could not have written without her permission.

In the story, ***The Tides That Bind***, especial ethical considerations are addressed here. While none of my companions have been involved in illicit economies, the story gestures towards the politics of crime with respect to abalone poaching in South Africa, a practice which is fairly widespread. To afford extra protection, Melumzi is a ***composite*** of four different companions that I met variously throughout this journey. For complete anonymity, Melumzi is a pseudonym I use to describe this composite character, as is Lwandle. A couple of these companions have had interactions with poachers in the past, which arose in varying levels of detail in their life stories. Further, while this story takes place in Hangberg, an 'abalone poaching hotspot', poaching takes place across the Eastern and Western Cape, and so many companions were from varying coastal and other locales. Other characteristics that may have made them 'identifiable', such as through their tattoos and dreadlocks, are also common amongst South African Rastafarian peoples, and so are not specific to one person. I have thus changed aspects of the story and characters to ensure non-traceability and to fictionalise aspects of events that are based on real happenings that have been conveyed to me by these companions and relevant others through various conversations throughout this research.

Reading the landscape

As Spirn (1998, p.20) writes, "landscapes are the world itself and may also be metaphors of the world". The meaning of/in landscapes can be derived through human disturbance. For Spirn, 'environment' and 'place' gesture to a position of neutrality, terms that are,

> abstract, disembodied, sacrificing meaning, concealing tensions and conflicts, ignoring the assumptions *landscape* reveals. *Landscape* connotes a sense of the purposefully shaped, the sensual and aesthetic, the embeddedness in culture" as a place "loud with dialogues". (p.18)

Critical to *critical rhizomatic narrative*, are how landscapes can be 'read' or understood through semiotic relationalities. 'Reading' the landscape through *critical rhizomatic narrative* is not an exercise into a linguistic-dialogical analysis through literal text, but rather a textu(r)al engagement with social discourses, such as power, race, gender and nationalism (Duncan, 2009), recognising that landscapes, like language, form assemblages through their pluralism, of which I am a part.

'Reading'-the-landscape in this inquiry, both materially and metaphorically, is simultaneously a contested spatiality, space for possibility-and-resistance, an ensemble of pluralist voices, as it is a sociopolitical, economic, cultural and pedagogic assemblage. This landscape is also *home*, even in its unhomeliness (Prezelj, 2017).

Reading the landscapes through this narrative methodology requires navigation, though not nomadic loss of orientation, of its undulations and its utterances in the oft-shadowed valleys and open plains of the multiplicities of discourse and affect that are inscribed in its topographies.

Walking with

The 'fieldwork' aspect of this inquiry was conducted mostly on foot, in a multi-sensate journey that, in a sense, extends its roots/routes back to before this research officially started. This is the case for me as well as those I communed with in this research. Walking alongside the people who contribute to this inquiry, creates opportunities and possibilities to pay attention to sociospatial relations (Anderson, 2004) afforded in undertaking (post)qualitative research in this way, and which contributes to the 'mobility turn' within the social sciences (Bartlett et al, 2023). Yet, my companions are not only humans but more-than-humans, and so, walking-with-the-landscape performs a continuous-and-unfolding conversation that reveals its contingencies/alliances/complexities/utterances in rhythmic (polyphonic) ways. Walking *with*, allows for a temporal/spatial journey that traverses ecosystems/biomes/temporalities/emotional landscapes.

Walking *itself* has contextual and semiotic significance, such as in the journeys of the pastoral Cape *Khoi* whose roots/routes were diverted and eventually blocked by settler occupation. But walking also has other connotations, in the long journeys traversed to available water pumps during apartheid resettlement, during the long routes taken by those residents of informal settlements on the urban-periphery during the Cape Town water crisis 2017/18 to access municipal taps, and across difficult terrain that invasive clearers now navigate to access colonially-planted invasive species.

Walking-as-inquiry works against the confessionalist and representalist ontologies of landscape and lived experience, through a deeply relational, interconnected and entangled companionship.

Walking *with critical rhizomatic narrative* in a meta-semiotic engagement with the landscape and its inhabitants, affords a sociomaterial and affective reflexivity that attends to relational solidarities with those who have long walked these paths, and who will continue to do so hereafter, while locating inquiry in the metaphorical and embodied inter-subjectivities, coproductions and multi-dimensionalities of the lived experiences of 'ordinary' humans and more-than-humans.

Listening with

Dialogue is a much-discussed aspect of narrative methodologies and qualitative research more broadly, but 'listening' as an 'everyday', continuous assemblage of semiotic relationalities has thus far not been afforded much attention. It is an important meaning-making process beyond the linearity of sender/receiver (Staddon et al, 2021), which can perpetuate a subject/object divide. Here,

> listening can be construed as a normative act in its own right (eg. vis. 'hearing', or 'speaking'); or distinguished into listening archetypes from which normative listening behaviour can be inferred, such as 'deep' or 'active' listening' (ie. vis. 'shallow' or 'passive'). (p.345)

The authors write of the different ways listening can be embraced for engaging with these relationalities (p.345): listening as a relationship and the embedded power structures in play; care and empathy within the relationship; and inclusivity through deep listening and agential voice. While Berman (2020) warns of an 'ear from nowhere', others emphasise the need for listening from 'somewhere' (Bennett et al, 2015).

The *critical reflexivity* of *critical rhizomatic narrative* affords an important orientation to 'listening', knowing that our inner ear will always be attuned to the social histories of which we are a part prior to the conversation, and which influences *what* we hear and *how* we hear it. In some senses, listening will always be somewhat selective based on our own subjectivities, though Koch (2020) reminds us that 'intellectual humility' and 'an ethic of openness' fosters 'deep listening' as a critical reflexive tool towards engaging with the power imbalances embedded in these relationalities and how they attune us towards assemblages 'unheard'. Against the opportunism of interpretivism that can threaten to deafen voices other than our own through human centralisms, *critical rhizomatic narrative* instead reminds us that listening, as one semiotic offering, affords reflexive pathways through which relationalities can emerge.

In this inquiry, I often found myself listening for avenues through which to insert possibilities of kinship, which reflected my own hopes to subvert belonging/unbelonging and subject/object divides, in part influenced by my outsider/insider sensitivities in asserting my South African identity while speaking with a foreign accent. But, these efforts were quickly replaced by a consciousness, that in so doing, I had tuned myself inwards, and stopped listening *with* those with whom I was conversing. Walking in Newlands Forest, listening to the southeasterly wind brush through the branches adopted a semiotic significance attributed to my own wild and unabandoned longing to return to my homeland, at first blissfully oblivious to the way it snapped at the blackened stems of burnt *Proteaceae* after a recent wildfire. Yet, listening, especially for the voices of the more-than-human, has always informed indigenous pedagogies,

especially for the *isiXhosa*, who 'listen' for their call from the ancestors to become an *insangoma* (van der Watt et al, 2021).

In this way, listening *with* and walking *with*, and all the other semiotic engagements of this inquiry are not distinct, but continuously entangled. As Ebenreck (1983, in Staddon et al, 2021, p.350) notes,

> Learning to 'listen to the land'… will involve walking the land, studying its soil, terrain, and water, knowing its native plants and history. Walking the land while asking one's self 'what does it have to say to me?' may reveal essential knowledge related to the issue of what can appropriately be done with the land.

In reciprocal ways, scientists have shown that "plants react to vibrations, sunlight, pressure, gravity, and chemicals and some biologists regard the exchanges between, for example, plants and fungi as forms of conversation" (p.350), which I engage with in ***Turning towards the light: a beginning without end*** as dialogue through the 'tropism' of plants. Listening for the pluralism of voices in the landscape, while walking amongst it, becomes a relational, reflexive inquiry approach attuned to the "material and discursive knots and intensities of the assemblage" (Mazzie and Jackson, 2017, p.1090).

Visual methodologies

To engage in a multimodal affective storytelling, my 'mycelial interludes' weave between my writing through the medium of visual photography. I hold the critiques of such methods and methodologies close.

Photography has been critiqued as a 'manifestation of coloniality', where "photography in which the oppression and violence of colonialism are embedded", and "power structures also often created, facilitated, circulated, and preserved colonial photographic work" (Reisz, 2024, p.108). Depictions of landscape have also revealed the intersections of patriarchy, Orientalism/colonialism, gendered and racial dynamics (Devadoss, 2020). Historical photographs often portray landscapes as 'empty wilderness', devoid of the deeply diverse forms of indigeneity that constitute these landscapes or the struggles that undergird them, through a romanticism of the 'inescapable wild'. Photography, in parallel with botanical drawings, has also been used as a method of 'categorisation' to create taxonomic claims-to-truth as to 'how we see the world', influenced by the highly-racialised botanical practices of Carl Linnaeus in 1735 (Paterlini, 2007). Critically, less visible forms of coloniality form "a patina on the picture of the world… through which colonial photography has been viewed, perceived and understood" (Reisz, 2024, p.108), known by these scholars as 'colonial visuality' operating as a 'visual regime' (Foster, 1988, p.x). For Hevia (2009), this is known as the 'photography complex', which critiques the ways in which historical and political devices have shaped the 'reality' photography produces. As such, "the photograph in itself is neither a reflection nor representation of the real, but a kind of metonymic sign of the photography complex in operation" and which has "the capacity to mobilise and deploy elements for generating new material realities" (p.81).

In keeping with my ethical and reflexive commitments, these images make no claims to the real-or-unreal, and do not offer an arrival at a single reality (Reisz, 2024), nor do they seek to offer a "simple or mimetic depiction of lived experience" (Mirzoeff, 2011, p.5). Images can instead offer a "critical refutation of the implicit 'argument' of the images… and create a

contrary visual image or 'staring back' into the face of the predatory colonial gaze" (Alloula, 1986 in Reisz, 2024, p.108). While not intended to be predatory, I am conscious of what 'looking back' into my camera and my own gaze portends.

My use of photography, as an aid to the multi-sensory affectivity of this inquiry, is continually engaged in the 'photography complex', as a relationality between those I research with, my own ways-of-seeing the world, and what being in front/behind 'the lens' suggests. They gesture towards the affectivity of the research journey I have undertaken, as well as the 'vibrant matter' that precedes it and exists long after it. The '*moment*' (in *time*, and of *articulation*) the photographs portray also bely a complex interconnectedness of multi-temporal/spatial accumulations that occur in a single rhizomatic 'bulb'. What is being photographed is a shifting/sliding relationality, that opens new conversations and interludes in the seconds that precede-and-follow the 'click-of-the-shutter' and offer moments of engagement that seek to affectively interlocute with the *rhizomatic conversations* behind the stories.

The photographs, through the '*mycelial interludes*', engage the semiotics-of-landscape that bear witness to diverse ways-of-feeling/knowing/experiencing affectivity. While they make no claims to 'truth', they hope to offer another opportunity to engage with interconnected complexities through the sensate beyond my stories alone. In the context of climate change, photographs also gesture towards a commemoration of having been present with the lives of more-than-human agents that are threatened or nearing extinction. While many of these photographs depict more-than-human matter, which are not passive, and are also engaged in a conversational relationality with me in that moment, many of the photographs of human agents were taken while in constant verbal conversation, while walking *with*, and they became one medium of conversation that I was aware created pauses or new connections in rhizomatic ways. The presence of my camera became a request to take 'graduation photographs' during a backyard chicken farming course in Mitchell's Plain, and it became a memento for celebrating Fatima's water-saving practices (at her request and with her permission) in ***A Lesson from Spekboom*** with the employee of *Soil for Life*. It also became something that was put aside and not used at all in the tenuous, quivering moments with Melumzi in ***The Tides That Bind***.

Contribution to the field

In ethical response, and in solidarity with the indigenous and local people and ecologies of this land and as a political ally, I humbly offer this research as a small contribution to the collective reclamation of indigenous and situated cosmologies in a context where these have been consistently-undermined under the force of colonialism and separatism. I also hope that this research may afford some contribution towards understanding the less-visibilised *affects* of crisis-and-resistance in the Anthropocene.

Through its transdisciplinarity, this inquiry seeks to respond to a relatively-recent call for transdisciplinary alliances in addressing vexed 'problems' associated with interrelated development crises (Shackleton et al, 2023). This research spills across a range of epistemic locales and is reflexively-and-narratively orientated, with specific sensitivities to local, Southern ontologies (Wolff et al, 2019). The transdisciplinary approach and epistemic border-crossing is an attempt to grasp at complexity, which often defies linear analysis and evades simple solution. The social/political/economic/ecological complexities of development in the Western Cape of South Africa provide ample evidence of a context where a 'solutionist' approach (Turok et al, 2021) may be naïve and where disentangling these complexities proves to be a political minefield.

The inquiry contributes uniquely to transdisciplinary research and the development studies field in a number of closely-connected ways: the context (development context of the Western Cape of South Africa); the theoretical orientations of the research (political ecology/socio-materialism/posthumanism/decoloniality/indigeneity/political economy), the focus (the politics of water, food, conservation, socioecologies and livelihoods), methodological orientation (reflexive storying through *critical rhizomatic narrative*) and boundary-crossing (epistemic and ontological).

It is also my hope that my contributions will expand the margins of critical artsbased research and *critical rhizomatic narrative* as an elastic methodology through its more-than-human orientations. By bringing together the dialogical and the indigenous, it also connects the biology and ecology of indigeneity with decoloniality. Through its imbrication of political ecology and posthumanism, such embrace of aesthetic methodology is a unique contribution to the international development field in itself, for which such a methodological use is entirely novel. Such an artsbased methodological approach also serves to decolonise development studies in its approach and particular philosophical application. The research also relatively uniquely brings together vexing 'development' issues and conundrums that are within the purview of development studies, political science, and environmental science.

However, some contribution *beyond* the field may also be offered, in the ways that forms of crises-and-resistance in the Anthropocene are not experienced in South Africa alone, and socioecological precarities are increasing their tempo globally. Such is the case for the Western Cape's Day Zero, an event that becomes more likely to e/affect metropolitan cities worldwide, as well as droughts, food-and-water insecurity, biodiversity loss, and the ongoing invasive legacies of colonialism and hegemonic domination. Thus, this research may contribute towards thinking through the affect/effect of similar precarities and nuanced resistances in other global contexts.

As I have sought to be non-extractive throughout this thesis, there are also personal contributions that I may offer both *within* and *beyond* the field and this research, with especial regard for the lives of the humans and more-than-humans I have 'researched with'. With the photography of my mycelial interludes, I intend to hold an exhibition to bring attention to these visual storied narratives. I also continue to have relationships with many of the protagonists, especially Elizabeth, to whom I offer digital assistance as she begins a new venture in micro-herbs. I also continue to support the work of the South African Botanical Society (SANBI) through *iNaturalist*, identifying and geomapping potentially-threatened species across the Cape. But, I also hope to contribute in many other ways, in museums, exhibits, and through talks, conferences, workshops, publications, and in other academic and community-based ways, I see my activism and solidarities as contributing to socioecological, climate, cognitive and intersectional justice and I dedicate the rest of my life to such undertakings.



Reflections of flight in the Kruger National Park, South Africa

Viscous Histories

The Cape became an 'in-between' place for European travellers voyaging between Europe and the East during the 16th and 17th century spice trade, until it was more formally colonised by the Dutch East India Company in 1652, under the control of Jan van Riebeeck (Worden et al, 1998). Resource extraction and exploitation became common practice under colonial rule, and water, in particular, became the site of geopolitical power and control. The most significant supply was derived from the Table Mountain perennial spring water aquifer, for which the *KhoiKhoi* had named '*Camissa*', 'place of sweet water' (February et al, 2004). The transhumant[a] pastoralism of the indigenous *Khoikhoi*, who followed the rains, were insidiously-replaced by European settlers. Simultaneously, the distribution of water rights based on land access quickly founded this country's water laws.

> It is perhaps of consequence that 'rival' and 'river' are derived from the same Latin word *rivalis* – one who uses the same stream (van Wyk, 2010).

The defeat of the Cape *Khoikhoi* allowed for further land appropriation by European settlers, who occupied water-rich areas, leaving little available pastoral land for the *Khoikhoi* who had only relied on these resources during their transhumance seasonal demand (Worden et al, 1998), *never taking-too-much-from-the-land* (see ***The Tides That Bind***). Faced with otherwise insecure survival and waterless independence, the slow violence of the *Khoikhoi*'s economic and social disintegration eventually led to the near-loss of their language (Guelke, 1992, p.820) and the confinement of their bodies into oppressive systems of whiteness (Green et al, 2007). Further violences played out in the reshaping of the land – now croplands, monocultural plantations, and European housing. The land, once sacred to the *Khoikhoi* and the *San*[b], became a land of conquest and both fast-and-slow violences, cementing histories of land dispossession through historical legislation, which then under apartheid prevented indigenous peoples of South Africa from acquiring, holding or disposing of immovable property under its Native Land Act of 1913 (van Wyk, 2010).

The first water legislation came into practice and this era was defined by increasingly desperate attempts to claim control over the 'wildness' of the natural environment in a form of 'ecocide'[c] and 'ecophobia'[d] (Sarlieve, 2020; Deyo, 2019). In a region growing more arid due to environmental denuding, the first water crisis emerged in 1663 (Deacon, 1992). In 1896, alien Acacia species were introduced in an attempt to "rationalise a landscape according to principles of a global political economy" (Hornborg et al, 2007 in Anderson, 2012, p.6), and despite their high fuel-loads, significant water-use, and propensity towards frequent burning, their introduction sought to reinforce "a foreign aesthetic based on an assumed ecology from the woodier landscapes of Europe, and were ecologically grossly misguided, further degrading the natural environment of Cape Town" (p.6).

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[a] Seasonal migration/nomadism with livestock according to climatic changes

[b] The *KhoiKhoi* and the *San* began to assimilate through the *KhoiKhoi*'s dominance in livestock trade with settlers – becoming the *KhoiSan*.

[c] Ecocide is defined as "various measures of devastation and destruction which have in common that they aim at damaging and destroying the ecology of geographic areas to the detriment of human life, animal life and plant life (Freid, 1972, p.43)

[d] Ecophobia, or a 'fear of nature', is rendered as a "primordial, largely precognitive (or unconscious) awareness of our animality: which is to say, our inescapably vulnerable, mortal nature" (Deyo, 2019, p.442).

Further alien Acacias were sewn into the mobile sand dunes of the Cape Flats on the urban edge of Cape Town in an effort to stabilise them. These dune landscapes were considered a major inhibitor to cattle mobility during early settlement, and the Acacias, having hailed from Australian and Mediterranean fire-prone environments, thrived without inhibition or control, a lasting legacy and threat to biodiversity in the Cape today (van Wilgen, 2012). As the Acacias grew, racial segregation in the city began more formally in the 1900's, and indigenous/local peoples were moved to the urban edge in the first formal resettlement project, which was considered the frontier of hostility and the 'wild' opposition to the 'simplified' benign core (Anderson, 2012). Racialised resettlement created a "complex system for controlling the labour and movement of Africans and clearly defining and separating the country's four officially-designated racial groups – Africans, Coloureds, Asians and Whites" (Raddock, 2024, p.12).

The subsequent 'separate development' project uprooted millions of indigenous South Africans, often forcing them to leave behind land that "had been lived on by their family for generations, demonstrating the absurdity of the so-called 'homelands' (Bantustans) the government relocated them to" (Tarantino, 2019, p.18). The Bantustans, established under the Bantu Homelands Citizenship Act of 1970, were created with the intention to deny Black South Africans citizenship of the mother country and dilute their presence in South Africa for Whites (Tarantino, 2019). The degradation of their living conditions as a result of the resettlement policies entrenched conditions of poverty, where "most people suffered material loss when they were relocated, particularly those moved from situations where they had had agricultural land into situations where they did not" (Dubow, 2014, p.114). Water was often kept in substandard government tanks, taps were turned off on an *ad hoc* basis by government officials to 'conserve' the resource, and taps were located miles from the settlements (p.23) (see ***A Lesson from Spekboom***). Critically, the homelands lacked access to basic services and such racialism largely remains mapped onto the materialities of land, water, and resource allocation, despite the advent of representative democracy in 1994.

In the Cape, the significant use of water by invasive plantations worked in parallel to the anti-apartheid resistance movement of the 1980's, unequal water access becoming a mobilising matter. The liberation from South Africa's iniquities (not inequities) (Takacs, 2016) in its 1996 constitution, its resurrected Public Trust Doctrine, and the 1998 National Water Act provided the legality, policies, activism and political will to enshrine the "right to have access to sufficient food and water" (p.60). The new constitution abolished the privatisation of water systems established through the land dispossession of colonial conquest, and which were distributed along racially-discriminatory lines, and made it a common resource for all.

In an arid country of extreme drought exacerbated by the implantation of invasive species, and a fledgling democracy (Stein, 2006) that inherited the vast inequalities of the (pre)apartheid era, South Africa's progressive and holistic approach to the constitutional right to water enshrined a deep ecological understanding that as a natural resource lacking infinite capacity, its ecological infrastructure needed to be stewarded for the enjoyment and benefit of all. Despite such landmark progress in international law, the constitution has been undermined by the "tension between the ideology of neoliberal economic reforms, the demands of human rights, and the ecological reality of a limited source of clean fresh water" (Takacs, 2016, p.60). It is of note that the right to water remains classified in international law and South Africa's constitution as an Economic, Social and Cultural (ESC) right, rather than a Civil and Political (CP) right, allowing for its mismanagement or underperformance to be derogated according to a subjective view of its protection for 'current and future generations' (Takacs, 2016), and for

the post(-)apartheid government to further entrench apartheid-era socio-economic inequalities in the name of its capitalist interests.

The politics of water through invasive socioecologies is a largely understudied area through which apartheid legacies might be revealed as a new 'class struggle' (Bond, 2002). Possibilities for the denial of access, and the subjective interpretive nature of the Water Services Act 1997, means that,

> lack of access and control over water resources, unfavourable interpretations of water policies, exclusion from decision-making processes, and the lingering apartheid political and social ideologies underlying water law all obstruct disadvantaged South Africans from having their right to water fulfilled. (Tarantino, 2019, p.39)

Today, the politics of water (which also underwrites the politics of food) animates the struggle between "the still-dominant capitalistic economic principles of the apartheid era [which] are not compatible with the somewhat-socialist ideology of the South African Constitution" (Tarantino, 2019, p.91). The continuation of pre-paid meters in economically-disenfranchised settlements, "the commercialisation and privatisation of services [and water] disconnection due to non-payment are two of the long-standing policies which have made a mockery of the ANC's 'lifeline' promises" (Bond, 2002, p.187). Consequently, the capitalist framework that promotes a free-market economy entrenches the commodification of water at the expense of the environment and the most disadvantaged, and perpetuates the distribution of water along racialised lines. Thus, "because access to safe water is a necessary condition for survival, issues surrounding water policies are 'the most controversial when subjected to the laws of capitalism'" (Bond, 2002, p.26 in Tarantino, 2019, p.42).

Today, the City of Cape Town suffers from stark social and development binaries exacerbated by South Africa's racially-segregated history. Its urban ecology and social ecologies are deeply-interwoven, and its 'natural spaces' are indicative of contested histories. Invasive alien species continue to flourish along the Cape Flats, such as in Philippi (see ***Something About Water***), and elsewhere within the City, such as Hangberg (see ***The Tides That Bind***), at great cost to 'ecosystem services' and biodiversity[e] (van Wilgen, 2012), and despite the landmark Government Public Works: Working for Water Programme, which was introduced as a poverty alleviation method while improving water service delivery through the clearing of invasive species. With most natural surface water resources now exhausted, provisions are mostly exported from outside the city (Anderson, 2012). The flow of resources within-and-without the City boundaries undercuts the idea of the City as a bounded entity, and sees the mobility of resources and capital as transboundary objects that move in fluidity across Euromodernist delineations of centrality and peripherality.

Critical to the context of this research setting and the stories narrated, the historical introduction of alien species played a significant, yet globally-underreported, role in the Cape Town water crisis, where alien vegetation used over 100 million litres per day of the Western Cape Water Supply System (WCWSS), 20% of Cape Town's daily usage (Slingsby & Botha, 2018). This has exacerbated the growing gap between the priorities of existing governance policies and the daily water needs of citizens. The result is a costly entanglement of competing challenges. Alien vegetation currently costs South Africa approximately ZAR 6.5 billion

[e] The high levels of endemism and diverse species of flora (Rebelo et al, 2011) of Table Mountain are threatened by growing urbanisation and the invasive advancements of alien vegetation, and many feature on South Africa's IUCN-endorsed 'Red List of Threatened Species'.

annually in addition to the ZAR 1.5 billion it spends on managing the challenge (SA News, 2021). Yet, this financial cost does not account for the stresses experienced by those facing increases in drought, or indeed flooding, within cities and the instability of livelihoods caused by biodiversity loss and water insecurity. Compounding these disasters is catalytic climate change as an overarching challenge, developing an increasingly unsustainable environment for all, but especially the most economically-disenfranchised. Scales and spatialities of inequality of the (non)human remain, and the 'conservation' of socioecological systems are vulnerable to dominant value systems (Adams, 1996), which differentiate wellbeing outcomes in accordance with normative values that shape decisions around whose lives count the most (Redham, 2011).

Against this backdrop and in contrast to a more deficit view of its history, South Africa is also marked by narratives of political resistance, collectivism, and solidarity (Nagy, 2002). Its rich diversities also have been the source of its aesthetic bounty, its bold political aspiration, the resourcefulness of its people, and the promises of hope, humanity and alternative possibilities it offers. However, 'South African nationhood' collides with other political imaginaries circulating within the social domain and among the global/local discourses at play, so that contradiction and possibility become the competing hallmarks of its history of the present (Foucault, 1977).



Light and shadow in the Valley of Desolation, Camdeboo National Park

Spectral pasts

Freedom is the negotiation of ghosts on a haunted landscape; it does not exorcise the haunting but works to survive and negotiate it with flair.

Anna Lowenhaupt Tsing (2015, p.76)

Clouds gather and roil over the top of Table Mountain, besieging its promontory bluffs… overflowing in sheets down the slopes of its rugged flat-stone lip to form the mountain's iconic 'tablecloth'. Legends tell of the 18th century poet, Dante Gabriel Rossetti (1912, p.7) who wrote of the birth of the tablecloth, that it was derived from the smoking pipe of a famous Dutch pirate, Jan Van Hunks, who resided at the foot of the mountain and who would stop to smoke along its rocky precipices.

'For thirty years', the Dutchman said,
I have smoked both night and day;
I've laid great wagers on my pipe
But never once had to pay,
For my vapouring foes long ere the close
Have all sneaked sickly away.

One day, meeting another who smoked, they duelled to compete for who could smoke the most. During their duel, the pair were visited **three** times by a starving man, a grief-stricken woman, and a pastor, whose cries for help Van Hunks cruelly dismissed. But, the mysterious opponent revealed himself to be the devil, and now, "When the Devil wants his pipe/They bring him Jan Van Hunks" (p.19). Local lore still tells that when the clouds gather over the mountain's flat peaks, Van Hunks and the devil are duelling once more. Nearby, the adjacent bluff of Devil's Peak stands as Table Mountain's eternal challenger, a reminder of the three strangers whose cries went unanswered in the night, and the vapouring foes that still gather from the pipes of colonial ghosts…

Today, smoke along the mountain slopes often holds other meanings… another fire, another socioecological disaster, another injurious dismemberment of its beautiful landscapes… no longer strangers in the night, though with cries that still go unanswered.

Smoke is both legend, as much as it is present and future crisis.

Like the tale of Van Hunks, legends, geomythologies, ghosts and crises haunt South Africa's landscapes, with spectral pasts that move through haunting relationality between the present and future for its residents today. While ghosts and spectres are commonly viewed as an apartheid-era trope that the late Archbishop Desmond Tutu hoped to lay to rest through the country's post-apartheid Truth and Reconciliation Commission (TRC) (Swanson, 2007), 30 years after democratisation, South Africa's colonial and apartheid past are still revealed in the absent/presences of the there/then, here/now and the effects of the past/present on its human, nonhuman and more-than-human subjects. "How *can* ghosts be laid to rest", asked Demos (2013, p.21), "when the events that unleashed them are not entirely concluded, only repressed in the present?"

The legacies that haunt the country's multiscapes (social, political, economic, ecological, material, geographic and geomythological), or indeed its climate-affected *harmscapes* (Berg and

Shearing, 2024), emerge as onto-epistemic *spoke* (Afrikaans for 'ghosts') or *sepóko*[a] (in Tswana), a "recognition of the presence of something that is no longer, but that still remains as an affective and sometimes irresistible force in the world" (Sterling, 2022, p.69).

For Demos's ghosts (2013) who have not yet been laid to rest, they appear in presents and futures with spectral yearning for terminable pasts that have become moribund. Such material phantoms denote the presence of an end which has not been absolute, an indeterminate and unsettled (in)finality. Trapped somewhere in the 'in-between' of two eras, demarcated by democratic transition, set adrift amidst the liminality of biopolitics and necropolitics (Foucault, 2003) in the material and allegorical hyphen…

… between post(-)apartheid South Africa;

… between the thanato-political[b] symbiotic co-presence of life and death (Murray, 2006), which has become manifest in the cleavages between citizens and non-citizens (and those who/that which can be stripped of citizenship or constituted as 'failed citizens' (Swanson, 2013);

… between the culturally, morally and economically valuable and 'the pathological' (Haritaworn et al, 2014);

… between the fall of a regime and the rise of a new order in pursuit of world-ending and world-building;

… between enchantment and disenchantment;

… between spectacular evil and radical hope (Lear, 2006);

… between bodies politic (human and nonhuman) marked by *dispotifs* of exclusion and inclusion (Fishel and Agius 2024);

… and other dichotomies produced through learned divisiveness (Willinsky, 2000).

The forms of paternalistic biopolitical/necropolitical/thanato-political governmentality through which the apartheid regime operated, a system that exerted social and political power by 'making live and letting die'/'who gets to live and must die' (Foucault, 2003), and in lauding over racialised decisions as to whose life is grievable (Butler, 2016), and which "deal[t] with the population, with the population as a social problem, as a problem that is at once scientific and political, as a biological problem and as power's problem" (p.245), and a system which was responsible for death and division of many kinds, was assumed (following democratisation) to have undergone its own death… the death of White-minority rule, segregation, and discrimination[c]. But, the liminality in which post(-)apartheid South Africa finds itself is replete with spectres, who haunt the temporalities/spatialities/placialities and events that were not concluded during the country's democratic transition and the hopeful anticipation of apartheid's 'death'.

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[a] *Sepóko* in Tswana is derived from Afrikaans and based on interactions between the Northern Sotho peoples and the mainly Afrikaans-speaking farmers (Ziervogel and Mokgokong, 1985).

[b] The politics of death.

[c] This even appearing in a three-part BBC documentary in 1995 entitled 'Death of Apartheid'.

These legacies shape present and future identities, and the crises that attend them point towards their shadowy presence. As Derrida formatively wrote of his *hauntological* portmanteau in *Specters of Marx*, "there can be no 'I', no sense of self if it were not for the haunting present absence of one's others, those yet to come, those that have been, and those that do not exist as such" (Henriksen, 2021, para 3). As Gelder and Jacobs (1998, p.42) write of a haunted South Africa:

> Ghosts simply could not function in a climate of sameness, in a country which fantasises about itself as 'one nation' or which imagines a utopian future of 'reconciliation' in which… all the ghosts have been laid to rest. But neither can they function in a climate of nothing but difference, where the one can never resemble the other, as in a 'divided' nation. In South Africa, sameness and difference collide in complex ways, creating a structure in which sameness and difference embrace and refuse each other simultaneously.

Hauntologies work in gritty, complex, contradicting ways through 'spectral accretions' (Waterton and Saul, 2020), rendering a fear of the difficult past (Shaw, 2018) and evoking its excavation 'beyond the unheimlich' (Fisher, 2016) to consider, "how the deep-time of archaeological materials produce 'enchantments'" that influence social/cultural/environmental challenges (Fredengren, 2016 in Paphitis, 2020, p.1).

Such negotiations with liminality perform a 'social configuration' that recognises the "marginalised, trivialised, denied, disqualified, taxed and aggrieved" Gordon, 2008, p.xviii) through a 'historical consciousness' of multivocality (Seixas, 2006; Paphitis, 2020). Thus, spectres are entwined with posthumanism, blurring lines between nature/culture and "reinstat[ing] voices of overlooked agents" (Paphitis, 2020, p.2). They are rendered decolonial through folkloristic inquiries and Black hauntologies (Northover, 2012), which invite indigenous resistances through ancestral spectres that, through their interconnectedness with ancient lands, defy erasures of the past performed by ahistorical Euromodernist, capitalist accumulations (Northover, 2012).

Threatened futures of the Anthropocene make the call for hauntology an urgent archaeological practice in re-learning the language-of-landscape. As Paphitis (2020, p.3) writes,

> our present and our futures are haunted and threatened both by absences (eg. deforestation, melting ice, plant and animal extinctions) and by very material ghosts – particularly anthropogenic waste (eg. plastics, toxic and chemical contaminations, carbon emissions).

These become,

> *matter out of place* of the spectrality of human behaviour, which stretch conventional temporal, cultural and material foci of archaeologists and challenge our conceptualisations and collection of heritage. (p.3)

In the seven perennial streams of Table Mountain and in the flows of Skeleton Gorge, lies
one such material spectre
that exists nowhere else on Earth…

… a rare, elusive and ancient amphibian, named the Table Mountain Ghost Frog (SANBI, 2018), with translucent bellies and wide-webbed discs that allow them to cling to rocks in the fast-flowing water. They are *Heleophrynes*, from the Latin, 'one who is afraid of the sun'. During colonisation, they evaded human disturbance in the high mountain slopes and rocky scree, where settlers struggled to climb in their search for timber, and the ghosts of those who tried and failed still haunt Skeleton Gorge in the enduring plantation Pines below. Only appearing at night under the pale light of the full moon, the Ghost Frog emerges from rocky nooks to feed on the stream's algae (Edmondstone, 2022)…

but the streams of the mountain grow less and less…
urban encroachment expands its creeping advances…
and fires burn in increasing tempos across the land.

Colonially-planted Pines drink more than their share, dams are clogged with logging waste, and human disturbance in few remaining ancient woods have exposed canopy gaps to the sun. The Ghost Frog's evasion of human disturbance during the first settler invasions on the land have now fallen victim to the tautology of invasion itself, and that its very nature exalts an insidious necropolitics in reverberations and hauntologies that circle in, overlap and ripple outwards from the past.

In 2008, the amphibian became an EDGE (Evolutionarily Distinct and Globally Endangered) species, and in South Africa, it is listed as Critically Endangered (SANBI, 2018). Now, the Ghost Frog is a spectral apparition due to the reduced water flow and increased sedimentation on rocks that prevent tadpoles from being able to attach (SANBI, 2018), and they haunt landscapes that have historically been one of the most biodiverse regions on Earth…

The ontologies of haunting, known as Derrida's hauntologies, and eco-hauntologies (Shildrick, 2002), which enshroud ecological spectres, present a past that exists as an "ontological threat to the present and to the future, and thus represents both the 'no longer' and the 'not yet'" (Paphitis, 2020, p.1). Eco-hauntology extends the hauntological debate further by calling for an "openness to the radically, but not absolutely, unknowable other, which understands that neither the one nor the other can exist apart" (Shildrick, 2002, p.131). It thus invites a "welcoming of the monstrous *arrivant*", the "potential site of both a reconceived ontology, and a new form of ethics" (p.131) that could be "a hauntology; an ontology of the present absent, of a strange future yet to arrive but to some extent already here as the other (buried) within, a monstrous promise of things to come but also a reminder of what the self owes its others, past and future, in the present". For Shildrick, in reading Derrida, the monster cannot be "fully containable within the binary structure of the western logos" (p.131), and instead, "signals a transformation of the relation between self and other such that the encounter with the strange is not a discrete event but the constant condition of becoming" (p.131). In similar ways, in Simard's (2021), and my own, Canadian woods of British Columbia, a Grandmother Tree sends nutrients to young saplings from her body even after she has perished. In South Africa, perhaps with teleological significance, the Resurrection Plant becomes revived from the brink of drought-induced death after just a little water. The Magic Tree resprouts epicormic buds from its trunk, long after its canopy has collapsed, and its body fallen.

For ghosts truly to be laid to rest, we must first notice them, walk with them, interlocute with them, listen with them, recognising that they form "the space in which we always find ourselves thrown, having to retrieve ourselves, our present, and our future, from a confrontation, excavation, and interpretation of those who came before us" (Ruin, 2017, p.417). By so doing,

we may discern their affectivity and materiality (Zembylas et al, 2020), and the ways South Africa's colonial and apartheid *sepóko* are alive in the moon-lit shimmering dialectics of absent/presences of the there/then, here/now, and the impacts of the past/present on the country's human, nonhuman and more-than-human elements… ghosts that transverse canopy gaps in the language-of-landscape and our ability to interlocute with, or hear, them.

As Bell (1997, p.831) writes, "ghosts have good reason to haunt the specific places they do", as ephemeral matter that "push and pull these underbelly histories into strange narrative shapes" (Waterton and Saul, 2020, p.3), like mycelia in the understory that speak with arboreal discourse… narratives shaped by the undulations and tributaries of language like the ebbs-and-flows of a landscape and the rhythmical zephyrs that caress it…

Critical to the spectres that materialise in this research is an understanding of how processes of occupation and invasion have become hauntological legacies of anthropogenic and colonialised landscapes, threatening the heterogeneity of the *ihlathi lesiXhosa* core (literally-and-metaphorically), and permeating its ecotones (edges) through a transversality of borderwork (Rumford, 2008), which I explore further in ***Something About Water***.

Robbins (2004) introduced the concept of "sociobiological networks", drawing on principles of Actor-Network Theory (ANT) to view 'invasion' as occurring when biological and social actors engage, "each influencing the other as well as propelling the process of invasion forward" (Neely, 2010, p.873). Here, competing historical, global/local, geopolitical and eco-material crises, notably the political/ecological/economic/social fragilities and hauntings, ones which in this contextualisation have come to dominate the post(-)apartheid landscape, can be viewed as invasive in the daily lives of the most vulnerable, instead of necessarily invasive species in-and-of themselves. With this, 'the socioecological' extends 'the ecological' in its disciplinary constitution. Invasive ecology, or in this sense, invasive socio-ecology, with its colonial or settler paradigm effects, provides a politico-spatial lens to consider how hauntologies manifest in lived experiences of the human and more-than-human.

Each story in this research can be viewed in relation to post(-)apartheid legacies that still 'invade/haunt' the lives of those I narrate, and in their experiences of climate change. Spatialities striated by experiences of socioecological disasters, induced by climate change, tell a story of invasion, devastation, and the effects of Euromodernism and legacies of apartheid/colonialism. The settler paradigm can speak as much to a notion of political invasion in South Africa as it can to ecological invasiveness. Ecological forms of invasion are most visibly manifest today through the spread of colonially-introduced alien invasive species, although *invasion* goes by many names (O'Donovan, 2023).

In hauntological ways, the country's contested legacies have heralded a 'what is to come', an exercised/exorcised foreshadowing in which these legacies have been a "virtuality whose threatened coming was already playing a part in undermining the present state of things" (Fisher, 2014, p.19), thereby casting a phantasmal shadow over the country's present and the failure of certain futures to come to fruition, much like the vision of a democratic South Africa that would 'right' apartheid 'wrongs' (Sterling, 2022). South Africa's complex histories have been "a trace that marks the present with its absence in advance" (Derrida and Stiegler, 2013, p.39), both the *no longer* and the *not yet*. By turning to spectres to help navigate 'the in-between', the hyphen of post(-)apartheid South Africa, the liminal spaces that these legacies occupy[d], we

[d] I use words like 'occupation' cautiously, which, even in small violences, lend themselves to colonial occupation and settler narratives. I found myself unable to search for less invasive terms to describe the space that spectres,

may ask how we learn from 'ghostly matters' (Gordon, 2008) "and the ghosts of the past/present in a manner that shows a sensibility toward this haunting and does not wash out or make invisible the very real questions of land, settlement and occupation (Tuck and Yang, 2012)" (Zembylas et al, 2020, p.2).

Interlocuting with spectres of the past/present may ultimately shape, and help us envision, a different, perhaps more radically-hopeful future rather than fixing the past (Zembylas et al, 2020). In this research, hauntology offers one trope that makes possible the visibilising of spectres of apartheid, colonialism, racialism and oppression, in addition to hegemonies of the global, such as Euromodernism and globalising capital, which reveal themselves in the materialities of spaces across the geographies of my fieldwork.

The spectres are not relegated to human imaginings alone, but are also architectures, climates, spaces, temporal filaments, ecologies, multiscapes, voices, lived experiences, livelihoods, hopes, promises, futures, objects and ruins. They are rhizomatic, decolonial, feminist, complex, and sociomaterial… spectres of human, non-human and of the more-than-human. Haunting works as an affective operation, and embodied hauntologies "work with atmospheres, traces, fragments, contagions, gaps, absences and displaced actors and agencies that register affectively" (Blackman, 2016 in Zembylas et al, 2020, p.2). Here, "affect is disclosed in these fleeting fragments, traces, and embodied reactions and in felt intensities and sensations" (Seigworth and Gregg, 2010 in Zembylas et al, 2020, p.2). Hauntings also act to de-modernise 'unilinear time', the "continuous unfolding of the past into the future" (Barad, 2017, p.22), mixing in overlapping, circular, iterative, and multitudinous ways between the past, present and future, as canopy gaps open and close…

(Eco)hauntology is embedded in practices of critical heritage, as ways of paying attention to themes of power, identity, 'sustainable' development, and other thematics, by drawing on critical arguments within decoloniality, (eco)feminisms, sociomaterialism, posthumanism and cultural geographies. Just as spectres in stasis and liminal relationalities are embodied in the absent/presences, the there/then, and the here/now, I pursue a reflexive research engagement in integrating theoretical with empirical elements through narrativity, situating my thinking and my person reflexively and affectively within the research. The theoretical and imagined, empirical and storied, self and relationalities in-between, mutually-haunt, resist and co-exist with the sociomaterialities. Sociomaterial and posthuman approaches to political ecology mix and disrupt, working with-and-against-and-for each other similarly to Derrida's envisioning when conceptualising hauntology itself, infusing ontology (*ontologie*) with hauntology (*hauntologie*).

This morphological transformation where ontology itself "is displaced[e] by the shadow of the spectre of being" (Sterling, 2022, p.2), "introduces haunting into the very construction of the concept" (Derrida, 1994, p.202), and not (only) outside of it.

I am reminded of the Western centralisms of the Anthropocene and the spectres that haunt its human materialities, even as it is shadowed by the realities of its own making…

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and legacies, can fill, but this is part of their antecedent and affect that they themselves can become both the settler and the settled. They speak to these violences both because of them and as the cause of them.

[e] As with terms of 'occupation', displacement is a material legacy (past and present) for generations of indigenous/local South Africans. Instead of identities and 'being', or ontologies, becoming replaced (or displaced as it is here) further by me, this research and the theories I draw on to elucidate contextual views, acts as invitation to co-exist alongside and complicate states of being. I invite these spectres to 'sit at the table' of ontology, co-existing and offering agency to both the spectres and those present to refute their invitation at any time.

Davis (2005, p.379) writes that the 'ghost's secret' is not a,

> puzzle to be solved; it is the structural openness or address directed towards the living by the voices of the past or the not yet formulated possibilities of the future.

The political charge of hauntology lies less in the idea that otherworldly spirits and ghosts may exist, although for many indigenous peoples, spectres and ancestors are deeply spiritual and affective companions, (with which I also converse in this research), but asks, as (Gordon, 2008, p.18 in Sterling, 2022, p.2) did, "how do we develop a critical language to describe and analyse the affective, historical, and mnemonic structures of such hauntings?"

I argue that to embrace hauntologies as a *practice* enables a re-learning of the language-of-landscape. I have tried to bring decoloniality and ecofeminism to this narrative research in recognising that South Africa is marked by geographies/histories/spatialities of ongoing historical European colonialism and Western globalising imperialism, despite recent geopolitical realignments in South Africa's joining the intergovernmental bloc of Brazil, Russia, India, and China (BRICS)[f], albeit mostly symbolic (Vandome, 2023), and given newer neo-imperialist influences particularly from China and Russia (Harding, 2023). It is in the quotidian rhythms of these striated geographies/histories/spatialities of what constitutes South Africa's historical identity that the political charge of hauntology becomes visible in the absent/presences of the past and the everyday. Many of my research encounters take place in spaces that have historically-repressed voices of 'ordinary lives', yet the landscapes sing with their bodies, hauntings, narratives and being.

African theologies, cosmologies and indigenous ways-of-knowing, such as through *Ubuntu*[g], view identity and the body holistically (Ras, 2017). The embedding of personhood in an intricate web of relations with family (living and deceased), God and nature (Maimela, 1991) means that each individual shares a horizontal connection with others in society and a vertical connection with ancestors and future generations (Krüger, Lubbe & Steyn, 2009). This view sits in opposition to the Greek and Cartesian dualisms of body and soul, where the soul and reason possess properties of what constitutes 'good', and the body with earthly unreliabilities and insensibilities (Ras, 2017). Such thinking destabilises the Western humanist views of the forest, with the old Greek concept of the 'city', and 'order' at its centre (the city and modernity), and chaos and the unknowability of the radical Other at the periphery (nature, forests, and what lies at the edges). Much of the spatial inequalities in South African metropolises echo these formations, and in the Western Cape, the historically-subjugated are relegated to the fringes of Cape Town's urban core. These spatial 'gaps' are explored in each of the **three stories**, which also bring us to dwell thoughtfully and respectfully on the many bodies that have been displaced/disembodied through the monstrous anthropologies (Fisher, 2013) and violences of colonialism, apartheid, and ongoing modernity…

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[f] The BRICS originally included Brazil, Russia, India, China and South Africa. In 2024, they expanded to include Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates (ILO, 2024).

[g] In South Africa, foundational to its formative post(-)apartheid peace process, the Truth and Reconciliation Commission (TRC) and the late Archbishop Desmond Tutu's African theologies, the African epistemological worldview of *Ubuntu*, coming from the *isiXhosa* expression '*umuntu ngumuntu ngbantu*' (Swanson, 2007) was offered as a response to the forms of violence witnessed by the country's torrid histories. As the maxim, *I am because you are*, or *I am a person through other persons*, Ras (2017) writes that these embodiments follow Plato's (1997) notion of 'wholeness', an African worldview premised on embodied 'oneness'.

Spectres can be simultaneously the 'white' spectres of such violences, such as colonialism, apartheid or racial capitalism (Ras, 2017), as well as those who suffered because of them. It is because of their co-mutuality and their duo-ontologies that Taylor (2011) argues that 'the spectral turn' should inherently be decolonial, a "seething presence" (p.31) for those who have experienced politico-cultural repression at the hands of colonial masters and who now live with haunting memories/ancestors/ghosts/presences and the consequences on their bodies of such oppressions. In *Beloved*, Toni Morrison (1987, p.221) writes: "You know as well as I do that people who die bad don't stay in the ground".

Poststructuralists and posthumanists have sought to address hauntings and memories by tracing the 'fault lines, fissures, infiltrations' of the colonial apparatus that spectres invoke (Ras, 2017), where "to trace them is to find the vestiges of the vanquished, often to highlight and strengthen long-colonised peoples, aiming to eviscerate the strength of colonising and imperial projects" (Taylor, 2011, p.33). These arguments confirm more-than-human agency, even posthumously, to those who have suffered. In what Derrida terms the 'spectral oath', we have an ethical responsibility:

> Respect for the alterity of the other dictates respect for the ghost (*les revenant*) and, therefore, for the non-living… There is no respect and, therefore, no justice possible without this relation of fidelity or of promise… to what is no longer living or not living yet, to what is not simply present. There would be no urgent demand for justice, or for responsibility, without this spectral oath. And there would be no oath, period. (Derrida & Stiegler, 2013, p.42–43)

Derrida's reverence of spectres, however, should be contextualised. In this research, I provide decolonial and ecofeminist critiques of spectres similar to Coly's (2019, p.246) who argued that hauntology can "prolong the trauma of colonialism", an effect South Africa's TRC attempted to mitigate (Block, 1996).

Mindfully, I don't wish for the spectres I witness/invoke to perpetuate ideological siege over racialised or female bodies or the more-than-human by privileging the oft-whiteness of apparitions. I also am aware that reflexivity is required to acknowledge my inability to stand outside of myself completely to view or shape the world of this research, and that I am always inside the discourse I am attempting to thwart. Instead, decolonial and eco-feminist scholarship seeks to reclaim hauntologies from colonial and neocolonial discourses, and reveals an eco-critical heritage of power, identity and socioecologies in South Africa's racialised and gendered histories. Here, decolonial, feminist and posthuman spectres (following Derrida) work against "the tangible intangibility of a proper body without flesh, but still the body of someone as someone other" (Derrida, 1994, p.6). The violences on racialised and female bodies, and on the more-than-human, and these traces of death, haunt the temporal and spatial filaments between-and-within bodies, persisting in (im)material/(in)corporeal/ontological/phenomenological/psychoanalytic manifestations, raising questions about the historico-material present/absent hauntings of postmodernity.

Crucially, Coly (2019, p.13) warns that the past "allows the colonial to spectralise itself in the postcolonial and then live on as a haunting presence in the postcolonial". As Derrida (1994, p.116) recognises, "a radicalisation is always indebted to the very thing it radicalises". Fanonian and Derridian postcolonial hauntologies, where Derrida's traces provide new utterances as spectres, are extended by Mudimbe (1988) and Mbembe (2001) on the inevitability of finding

colonial discourses embedded within 'postcoloniality'. As Mbembe (2001, p.5) writes of the 'always-already ghosts of postcolonial Africa':

> There in all its closed glory, is the prior discourse against which any comment by an African about Africa is deployed. There is the language that every comment by an African about Africa must endlessly eradicate, validate, or ignore, often to his/her cost, the ordeal whose erratic fulfilment many Africans have spent their lives trying to prevent.

I have attempted to honour this critique in my approach to this research, seeking to fulfil a 'spectral oath' and provide discursive sepulchre to the hauntings that have been unable to be collected, while also privileging the decolonial, feminist futures of hope that equally have a right not to be spectralised in the post(-)colonial. Bodies may carry the violences and traumas of past injustices but are also sites of resistance and belonging.

In many of my visual mycelial interludes, I focus on hands and the stories they tell. Hands do work, with love/hate/passion/indifference or through labour-power in resistance/solidarities. They are parts of a whole, in the ways mycelia still form the forest. In Swanson (2015), Judith Butler (2004) writes of the ways loss and vulnerability come from the *textu(r)ality* of our flesh, of our being socially-constituted bodies, not only through our constructed subjectivities as a *textual* condition. Here, the textural and the textual are one. It is in the relationality of such embodied, material encounters with diverse others that gives rise to hauntings. Michel Serres's (2008) embodiment of the self on the surface and on the skin (and epidermal tissues of the more-than-human) does not limit ways-of-knowing to the mind (Swanson, 2015), but rather embraces actions and enablements of both the body-and-mind that together engage with the soul through sensory encounters. As Swanson (p.102) writes,

> The cognitive and the embodied, the affect and the effect, lie together, quivering with knowing and feeling. They lie in the poetics of the embodied encounter and the political recognition, a small, infinitesimal 'political' in a human touch, in the circumstance, in the rush of blood to the heart, the brain, the neurons, and the skin that is a response to another's vulnerability, and in the infinitely political haunting that follows.

Ubuntu as cosmic offering, and its 'healing' abilities for fragmented-bodies and fragmented-bodies-within-fragmented-countries, still has not formatively captured the misalignment between a 'resurrected-or-restored' body and ghosts (Ras, 2017). As Ras (2017, p.5) notes that *Ubuntu* was unable to transform/restore the reconfigured bodies of pre-and-post(-)apartheid,

> there is a drastic disconnect between the ideals of *Ubuntu* and the lived reality of millions of Africans (Eliastam, 2015) to such a degree that one wonders whether these ideals can ever really fully take root in our present context or if they were ever really fully present.

The country continues to battle extreme inequalities, poverty, violence, land dispossession, and other materialities of daily life. As Coly (2019, p.15) writes, fundamentally,

> hauntology is a tragedy… in a postcolonial context, hauntology is also the manifestation of the lingering violence of colonialism, the subjection of formerly colonised communities to new forms of colonialism and the apprehensive alertness of these communities to future forms of colonialism.

A socially-just/decolonial/ecofeminist hauntology recognises the role of hegemonies within this operation, and these hegemonies' ability to work insidiously in their hauntings. But, Gordon (1997, p.16) offers possibilities in the face of the trauma of hauntology, writing that its "repressed or unresolved social violence [calls for] something to be done".

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– Three Stories –



Something About Water

> *Our children must go to the forest. They must know everything about the forest. Everything about being Xhosa is from the forest; it is the* isithethe *(the manner of doing things) of Xhosa people.* [a]

On the slopes of Table Mountain National Park, Giant Ironwood Trees (*Olea capensis macrocarpa*), Assegais (*Curtisia Assegai*) and Leucadendron (*Leucadendron argenteum*) cluster between the rocky paths that climb from Rhodes Drive of suburban Cape Town into the upper hills of the mountain peaks, a densely-wooded patch of Southern Afrotemperate forest known as Newlands Forest…

> *It is a place I have come to know in different ways through the different stages of my life, and it has come to take on different meanings for me as my understanding of what constitutes it as a forest, and my relationship to it as forest, has qualitatively changed. … And yet, the deep connection to it as a place of knowing and wandering and feeling has not changed… it has merely deepened…*

These Western Cape Afrotemperate subtype woods[b] are few now in a land once dominated long-ago by tall, multi-layered canopies, and are relegated to 'fire refugia' areas, such as the wet riverine gorges and the rocky scree of the mountainside where fire cannot reach. Nighttime rainfall has made its woodsy petrichor[c] rise and swirl amongst the damp leaves, and there is the dull din of nearby traffic, muffled by a barrier of tall plantation Pines and Stinkwoods (*Celtis africana*). The forest is a reprieve from the congested city roads close-by, and the colonial and apartheid-era spatial planning that forces residents of Cape Town's periphery to travel daily into its gentrified suburbs and partially ghettoised city centre.

I accompany a team of five SANParks[d]-employed 'invasive clearers' while they work, those with the designated role of cutting down invasive species. As I begin to walk into this forest-reprieve together with them, the white noise of traffic seems to recede… the sounds of the 2nd industrial revolution of mass-production (McNeil, 1990), which the trees were planted to fuel and feed, invading these spaces … even nature here is in contradiction, being both reprieve and Euromodernist invasion. It reminds me of the constant, penetrating and intermittent hoots of the minibus taxis, as they rush past a small vegetable garden 20km away from Newlands Forest on the Cape Flats.

Here, in this mind-space of the Cape Flats, far from the threshold I've crossed into Newlands Forest, patches of life grow in the Amaqanda Learning Garden in Philippi Village, an entrepreneurial development hub and community centre that houses the multi-coloured rainbow walls of varying small businesses, such as hairdressers and cobblers. Some weeks before, I had been permitted entry to cross the threshold of the high cement boundary wall that separates this garden from the wider informal settlement of Philippi…

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[a] A Xhosa Elder in Cocks et al. (2016).

[b] A subdivision of the endemic Southern Afrotemperate forests (Southern Cape forests) of the Cape Peninsula.

[c] The earthy smell of rain on arid land.

[d] South African National Parks (SANParks).

Before arriving at its gates, I navigate the polyphonic mêleé of street-traders calling and the whistles of minibus taxi drivers – passing a wall graffitied with *The Wind of Change.* As smoke curls from the sticky open grids of braaied chicken feet, known colloquially as 'walkie-talkies', its wisps disappear among the confusion of satellite dishes and chaotic wires that form a strangely mycelial network in the sky – a panoply of peri-urban informal life. Here, encounters become gatherings that become happenings upon happenings.



Philippi, Cape Flats

… I think of the chickens in ***A Lesson from Spekboom***, and of Elizabeth, whom I accompanied on a '*Chicken Farmers for Small Business and Backyard Setups'* course on the Cape Flats, becoming 'certified' together in the garden of a primary school, as we learned of these invisibilised animals of the subaltern that shape everyday urban life in ontologically-heterogenous ways.

From my embodied encounter with this scene, it appears to me that these happenings have their own particular rhythm, syncopated by the quotidian and animated by indigenous and local ways-of-being and knowing.

Philippi Village was once the ruined-industrial landscape of an old cement factory, and now, two towering cement pillars remain to mark this place's past. The cement pillars have been painted with faces, eyes that turn towards the sun, surveying the land inside and outside the wall with an intensity of meaning beyond the casualness of the scene, much like a Benthamite panopticon (Foucault, 1995), but without invisibility in its omnipresence. Instead, it is 'the community' that is seen to be controlling the ways of seeing…

Under the eyes are painted with the words:

'Ubuntu: I am safe because you're safe'[e].

The emphasis on 'security and safety' is not inconsequential here. It reverberates within the paint, across the walls, and out into the settlement and beyond…

I had walked with Philippi Village's leader of the Amaqanda Learning Garden across the dusty grounds as he showed me the urban regenerative garden that was used to support the diets of the local community and host lessons on the benefits of urban gardening (see ***A Lesson from Spekboom***).

During the construction of Philippi Village, and through a consultative process, bitter resentments were voiced regarding the dire situation around lack of safety. It is a securitised discourse that feeds the promulgation of a familiar rhetoric on the criminal *harmscapes* of Cape Town (Holley et al, 2020). As a consequence of the area's high recorded crime rate, a modernist 'calculability' (Mbembe, 2000) of a *deficited* community, the wall was developed, hoping to ensure that local residents, women and children, who are the ones most likely to experience profound and widespread Gender-Based Violence (GBV), would be less at risk within the hub enclosure.

But, with emphasis and frustration in the Garden leader's voice, I was told that due to lack of municipal service provisions and failing infrastructure on the Cape Flats, this land had been used for residents to 'relieve themselves', land that was now enclosed by the Philippi Village boundary wall. He told me that for those living outside the walls, the boundary was perceived to act as both a physical and psycho-social divide…

[e] For residents of Philippi, human relations are indelibly intertwined with collective safety, a theme that was reflected in South Africa's post-apartheid TRC's use of *Ubuntu* principles toward forgiveness and restoration: "It shifts the primary focus of crime from the breaking of laws or offences against a faceless state to a perception of crime as violations against human beings, as injury or wrong done to another person" (Marx, 2002, p.51 in Swanson, 2007). In this context, *Ubuntu* serves as an appeal to a collective sense of humanity that is bound together in what it might mean to be 'safe'.

I think of the way that borders are everywhere, drawing contours and lines in patchy topographies, demarcating thresholds across ecosystems… like the one I had crossed into in Newlands Forest, defining sociocultural systems, and complex socioecologies that accumulate within, outside and across borders[1].



The cement pillars of Philippi Village

Such indicative spatial inequalities typify the ways in which continued structural violence, socioeconomic inequalities, and dispossession are 'temporally ossified' (Madlingozi, 2017), in post(-)apartheid South Africa, and remain indelibly intertwined with daily life for residents, even after the ANC's pledges in 1994 to eradicate racism, tackle poverty and inequalities, and 'right apartheid wrongs' (Houssay-Holzschuch, 2021) through democratisation. The lack of land reform and service delivery, current state capture, and political cronyism that has continued to shape conditions of crisis, such as the lack of municipal provisions for residents to relieve themselves, and which uphold and contribute to the conditions that make a boundary wall necessary, have manifested in a 'topography of terror' (Houssay-Holzschuch, 2021), where phantom borders of apartheid South Africa remain, and which is haunted by temporal and spatial 'ghosts' – the apartheid-era trope that Archbishop Desmond Tutu had hoped to lay to rest through the TRC (Ramphele, 2008).

The painted eyes watch…

They watch in the day, and they watch, mostly hidden, at night, under dull yellow security lights. They watch the chickens that run amongst small, dusty-leaved cruciferous[f] plants as they emerge intrepidly amidst the ruins of industrial infrastructure scattered across the gritty soils as cars drive past, unnoticing… I imagine the cells of the vegetal pores gasping for oxygen, small Davids between the Goliaths[g] of urban survival. This little spot of vibrant life acts as a respite from the monotone, polluted hues of modernity's outcasts. The farmer had stopped as we walked together, bending to pluck silvery leaves amidst the dry veld, and he had handed me a few stalks of *Impepho* ('the Liquorice plant')… inviting me to place it under my pillow to invoke a visit from my ancestors that night… liminalities and cosmologies of worldbuilding/ending speaking across gaps…

I become conscious that my mind has wandered, I return to the living present…

… the smell of the forest floor beckons awareness of my feet planted firmly on, almost in, its soils. My thoughts are constantly stilled by the quietude, a sense of reverence that I am among ancestors here. I speak to the trees as they do me. In the damp air, the ghostly arms of all the trees that have come before my time wrap their tendrils around me, a comforting hush, in the way my long-of-the-soil grandmother might whisper of my roots through the canopied arms and breath of my mother.

The forest holds me tenderly...

The pine-needle-induced acidic earth of Newlands Forest is soft and damp underfoot, and silvery lichen crawls up Cape Beech (*Rapanea melanophloeos*) bark in patchy defiance of the sulphur dioxide pollutants that threaten nearby. I think about how this was once a protected transition zone between endangered granite fynbos and peninsular shale fynbos. These lands were once home to a spread of indigenous flora and fauna, a unique ecosystem boasting nine species of plants that exist nowhere else in the world. I cannot picture the mathematical scale. I can only feel it… deeply.

Tendrilled thoughts ebb-and-flow with temporal cosmologies, and historical counterfactual imaginings reveal how the arboreal vegetation, dominated by proteas and *Ericaceae*, bear the scars of 1800's plantation clearing. It is not only cities that are wounded (Till, 2012) these days… More than 23 members of the forests' diverse fold are threatened or critically-endangered by invasive alien species introduced for timber, used for European settlement and 'development' (van Wilgen et al, 2020). [2]

The ghostly presence of indigenous Wynberg Conebush, now lost forever, haunts the forest air amidst the early morning mist as it whispers to bare patches of bark stripped from the forest's Cape Chestnut (*Calodendrum capense*) and Wild Peach (*Kiggelaria africana*) – they too will die soon…

[f] Cruciferous vegetables are leafy, and include cauliflowers, broccoli, Brussels sprouts.

[g] This is a reference to the Old Testament in the Bible. While South Africa is a multi-cultural, and religiously-diverse country, there has been a deepening influence of Christianity (Walshe, 1991). The Christian framing of the TRC was combined with indigenous African spirituality, as Archbishop Desmond Tutu openly embraced during the 1996 TRC hearings, and which shaped the proceedings in religious terms (Swanson, 2007). This, bringing such religious metaphors here is contextually-apt.

I have been told that independent harvesters have taken the trees' bark in the night to sell to traditional healers for their *muti*[h], those without the knowledge of 'safe' indigenous harvesting practice, but also those desperate to find ways to earn a living amidst the country's high unemployment. The tree's nutritional transport system now interrupted, their death will be slow but certain.

I stumble over a root on the forest path… and it jars me into thinking of the street traders, with bulbs and tubers spread across *shwe-shwe*[i] cloth on display outside Cape Town Station on the city centre's *Grand Parade.* I think back now and wonder: 'Were these from Newlands Forest too?' Survival takes many forms. I am confused about how to feel[j]….

I sit with this feeling for a while as I mull over the time I'd spent with Rosheda Muller, President of the South African Informal Traders Alliance (SAITA). She'd dedicated her life to fighting for the rights of medicinal plant traders, disenfranchised by the 'system'. SAITA, based in Cape Town, represents the official voice of over 2 million informal traders across South Africa.

"Nothing about us, without us"

… their slogan reads. She is a formidable woman, with a kind face, and a captivating speaker in such a contested space, whether geo-material, eco-feminist, or politico-economic. I'd spent many hours listening to her stories of the forced removals and evictions of informal traders on land across the city (Walker and Platzky, 1986). We'd met in *cafés,* and I'd visited her at SAITA's offices in Century City. She always found time to meet with me, though she was always 'putting out fires': another group had been illegally-removed, a trader could not open a bank account, a medicinal trader had been arrested… And, she had told me earnestly of her own story, eyes looking intently at me beneath her hijab… one hand gripping her cell phone:

Beginning as an informal trader in 1987, selling handmade clothes on the Parade, she tells me her experience of the history of contestation in this place. This land has always been contested, and forced removals of street traders from the city core has been taking place since colonial-era dispossessions and the attempted erasures and resettlements of 'Black bodies' to the city peripheries, with the purpose of 'sanitising' and protecting its 'modern' centre from these unwanted 'invasions' (Walker and Platzky, 1986).

But, after Nelson Mandela was released from prison in 1990, prior to democratic transition, Rosheda relayed how she'd sewn and gifted him a jacket, and in its lining, she had stitched in a letter petitioning against the spatial inequalities, for the right of the traders to remain on the land in order to support their livelihoods. I imagine him finding that letter, opening it with hands weathered by the hours of breaking granite under the South African sun when he was imprisoned on Robben Island (Soudien, 2015). I wonder what he thought…?

[h] In *isiXhosa,* meaning 'medicines and potions'.

[i] In *isiXhosa*, a traditional fabric.

[j] The confusion in its full reflexivity reflects my own contradictions I represent in this place as a 'settler-native' (Mamdani, 2020), tendrilled to the dilemmatic contradiction at the heart of social development versus ecological protectionism.

The land now known as the *Grand Parade*[k] has largely become protected, Rosheda told me with pride. Today, scores of informal traders set up their stalls on the Grand Parade – something she inferred was interrupted, unsurprisingly, during the 2010 FIFA World Cup, when traders were temporarily removed to make space for the influx of tourists[l]. I had thought then of the centre-forest, and concomitantly the centre-periphery spatialities of the city and the *ihlathi lesiXhosa*, the way "racial hatred and oppression reduce 'racialised and colonised subjects to the shadowy realm of non-Being, of less-than-Being'" (Conroy, 2023, p.1130).



Informal traders in Philippi

I felt her fire… and the burning injustice began to spread within my chest. But, perhaps with equal flame, I also thought of the way Mandela's jacket became a material imagination of possibility, a disruption that resisted attempted erasures and ongoing dismissals on/in the seams or margins of history, and 'mobilised' against the discursive and geographical 'logics of

[k] In some senses, the name of the 'Grand Parade' invokes bitter irony. What is actually being paraded here? Was colonialism grand? The dramatic contradictions are mapped into the materiality of this place – a mythologising of *triumphantalism* on the one hand, the reality something quite different 'on the Other'.

[l] I use 'influx of tourists' purposefully here to reverse the dominant discourse on migrants and refugees, and precariat peoples from being 'the influx', thereby acting as a disruptive discursive narrative device.

enclosure' (Conroy, 2023) that sought to resettle the traders into peripheral 'impermeable spaces' (Conroy, 2023) through an ontological resistance that became *place*. I think of how "borders have always leaked" (Nail, 2016, p.7)…

> I had looked across the plastic table of the *café* as she had smiled then… Teenagers were placing their order at the counter, laughing at something on their phones.

At that moment, I suddenly felt disquieted by the presence(s) of so many kinds of different worlds and worldings overlapping and conflicting with each other in any one moment. I pondered Rosheda's fighting spirit for the rights of these medicinal traders to support their livelihoods[3].

The origins of these tubers seem not of consequence when there is the matter of human survival, and especially when violent colonial histories have already dictated who lives and who is left to 'let die' (Mbembe, 2003). Yet, my mind and heart are saying: 'the tubers have rights, perhaps equal rights, too, do they not?'

> I am conscious that my discomfort provokes the vexed question of who speaks for the tubers, of who there might be to prevent them from being left to 'let die'…

… The thought beings me back to the forest-present… I look down at my tread and realise that the trodden roots below my feet are not alone.

The indigenous Assegai, Stinkwood and Cape Beech are among the fallen, and the invasive Bluegum trees too. White and grey water-based PVA (Polyvinyl Acetate) paint will soon become a common sight here throughout Newlands Forest, used to deter illegal bark-strippers, but the threats the earthly residents of the Newlands Ravine continue to face mount ever-higher.

… Invasive species are not its only presage.

I see the black charred remains from a devastating fire in 2021, reported at the time to have been started by 'vagrants' living on the mountain that burned the University of Cape Town's Jagger Library, as well as the historic Mostert's Mill and the heritage buildings that line the forest edge, an event which fuelled, like the flares of the fire, another political debate in the local media and among ideologically-divergent community groups (O'Donovan, 2023). The seared remains of these related incendiaries serve as ghostly reminders of such elemental destruction. They also are bitter reminders of the incendiary post(-)apartheid legacies, such as homelessness and poverty, precipitating conditions for the fire[4]. The marred landscape is an aide-memoire to the importance of indigeneity and ecopolitical resistance amidst the violences spewed forth by our actions perpetrated within Euromodernist frames[m].

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[m] 'Framing' is explored in other conversations, but I draw attention here to Butler's (2010) *Frames of War*. Butler wrote that life itself is situated within operations of power that determine "the lives of others as lost or injured (lose-able or injurable)" (p.1), where 'being' is "always given over to others, to norms, to social and political organisations that have developed historically in order to maximise precariousness for some and minimise precariousness for others" (p.3). As such, 'frames' "work to differentiate the lives we can apprehend from those we cannot (or that produce lives across a continuum of life) [that] not only organise visual experiences but also generate specific ontologies of the subject" (p.3). I introduce this here as means to think through the ways landscape, forest and multiple 'beings' and 'life' within the *ihlathi lesiXhosa* are "constituted through norms, which, in their reiteration, produce and shift the terms through which subjects are recognised" (p.3) as we walk these roots/routes (Swanson, 2004) together. It also works against a deterministic, normative ontology, instead recognising how they are informed by broader operations of power, and "very often come up against spectral

It is these violences that gave birth to this anthropomorphic geological epoch of the Anthropocene (Crutzen, 2000), with the native trees working in tireless resistance against human disturbance and colonially-impacted landscapes. It has led us to this nexus of contradiction: small pockets of remaining indigenous flora, scarred by 'medicinal harvesting', one that does not accord with local traditional indigenous knowledge systems, in a largely-unforested region, being the only remaining bulwark against highly-flammable alien Rooikrans (*Acacia cyclops*), Pines and Port Jackson (*Acacia saligna*) now invading the forest.

In the early morning quietude, rain threatens overhead as I walk along the forest paths with the invasive clearers. They walk in silence for a while. I first imagine it is the effect of the forest's stillness. It is cold and early… But perhaps there is also an awkwardness at my unusual presence here today.

I am a strange companion this morning.

Many community volunteer groups exist to clear invasives across the city, but initiatives like these exist in formal employment too. SANParks, formed in 1926, is the national scientific government body that is responsible for conserving South Africa's national parks (Department of Forestry, Fisheries, and the Environment, RSA).

The gentle snap of twigs underfoot intermediates the muffled sounds of our breath in the cold winter air, and the rustling of yellow waterproof SANParks 'Working for Water' (WfW) jackets next to me… they are thin and plastic… there are no petitions woven into *their* lining.

We walk together as I ask about the trees and about how the clearers began working for the SANParks' contractor to clear invasives. I wonder when they will be paid for their hard labour. I had been told that several contractors falsify documents and don't pay their staff. There is little SANParks can do. Only one young man responds as we stop at a patch of the forest waiting to be cleared.

Differences in mother-tongue language make communication slower between us.

I take photographs of the fungi that grow in steps up the bark of a Pine, my neck twisting to see the canopy above…

versions of what it is they claim to know" (Butler, 2010, p.4). This narrative journey draws critical awareness to the forest, and how "there are 'subjects' who are not quite recognisable as subjects, and there are 'lives' that are not quite – or indeed, are never – recognised as lives" (p.4).

We begin to converse…



Genus Stereum fungi in Newlands Forest

Buhlebendalo (as I call him here, in *isiXhosa*, meaning 'land of natural beauty') tells me that he is from Capricorn, an informal settlement on the shores of False Bay, 20km from central Cape Town. I have read about Capricorn before: it originally was established by Trek fishermen[n] who created informal housing to service the fishing industries on the coast. Known by residents as *Vrygrond* (Afrikaans for 'Free Ground'), it is home to *Afrikaapse*-speaking mixed-heritage and *isiXhosa*-speaking people who, during apartheid, were forcibly removed and relocated elsewhere across the country. Under cover of darkness, many would rebuild their dwellings torn down by the Council during the day, and today the settlement has grown despite the high levels of crime and poverty (Living Hope, nd.)…

… I think about the circumstances that would bring people to have to rebuild their homes at night, secretively, fearfully, and without assured safety, given the crime. I think about what diminished choices a person would have, or what other reasons there would be, to rebuild your home in an area that is not safe to live. I wonder what it means to 'belong' to Capricorn, what

[n] Trek fishing, known as 'trekking', is a centuries-old sustainable fishing method which requires fishermen to coordinate the distribution of a net amongst the waves using a small dinghy from the beach, with no reliance on technology (Elmendorp, 2020).

feelings and thoughts come together when telling someone you come from Capricorn, and what difference it makes in telling me, someone who does not live in a settlement like Capricorn, and who has never been there but who has read its history.

Buhlebendalo tells me of his love of nature, how his family has always loved the Earth, how he had hoped to gain employment in agriculture, but that his school grades weren't 'good enough'. I think about those words – 'not good enough' – and their devastating effect on the youth of this country with its high unemployment rate – so many young people, some with university degrees, others not… Buhlebendalo looks down at the ground when he says this, as if he carries the burden of that constructed educational failure by himself, as if he were a 'failed citizen' of his country (Swanson, 2013). He continues to explain how he enjoys this work now, as he gets to walk amongst the trees each day.

We stop to look at the leaf of an invasive Waxleaf Privet (*Ligustrum*) with its distinctive halo and its scent of orange-flavoured Oros concentrated juice when crushed between fingertips. This drink is a household name of South African childhoods. These leaf markings are its only distinguisher from its indigenous counterpart.

I consider how many have been pulled by mistake…

I watch his hands reach amongst their foliage before they are torn from the earth.

I ask him how he feels about killing these trees, about the forests growing smaller, how they are impacted by growing urbanisation, especially on the central mountain slopes, and while we look up at the canopy above together, he tells me:

'If the trees die, jobs die'.

… I first think he means that without these trees, his work clearing invasives would end. This initiative is one element of the landmark South African Government Working for Water Programme. It aims to support livelihoods and combat poverty by employing residents of informal settlements to tackle the country's invasive alien species threats. But I also sense there is more to his words – there are many kinds of lives and livelihoods that would die without these few remaining woods[5].

'What is your favourite tree?' I ask, and he leans against a nearby Pine, thinking for a moment.

Nodding, he tells me, 'the Gum' (Bluegum).

I smile and ask Buhlebendalo how he feels then about hand-pulling the young invasive Gums from the earth, about debarking and applying its tree-specific herbicide, and he smiles, albeit with a hint of perplexity:

'But they are also useful', he says…

'We need them for herbal uses, we need them for fire to cook our food, they keep our animals safe, and they keep us warm when the lights are out'.



Accompanying the Working for Water (WfW) invasive clearing team in Newlands Forest

I pause, thinking again about the country's recent electricity crisis that lasted for almost 17 years (Myburgh, 2008) and the ways in which its regular planned power-cuts, known here as 'loadshedding'[o], impact the most disadvantaged the most severely (Inglesi-Lotz, 2023).

The deep scar that lines Buhlebendalo's cheek twists as he turns away…
'Have I made him feel uncomfortable… bashful?', I wonder to myself…

… 'Can I ask you something?' he says, quizzically. 'Why do we kill these trees?'

… I stumble over my words as I immediately wonder why Buhlebendalo might be asking me this question, whether the SANParks training of new employees has given the invasive clearers the proper critical information to know why they are doing this clearing and whether a potential 'lack of understanding' might impact on the efficacy of the work to effectively clear alien-

[o] The Water-Energy-Food (WEF) nexus (Naidoo et al, 2021), as a socioecological systems thinking approach, is of particular significance in South Africa, with its long-standing energy crisis exacerbated by corruption, state capture and a reliance on fossil fuels. Planned power-cuts have been made necessary since 2007 due to insufficient generation capacity, in large part as a result of the mismanagement and corruption directed at Eskom, the country's government-owned national power generator (Naidoo et al, 2021).

infested areas. I wonder if there are lingual-cultural differences at play here, or educational influences, or both,

… or neither.

I also begin to wonder whether the training is delivered in *isiXhosa*, or languages other than English or Afrikaans, to overcome potential miscomprehensions. When I had spoken to a SANParks employee earlier on this topic, she had responded: 'You can never guarantee what they will understand when you tell them why, you can only hope they will remember it, but they will never understand the ecological reasons'.

I am disturbed by her comment, the language of 'they', and the assumptions around 'difference' that inform her thoughts. I hope in my actions and words that I do not contribute to this difference-making. Yet, I can't help feeling pangs of discomfort and anxiety in my chest as I struggle to think of what to say, ever conscious of the slight communicative dissonance that is setting in at this moment as we struggle to anticipate each other's thinking, while I simultaneously become conscious of the dangerous act of constituting difference communicatively…

I think, too, of the dramatic linguistic irony of Buhlebendalo being called an 'invasive clearer' in the context of the history of forced removals of Black South Africans as a cornerstone of 'grand apartheid' (Marais, 2023).

The trees loom and hang heavily overhead, and dark shadows play with light on the forest floor as I walk softly across it with my companion.

How can I begin to describe all the ways in which invasives impact lifeworlds? My mind immediately flashes back to Philippi Village…

… There, I had learned of complex, catalytic, effects of invasive species that I couldn't imagine were on the curriculum of the 'scientific' training delivered by SANParks. I had walked with members of the Philippi Village community, and they had told me of the soil degradation caused by the Village's cement factory origins. And, from my reading and conversations with world-renowned South African ecologist, Dr. David Le Maitre, I learned that the Cape Flats historically were characterised by nutrient-deficient soils, a vast swathe of aeolian sand that previously had been covered by wetlands. These sandy areas were later filled in for residential space, plagued by the colonial-era introduction of invasive Acacias and Hakeas… Spreading ferociously and drawing on limited water supplies, government efforts have since tried to combat the spread, but today, thickets pervade the region (Maitre et al, 2016).



The leader of the Amaqanda Learning Garden shows me the difference between nutrient-dense and nutrient-deficient soils of Philippi Village

> … I can see the thickets in my mind, far now from the Flats… the way their yellow flowers in springtime bely a sinister beauty. I assume that SANParks have told Buhlebendalo and other invasive clearers about the impact of invasives on indigenous biodiversity and water security, but it is the socioecological impacts of these low-hanging and dense invasives I learned of in Philippi that feel heavy on my tongue. They have become ecospatial (Brunbjerg et al, 2017) sites of crime, forcing those most at risk of Gender-Based Violence to have to travel long, arduous distances to avoid these thickets. This peri-urban area accounts for most serious crimes and more than half the murders in the Western Cape (Western Cape Government, 2023).

I think of all the long journeys indigenous South Africans have had to travel throughout torrid histories of dispossession – it is a ‘long walk to freedom’ (Mandela, 1994) indeed… Whilst most of these invasives within the Philippi Village boundary have since been harvested as woodchips to line chicken coops, I saw a few there as I walked with the chicken farmer, and now-leader of the Amaqanda Learning Garden. He told me that these invasive trees also act as sites of concealment along the veld for residents of Philippi who climb the boundary wall to either steal chickens or food.

I know these are only one of the complex threads tied to invasives.

The infinite unboundedness of it all seems overwhelming…Where do I begin…?

The response I give to Buhlebendalo, this young invasive clearer, is too simplified and I can feel it. It was the first thought that came to mind as I grappled to find words to explain such complex issues… and I hear myself saying: 'because they don't belong here, they are killing the other trees that you love.'…



Bluegums in Newlands Forest

Damp droplets run down the bark of the Pine, divert their flow and change course where they meet his shoulder as Buhlebendalo leans against it.

... Shadows from the canopy above dance and play in the wind across his hands.

I cannot read his face – I feel as though I am grasping back at my answer in front of me. As soon as I say 'belong', I feel a pang of discomfort – do I belong here?

What does it even mean to belong? …

It is something in my own experience I often have struggled with living in South Africa, Canada and latterly Scotland. I think of how my own 'accent' has shifted and been shaped by my many transboundary travels and homes in 'other lands', and how this garners questions and throws me into continuous existential doubt of my own sense of belonging wherever I go.

'Otherness' takes many forms…

I stumble over my explanation of the origins of these trees, that they were planted here by colonisers to harvest for timber, and I immediately regret the albeit-truthful association I made in doing so, wishing I could distance myself from my answer…

… that I too am constituted as 'white' in this land, just like the PVA paint that mars the trees…
… that I too have a different accent and a different language…
… that my body suddenly feels as alien as the foreign flora…
… that I too might be seen as invading their space and their time and this forest…

… and I suddenly become conscious that I might be seen to be speaking with 'the invasive clearing team' in pursuit of 'research' and my need for understanding, inevitably leaving again to a home in Cape Town, a home that is 'far from' Capricorn…

I find myself moving into 'rational' academic mode as I fley around, just like I deferred to in ***A Lesson from Spekboom***, searching for an entry-point to answer his heartfelt question.

I tell him of how invasive species are deleterious to the country's biodiversity, how they pose a significant threat to available water resources, how they contributed to the severe Western Cape drought in 2017/18, and how they intensify the impact of fires and contribute to soil erosion (van Wilgen, 2009). I hear the answer back at myself as I say it, and I taste its hollow timbre, detached, yet 'academically-informed'. I hear how it is 'rational', yet it lacks any sense of complexity of human emotion, desire, hopefulness, or indeed a listening disposition to this gentle young person's genuine, heartfelt enquiry.

It is a 'deaf' answer, deaf to another's life experiences,
deaf to their cultural and linguistic and epistemic and ecological ontologies…
deaf to human struggle…

Above, the dark clouds break and the downpour that had threatened the mo(u)rning stillness at last releases its heavy burden.

Buhlebendalo nods thoughtfully, turning away from the Pine, the silvery courses of rain resuming their gravitational pull in vertical routes down its bark to the soil once more.

He returns to his work at pulling the young invasives from the earth, his hands deftly moving indigenous fynbos aside as he walks gently, rain slivering off their leaves… and he shrugs…

'Oh, I only knew there was something about water'.

…

Rhizomatic Conversations

1 *The edge effect* ----------

On the forest edge that lines Platbos Forest in the Western Cape, Africa's southernmost forest, *Helichrysums* grow amidst the fynbos (van Wyk, 1997)… On the treeline, these silvery-green perennials emit the heady scents of Liquorice. In South Africa, this perennial is known as *Impepho*… in *isiXhosa*, 'air for the spirits', and its (un)rootedness on the arboreal edge seems far away from the *Impepho* growing on the exposed land of Philippi Village, clouded by passing cars, emerging from the nutrient-deficient soils of the Cape Flats…

> In their liminalities, they bely an ancient secret, that *Impepho* was considered the very first medicinal plant in *isiXhosa* cosmologies (van Wyk, 1997), a 'Mother Tree' (Simard, 2021) perhaps, and through their vegetal wisdom, they imparted the knowledge of all other medicinal plants to peoples across the land…

I wonder what stories my ancestors may tell me tonight, as I place it under my pillow as the Philippi Village leader encouraged me to do…

Their haunting relationalities speak across the urban divides of the Western Cape, across forest and metropolis and smoke… the 'air of the spirits' transversing the viscous borderlands of these topographies.

Their fluid spirits seem to give air to the critiques in critical geography studies around borders: physical, geopolitical, social, cultural. Borders act as inherently divisive between entities…

– inside/outside,
belonging/unbelonging,
normative/subversive,
us/the Other

(Arnold et al, 2020).

This critical turn responds to the call to re-think the productions of space and place in late capitalism and the globalised condition (Soja, 1989), where "comparing maps of a region or country and recognising the remarkable diversity among them illustrates the importance of understanding that 'these spaces are produced'" (Pickles, 2012, p.94).

The territorialisation and colonisation of environmental management is carved across global, national and state lines, an attempt to capitalise natural resources through environmental protectionism and to keep alive the vertical centre-periphery violences of North-South relations in pursuit of Euromodernist capitalist 'progress' (Arnold et al, 2020).

> Yet, smoke from wildfires burning across Canada and Mexico in May 2024 blanket the United States, and in January 2024, soaring global temperatures and seemingly-chaotic atmospheric circulation patterns brought Saharan dust plumes that blew over Western Europe.

Plastic waste circulates through transcontinental tides and washes up on 'other' shores. Japan, the Philippines, and wealthy European countries export their refuse to global wastelands, and

Chile's Atacama Desert hosts a global textile landfill visible from space under the guise of 'free trade' (Bartlett and Merino, 2024).

I reflect on the argument of Arnold et al (2020, p.11), that "growing protectionism, the resurfacing exclusionary populism, and identity discourses of some political leaders in both old and new democracies; or the rise of religious radicalism and nationalism – all show that in spite of, or even because of, increasing global circulations that transcend and obliterate binary boundaries, new national, social, economic, and cultural borders have appeared in contemporary fractured societies". I think of these divides, these new gaps, and new infills of gaps, and I consider the (im)possibility of escapes…

I am reminded of the ways "borders have always leaked" (Nail, 2016, p.7) in indigenous African ontologies, and the ways in which they have tended to be place-based, nomadic, ecologically-informed, and orientated toward 'the circular'. I consider, as a literal account of this orientation, the way in which the *KhoiKhoi* have always border-crossed through transhumant pastoralism, and how the *ihalthi lesiXhosa* itself transverses socially-constructed borders, encompassing mountains, thickets, rivers and everything in-between. Socially-constructed borders "can be erected and controlled, imposed or negotiated, contested and transgressed or bypassed, remapped or abolished; they reflect fluctuating, at times conflictual power relations and shifts in self-representations, or reconfigurations of the place and more largely the world we live in" (p.9). I realise that borders can also complicate/trouble/destabilise spatialities and temporalities across oft-arbitrary and ideological geopolitical lines, such as borders of colonial Africa, or Trump's 'migrant' wall, or transient migration of climate refugees.



One of the Philippi Village farmers holds Impepho

Temporal borders can be conceived of as complex matter(s) that oscillate between subjective/objective demarcations of past/present/future, and between political events, like pre-apartheid/apartheid/postapartheid. Borders are in constant negotiation, and I am

reminded of Shildrick's (2002, p.126) argument that, from a posthuman understanding, "the real task for the postmodernist theorist is surely to take up Anzaldúa's concept of the borderland, that 'vague and undetermined place', as not simply the location of the abnormal, but as the place where all binary distinctions are undone". Rumford (2008) calls this 'borderwork', "the activities of ordinary people – and their differentiated privileges – in envisioning, constructing, maintaining and resisting borders" (Ozguc and Burridge, 2023, p.471).

I consider my own privileges, and the eco-political responsibilities it demands of me in the daily borderwork of undoing the binaries of that fill-in the gaps of the in-between in this place that I live, in the place(s) of this research, in the place of my relational, face-to-face encounters (Levinas, 1984) with others.

In this 'moment of articulation' (Swanson, 2004), I realise that, in Philippi, the boundary wall acts as a physical representation and a metaphor for the 'frozen liminality' in which the country still finds itself after apartheid, an 'in-betweenness' where the "entanglement of temporalities produced by persisting injustice" (Houssay-Holzschuch, 2021, p.460) and its "suspended revolution" (Habib, 2013, p.1) has failed to draw a 'border' between its "intractable present and irrecoverable past" (Mbembe, 2011, p. viii in Houssay-Holzschuch, 2021, p.9)… This is what Ewing (2021) calls 'grey space': neither/both Black nor/and white, 'fractional spaces' that are "… positioned between the 'whiteness' of legality/approval/safety, and the 'blackness' of eviction/destruction/death". I reflect on how they are "neither integrated nor eliminated, forming pseudo-permanent margins of today's urban regions" (Yiftachel, 2009, p.89). Gebaba Baderoon (2015 in *Cityscapes Magazine*) melancholically writes:

> Geography is history. Living in Cape Town means you travel through the past all the time… Geography is learning how to step gently on the past, and walking from present into history and back with each footstep… Geography is fantasy; it's time and memory… Sometimes geography is irretrievable sadness...
>
> … *It reminds me of a beloved family friend, Nongetheni, who spoke of the way white people face the unknown entity of the future by ignoring the past. For her, in the isiXhosa way, we must walk forwards with our backs to the future,*
> *looking at and facing our pasts….*

The spatial organisation of apartheid South Africa can be visualised in "palimpsestic spaces [that] specifically seek out to 'stabilise and disambiguate different temporal layers' as opposed to a 'more inventive' process of seeking out 'new relations between the non-synchronous layers'" (Marshall et al, 2017, p.1166). McClintock (2010) refers to this non-synchronicity as a 'metabolic rift'… the Marxist idea that capitalism and urbanisation have "alienated humans from the natural environment and disrupted our traditional forms of 'social metabolism', the material transformation of the biophysical environment for the purpose of social reproduction" (p.193).



An 'inside' view of the Philippi Village wall

Thinking of 'metabolic rifts' in terms of a geological metaphor, 'brecciation' also illustrates the way "soil and matter may shift, become nonlinear, be displaced and socially disorganised" (Bartolini, 2013, p.4). Such geospatial shifts can lead to the "disparate concentration of elements of the past in the same space: the space of a dream" (p.4) … spaces that seem to ebb-and-flow as I cross the threshold into Newlands Forest, where time seems to stand still, a far cry from the noise and speed of urban life at its edge…

> Our responsibilities then, are to excavate the spatial and temporal displacements, which "leaves space for possibilities: excavating erased memories, and turning them into heritage – material, juridicial, immaterial, and spiritual – contribut[ing] to what Karen Till (2012) has called 'wounded cities'" (Houssay-Holzschuch, 2021, p.462).

In Philippi, I think about the ways in which such excavation may reveal possibilities in the multiple crises in urban politics, which can instead lead to "enabling moments" (Spivak, 2002, p.173), for thinking through what "needs to happen for the disjuncture between policy intent (urban integration) and outcome (urban fragmentation) to be remedied" (Pieterse, 2006, p.289). In so doing, we may open up "new discourses that can alter the realm of the possible" (p.289).

After the protests against the construction of the Philippi Village boundary wall, a prominent community leader in Philippi told me that he had offered a resolution: acceptance of the construction of the wall, in exchange for the provision of ablutions for the residents. He had introduced himself to me as a former small-holder chicken farmer, who, along with his brother, had migrated west from the Eastern Cape in search of employment.

Their paths echoed the journeys taken by many who have hoped for improved circumstances under the promise of better infrastructure under a Democratic Alliance (DA)-governed province of South Africa (Charles, 2022)…

Under the watchful eyes of the Philippi Village cement pillars… the leader told me how he and his brother now work in collaboration with Philippi Village, running the Amaqanda Learning Garden. The Garden is a small urban regenerative 'farm' that supplies small-scale food to Philippi and beyond. The brothers have brought their experience of permaculture and poultry with them, using chickens to restore the degraded soil conditions of the former cement factory land through their nitrogen-filled waste, rotating their mobile chicken coop in patches across the veld to support the growth of the garden's fruit and vegetables. I am familiar with the way such biodynamic methods have become increasingly used as a way to restore poor quality soil without relying on pesticides that destroy helpful pioneer weeds and beneficial soil bacteria (Johansson, 2024) (see ***A Lesson from Spekboom***).

I am always being reminded of the wonder of these lives that have been made subaltern through human dominion over nature…

And, on the Cape Flats, regenerative methods such as these are particularly valuable due to the low fertility soil that has become further degraded by the colonisation of invasive species.

I think of how the wall as a human-made material divide has formed an assemblage in the lives of Philippi residents, as well as its subaltern non-human matter (chickens, land, vegetables, water) and a transition zone (Kark and Van Rensburg, 2006) between multiple moments of contamination-and-encounter…

I realise that the politics of invasion transverses both between the centre-peripheral spatial politics of Cape Town's peri-urban divide, as well as the post(-)apartheid legacies that endure through the effects of multiple conjoined challenges of crime, lack of safety and municipal provision, as well as the occupation of invasive species on the land.

And, I consider the ways in which these a/effects accumulate through transboundary objects of water-and-food, through transboundary contaminations (Tsing, 2015).

Gaps
yawn and ache,
are closed,
and re-open again
in new ways.

These encounters are enmeshed with further encounters and matter is mobilised osmotically across porous borders.

These 'bordering' encounters have led me to Phillips (2001, p.6), who writes, "these days we are all unmoored. Our identities are fluid. Belonging is a contested state. Home is a place riddled with vexing questions". I have felt these fluidities on my return to South Africa, and all the spaces that have held me in-between. I recognise the privileges I have been afforded by this mobility regardless… globalisation and mobility presupposes a privileged citizen. This fluidity, however, has paved the way for heterogeneity produced through the rhizomatic accumulations and transformations of cultural, social, political and ecological borderlands, which carry with

them indeterminacy, and which I think of through the sociomaterial metaphor of socioecological ecotones.

In Rosheda's story here, the lining of Mandela's jacket became an ecospatial and material site of resistance, possibility and disturbance. I imagine it in terms of an ecotonal allegory, in keeping with my political ecology alliances, for through her storying, I felt I was passing through the lining itself as I listened… transversing boundaries and worlds through her words. In an ecological sense, transfers of this kind see higher levels of disturbance and change to those within patches (Wiens et al, 1985), and transboundary objects, such as water-and-food, transverse, accumulate and 'leak' within their communities in-and-across ecotones. These 'leakages' encountered in/within/across Mandela's jacket lining, can be thought of as colonial histories and apartheid violences that, through resistance, led to the material moment of Mandela being freed. It also served as the catalyst for: Rosheda to sew a petition into its lining; the spatial inequalities Rosheda faced, as well as the broader sociopolitical struggle Mandela fought against; the socioeconomic inequalities Rosheda faced as an informal trader and a woman; and the resistances that were sewed deep within its fabric.

The ecotonal metaphor paved a way for me to think about the lining as a "sliding movement between language and materiality" (Philippopoulos-Mihalopoulos, 2021, p.268). Thinking ecologically, ecotones are themselves a type of boundary, a transition zone with their own biotic or abiotic elements that contrast-or-overlap habitat patches, in ways that trouble the spatial heterogeneity of landscapes (Fagan et al, 2003). In these liminal-boundaries, diversity is dependent on the nature and 'health' of these spaces. Anthropogenically-impacted ecotones may find lower levels of endemism, while at the same time, dynamism may peak within ecotones in comparison to their boundary spatialities. Where ecoregional boundaries are often human-defined and subject to dominant Western topographies, these do not demarcate discontinuities or complex overlaps that take place in nature (Strayer et al, 2003). Ecotones represent the natural 'edges' of dynamism and organism transience between homogeneity and heterogeneity, and foster the conditions for various livelihoods and lifeworlds to thrive.

As they open and close, bow/bough and sway, I remember…
Canopies are ecotones.

Nevertheless, perhaps most pertinent to reading the liminal spaces of Philippi Village, Mandela's jacket, Newlands Forest, and the 'leaky' temporal/spatial bordering of the *ihlathi lesiXhosa* as the *Impepho's* ancestral air blows, is the

'edge effect'

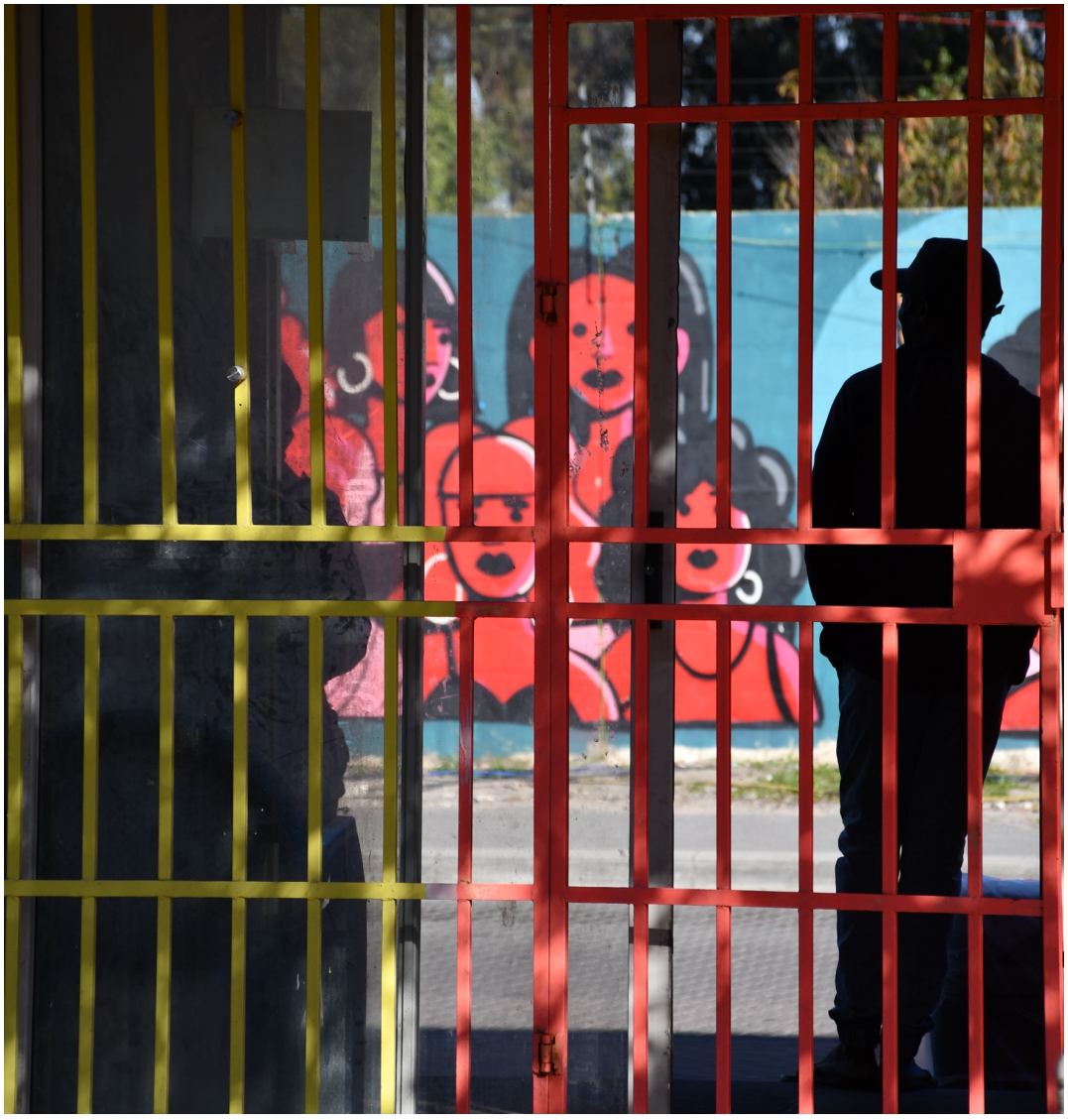
ecotones produce. I am reminded of the way Clements (1905) and Odum (1971) both wrote of the increased heterogeneity found on 'the edge' in dynamic ecologies, which has come to inform the way political ecologists think through the complexifying/troubling/working/mobilising/exchanging/overlapping processes that take place through disturbance-and-resilience. Much of this thinking has inspired disturbance theories (Pickett and White, 1985) and Tsing's (2015) 'patchy topographies' in reference to the Anthropocene, as they inspire my own thinking about how fluid impermanence and liminalities of ecotones suggest a cultural plurality "out of which conflict and change emerge" (Krall, 1994, p.4). While ecotonal thinking through these complex subjects can offer a dynamic interchange, I am also aware that, without criticality, it may "also represent a barrier that blocks some people from their rightful place in the scheme of things" (p.4).

These possibilities and rifts follow the scalar geographies, as well as feminist and Marxist geographies, that have increasingly troubled the ways gendered and capitalist spaces are produced through place, and where technoscientistic productions of place have lent themselves to a 'closed', 'bounded' nature (Helfenbein, 2010). Likewise, decolonial and feminist theories have troubled the interplays between space, place, power, and identity by revealing place to be a "locus of complex intersections and outcomes of power geometries that operate across many spatial scales, from the body to the global" (Massey, 1995, p.2). As witnessed in Philippi and elsewhere across my journeys, space is inherently political and material, "constructed through discursive, interpretive, lived and imagined practices [that] become place" (Helfenbein, 2019, p.8).

A political ecology understanding of the 'closed boundedness' of the ultra-modernistic, territorialist borders of the Western geopolitical imagination (Parker and Vaughan-Williams et al, 2009) thus necessitates a processual move towards critical theories of 'bordering' or 'border work', which, like the Philippi Village boundary wall, imbricate ethical and normative attendants of in/exclusion (Brambilla, 2014). As Gupta and Ferguson (1992, p.9) write: "in the pulverised space of postmodernity, space has not become irrelevant: it has become reterritorialized in a way that does not conform to experience of space that characterised the era of high modernity. It is thus that forces us to reconceptualise fundamentally the politics of community, solidarity, identity, and cultural difference".

Standing amidst the ruined landscapes of the cement factory and the patchy life-forms that have emerged through new encounters, my conversations with the community leader reveal the ways in which the wall here is intertwined with place-*making*, or meaning-making in response to wider structural/spatial forces (Helfenbein, 2019), a material embeddedness of histories, politics and powers enmeshed with borders, thus imbricating the spatial with social (Soja, 1989). As the social sciences and humanities often carry hallmarks of the Scientific Method, how can we overcome the redolent 'neutrality' inherent to many of the discourses within them? How can we give credence and recognition to the overlapping, contradictory and embodied encounters taking place across borders… with space, place, power and identity in a constant state of reterritorialization and deterritorialization, as Soja (1989) would describe it?

In Cape Town's histories, 'marginalisation' has taken place 'on/
within the margins'.



A man pauses a moment, 'outside' the gate that divides Philippi Village from the wider informal settlement of Philippi beyond

Perhaps, it is rather about working in the interstitial spaces, as Rosheda and the leader of the Amaqanda Learning Garden have, through "inter – the cutting edge of translation and negotiation, the in-between space – that carries the burden of the meaning of culture" (Bhabha, 1990, p.211). Thinking through ecotones then requires a "process of transculturation related to migration, the processes of diasporisation and creolisation, borrowing, syncretism, and cross-pollination; it also implies examining cultural divides and identity cleavages, vulnerabilities, modes of opposition and resistance, as well as avoidance strategies" (Arnold et al, 2020, p.14). This is the challenge I accept in ways of undertaking this research, and which necessitates thinking in decolonial and sociomaterial ways about ongoing invasive legacies.

By paying attention to the complexities of slow/fast, visible/invisible violences and invasions as they accumulate in the 'interstitial', across boundary walls or in jacket linings, across language, across temporal spaces, and infinite other ecotones, we may begin to 'reclaim' a notion of 'resilience' in the Global South, one that may truly 'resist' the challenges of the Anthropocene.

2 *Roots/routes of invasion* ----------

There is invasion at every turn…

It is a po(r)tent(ous) responsibility to delve into the world of invasives, and it often feels as though danger lurks in the shadows. Even using the term 'invasive' itself can feel like a creeping malaise… I think about Marwa Helal's (2019) poetic *Invasive Species*, the way she reclaims her identity as an 'immigrant' in the United States by rewriting its term, dehumanising herself as resistance, renaming herself as an "invasive specius sapien": "I invasive species beast of no nation a being of no consequence" (p.1) , she writes. I carry the weight of the synthetic apertures of 'invasion' that have been imposed upon it… that despite, or rather, *because* of its violences, "this is a story we need to know…" (Tsing, 2015, p.18)

who made this taxonomy?
unmake it

Marwa Helal (2019)

Invasion is everywhere… and, in a country like South Africa, I am compelled to explore the tendrilled reaches of the more-than-human.

'Being' in the world today, we have borne witness to the way thousands of organisms have moved and thrived in other regions of the world, due in part to the mobility of globalisation, and many have crossed South Africa's borders as food crops, timber, horticulture, dune stabilisation and hedge plants (Enviroworks Special Edition Report, 2022). With a natural competitive advantage over indigenous species, invasive species rapidly

spread,

contributing to environmental degradation. Their leaf litter changes the pH of soils, poisoning nearby indigenous plants. Research has revealed their large-scale impacts on water sources and seepage zones, such as the Rookirans (*Acacia cyclops*) which was introduced to stabilise dunes, and they clog vital waterways, like the Water Hyacinth (*Eichhornia crassipes*), which arrived as an 'ornamental' plant. They can dehydrate water systems and curb water flows. The Enviroworks Special Edition Report on Invasive Species (2022) wrote that invasive alien species are introduced both unintentionally and intentionally by humans.

Invasives are everywhere…



Invasive Acacia cyclops in the Northern Suburbs of Cape Town

In South Africa, an already-arid region vulnerable to drought (see ***A Lesson from Spekboom***), invasive species have been shown to have a significant impact on human and more-than-human landscapes. They also have adverse effects on agricultural resources, threatening food availability and production costs. Their high fuel loads make them more susceptible to carrying fire, and their ability to withstand hotter temperatures than those of their indigenous neighbours make them more likely to crowd into the graveyard spaces left behind (Van Wilgen et al, 2018). The naturally-arid climates from which they originate also make them likely to spread faster at times of severe drought due to extreme weather events associated with climate change. As a result, they can turn heterogenous spaces into monocultures, compete with indigenous species for food, water, light and space, change fire regimes, contribute to soil erosion, hybridise with indigenous species, degrade water quality, and impact ecosystem resilience to flooding (Van Wilgen et al, 2018).

Modern perspectives of biological invasion find commonality in their anthropogenic activity spread, although I am reminded of Mungi and Qureshi (2018, p.7) who argue that all "'species' distributions are dynamic; each species originated somewhere, had subsequent changes in its life histories that has resulted in its current distribution and will determine further speciation within the geographic barriers... with increased human transport available, humans are spreading many species out of the geographic barrier, will all these species become invasive?"

I refer to other scholars who have tried to find some kind of criterion for what constitutes 'invasive', rather than only 'alien', with some suggesting that invasive implies spreading beyond geographic origin in ways that include questions of 'negative impact' (Mungi and Qureshi, 2018). Lavergne et al (2010) tell us that all biotic communities are subject to change and 'disturbance' and forms of 'alienation', and that which differentiates between harmful or simply changing, has become simplified: "Biological invasion is a special case where all the criteria are

the same, except that it enforces immediate changes on the ecosystem, which in an ideal evolutionary time would give equal opportunity to the native species to respond" (Mungi and Qureshi, 2018, p.7).

This discussion brings the language of climate change policy to my mind… I am reminded of the differential impacts on the 'disproportionately-disadvantaged' (a term I critique in ***A Lesson from Spekboom***) peoples of the Global South, who have contributed to the climate crisis the least. Euromodernism in the Anthropocene has hardly been an 'ideal evolutionary time', a time when indigenous peoples might participate equally, or have their responses heard. As a result, these 'climate changes', drawing on wider meanings of 'climate' (see ***A Lesson from Spekboom***), are manifested in the "localised extinction of native species, loss in functional diversity and gradual homogenisation of the global biota" (Mungi and Qureshi, 2018, p.8). While it may be problematic to naturalise and draw a one-to-one and literal relationship between indigenous peoples and indigenous ecological species, there is at least some resonance between the historical plight of indigenous people and indigenous ecosystems under the thrust of modern industrialisation, development, and globalising capitalism.

(Post)modernity disrupts the homeostasis of nature and its perceived equilibrium. In so doing, we become open to understanding the ways in which ecosystems are in constant states of flux, fragility and complexity (White, 1998). Mungi and Qureshi (2018, p.9) remind us that invasive ecologies are no longer merited for their origins or their negative impacts, but rather their "potential regime shift in a non-ecological time and… the anthropogenic base of such shifts", through 'spatio-temporal ecotones'. With unrelenting climate change, and the collapse of the Clementsian principles of equilibrium and climax, such dynamism and mobility will increase the spread of such invasiveness (Mungi and Qureshi, 2018).

If this is the case, then what are we to do?
Will invasion ecologists have to permit their unabated spread without human intervention by removing humans as a 'causal agent', potentially creating further chaos?
Or, do we engage in further anthropogenic activities that propel conservation agendas?'

I cannot claim to have the answers, but I do raise these questions in these conversations to trouble this duality from posthumanist and decolonial perspectives. By removing Westernised humans as a 'causal agent', we are made to engage with forms of post-anthropocentrism, where Euromodernist humans come to "argue themselves out of the picture precisely at a time when climate change caused by the impact of human civilisation calls for urgent and responsible, *human* action" (Braidotti and Hlavajova, 2018, p.94), and at a time where anthropogenic activity has created and perpetuated a crisis of biological invasion.

Humanist thought cannot absolve humans of the structural inequalities they have induced, while pioneer species and indigenous peoples are left with having to reckon with the consequences wrought upon them on their own.
There cannot be a 'post', in the sense of an after,
without directly addressing these critical contradictions,
at least not yet,
which is also the case for post(-)apartheid and post(-)colonialism.

Complexity theories in Ecology have acknowledged the ways that 'disturbance' is inherently ecological. But, to indulge in the idea that human intervention is the *only kind* of solution to ecological/climate disturbance is to reinforce Euromodernist positions of dominion over nature, and that through the reinforcement, stabilisation and universalisation of existing

capitalist systems and modernity, they become positioned as "the most efficient remedy" (Hartman and Degeorges, 2019, p.456) to the chaos they have created. This point also warrants a challenging of the critiques of invasion ecologies, which are premised on the perpetuation of 'alien' discourse on the 'non-native', as witnessed in parallel with the early language of apartheid that gave definition to 'native' and 'non-native'/European. As my personal political commitments do not align with the continuation of such violences, I engage with this matter here, as well as a few critiques of 'invasion discourse' in ***Finding the Path*** and ***Spectral Pasts***. My purpose in doing so, seeks to reaffirm the question as to,

> whether a decolonial view might suggest that such ecologies may refer not to the 'indigenous' as 'alien', but rather settler paradigms as 'invasive'.

This provokes the question as to whether this reversal in attendant meanings of the discourse would help us find a way through the entrenched divisive positions we find ourselves in and serve to undo the violences, or simply invert the lexicon without breakthrough.



Kirstenbosch National Botanical Gardens

Renaissance and modernist positionalities view the retardation of human progress, such as through threats to croplands, as 'bad weeds' (Neely, 2010), and that may be true within the context of the way global hegemonies of food have asserted their dominance in such processes, but who decides the threshold upon which negative impact takes place in order for it to be 'problematised', and for which ecosystem? By critiquing invasive ecologies for necessitating value-subjects of what is inherently 'good' or 'bad', and by claiming that such dichotomies and bifurcations perpetuate ideas of 'non-natives' as straightforwardly bad, we would ironically, in the process, create a position of *neutrality* that would then favour Western/Northern/Eurocentric paradigms and would obfuscate the violences of 'Othering' faced by indigenous humans and non-humans. I argue that this is because *neutrality* is, in itself,

ideological and values-laden and offers no escape from 'the political'. This understanding finds strong parallels with Mamdani's (2020, p.18)'s *Neither Settler nor Native*, where he asks "what it means for the political to be colonised and what it would look like to achieve active decolonisation", knowing that the "angle you look from determines what you see" (Andaiye, 2020, p.3).

This argument does not suggest that 'landscape purism' is a solution, nor do I suggest a return to 'pre-invasion homeostasis', as these are also subjective and indicative of European romanticism. The idea of a pre-disturbance world of paradise is a fallacy, and risks recolonising nature and thought. Rather, I suggest that a deeply complex, ethico-onto-epistemological embracing of the way differential kinds of invasion are still deeply imbricated within everyday lifeworlds, and the way that invasive ecologies perform rhizomatic assemblages that gather together the most 'urgent crises' of the Anthropocene, may also offer possibilities of decolonial resistance against the militancy of invasion (Seroto, 2018).

'Weediness', then, is not the stuff of Shakespearean literature, nor of the Bible, but rather might be conceived of as 'colonial invasion' that transverses temporal and spatial ecotonal materialities in Global South contexts. This idea is relevant to discussions on the *ihlathi lesiXhosa* more broadly…

South Africa's histories tell stories of invasion, devastation and the effects of Euromodernism and legacies of colonialism, and the ways in which these haunt and mix with precarities of the Anthropocene. Walking through Newlands Forest, I was reminded of the way geographers use web layers in Geographic Information Systems (GIS) to reveal multiple map tiles and scenes…

Stepping through the forest, these layers can be (re)imagined beyond their vertical 'hardware data' or as 'counterfactuals', and instead as temporal and spatial (s)cenes, each with their own complex overlapping topographies, histories and encounters connected by their mycelial understories… to walk through a forest is to walk through its fibred layers between

overstory
and
understory

as they are made and (re)made…

When Donna Haraway introduced the Plantationocene (Haraway, 2015), one of a number of alternate-epochs to the Anthropocene in political ecology scholarship, she was referring to the "devastating transformation of diverse kinds of human-tended farms, pastures, and forests into extractive and enclosed plantations, relying on slave labour and other forms of exploited, alienated, and usually spatially transported labour" (p.160). This included the "rapid displacement and reformulation of germ plasm, genomes, cuttings, and all other names and forms of part organisms and of deracinated plants, animals, and people" (p.164).

While much of the thinking around the Plantationocene has focused on the role of plantation territories and the relationalities it creates with the land, species, the global market, forced migration, and racial labour (Chao et al, 2023), scholars have also invited a demystification of "the ways in which the forced relocation, alienation, and enslavement of people, plants, and animals undergird the supposed efficiency of the plantation" (p.4). The primary focus has been to understand relations of control over "people, land, and resources as the premise from which the modern era is constituted and unfolds" (p.4). It inculcates a premise that plantations reside

at the core of modern systems (colonialism, capitalism or socialism), while drawing attention to the ways that plantation regimes are rooted in racialised assemblages.

In Philippi Village, more-than-human ecologies of plantation politics are invariably enmeshed with crop-worlds and agrifood, but here, they also foster discourses around alienation of people, plants and land since the beginning of modern global colonisation, and shift foci away from 'triumphant' origins of the Anthropocene in colonial Europe to the invasions of modernist organisations that find their roots of the modern era in conquest and dispossession in the Global South. Reflecting on these 'landscapes of empire' (Besky, 2013), the Plantationocene offers a valuable engagement with the necrobiopolitics (Chao et al, 2023) of capacious plantation politics that is deeply imbricated within non-human and human lives.

Thinking *with* the Plantationocene can be read concomitantly with the Anthropocene – which has come under criticism for privileging a dominant view of overpopulation and industrialisation, as well as homogenising humanity – and the Capitalocene (Moore, 2017) – which engages the sociomaterial relations of capitalist production as the defining feature of our time, yet has also been critiqued for its ignorance of life that takes place outside of capitalist control. Together, they imbricate political ecology and race theories to understand the ways in which plantations "work to control, simplify, alienate, and tame ecologies at the same time as they create and propagate constructions of race and racialised forms of work" (Chao et al, 2023, p.5). With lasting legacies of Western Cape colonial plantation in mind, thinking with the Plantationocene as an especially-apt epoch in which to engage with this subject, we begin to recognise the ways invasive timber Pine plantations (and the (im)plantation of the Acacias along the Cape Flats have reconfigured the *ihlathi lesiXhosa* around them – the plants, animals, soils, water, ecosystems, and ancestral cosmologies. Earthly eco-cosmologies are indelibly marked in an assemblage of multiplicities.

these growing pains though
the good will hunting
we
fallen twigs
look like bones
waiting to be lit

I am trying to tell you something about how
rearranging the words
rearranges the universe

Generation of Feeling
Marwa Helal (2019)

There is dark irony to be found in the way invasive Pines have become a tautology, proving their invasiveness by having escaped plantations to occupy riparian banks where water supply has always been precarious. Invasion ecologies are transferred as transboundary contaminations from human to non-human creating new economies of invasion. Plantations create plantations, as systems of capital oppression beget further violences. In some sense, I see the way Acacias may act as a metaphor for climate change, in the ways that Western/Northern/Eurocentred industrial disturbance has irrevocably catalysed the Great Collapse (Granberg and Glover, 2023) in which we now seek existence, while residents of the Global South, who are 'disproportionately-disadvantaged', are forced to create new livelihoods

with(in) these attendant emergent invasions, invasions that take the form of extreme weather events and multiple complex crises.

Similarly, for Chao (2022), Plantationocenic occupation in Indonesian West Papua revealed plantation violence as a multispecies act. There, cash crops became vegetal embodiments of invasive settler-colonial institutions, while crops themselves are imbricated in forces of extractive agroindustry. In the Cape, we can see how invasive Pines are arboreal actants of similar invasive settler-colonial hegemonies, while being reduced themselves to the value utilities of Euromodernist systems and subjected to extractions of industrial production. Their devastating impacts on the politics of water-and-food also enacts forms of Plantationocene 'forced migrations' across borderlands…

… climate refugees fleeing the Cape Town drought in 2017/18 exacerbated by water-hungry invasive Pines and Acacias…
… the many miles that disenfranchised citizens in peri-urban Cape Town were forced to travel to reach available water points, during apartheid and after democracy…
… the distance between our plates and the source of our food…
… the *Khoisan* displacement into the interior away from rivers and sea…
… the many miles that women and children are forced to travel to avoid ecospatial sites of invasive crime in Philippi…
… the transversality of systemic injustices across Philippi Village's boundary wall…
… Rosheda Muller's spatial justice petition woven into Nelson Mandela's jacket.

Just as ambiguities and strange encounters emerged for Chao (2022), promises of profit and progress through the clearing of invasive species in Newlands Forest through South Africa's national Working for Water Programme are awkward encounters alongside histories of land dispossession, and ecological decay. I pause here momentarily, to return to it later along my roots/routes.

… at the same time, we cannot end the story with decay…

Resistance creates its own disturbances which can accumulate around politics of invasion.

Each year, during the spring wildflower season, thousands flock to the West Coast to pay homage to the kaleidoscopes of colours that blanket the landscape… and setting out to visit the annual Darling Wildflower Show along the way, I had seen the tiny petals of the Bokbaai vygies (*Dorotheanthus bellidiformis*) and Gousbloms (*Arctotis hirsute*) by the roadside.



Genus Felicias on a rainy springtime day in the West Coast National Park

And at the show, I met a man, standing next to a photograph of an Acacia. From its branches hung large bulbous brown sacks, irregular and coalescing around the bark. These are the Acacia gall rust fungus (*Uromycladium tepperianum*), he told me. Originating from Australia, these galls naturally attack Acacias, and were being introduced as a 'natural' method of combatting the invasive threat. With teliospores spread by the wind, they would develop in **three's**…

… I thought of Cape Town's three-year drought…
… the cultural cosmological significance of three in indigenous African onto-epistemologies …
… the way Fatima in ***A Lesson from Spekboom*** gifted me three of her spekboom in an act of

Islamic *sunnah*…

… the birth-life-death cycle…
… the past-present-future…
… pre-during-post(-)apartheid…
… the three stories of this research…

… *there are always teliospores of the more-than-human where we may notice them.*

Three teliospores produce pedicels, which penetrate the epidermal cells of young phyllodes (leaves) and stems, he told me. They infect the Acacia through an act of colonisation of the plant tissue, and large galls form on branches or phyllodes, using the Acacia's nutrients to grow, reducing the tree's growth and seed production (Wood and Morris, 2007). Ultimately, their parasitic relationship makes the Acacia vulnerable to stress, such as drought, and the Acacia perishes (Wood and Morris, 2007). The rust fungus survives only within a living host, and once the Acacia dies, it dies too. The fungi's rapid spread requires little introduction in South Africa, and while fires and improperly executed invasive clearing curbs their efficacy and benefits the

Acacias instead, the fungus naturally reinvades. Over time, Acacias become less dense, and indigenous woodlands (plants and grasses) regrow. Studies have shown considerable efficacy in comparison to the physical removals and poisoning of trunks, which leave room for 'human error' in improper clearing, and a particular achievement has been the way the rust fungus has ameliorated 'conflicts of interest' for commercially-valuable species, i.e. *Acacia mearnsii*, used for tannin and woodchip production (Strydom et al, 2019). Whether the introduction of another alien species enacts further invasions and contaminations remains to be seen…



Gall rust fungus on spring-flowering Acacia

Driving past the stretches of invasive Acacias that blanket the Flats, I had not noticed these sacks before. Now, I see them in abundance, rooting themselves beneath the yellow flowers that bloom over the fences of Khayelitsha and Philippi in springtime…

But, this is not the only bioeconomy that is in assemblage with invasive Acacias that have offered me 'other' streams of thought. *Acacia saligna*, belonging to the legume family (*Fabaceae*), the kind found on the Cape Flats, is symbiotically in relation with Rhizobia, Gram-negative rod-shaped root nodule bacteria in the soil. Few bacteria can fix free nitrogen, but the cortical structures of Acacia roots permit bacteria strains to induce their ability to utilise atmospheric nitrogen (Basu and Kumar, 2020). Their nitrogen-fixing abilities have become of notable interest for scientists looking to mimic these properties in support of combatting food insecurity due to low-production agricultural yields across Africa, as a form of biomimicry.

Over a cup of Resurrection Plant tea when invited to her home for a research conversation one day, I spoke with Jill Farrant, Professor of Molecular and Cell Biology at the University of Cape Town, who is undertaking similar work on her revolutionary 'plant stress' research of the indigenous Resurrection Plant. There, she told me of how the plant is so named, as it can resist extreme drought for lengthy periods and 'come back to life' with just a little water. The

Resurrection Plant is now being studied to unlock 'drought-resistant' genomes in crop-worlds. As I listened to her research work, notes of cosmological wonder and awakening metempsychosis – as the soul transverses across bodies of the more-than-human – lingered on my tongue with every sip…

Food, and its politics, is enacted through processes of invasion and symbiosis as a transboundary object, engaging with both the plantation ecologies of the Plantationocene alongside arboreal resistances and multispecies justices. Bacteria are arguably the first and greatest planetary terraformers (Haraway, 2015), and their inter/intra-actions with humans and non-humans have dispersed across epochs, objects, movements, ecologies, and temporal scales. In many ways, they are the first invaders and simultaneously the first forms of resistance.

… we have much to learn from the production of such seeded, rhizomatic knowledge…

Jones (2019) reminds us that trees, like language and discourse, emerge from the soils in which they grow. Nutrients are essential for their survival. Like the microplastics that now accumulate in our soils globally (Chen et al, 2020), which 'alienate' soils' chemical, physical and biological properties as well as other forms of life within them, we must attend to the multiple, complex forms of invasion that have alienated our multispecies worlds.

I engage with these conversations as a way-of-thinking of invasion ecologies with the Plantationocene that enacts a continuous unfolding of invasion-and-resistance: "invasion by capital, corporations, and the state of lands, territories, ecosystems, diversity, dignity, agency, and autonomy, and resistance by those who inhabit these territories and spaces and for whom these invasions result in myriad dispossessions" (Chao et al, 2023, p.8). What is particularly compelling is the way colonisation of the gall rust fungus on the Acacia tissues parasitically renders the trees vulnerable to the same stresses to which they were once resilient. We can come to see this in parallel with the way global capital and invasive settler paradigms threaten disenfranchised ecosystems of the human, especially with respect to subalternated, racialised bodies in South Africa, the more-than-human rendered non-human. In so doing, they enact a form of ecocide through Euromodernist terraphthoric (destructive) growth (Ryan, 2020). Likewise, in this capacity, fires and improper forms of invasive clearing also might be reimagined, not as forms of destruction and degradation as dominant Eurocentred contexts might know them, but as forms of resistance too…

… as fires are for dormant Fynbos seeds.



Uromycladium tepperianum on *Acacia saligna* near Onrus, Western Cape

The fungus has now animated further Plantationocene enactments by preserving the utility value of the Acacia and its further participation in market economies, ones primarily supported by Black-labour, while at the same time and as enmeshed, generating livelihood incomes. The fungus can only exist in a living host, and if we imagine our world as the thicket of Acacias (an *ihlathi lesiXhosa*), there is a warning to be found in this birth-life-death cycle, and the contaminations that haunt. Like colonialities of power (Quijano, 2000), symbolic, material, cultural and onto-epistemic violences have blown across the world on the wind, penetrating the epidermal cells of our socioecological and indigenous roots…

That an invasive species would undergo a death from the introduction of another non-human species in which they share common roots of place parallels the earlier political economy argument I made that humans have looked to their own modernist regimes as the "most efficient remedy" (Hartman and Degeorges, 2019, p.456) to the very crisis they have created. It reminds one that invasion goes by many names, and its very ontology is one of subversion,

occupation,

alienation.

In many ways, we have alienated/occupied ourselves by invading our own ecologies, as we have indigenous/queer/female bodies, the more-than-human and the 'radically unknowable Other' (Levinas, 1987).

At the same time, there is biomimicry to be understood from the natural metabolisms of the earth, and resistance and resurrection too…

Alongside the Plantationocene, the Capitalocene, the Anthropocene, and other (s)cenes I pick up and put down along the roots/routes of this research journey, I hold Albrecht's (2021) Symbiocene in my other hand. I feel the way this term also offers a descriptive ethical way-of-thinking that seeks to trouble the parasitism of the other 'cenes', in a turn toward thinking differently about our anthropogenic crises without standing within the Anthropocentric discourse that contributed to them. Yet, I am aware that there is no sanitised position, no escape or safety net to rely on…

Like the mutualistic, symbiotic processes of invasive Acacia roots and Rhizobacteria that fix nitrogen and support necessary soil fertilisation for agricultural crop yields, Albrecht (2021) offers a way-of-thinking about entities in contested domains that respect "entitlements of coalescence, vagility, passage, movement and flow within organically and symbiotically unified wholes" (p.513). Tsing (2015) echoes this approach towards interspecies relations, where biology studies have increasingly come to understand evolution through organisms and their symbionts. Together, these are known as 'holobionts' that work concomitantly through processes of 'symbiopoiesis' (Tsing, 2015).

For Albrecht (2021), in the Symbiocene, rights are signified through unity, cooperation and inclusion, which are reminiscent of South Africa's national-political aspirations of *Ubuntu*. As I principally align with such radical hopes (Lear, 2006), I believe there are resistances to be found in the plethora of symbioses in our world. However, there is much work to be done to extricate ourselves from the parasitic conditions in which we still find ourselves. In some ways, a Symbiocene view adopted *without critical reflexivity* creates a way for humans to write themselves out of the picture, precisely at a time where collective urgent action is required of the *Anthropos*. To speak of the Symbiocene in a world still characterised by the 'wicked', haunting encounters of the Plantationocene, as but one epoch of inquiry, is to speak of a hope for resistance, but my hope is not for it to become another re-enactment of universalisation and homogenising models of modernity and development discourses that pave over multi-sited/temporal/scalar collectives in our more-than-human publics.

Perhaps, it is rather about recognising the complex mutualisms and holobionts that act as forms of resistance against divisive epochs of capital, without eschewing responsible recognition of the material realities of ongoing structural and systemic autopoietic degradations. Even our 'cenes' perform spatial/temporal boundedness, but it is through their liminalities and complexities, the way they haunt and cooperate, that we may see them as concomitant insights that allow us to engage with and problematise capacious and complex ways-of-being-in-the-world today, offering a radical hope for a truly Symbiopoetic/scenic future.

3 *Everywhere/anywhere* ----------

We Are Bark
Ntaoleng Labane (2020)

When all the leaves fall at your door
Do not blame the tree

On the side of Main Road that winds from Muizenberg into Kalk Bay on the False Bay coastline, I often have walked past a regular stall outside the train station that sits flush against the rocky shores and tidal pools, a brown blanket laid on the pavement steps, covered in tubers,

bulbs, barks and seeds. String binds together poultices and bunches of vegetation. It is the same scene I have espied on the corner of certain streets across Cape Town: on the intersection below the historic Mostert's Mill in Mowbray; on the open square of the Grand Parade in the City Bowl; next to the stalls of braaied chicken feet on Govan Mbeki Road in Philippi on the Cape Flats as their redolence of pungent earth mix with the sticky smell of salt rubs and crispy flesh…

There is a certain kind of heartache to see children of the *ihlathi lesiXhosa* lying below the feet of busy passers-by, as cars roar close to the verge and exhaust plumes roll over their skins, as taxi hooters and the call of minibus taxi drivers land on the crossed legs and weathered hands of the sellers as they sit rolling *entjies* in the noonday dust. The brown blanket of little fibres and stalks and leaves are far from home, I thought. They were resettled and placed here, but then, so had its sellers. We are always being pulled this way and that in this place… every position unravels new threads in infinite vicissitudes.

I approached a seller once…

he had asked what my ailment was –
I had asked him where his plants came from –

his tone changed, he was suspicious then.

It was to be the same conversation I would have with a man selling abalone shells from a street stall in Hout Bay (in ***The Tides That Bind***) as I passed by on my way to the morning market.

Their hands had moved as they spoke, gesturing behind to the mountains, the trees, the city, the sea, everything in-between, waving in the ether.
'Everywhere', they'd both said…

'anywhere'.

For it wept all year round
Hoping
Praying you would notice

'Everywhere' across the city, wild-harvested resources are bought and sold in a 'multimillion rand hidden economy' (Cunningham, 1989). Proteaceae are harvested across the Cape Peninsula (Rebelo, 2011), honeybush tea (*Cyclopia spp.*) and buchu (*Agasthosma spp.*) as sources of food, illicitly harvested abalone (*Haliotis spp.*) by illicit economy syndicates for export trade (see ***The Tides That Bind***), and invasive Acacia species for the informal trade of firewood (Petersen et al, 2017). Over 170 wild medicines trade hands within the city, and more than 448 biotic species are harvested from public and wild areas. Many are illegally sourced within conservation legislation and land tenure (Petersen et al, 2017). Of these, most medicinal plants are derived from trees…

and 83% are primarily sourced for their bark (Van Wyk et al, 1997).

Ring-barking/bark-stripping, where the bark is circumferentially stripped for use, is a common consequence when undertaken by unskilled collectors (Zschocke et al, 2000), disenabling the nutrient pathways that carry the flow of nutrients from foliage to roots, thus ultimately leading to the trees' death. Much of the demand for wild medicines are through export trade, and in Cameroon, *Prunus Africana* bark has become Endangered due to their export to European pharmaceutical companies (Geldenhuys, 2004).



Authorised ring-barking is used to remove invasive species too (Newlands Forest)

Wild medicine harvesting now contributes substantially to habitat destruction as biodiversity rapidly declines, despite the implementation of legal conservation frameworks. Much of this destruction is due to lack of consideration in government institutions to account for complex ecological processes, cultural relationships and livelihood dependencies, hegemonic paradigms that deepen inequalities, and climate change. Policy focus is on limiting harvesting practices and controlling sustainability levels (Geldenhuys, 2004).

In South Africa, sympatric to colonial-era 'simplification' processes of managing natural areas, a complex system of conservation agencies and legislation govern private and public biodiversity lands, which together perform the country's conservation strategies (Petersen et al, 2017). The country's complex and contested history of land tenure, combined with the wide undulations of biodiversity, each with their own particularities, reflects fissures within its formal conservation framework, characterised by "a range of concurrent competences, with national and provincial responsibilities, and regionally differing policies with regard to species management" (p.1). Shackleton (2009) refers to the depletion of biodiversity due to wild harvesting as taking place within a management vacuum, "exacerbated by the lack of a clear government department specifically responsible for sustainable resource use, commonly poor institutional capacity in existing departments, and erosion in traditional authority leadership and communal tenure which might otherwise play a role in overseeing such activities" (Petersen et al, 2017, p.1). Mathibela et al (2015) further expand by noting that, "[this] is exacerbated by a weak legislative framework governing the use of plant resources and inadequate environmental law enforcement" (p.2). Where cooperative projects are undertaken, they promote strong policies, but on the ground are said to be effectually weak (Petersen et al, 2017).

Yet, here lies the conundrum. These commentators place the burden of responsibility on formal governance structures in a context where state governance has significantly broken down and

the capacity to resource policy that requires monitoring and policing is almost entirely absent. In political science parlance, it could be expressed as an 'absent state'. What use are these advocacies then, and what democratic, informed alternatives might there be? It also raises the spectre of mode of thinking that leads to this modernist, state-apparatus-dependent, juridicial impasse.

But, in a country like South Africa, where crises are complexly-intertwined, exacerbations also can be found in the deeply conflictual approaches to conservation. Here, and similarly in many parts of the world, traditional healers and *isangomas* (traditional healers in South Africa) are trusted with healthcare provision for residents of indigenous settlements through plant, animal and mineral substances (Agbor and Naidoo, 2011), and the harvesting of medicinal plants is intended to be a practice undertaken stringently by those with the Traditional Knowledge (Bruchac, 2014). Forms of indigenous knowledge more broadly are considered to be the most important asset of majority-indigenous in/semi-formal settlement residents, supporting survival strategies, and ready access to food, medicines, and shelter (Bruchac, 2014). Indigenous and local knowledges also provide routes/roots to democratic control over people's lives through opportunities for grassroots decision-making over natural resources, ecological zones, aquaculture, agriculture, game-management and forestry (van Wyk and Prinsloo, 2018).

That its roots are parched
In need of more than water

Much of the distribution, ecologies, methods of extraction and the management of medicinal plants is passed through generations to preserve such knowledges, many of which include strict cultural beliefs and practices that promote the conservation of these species (Williams et al, 2000). Van Wyk and Prinsloo (2018, p.336) offer examples:

> only collecting plant material once it has been ordained by their ancestors and after performing certain rituals; where the root of a plant is collected for use as medicine, cultural tradition forbids the collection of more than two roots of the same plant at one time… bark that is used for treating kidney diseases are sometimes harvested from the eastern and western sides of the tree only, traditionally resembling the kidneys thereby preventing ringbarking…

Increased urbanisation in Cape Town has paralleled a rise in medicinal plant use and a stronger reliance on the harvesting of plants by those who have migrated seeking employment and education. I am reminded of the Philippi Village brothers making their journey from the Eastern Cape…

When the tree bends and begins to wither
Do not weep
For you ignored it every time it bled

This increase in demand for plants in the Western Cape has also been encouraged by a local move to return to *Khoisan* 'indigenous ways-of-being' and cultural practices, as well as a rise in Rastafarianism and use of local medicinal flora. These informal value chains, nonetheless, directly impact local biodiversity, resources, cultural practices, as well as 'conservation efforts', which have in the past discounted the livelihoods challenge that complicate them (Petersen et al, 2017). Rastas form an important part of the herbal trade, selling their harvests directly to those who need it, something I would hear more about from a Rasta I befriended in ***The Tides***

That Bind, but also providing *isangomas* with supplies for their medicinal trade. It is a trade worth approximately ZAR 2.9 billion/year (Rasethe et al, 2019), a sum significantly higher than Cape Town's annual budget for conservation of its local flora and fauna, including stewardship of its 24 protected zones (Petersen et al, 2014).

But in the 'calculable' (Mbembe, 2000) marking out of 'the problem' in scientific parlance, I raise the question of how a counter-logic could be inserted to complicate the singularity of this scientific narrative: how does incoming migration through unemployment, socioecologically-induced climate change, and sociopolitical threats construct 'the problem', and who carries the burden of blame and responsibility in this arrangement? Where is there a 'gap' in the discourse to prize open alternative narratives and possibilities, while addressing the immediacy of the 'extraction and extinction' threat?

I cannot help frequently thinking back on these small bundles of harvested plant matter on the dusty wrinkled brown blanket spread on the hard, unyielding tar of the pavement. I think of the way they cannot speak, or rather that they haven't been heard by societal human publics.

… I think of how their bodies are broken down… their portioned parts destined for other locales. They'd reminded me of the unnamed succulents I had seen in gentrified plant shops in Edinburgh and across Scotland.
… I had checked to see if they were 'labelled' at least, so their new owners would at least know of their journey, their struggle… perhaps they were homesick in the way I have been…

Yet, their labels would simply say

succulent

printed in amorphous 'Times New Roman',
… but I knew they were from South Africa. I can recognise my siblings anywhere/everywhere…

Perhaps, my label is **human**, but I know the soils from which I have grown.

… I ask myself, 'from which patch of land had they been taken, which rocky outcrop, which mother plant had been portioned into seedlings in nurseries to generate them on mass…
… only to end up here, on the fluorescent-lit shelves of a home store across the ocean amongst other nameless objects, at an exorbitant price for their exoticism?'

They didn't ask to be called 'exotic'… There are already so few of them left.

'So far from home', I thought, 'in much the same way as more-than-human and human bodies and identities are fragmented, moved, and commodified through systems of capital and increased climate injustices'.

My heart is heavy… but I return to research mode, to scientific parlance. I know I am sublimating, suppressing… But to where do we reach with our disjointed limbs, heavy, weighted with our grief?

…

'Economic forces of supply and demand' mean that the increasing scarcity of medicinal plants increases the commodities and profit for gatherers, with the catalysing effect of perpetuating further gathering (Cunningham, 1988). As a result, traditional healers purchase commercially-harvested medicinal plants at lower prices, which has become especially prevalent in cities that are far from resources (Mander, 1998).

As van Wyk and Prinsloo (2018, p.337) write, "commercial harvesters from both urban and rural areas perceive plants as a common property resource, and there are no or little incentives for resource management or traditional conservation practices". It is interesting that in increasingly urbanised contexts like Cape Town, many indigenous peoples believe that commercially-harvested medicinal plants come into 'contamination' with non-indigenous peoples, thereby degrading the healing properties of the *amayeza* (medicine in *isiXhosa*) (van Wyk and Prinsloo, 2018).

Pollution… contamination… invasion…

Despite this circumstance, commercial harvesting has sought to meet global demand, and the *Buchu* I walk amongst in Newlands Forest and that grow in my garden, are now the stuff of a booming export trade, alongside the Aloe (like the one in Fatima's garden in ***A Lesson from Spekboom***) (van Wyk and Prinsloo, 2018).

We can now conceive of the way medicinal plants trade hands, primarily in **three** ways (van Wyk and Prinsloo, 2018):

… nationally, where hundreds of species are traded through regional markets;
… informally, comprising mostly rare and/or threatened species that move across national borders;
… and formally, where the global export trade finds principle demand from Europe, America and Asia.

The 'place-based' nature of trees, their bodies, and the 'vibrant matter' (Bennett, 2010) that makes the sum of their parts, have become as unmoored as humans through *Anthropos*-led systems of capital…



Medicinal plants by the roadside in Clanwilliam

Spread across your naked lawn like the night lit sky
Hoping you would take notice
Of its beauty
Acknowledge the many light-years it travelled to get to you

Perhaps most pertinent to the lack of integrated legislative frameworks that can encompass the practice of traditional medicinal harvesting, is the Patent Amendment Act (Act 20 of 2005), which is unable to uniformly describe what indigenous knowledge practices of medicinal plant harvesting entails. There is no defined communal system, no specific written history, and no named creator (van Wyk and Prinsloo, 2018). Our legal system, originating and constituted in large part within European Enlightenment contexts, fails us… fails these small, broken body parts, and their plant mothers…

As McGaw et al (2005) note, "the type of rights Africa needs are not intellectual property rights monopolised through privatisation, but rights that support local communities and indigenous people". I am reminded of Albrecht's (2021) Symbiocene, which takes an inclusive rights-based approach to our geological epoch, as well as the mutualistic support provided by Mother Trees in Simard's (2021) forests. Speculative imaginaries of collective (*Ubuntu*) rights are indeed in the realm of the possible, but how can we ever reduce complex multiplicities to one definition? How can we find a different kind of justice in 'the gaps', in complex socioecological holism? …

I am reminded of the Derridean challenge, that the naming of the "calculable and determinate is fundamentally unable to deliver ethical content, the very undecidability of the monstrous arrivant" (Shildrick, 2002, p.124)…

Much rhetoric has sought to depoliticise conservation discourses, to argue that living diversity is a moral necessity, and that to view it within assemblages of politicised actants, is to devalue the ethical 'mission' (Meine et al, 2006)…

Others, as Adams (2013) notes, believe in adherence to scientific 'truth', and that conservation is beholden only to its 'data'…

Still others assume a neutral way-of-doing-conservation, and while irregularities or discrepancies may exist in 'actually-existing conservation' spaces, these will be rectified through so-called 'win-win-solutions' (Adams, 2013). This is the parlance of United Nations sustainability frameworks, of the language of business, of policy and managerialisms.

Between competing paradigmatic and positional discourses, I ask of myself, 'what 'gaps' might be prized open to insert filamental routes/roots to possibility?'

… The body parts continue to lie in the open sun,
on the brown blanket,
on a dusty pavement…

There is no more pertinent a critique than that of Spinage's (1998, p.274) repudiation of contested conservation conflicts with indigenous peoples, who wrote that if conservation should be subject to change, "it should be based on ecological criteria and not political ideology". Political ecology, however, reminds us that nature is "fundamentally and thoroughly social and political" (Neumann, 2005, p.44), and that "human decisions, and therefore all conservation decisions, are inherently political" (Adams, 2015, p.65), reflecting a way-of-thinking that makes for an "explicit alternative to 'apolitical' ecology" (Robbins, 2004, p.5)…

In the Western Cape, conservation spaces restrict the mobility of indigenous peoples to take part in historical practices of indigenous knowledge. They also serve as a reinforcement mechanism that bears similarities with apartheid-era violences of segregation and displacement.

At the same time, to not conserve such spaces allows for increasing threats to biodiversity, including the growth of invasive species, in the wake of climate change. Undercutting both of these alternates, however, is the impact of globalising neoliberal capitalism that perpetuates illicit and informal value chains within conservation spaces to support livelihoods as inequalities grow.

It is not a coincidence
That we look like trees when we stretch our limbs out
The fruits of minds are nourished by intelligence

The ideology of democratic freedom underscored by the South African Constitution in 1996 also underwrote an equal entitlement to the bounty and beauty of the land, something which is uneven and unequal in practice, and did not account for diverse knowledges and expressions as to what constitutes such entitlements, nor how these would be reconciled with divisive post(-)apartheid legacies and increasing unemployment and poverty. The conserved lands of Newlands Forest, for example, are now primarily enjoyed by tourists and local Capetonian residents who have largely never had to rely on these lands for survival, in a space already-contaminated by histories of dispossession and colonial displacement. As Adams (2015, p.65) asks:

> Whose uses of nature should be allowed and whose should be prevented by rules, laws and economic relations? Whose freedom of action does conservation action protect, and whose does it constrain? Who wins from any given conservation decision, and who loses?

In the context of the Anthropocene, I am reminded of Robbins (2004, p.5), who writes that "the systems that govern use, overuse, degradation and recovery of nature are structured into a large social engine, which revolves around the control of nature and labour". Capitalism and the exploitation of nature are all the result of human decisions on varying scales (Adams, 2015), determined by markets, regulations of the state, and non-governmental lobbying. The politics of anthropogenic systems of capital are what govern environmental changes, as well as how their benefits and costs are distributed (Adams, 2015), which are as uneven as the differential risks experienced between the 'disproportionately-disadvantaged' and the Global North across scales of climate change.

Perceived conceptions of conservation through neat, hierarchical processes (global to local) also are not reflective of the differential impacts of global processes across multiple temporal/spatial scales, just like the May 2024 Canadian wildfires that raised air quality warnings in the United States and threatened local and national pollution legislatures across international territories (New York Times, May 2024). The social constructions and relationalities that accumulate around conservation tell stories of the power and politics of scale. How environmental management is scaled is deeply influenced by relations and performances of power exercised by specific actants to 'frame' outcomes (Adams, 2015). Through the politics of 'frames', (in alluding to Butler's (2009) critiques), differential politics of knowledge are also (re)produced (Watts and Peet, 2004). Here, knowledge is informed by 'power that is everywhere' and which acts as flows and discursively-constituted 'regimes of truth' (Foucault, 1991). Fairhead and Leach (2003) note the ways that scientific knowledge is used to produce conservation strategies that account for ecosystem distributions, regulations, and control…

… and yet…

indigenous knowledge most often is not included, and indigenous bodies are not (ac)counted for in decision-making spaces (Adams, 2015), resulting in contested spaces and ideas over who and what is being conserved, and where…

Those who are ready to partake can pick these fruits
Those who are ready to nest in
Can build a home in our hearts

I engage with indigenous knowledges in the gaps within contested spaces, such as those of conservation versus socioecological holism, in various ways throughout this writing/journeying.

Guattari (2000, p.50) reminds us that "what condemns the capitalist value system is that it is characterised by general equivalence, which flattens out all other forms of value, alienating them in its hegemony". Colonial-era 'conservation' rested on the modernist 'simplification' process of nature, yet ecologies are deeply complex and intertwined. This unruliness acts as resistance through nature's inability to be ontologically simplified.

While I explore the politics of conservation and diverse forms of conflict further in ***The Tides That Bind***, these threads are important to my narrative journeying with the medicinal plant trade, with an exploration of Newlands Forest, and with the other arboreal rhizomes of this research more broadly. Political and socioecological legacies haunt informality and illicit economies, precipitated by dominant and destructive hegemonic paradigms. These hauntings are animated through the engines of urbanisation, industrialisation, and globalising capital, that produce ongoing waves of dispossession and displacement, compounded by anthropogenic climate change. These deleterious accumulations find purchase in the ecotones and cracks of conservation… politicised across temporal and spatial scales. Plants too find themselves amidst a schizophrenic state of belonging (Deleuze and Guattari, 2005), their identities shifting and reverberating between conserved, spiritual, cosmological entities, and migratory, dismembered commodoties…

The broken bodies lie still on the blanket in the sun….



Medicinal plants in Clanwilliam

For many environmentalists, conservation is often considered a necessary and moral space, and I am grateful for some protections offered to preserve biological species that may otherwise become another casualty of our biodiversity crisis. As with all other vexing and arboreal spaces of this research, conservation also risks performing new violences and politicises new conflicts through the bounded entities of its contested spaces. This is also something that challenges my own positionalities and embodied ways-of-thinking and relating to spaces I participate in. Conservation attains this effect via its production of 'visible' knowledges, through material segregations of ecosystems, and by promoting the same kinds of 'universal' scientific 'truths' that produce and validate what constitutes the borders of ecosystems (and bodies) and that lay claim to who/what/where/how those ecosystems/bodies are to be managed.

And those who are ready to fly can take flight from our height
Those who are ready to build can chop us down to a stump
And those who are hungry can burn us and eat our flesh

There can be no moral high-ground. There is no neutral way-of-doing-anything, not while the systems and processes that have established themselves as necessary to battle the barrelling crises of climate change continue to enact further injustices and further performativities of settler paradigms under the steady gaze of Euromodernist paradigms of environmental ethics.

In my mind, I slowly and reverently lay my body down beside the broken parts of my siblings, on a dusty brown blanket in the sun,

… and I weep.

4 *(Proto)publics of fire* ----------

And so, when you tell us to forget it,
to build a bridge and get over it,
you speak like people desperate to commit new sins
while we are still trying to forget your
fathers
walking into our homes
without
knocking first.

Things We Lost in the Fire
Vuyelwa Maluleke (2015)

The following narratives and parts of critical commentary were published in contribution to a chapter I wrote in *Climate Justice in the Majority World* (O'Donovan in Crawford et al, 2023), rewritten here in relation to the current situated discussion.

Fires are a common occurrence here in Cape Town, and the landscape continually bears the black, ashen scars of a burn…

There is always the smell of smoke on the wind…

… yet, the fires that burned on 18th April 2021, spreading quickly and ferociously through the brittle fynbos across Table Mountain National Park, also destroyed significant parts of historical buildings on the slopes of Devil's Peak and surrounds (O'Donovan, 2023). The University of Cape Town's Jagger Library became a casualty of the fire, as well as an irreplaceable collection of ancient African Studies archives and the historic Mostert's Mill, as it raged on for days (Burke, 2021).



A fire on Table Mountain in 2024, with helicopters flying into the smoke to disgorge buckets of ocean water from the Atlantic

The disaster made global headlines, not necessarily because of the fire in-and-of-itself, but because of the destruction and incalculable loss of historic university buildings and artefacts. Local news sources quickly reported that the fire was started by displaced people (engaging the term 'vagrants') living on the slopes of Table Mountain who had left their fire unattended, which provoked a familiar debate about 'homelessness' and poverty in the City (Marvin, 2021). This time, however, the fire threatened not only the 'disadvantaged', but also the 'historically-advantaged' as well as 'heritage' infrastructure (van Wilgen and van Wilgen-Bredenkamp, 2021). I remember receiving a number of widely-circulated email requests at the time asking global researchers (including those at the University of Edinburgh) to provide copies of documents they may have used that could recover precious African Studies archives. These were devastating events, but the historic Mostert's Mill was restored quickly and infrastructure rebuild was expeditious.

The scenes of the 2021 fires were a near-mirror-image repeat of the same fires that burned in 2000, with similar media headlines and reports that emerged blaming invasive species and the 'homeless' simultaneously for the cause, overlapping 'moments of crisis' (Lund, 2012). They are points of disruption and eruption, illuminating the endemic and invisibilised vulnerabilities of everyday life here, as they mix with political spatialities of language, power, race and lived experience (O'Donovan, 2023).

It is interesting how, in the 2000 fires, little discursive attention was paid to the unintended benefits of these fires on the fynbos biome, an ecosystem that is both fire-prone and fire-dependent for survival. The fynbos biome relies on seasonal, low-level fire-triggered regeneration (Neely, 2010), although the catalytic frequency of fires as average temperatures rise and unregulated urbanisation intensifies has also led to species destruction rather than regeneration (Neely, 2010). The seeds of some invasive species, such as Australian Acacia, are active pyrophytes, where fire heat breaks open their hard dormant shells (Holmes, 1997). Others, such as Pines, are passive pyrophytes, being fire-resistant and outliving their native neighbours by crowding into empty spaces left behind by these disturbed ecosystems. This inherent hardiness allows the invasive species to flourish while their indigenous neighbours fail to regrow (Neely, 2010). In the urban-natural ecotones, prescribed burning is often difficult as it poses threats to urban infrastructure, yet healthy vegetation is reliant on these ecological disturbances. In a region that is bioclimatically well-adapted to woody tree growth, exacerbated by strong southeasterly winds, fire is both risk and resurrection.

… It is not always the predetermined crisis neoliberal discourses have 'framed' them to be
(see ***A Lesson from Spekboom***).

The 2021 fires heralded a renewed focus on the existing sociopolitical legacies of apartheid. These fires had quickly succeeded the Cape Town water crisis 2015-2020, as well as the global COVID-19 pandemic. Cape Town had become an infamous exemplar of vulnerabilities around food-and-water insecurity, precarious livelihoods, biodiversity loss, urban densification and burgeoning inequality, faced by many metropolitan cities around the world (Joubert and Ziervogel, 2019), while at the same time, the global pandemic had also compounded existing stresses to reveal a 'new' type of displacement-disenfranchisement (O'Donovan, 2023).

Development narratives point their fingers…

The mobilities/moveabilities of disenfranchised peoples are in constant flux across the city core and its urban peripheries, and forced removals of residents from tracts of land within the city are something that Rosheda Muller also conveyed to me, and which I have witnessed many times on my journeys throughout Cape Town, often with no alternative location provided. These forced removals are an ongoing legacy of the apartheid state. I often have driven past as police stand watchfully as 'the already-displaced' pack up their belongings, loading them into shopping trolleys.

'Where do they go from here?', I have wondered many times. 'Where is one allowed to rest?'

More bodily breakdowns…

There is heartache to be felt each day in this city…

In a moment of crisis such as this, both invasives (nature) and the urban poor (socially-disenfranchised indigenous peoples) were constructed as being simultaneously 'to blame'. This 'blame discourse is despite the promises made by liberation ideologies, social protection narratives, and development justice discourses. While fires erupt continuously, exacerbated by the significant presence of invasive alien species, on the Cape Flats little support was then offered in the peri-urban spaces characterised by limited infrastructure, low socioeconomic 'value', and human/non-human bodies that are 'problematic' to the City, according to its standards of 'progress'. Heritage infrastructure was quickly restored in a city suffering from limited housing, contested land tenure, and consistent removals of the urban poor, and at a time where increased displacement as a result of the COVID-19 pandemic and extreme weather events due to climate change deepened positions of disadvantage. The fire revealed the ways in which capital discourses of modernism and coloniality continue to underscore the invasive legacies and systems of alienation imposed on humans and non-humans that haunt the city.



The remains of a devastating fire in Heldeberg Nature Reserve in 2022 with its charred remains of Proteaceae, now also offering an opportunity to control invasive alien species regrowth

It is perhaps with teleological significance that, in thinking about the 2021 fire, I thought of Mbembe (2015), who wrote of the need to bring down the Cecil John Rhodes statue on the University of Cape Town campus, which became known as the 'Rhodes Must Fall' student

movement, accompanied by a call for the demythologising of whiteness. In particular ways, white colonial history, with its incendiary legacies, was arguably complicit in 'bringing down' heritage infrastructure that was representative of white histories themselves.

Echoing Mbembe's call, it becomes a principle of self-destruction wrought by whiteness…

… In this case, the self-destruction is brought on through catalytic frequencies of fire hazards as a product of white (Global North-dominated) anthropogenic climate change…

… Whiteness ignited fire risk because of Euromodernist industrialisation and urbanisation on the urban-nature interface…

… and it burgeoned vulnerabilities stoked by fire through colonially-introduced invasive species.

As Mbembe (2015, p.3) writes, "we are therefore calling for the demythologisation of whiteness because democracy in South Africa will either be built on the ruins of those versions of whiteness that produced Rhodes or it will fail".

The emphases on rebuilding colonial-era infrastructure rather than attending to spatial justice for the historically-disadvantaged echoes this call, where versions of whiteness that, for Mbembe produced men like Rhodes, and that have propped up the centre-periphery spatial injustices, must be "recalled and de-commissioned if we have to put history to rest, free ourselves from our own entrapment in white mythologies and open a future for all here and now" (Mbembe, 2015, p.4). Mbembe's thought has influenced my thinking here and informs my own writing with respect to the invasion ecologies that haunt the city, and the country more broadly, and I find myself faced again with Demos's (2013, p.21) spectral question: "How *can* ghosts be laid to rest, when the events that unleashed them are not entirely concluded, only repressed in the present?"

I do not suggest that the University of Cape Town's Jagger Library is akin to the statue of Cecil John Rhodes, for libraries are epistemic spaces. Rather, my thinking looks to the way Mbembe has called for a rehabilitation of the public space, a redefinition of what is public, "what pertains to the realm of *the common* and as such, does not belong to anyone in particular because they must be equally shared between equals" (Mbembe, 2015, p.4).

The decolonising of buildings and of public spaces, as Mbembe (2015, p.4) says, "is inseparable from the *democratisation of access*". While Mbembe refers to the university space, I draw inference to the lack of access the urban poor have in the urban core of Cape Town as an effect of invasive colonial legacies that enact spatial inequalities. Mbembe (2015, p.6) says: "it has to do with an expansive sense of citizenship itself indispensable for the project of democracy, which itself means nothing without a deep commitment to some idea of public-ness". Towards a hope for resistance, then, requires a "logic of self-affirmation, interruption and occupation" through "pedagogies of presence" (p.6).

My thoughts here bow/bough towards recognition of the ways in which assets of capital (metaphorically paralleling invasive Acacias and Pines, indigenous ecosystems, as well as objectified Black-and-female bodies) become repeatedly reinscribed in forms of inequality, denial of access, and more broadly, politics of oppression in this setting. Colonially-introduced invasive species have made the urban-nature interface vulnerable to fire, in an already-burning

world of the 'Great Collapse'. Yet, these events, through the performance of pejorative discourse about who is entitled to the 'rights of access' in systems of power and languages of oppression and the privileging of already-white infrastructures, compound the 'wrongs' done to indigenous peoples that post(-)apartheid liberation ideologies (exemplified through the WfW employment-making programme) promised to 'make right', and which act to further deny spatialities of 'access'.

The smoke that curls around the mountain are the burn of indigenous and invasive species,
as they are the ashes of the promises of
democratic transition, livelihoods and socioecological justice,
for both human and more-than-human…

Thinking with the arboreal discourses that make up the 'shady ecologies' of the *ihlathi lesiXhosa*, we may come to understand that the redefinition of the public Mbembe calls for can also be understood through the ways in which forests are made through the formations of publics (Jones, 2019), or what Eberly (2000) calls 'protopublics'. 'Pedagogies of presence' through a 'decolonial re-occupation' of the histories of white mythologies can be understood through the discursive roles that trees assume, "fostering both pastoral and ecological values in the rhetorical construction of place" (Jones, 2019, p.64). By decolonising place in its alliances with posthumanism, or in this case, spatial inequalities and their attendant forms of historical crises and invasive legacies, trees put down "roots across bifurcated zones – virtual and actual, natural and cultural, human and non-human" (p.64).

As Bennett (2009, p.100) writes, "what, if anything, does the claim that worms and trees and aluminium are participants in an ecosystem say about political participation?" …

Both the media narratives and my storying of these fires brings Rivers (2015, p.576) to mind. Rivers 'wrote' that: "writing moves (in) the world. As writing moves, it bumps into things, generating effects. Writing shapes and becomes a part of the environment. Writing composes connections: its agonism produces publics". Invasive species have produced similar agonism in the disturbances and conflicts of injustice, witnessed in Philippi and elsewhere. Yet, the rhetorical assemblages that can produce decolonial and 'just' publics that democratise access, offer a form of resistance towards a "sustainable bioregion of discourse" (Jones, 2019, p.71).

Perhaps it is time we ask the trees to write and guide the way so that these ghosts may be laid to rest…

5 *If the trees die, jobs die* ----------

My journeys take me to the wider ecotones of the *ihlathi lesiXhosa*…

In the Beginning
Christine Coates (2018)

When we first came
it was as if I'd woken from a dream –
paradise was not a name I knew yet.

On the sides of the road near Barberton in the southern province of Mpumalanga, far from the edges of Newlands Forest or the Cape Flats, the verges are set alight…

Nearby, plantation Pines stand in vertical rows… dead land, dead space… you can see straight through them… their pine needles a battery across the acidic soils, carpeting, covering, suffocating, preventing other life forms from pushing through.

Smoke rises as ashes blaze, and the controlled burns started through the toil of workers on the sides of the road rise in apocalyptic (s)cenes.

The South African Paper and Pulp Industry (SAPPI) has ordered prescribed burns nearby to protect its plantations from wildfires, yet burns run out of control in the province despite the fingers pointed at El Niño phenomena and extreme weather events.

… Climate change can offer a convenient scapegoat when the world is burning, while also being a material agent of the ashes…

SAPPI has grown from a South African forest products company to a global industry, manufacturing pulp for the paper market. Their "excellent operating efficiencies" (WRM, 2003) are not impacted by "externalities", as they call it. The limited and contaminated water supplies, dwindling forests, destroyed ecosystems, dispossessed land and poverty by those who have lost their livelihoods, are of no consequence to their economic 'success'. Neither are the damaged ecotones of indigenous forest as plantations and industrial sugar cane crops creep ever-closer (WRM, 2003), the increasing fire risk a gaping wound in the forests' first line of defence, disturbing the protective moisture formed by its canopy humidities. The Plantation economy booms, and bodies of modernist labour become circumscribed in the commodification of capital assets.

We rejoin the path in the Western Cape once more…

We could hardly see the edges
but the views beyond –
Stellenbosch, Hottentots Holland, Paarl Rock –
above us only sky.

Invasive species have become a critical economy in the Plantationocene, and Aitken et al (2009) note how indigenous peoples were encouraged to use Acacias to combat the deleterious effects on biodiversity, while Acacia plantations were also built to supply building infrastructure to indigenous peoples, while also further dispossessing people on their land.

"If the trees die, jobs die", Buhlebendalo had told me.

In many ways, this may be true. Rangan (2009) draws from other scholars in demonstrating the way that despite invasive Acacias material imbrications with water resources, food and land use, economically-precarious households rely on their economy for subsistence and to earn a livelihood (de Neergaard et al, 2005). Firewood is gathered from plantations and from where they grow freely, they service employment in the forestry industry, support fruit production in urban gardens like the one in Philippi Village, and building materials are extracted from plantations on community land (Rangan, 2009). Policy frameworks reflect a competing approach that scales Acacia species according to their level of threat, which are unreflective of the uses by indigenous groups that have had little choice but to depend on them since their colonial-era introduction. Nature has become reinscribed in hierarchical scales indicative of the nature/culture divide. For forestry plantations, government regulations stipulate that

labour is required to remove the invasive species that cross the edges, while plantation owners complain that the management of species beyond their borders are prohibitive to the growing industry (Rangan, 2009).

Tall gum trees and pine,
yellowwood, blackwood.
Every creature – lizard and skink, shrew and mongoose –
the birds of the air.

The edge effect of invasive plantations illustrate the stark inequalities and reproductions of violence enacted through systems of capital. SAPPI reinforces centre-peripherality actions, investing in the politics of space, where Western universalisms of 'rationality' and universalisms of 'truth' are centred through linear models of human progress and industrialisation. The human and more-than-human are alienated and reinscribed in 'Othering' discourses that follow Enlightenment-era dualisms between the Western model and 'abject Blackness' (Northover, 2012). The management of invasive species and the capitalisation of human and non-human indigenous assets within systems of alienation and labour to service Euromodernist global industrialisation in South Africa act as a centrifugal force of violence, which performs an important example of the invasion ecologies and economies that circulate worldwide through global hegemonies of production and their extractive ontologies in the Anthropocene/Plantationocene/Capitalocene.



Poison removal of invasive species near Morningstar, Western Cape

But… these conversations also offer a critical way-of-thinking through the eco-hauntologies and canopy gaps of the development agenda.

Poverty alleviation schemes, such as Working for Water, were a key component of South Africa's democratic transition, recruiting the 'urban poor' from local settlements, such as

Capricorn. I have driven past it many times on my way to the sea on the coasts of False Bay. But, discourse surrounding WfW is divisive and ranges from an ideological tenet of democratic ambition, to the recognition that forms of capital are deeply imbricated, to outright criticism of the programme's failure to curb capacious growth of invasive species (Hobbs, 2004). Warring implementation strategies between focusing efforts on areas where the most impoverished reside, rather than areas of high infestation, are of particular note.

We occupied ourselves cutting
paths, the overgrown bush.
Fruit nourishes us – avocado, guava, lemon,
and one beguiling apple tree.

The 'development' discourses that emerged from the post(-)apartheid ANC-led government were reflective of the post-World War II dominant discourses that positioned the institutionalisation of economic assistance through multilateral and state development (Rangan, 2009). As Esteva (1992, p.8) wrote, "there is nothing in modern mentality comparable to [development] as a force guiding thought and behaviour". Development discourse in the apartheid era was used to support separatist policies (Crush, 1996), while its appropriation by apartheid apologists and the ANC after democratic transition revealed deep contradictions (Crush, 1996). Development discourses of the time had much to contend with: the "'big D' Development defined as a post-second world war project of intervention in the 'third world' that emerged in the context of decolonisation and the Cold War, and 'little D' development or the development of capitalism as a geographically uneven, profoundly contradictory set of historical processes" (Hart, 2001, p.650). Development discourses were positioned as having risen from the ashes of industrial capitalism to confront the ruins of 'progress', while simultaneously theorists wrote that "the unleashing of markets for labour, land and money… wreaks profound havoc and generates countertendencies and demands for intervention and social protection" (p.650) in a form of neoliberal polemic (Lal, 1985) that contained such dichotomous interventions within capitalism itself (Hart, 2001).

What these share, and pertinent to the militant foreground of South Africa's democratic transition, was the understanding of development as a post-war international project (Hart, 2001). Post-development critiques, or as I offer, post(-)development critiques, as well as neoliberal polemic, have thus far paved over the "multiply inflected capitalisms that have gone into the making of globalisation" (p.6 51), something which is reflected in the sustainable development agenda and its intersection with development discourses (see ***A Lesson from Spekboom***).

We longed for a child – one little boy –
hidden in blankets of kikuyu.

In South Africa, where conservation and development rhetoric was undergirded by a European romanticism, informed by capitalist agendas of 'progress' (Anderson and Grove, 1987) and the return to a Western 'Xanadu' (see ***A Lesson from Spekboom***) of pre-colonial nature, the appropriations of development idioms by the post(-)apartheid government were reflective of an emergent neoliberal capitalism of 'sustainability' (something which is commonly seen today in the UN Sustainable Development Goals) that imbricated social 'responsibilities' with environmental degradation. As a result, the 'invasive problem' was presented as a threat to economic progress, alongside the human 'threats' of urban poverty (especially paradigms of deep informality and 'shadow' economies) underscored by promises of liberation ideologies.



Accompanying the Working for Water invasive clearing team in Newlands Forest

Both Acacias and the urban poor were conceived of as costly losses in the realms of social protection, as well as agricultural productions, water resources, land management, and biodiversity. WfW emerged from this intersecting agenda. At the same time, the Department of Water Affairs and Forestry encouraged the bioeconomy of Acacias to support development in ex-'homeland' communities (Rangan, 2009), supported by forestry industries such as SAPPI. In areas such as Capricorn, characterised by statistics of high crime, poverty, limited education and employment, with minimal access to electricity or piped water supply, invasive species are considered critical for cooking fuel, firewood, heating, building and fencing supplies, and bark is used as a medicinal plant to treat stomach ailments. In Rangan's (2009) study of indigenous peoples' relationalities with Acacias in Oshoek-Lochiel in Mpumalanga, residents echoed the phrases I heard in Newlands Forest: "our lives depend on it" (Rangan, 2009).

When we first came we sat
under the tree that told stories –
it held the memory of the first people,
snakes and frogs, stone and clay.

Political ecologists have understood that relationalities between humans and more-than-humans act within webs of influence rather than unitary cause-and-effect processes (Fairhead and Leach, 1995). Rangan (2009) suggests that the bioeconomy of Acacias has developed into a form of symbiosis that drives further socio-ecological transformations. However, this does not strike as the kind of symbiont relationalities of the Symbiocene. The economies of capital around Acacias act more in an autopoietic form of parasitic symbiosis that converts objects of alienation into, what Tsing (2015) calls, 'trophies of freedom'. For Tsing (2015, p.121), this is where alienation occurs, where, "in the capitalist logics of commodification, things are torn

from their lifeworlds to become objects of exchange". In this context, invasives, indigenous species, indigenous South Africans, forms of indigenous knowledge, and other multiplicities of encounters and threads (which would take me a lifetime to explore in research) are torn from their lifeworlds as objects of exchange.

What systems of modernity and capital ignore, however, are the enmeshed ways in which assets of capital have value outside of capital systems. Things do not just have value in use and commodity exchange (Tsing, 2015). Liberation ideologies in South Africa have been propped up by development discourses, and 'trophies of freedom' are enacted through socioeconomic livelihoods that have become intertwined with 'forest' livelihoods. In some senses, the economies built around Pines and Acacias perform economic independence and livelihood survival strategies for the urban poor in settlements like Capricorn. But to call them either 'trophies' or 'freedom' is to reinscribe development discourses of harm. This is where Tsing's (2015) salvage accumulation takes place, in the "establishment of capitalist value from noncapitalist value regimes" (p.128).

Then the summer of thunderstorms,
the frightened sound of birds merged
with the night.

The way invasive economies are inscribed in South Africa urgently requires a decolonising of development discourses. The inheritance of post-Cold War global development rhetoric, and the way these have transversed apartheid and post(-)apartheid regimes are demonstrative of the haunting temporalities in which development is currently enacted. Development discourse in South Africa is predicated on a Eurocentric 'truth' and 'ideology', "which asserted itself forcefully onto the rest of the world through colonialism and continues to do so through coloniality" (Grosfoguel, 2011 in Plaatjie, 2013, p.120).

'Truth' around Acacias, for example, is inscribed through Euromodernist narratives of history that make claims to truth dependent on what such narratives seek to make visible or hide (Alcoff, 1997). Universalisms of 'truth' are taken up through ideologies, which "interpellate and orient behaviours, and provide frameworks for social organisation and psychological processes" (Wynter, 1991, p.252). Together, as Plaatjie (2013, p.120) writes, "*truth* emerges only in a particular space/cultural context and is, therefore, constitutive of *ideology in that same space/cultural context*, and is then mediated and facilitated into human action in living that *truth* in that particular public space".

This is what animates development…

In the morning each fold of earth,
grass, heavy with rain.

In the context of invasion ecologies, Acacias are inscribed through normative ideologies of European Romanticism and Enlightenment-era bifurcations of nature/culture, alongside positivist realisms of ecological impact, and as a result, development discourses and policy and frameworks are constructed to enact these forms of 'truth'. They stand in juxtaposition to the nationalist ideologies that emerged from democratic transition through a 'development as freedom' (Sen, 1999) approach, which have reinscribed the already-disenfranchised within further Euromodernist regimes of capital, 'truth', and 'ideology'. What they ignore are the complex, multitudinous 'other' forms of truth and ideology that have become imbricated with

invasives – the multispecies lifeworlds that have emerged from the disturbance of their introduction, and the ongoing, convalescing disturbances they are in encounter with.

One hot day a perigee moon was rising,
a burnished puff adder crossed our path,
and we were afraid.

Towards a complexity-based posthuman thinking around invasion economies, arboreal discourse reminds us that trees play conflicting roles, especially in ostensibly antidevelopment rhetorics through the biological control and labour extraction of Acacias, while also directly participating in development discourses propped up by modernist systems of capital. Plantation ecologies reinscribe familiar binaries between (good) nature and (bad) culture (Rice et al, 2012). They act as "both symptoms and catalysts of public subjectivities" (p.12). This thinking lends itself to "imagining how we can improve discourse in order to repair damaged places and promote long term sustainable futures" (p.14). Livelihoods, in this way, like the way forests are 'defined' by global frameworks, are achieved through agonism (Jones, 2019), and the bioeconomy of Acacias demonstrates how economies, like trees, establish themselves through competitive, adaptive and collaborative processes (Jones, 2019) through both "individual competition and large-scale processes of adaptation and collaboration… each entity maintains its own identity while also participating in larger-scale economies. These symbiotic exchanges can be mutualistic, commensalistic, or parasitic at the individual level, but they achieve stability through collaboration" (p.73).

We began as strangers
here in the naked pulse of summer.

These are the kinds of complex encounters we need to know, where "even harmful, frightening or negative relatives are important and must be understood and honoured if we are to survive together in the same spaces" (Powell, 2011, p.1) in the everyday. If we understand development as normative, and subject to multiple 'truths' and 'ideologies', then invasion economies and ecologies require development discourses that reflect the "lived experience of peoples predicated on their subjectivities and derivable from their experiences of their situatedness, which is classified by race, gender, ethics, episteme, sex, ethics, aesthetics, or border thinking" (Plaatjie, 2013, p.120).

You were engaged with naming the world,
I changed my name to the colour of absence.

There are many other kinds of trees that are also entwined with lifeworlds and livelihoods, including those directly impacted by the presence of invasive species. There are also many livelihoods impacted by their role in water scarcity and attendant food security. Multispecies lifeworlds are at risk by plantation schemes and impact critical diversity. Mycelia, bacteria and lichen are livelihood-dependent on heterogenous forests, as are indigenous peoples.

Indeed, if 'trees die, jobs die', but questions remain:

… Which trees? Whose livelihoods?…

A Lesson from Spekboom

> *Yesterday, my son wasted a whole bathtub of water. All down the drain. I went ballistic. But when I got home last night, there it was, full again. The way it was raining – sjoe! At 2am, 3am when it rains, when everybody's sleeping, there I am busy with my water. I'm going mad.*[1]

Fatima's eyes had crinkled with her smile as she spoke, beckoning me to follow her from the small front garden down the alleyway at the side of her rust-coloured brick house in Mitchell's Plain. Here, on the Cape Flats, houses stand close together, clinging to the edges of the sidewalk, and I can hear the dogs barking relentlessly over the wire fence and make-shift laundry lines outside. Grey skies had brought a chill to the air, and Fatima wrapped her tartan jacket and hijab close as she guided me past a municipal refuse bin outside her front door filled to the brim with water, its ripples lapping at the lip.



Fatima with her water in Mitchell's Plain

I had arrived at Fatima's house with an employee of *Soil for Life*, a local organisation who provides seedlings and training on urban gardening to support household food security in neighbourhoods like Fatima's that were the historical material signification of apartheid-style racial segregation and attendant poverty. Fatima had been nominated for a *Soil for Life* community award for continuing to save water, long past the 'immediate urgency' of the Cape Town 2015-2020 drought and Day-Zero water crisis of 2017/18. The employee had offered for me to accompany her while she took photographs, with Fatima's permission, on her cell phone of Fatima's efforts to use in their upcoming award ceremony. Fatima had also given permission

for me to take photographs, and I am grateful for these images of her seedlings, held so gently in the creases of her hands, which that have become a loving gallery of images that immortalises the memory of such delicate, precarious life and their embodied encounters in a moment in time.

The flash of her camera reflects and refracts off the bin's surface for a split second… eternalising the shifting, viscous, ephemeral contents.

I would later attend this ceremony, embarrassed of my own tears that would fall as she received her award, yet deeply inspired and full of a strange pride – she barely knows me. Moments like these stand in stark contrast to the external media discourses that participate in and maintain deficit discourses, with their routinised foci on failures, poverty, crime and other violences as spectacles, and in ways where the peoples of these communities are encumbered to carry the weight and burden of these performances – banally constituted as spectacular forms of evil within the quotidian of ordinary lives.

As I was unfamiliar with the exact route and had been warned about safety concerns around getting lost in these neighbourhoods, I followed the employee in my car down the wide sandy roads that line the dark blue coast from Muizenberg, passing Capricorn on our way, imagining the Buhlebendalo, the young invasive clearer I met in Newlands Forest, hard at work in some forest or patch of Acacias that day, and through the dusty peri-urban roads of the 'Coloured'[a] neighbourhoods of the Flats. Looking out at the coastline to the side of me, I watched the fishermen cast their nets for as long as I could hold my gaze… Once we arrived, the *Soil for Life* employee gestured for me to follow Fatima while she took photographs. I had visited *Soil for Life* numerous times, and after they learned of my interest in water-and-food, they told me that there was one person I needed to meet most of all.

That morning, I met the employee at the *Soil for Life* 'offices' in the leafy southern suburbs of Constantia. She had told me that I must meet her there and follow her in my car so she could guide a safe route through the settlements, a route that would avoid the mercurial and rapidly-changing circumstances that can arise on the quicker route through Philippi. Things can change quickly when unrest and instability preys upon lifeworlds. Disturbances are always making new encounters.

At the *Soil for Life* headquarters, the morning light washes daybreak with its golden hues as I walked amidst the long rows of vegetables and patches of life that grow between trickling ponds underneath broad-leafed Natal Banana Trees, the same as those I had played amongst as a child, as they sway languidly against a backdrop of Table Mountain's southern silhouette. Bees and butterflies flit between rows of spinach and cabbage and the marigolds that grow between as companion plants[b]. These butterflies remind me of Lorenz's (1963) 'Butterfly

[a] 'Coloured' is a highly-contested term for peoples of mixed racial background (Christopher, 2002), and my use of inverted commas acknowledges the political and historical constructions that birthed its use during apartheid racial categorisation. It acknowledges that while "white is a colour" (Roman, 1993, p.71), using 'Coloured' or 'people of colour' "still implies that white culture is the *hidden norm* against which all other racially subordinate groups 'so-called differences' are measured" (p.71). It acknowledges critique of its pejorative violence. I attend to further conversations around the diverse, complex forms of indigeneity and identity in South Africa throughout my writing.

[b] Companion planting is a gardening practice where certain plants are grown nearby others to support them as a community. Companion planting supports heterogenous growth essential to species survival, and helps to ward off the pests that accumulate when plants are grown in isolation. Companion planting is a reminder of the necessity

Effect', and I imagine all the encounters and disturbances that are carried far on the wind on their wings from here.

Indigenous succulents emerge between the soil and woodchips below a Pine. I approached the Pine, needles crackling underfoot, looking up at a painted green sign pinned to its bark that reads in hand-written text:

Advice from a Tree:
Stand tall and proud
Go out on a limb
Remember your roots
Drink plenty of water
Be content with your natural beauty
Enjoy the view

I felt immeasurable sadness as I stood reading the sign surrounded by the beauty of the lands around me. A message so proud, so well-meaning, yet filled with dark irony. I thanked the Pine for its advice but had questions of my own.

'Drink plenty of water', it seemed to warn, something I knew that as an invasive water-hungry species, it would do all too well.
'Who are the ones that get to drink?' I asked the mottled bark, 'from where will they drink when the soils run dry?'

'Remember your roots', it replied, with a voice carried across temporal oceans from the Mediterranean. Those familiar feelings of un/belonging churned and swelled in my stomach. 'Whose roots? From where? Who decides the soils in which these roots take hold, and where do they belong?

'Be content with your natural beauty', it advised, but I was confused.
'All 'nature' is beautiful, I agree, Pine, but does contentment bely acceptance of your own unnatural presence here? Am I to wrestle with what constitutes 'beauty', when your occupancy in these lands has also taken forms of beauty away?'

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of diversity and heterogeneity for ecological survival, with implications for society and socioecological wellbeing and survival as well, as emphasised in complexity and systems thinking approaches.

The Pine watched me from below its boughs as I thought of Arne Naess's (2005, p.2) 'deep ecologies'. Standing in its mottled canopied shade, I remembered that for Naess, what feels natural is thus beautiful, and beautiful acts "display facility and appear to be accomplished without painful toil". For Naess, what feels natural is a deep environmental ethic that paves the way for ecologically beautiful thinking (p.2). 'How then can we think beautifully and be content with your purported naturalness', I asked the Pine, 'in a landscape replete with the painful toil of many kinds?'

'Enjoy the view', it had concluded, with no more to say. I had been silent then, as I'd turned back to the lettuce growing behind me, thinking of all the limbs, all the roots, and all the diverse views that make up the beauty of this land.



Soil for Life headquarters in the Southern Suburbs

Following Fatima around the side of her house, we emerged into a small concrete back garden. I stopped to take it all in, this mêlée of colours and life that lay hidden amidst the grey tones of the peri-urban that makes up the Flats. A stained ceramic bathtub sits perched at an angle, partly-hidden behind tall piles of 2-litre plastic Coca-Cola bottles, full with their aqueous cargo – shades of greys (I think of Ewing's (2021) 'grey space') from the concrete wall behind them colouring their achromatic viscosity. Rows of garden pots lie between the open back door and a large JoJo tank[c], a vertical water storage unit that threatens to overflow onto the paved stones askew below. She won this in a competition, she tells me, for saving water – her pride is palpable[2].

[c] A JoJo tank is used for rainwater harvesting and water filtration in domestic and industrial applications, allowing one to store rainwater and to eliminate water waste.

The tank stands nearly as high as the walls that enclose it, the barbed chicken wire and satellite dishes that line the Mitchell's Plain skyline visible above. Behind me, white polystyrene hollowed blocks border the brick wall of the house, filled with seedlings, and a small sign nailed to a wooden post reads 'sheet mulch bed'. I am careful to watch where I step. Plastic buckets risk being toppled in the confined space, and their shimmering watery contents are filled to the brim… lemon peels and eggshells floating aimlessly on their surface. I feel cumbersome and awkward in such a constrained space, as if I might be an accidental invader and disturb the delicate balance of happenings all taking place at once and tip the balance somehow of this precious ecosystem… The Sign on the Pine speaks to me…

– Stand Tall And Proud –

Fatima turned to me. She had not stopped smiling, and sunshine leaked from the wrinkles of her eyes. She followed my gaze as it swept over the various water receptacles that filled every corner and space of her garden:

> It's so amazing, I have saved this water since 2018. There was a drought, you know. Even the soil was dry. My husband says: 'Fatima, leave some water for the earth', and I do, but I need it for my garden. The bathtub inside, I use it for my washing – after the rain has cleaned the dirt from my roof, it becomes clear, and then it goes into my bath.

A Fynbos Aloe[d] (*Aloe succotrina*) presides supreme over the scene, its fiery orange flowers mimicking the plastic netting that encases a bunch of butternuts hanging next to the aluminium door, a single tap at the base. Its towering stature seems out of place in such a small space, and perhaps its wildness too. I think of its homely tenacity along exposed mountain ridges and inhospitable rocky outcrops of the Eastern and Western Cape's formidable ranges… When everything else in this back garden seems to have been placed here to serve a livelihood purpose, I wonder if this Aloe is being used too and in what ways. In this small concrete space, a liminal suspension where life grows in abundance despite increasingly uninhabitable conditions outside, our local geography seems amorphous. We could be anywhere, in any informal settlement across the globe… and yet, the Aloe reminds us of our roots[3].

[d] The Aloe is a succulent plant, a xerophyte that adapts to areas of low-water availability and possesses large water storage tissue (Murillo-Amador, 2015), most at home on the *krantz* ('rocky cliffs') of the mountains and on desert fringes.



Aloe succotrina in Fatima's garden

It begins to drizzle, and I see the droplets begin to collect on the nasturtium (*Tropaeolum*) and spekboom (*Portulacaria afra*) that creep along the wall. They shine and glisten under the delicate weight of their watery visitors. Drops collect and still on their leaves. The moisture slides down plastic orange shopping bags that hang over a wooden fence post, bordering a white sign: 'eat organic'. It collects on Fatima's hijab, and she smiles as she reaches and plucks **three** spekboom leaves, round and wet, and hands them to me, 'They are so healthy, you know'[e].

The drought-resistant spekboom are aplenty in the Western Cape, and I think about how the harsh Cape Doctor winds that blow down the slopes of Table Mountain often dispense of these hardy edible children amongst my allotment vegetables at the Oranjezicht City Farm. They are always seeking to root where they may… I know the feeling. From her, it feels like a gift, as if she has given me something of herself. I thank her for this offering, taking the spekboom from between her fingertips. Their lemony juices coat my mouth, their sharp taste undiminished by

[e] Known as a 'miracle plant', its leaves are rich in manganese, cobalt, magnesium, vitamin C, iodine and selenium.

the dilution of rainfall. 'You must have three', she gently chides me, 'in our religion[f], it is *sunnah*, you must do things in threes'[4].

I nodded at the cosmological significance of this. It felt like another homage to the 'Thirds' that seem to pervade my experiences in Cape Town, this research and my writing, small resistances against the pejorative development discourses of the 'Third World', and a repellent to modernist binaries and their oppositional violences on 'other' contexts.

I thought again of the Oranjezicht City Farm, 20km away on the slopes of Table Mountain in the City Bowl, where I tend an allotment of seedlings of my own. I often come here to garden, to work my hands amongst the grey sandy loam soils of the Western Cape, the earth that raised me and raises me still. Its spatial layout is designed on that of the Dutch colonial homestead, a perfect pi, divided into **three** segments. A canal divides the thirds, collecting in a koi pond in the centre. Once part of the 17th century Oranjezicht Homestead, the largest farm in the Upper Table Valley, I walk along the pathways that pay homage to the old Dutch designs, yet today indigenous buchu (*Agathosma spp*), Natal plum (*Carissa macrocarpa*), sage (*Salvia Africana-caerulea*), spekboom (*Portulacaria afra*) and wild rosemary (*Eriocephalus africanus*) line the verges. I am always stopping to smell their heady scents before returning to my soils.

Here, like Fatima, I also grow organic vegetables provided by the farm, though its position beneath one of the Seven Wonders of Nature, the slopes of Table Mountain, soaring into the sky, feels a world away from the close houses and nutrient deficient soils of the Flats. My allotment is a place of refuge for me, and peace, and tears have often seeped into my eyes as I cast my gaze across the purple Cosmos as they sway delicately beneath the ragged crags and bluffs of the sheer mountain slope. Quiet, melancholic appreciation of the sheer beauty and love for this land perpetually envelops me. Here, one can purchase 'bokashi'[g], another companion participant in Haraway's (2003) 'compost society'.

The disparity between our livelihood circumstances and the availability of water is not lost on me, binaries I know that are further entrenched through the centre-periphery spatial politics of segregation. The gate to the farm is always locked. I have a code, and I recall how one day a street car-guard had knocked while I worked, asking to be let in to refill his water bottle from the taps of the farm. 'Of course', I'd said, turning the key to let him in. I remember how I'd felt a terrible guilt of the water I'd used so freely here, for vegetables upon which my survival does not rely, while he thirsted in the hot sun on the streets outside.

I grow these vegetables from a moral environmental ethic that finds kinship in the (re)turn towards urban agriculture, a form of living-enactment of *beautiful thinking* (Naess, 1993), I

[f] For Fatima, torrid histories of oppression are further complicated by her 'Malay' heritage, considered to be part of the 'Coloured' racial group during apartheid and the descendants of enslaved and free Muslims who were brought to the Cape by the Dutch East India Company from the then-Dutch East Indies (present-day Indonesia) and Asia (Kotze, 2012). Settling in Bo Kaap and District Six, Cape Town became the only centre of Islamic faith in South Africa following the abolishment of slavery in the 19th century, and by this time, the term 'Cape Malay' was used to encompass all practising Muslims of the Cape, including those descended from indigenous *Khoi* and European settlers. Their apartheid-era categorisation as 'Coloured' led to their subjugation and displacement alongside their Black neighbours, occupying an interstitial space between white and Black where they possessed voting rights but without equal power to whites.

[g] Bokashi (Japanese for 'fermented organic matter') is the bacteria-fermented liquid formed through the integration of food waste with soil components before being decomposed. It supports the addition of nutrients in the soil.

suppose, but I am aware of the disparities in the necessity Fatima finds in growing them here on the Flats. The tomatoes and aubergines I grow with pride, are not the stuff of my survival. I try to assuage the feelings of guilt that arise so readily by thinking of the way my hands also turn the soil. I am also of this land, but I know it is not the same… The soils from which Fatima and I have grown are convoluted, sometimes constituted as competing, sometimes coalescing. The tree sign speaks again…

– Go out on a limb –

Fatima beams broadly as I savour the taste, enjoying my pleasure, and she casts her gaze across the vegetable seedlings. I can sense her pride and it is infectious. I ask her when she started her garden; what made her do so. '*Neh*[h], I have been unemployed at home for 13 years', she tells me:

> I used to work in the clothing industry, but with its recession, I worked for four different places. After six months, when I get there, they are closed under liquidation. I sat at home, and I thought, 'what's tonight to eat, what's tomorrow to eat?' And, I said to myself, 'man, start your own garden'. I started in the front, and one of the Soil for Life members walked past with her husband and saw me gardening…



Fatima savours a dewy spekboom leaf in her garden

I try to imagine that moment of realisation to start a garden in such difficult economic circumstances, the feeling of desperation to provide for your family, and the disempowerment and helplessness of monolithic socioeconomic inequalities and glocalising economic

[h] *Neh* is Afrikaans slang originating from the original French Huguenot 'né', borrowed into Afrikaans, but now used across the diverse language groups of South Africa.

recessions that the impact on local lives. I thought again of Rosheda Muller, imagining these two formidable women sewing clothes a few kilometres away across the city, in informal-and-formal employment, and the difficulties they both have faced. I am reminded of the way small resiliences are found in the socioecological fabric of this place of Cape Town where we both reside, and the importance of companion plants to ward off the pests of Euromodernism, a warning to us that we should not try to survive in isolation… that we need each other, that we owe an overarching responsibility of care to each other in our many face-to-face encounters as our being-in-the-world with others (Levinas, 1998).

> She came to me. She said, 'You're busy with the garden'. I said, 'I love to garden'. I hadn't started growing vegetables yet, but my late father was always busy in the yard, mostly with onions, potatoes, and chillies. She told me of a class, and that I could use my 1m x 2m bed to plant. That was 2018. My first harvest, my first spinach – it's still going. I told Soil for Life when they visited. They said, 'Fatima, is that your spinach?'

Her voice mimics the surprise, as she smiles.

> I said, 'yes, all because of you.' The 'Plainies'[i], they will always be with me. Even when I don't have the energy, I ask Allah to give me strength, because my spinach needs me. My son, he comes to me, he says 'Mommy, I never hear you call my name anymore'. He only hears me call my lettuce, my spinach, my cucumber and my tomato, and I told him, that is my life now.

Her voice lilts reminiscent of an accent you hear on the Cape Flats, as if each word were a question, rising in emphasis, impassioned by her excitement now discussing her vegetables. I feel a touch of sadness for Fatima's children who perhaps have yet to understand their mother's relationship with food-and-water, touched by anxiety, grief, love and pride.

The grey skies cast shadows overhead, and I look across at the polystyrene planter boxes filled with seedlings…

> If my neighbours ask for a bit of celery, I give it to them, I don't sell my vegetables. I have a big family, I give it to my mother, my sister, her children. We are all 'in the struggle'[5]. It's mostly the women that will think of what food to put on the table. My husband, he tells me now he's retired. I must accept. He does nothing. Without my garden, I couldn't put food on the table. If we all had gardens, we wouldn't all live on top of each other. I am more busy in the soil than in the house now. Sometimes I put a pot on with the onions, and it will burn to dust. I will put on another. Gardening has taught me a lot – patience, tolerance, discipline, perseverance. Not every seed will grow.

The shrill deafening calls of *Hadeda Ibis*[j] overhead pierce the still cool air as I absorb her words:

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[i] 'Plainies' is a colloquial reference to the residents of Mitchell's Plain.

[j] An invasive species from central Africa.

> Not every seed will grow at the same time. It teaches you, not everybody is the same. Plants are like people. You grow differently, and I grow differently. You must first nurture the soil.



Fatima teaches me of companion planting with Aloes

I remember the voice of the tree and the words on the sign…

– Remember your roots –

I think of the leader of the Amaqanda Learning Garden toiling in the nutrient-deficient soils of Philippi Village nearby, the different lifeworlds between there and here-and-now, and seeds that are sown…

I think of the way Melumzi in ***The Tides That Bind*** nurtures different kinds of soils in different kinds of ways…

I think of the way the chickens of Philippi Village peck at the seeds of corn and vegetables as they help to restore the soils through practices of regenerative urban agriculture…

I think of other chickens nurturing the soils elsewhere across Mitchell's Plain…

I think of Elizabeth, who I had also met through *Soil for Life*, an elderly woman with a soft voice and broad smile, who had invited me to attend a course with her in the gardens of a primary school on the Cape Flats. We had both become certified 'Chicken Farmers for Small Business and Backyard Setups' over those few days. We had collected our certificates together… she had taken me under her 'wing'. Both my grandmothers are long of the soil now, and I know they visited me and visit me still in my relationship with Elizabeth, long after our course had ended. There, we'd sat in a 'forest classroom', written on a painted sign, though it was not a forest at all – another *ihlathi lesiXhosa,* a small open patch behind the school, and learnt about how to raise 'layers' and 'broilers'[k], and the herbs that would support healthy diets.

I had sat with other 'Plainies', as we spoke over cups of hot black coffee that curled in the crisp morning air around a firepit, drawing our sweaters close for warmth. Elizabeth and I had turned to each other, shocked to learn of the niche commodity market for 'coloured' yolks, where chickens would be fed a distressing singular diet of only green vegetables to produce a green yolk, or exclusively red peppers to produce a red one. This was abuse, we were told, and I fully agree.



Attending a 'Chicken Farmers for Small Business and Backyard Setups' course in Mitchell's Plain with Elizabeth

Chickens, like the earth, like people, need heterogeneity to survive, and to make heterogenous healthy soils[6]. Over these few days, as I came to know my fellow classmates, with my camera present, they excitedly asked me to take 'graduation photos' of each of them at the end of our course. I had felt a deep sense of pride then, to imagine what such ceremony might mean, to take part, to feel as though we were 'in this together'… I had gone from strange companion, someone who was there to learn and not to breed chickens for my survival, to a fellow classmate and friend… and today, Elizabeth continues to be one of my steadfast companions.

[k] 'Layers' are chickens bred for eggs, and 'broilers' are chickens bred for poultry production.

My mind is caught amongst the seeds that blow on the wind… and I am brought back to Fatima's garden as the call to prayer from the nearby mosque competes with the shrill call of the Hadedas overhead… I lean closer…

> *Allahu akbar –*
> 'I am meant to take pills for my depression, but when I found out what' –
> *Ashadu anna la ila ill Allah –*
> 'the pharmaceutical companies are doing to our bodies, I don't drink my' –
> *Ashhadu anna Muhammadan rasul Allah –*
> 'pills. I don't tell the lady. Instead I eat my spekboom, I eat my lettuce, and I feel' –
> *Hayya alas salah –*
> 'better. It's as if this is part of you now.'
> *Allahu akbar.*
> *Allahu akbar.*
>
> It keeps my family together. I don't watch TV. Before I started my garden, I was idle. I saw people fighting on TV, the EFF[1], their red jackets, I said I don't want to watch this. The things happening in this country, the politics, the less you know the better! Keep busy with the things that make you happy… Let me show you inside.

A weariness passes over Fatima's face, and I imagine all the things she has seen. I imagine how desensitised one must become to have witnessed violences of many kinds… the fatigue of seeing it in the media too… the way she seems resigned to joys produced through 'not knowing'.

I turn on my heel, and follow Fatima between the rows of planter boxes, I watch where she steps. I am nervous to spill a drop of water from the buckets nearby with the slightest touch. To do so would feel like theft – from her, from her garden, from the earth… I am not sure.

The fibres of her tartan jacket glisten with dew as I tread behind, and I dip my head below the low-hanging corrugated aluminium roof, as if in deference to the butternut-lined doorway that gives passage. Her husband is asleep on a couch inside, and we whisper… I do not look too long. I keep my eyes low. I feel like I am taking up too much space in her home. It feels different in her garden – I have one too – they are spaces we share a strong attachment to. Our spinach looks the same. While our life experiences have differed in so many ways, we have that in common.

She ushers me into a small bathroom. Inside, I see the glassy surface of a bathtub filled to the brim with water, bearing an opalescent shine in the dim dusty light from the window, a large kitchen bin threatening to overflow, the surface of a broken top-loader washing machine rippling as she lifts its lid.

It feels to me as if there is no room in here for us both…

[1] The Economic Freedom Fighters (EFF) are a far-left pan-Africanist and Marxist-Leninist political party that are allied with extreme anti-white, anti-Semitic and anti-Indian rhetoric. Founded in 2013 by former ANC Youth League President Julius Malema, they are known for their radical and militant economic emancipation movement and violent racialised threats.

‘I take this water in tubs to my mother, she can use it too’, Fatima says, looking back at me in explanation. Close-by, the sounds of a plane rumble overhead, preparing to land at the nearby Cape Town International Airport bordered by informal settlements.

> My son, he let out the whole bathtub of water. He told me, ‘Mommy, I also need to bath, I also need to wash.’ But that’s not his water. My children, they are grown adults. They say I’ve forgotten who they are, but my garden and my water are my children now.



Fatima’s JoJo tank, buckets and Coca-Cola bottles filled with some of the water she’s saved

The sign on the tree creaks a little as a light zephyr disturbs the sign… I hear the tree speak again…

– Drink plenty of water –

I imagine the impact of Fatima’s relationship with water on her children’s upbringing. What will they learn from this relationship and possibly carry into adulthood? Will they come to realise one day, I wonder, that injustice may be more than not having water for a bath? Will they see vegetables, food, things that grow as fellow children of the soil? Will they come to understand why their mother may nurture the Earth as she does them? I think about what it means to be a child of the Anthropocene these days, what it meant in my own upbringing, interminably shaped by the ethics of care instilled in me by my family, coming into a broader consciousness of world-building at the same time as the growing fervour of world-ending in

light of an accelerating advent of climate change. I remember the way Somerville (2017, p.399) wrote of children in today's world, "born into a different understanding of the stability of the world, into a storied future of inevitable entanglement in the fate of the planet". I have a sense of sympathy for her children who may no longer have the bathtime shared by their peers, but also a sense of hope, that for Fatima's children who are raised to observe such beautiful acts (Naess, 1993), that there is a promise for a new generation who will see themselves deserving of equal nurture as their more-than-human siblings.

In the dusty bathroom light, imagining how Fatima's son must have felt to be chided for letting out his bath, I am reminded of the day I had met another member of the *Soil for Life* community, Caleb, who also lived in Mitchell's Plain, not far from here.

Though wheelchair-bound, Caleb told me of his love for his small urban garden in the close confines of the Flats.

'Every morning before school, my children work in the garden', Caleb had said, proudly. 'Every morning, rain or shine', they help me. He smiled. 'They know how important it is. They tell their friends at school of the garden. They teach them about the spinach, and… I hope they will go home and try to start their own gardens too. I speak at their school too. Children need to know'. I'd thought about the relationships Caleb's and Fatima's children may grow to have with the land… in degraded soils nevertheless, but defying hopelessness. Life can be nurtured in almost any soil, with love and water…

– Be content with your natural beauty –

Fatima gestures for me to return outside. I am brought back to the spaces of her home, careful not to disturb her husband as I follow her through the small home again. She shows me how to wrap the leaf of an aloe around a seedling to help it germinate, teaching me her gardening skills. More kinds of companion planting, I think…

But, I must go soon. The *Soil for Life* employee has come to find me to tell me there is unrest and looting nearby and Fatima tells me to be careful…

I don't want to leave. There is still so much to talk about. She is enigmatic. I think of my allotment, how I will try her advice, how she will be a part of my vegetables too and the soils I will nurture far from the peripheries of the Flats. The *Soil for Life* employee, more urgently now, lets me know there has been 'an incident' nearby while we have been talking, while the mosque called for prayer. I must follow her in my car cautiously and alert, keeping my windows up. Don't stop. We must drive the 'safer' coastal road towards Muizenberg again. We must go now…

I ask Fatima a final question from my preprepared list. In my slight panic, I revert back to 'rational' academic mode, and it feels empty in our parting. Why does this always seem like a 'safe' resort? Why in times of urgency, do we lean on instrumental ways of relating, and why, in these moments, do those seem to make more sense than human empathy? I am conscious that I may have also already delayed her call to prayer, and I stumble over my words…

‘How do you feel about climate change and the impact on your garden?’ The phrase ‘climate change’ feels sterile and clinical. We have been touching her plants, tasting their leaves, wiping moisture from their fleshy tips. We have been giggling together about her son’s ‘foolhardy’ waste of water to bathe, marvelling at her spinach, watching droplets melt into her dark mulch beds, disguising the sandy earth that reminds us of the low nutrient quality here on the Cape Flats. It feels incongruous to be amongst such delicate fragility, such tenuous vulnerability, both in the form of the thin green stems that sprout tenaciously amongst the brick and concrete around us, and of what food will be available for her family this week, while human violence and brutality unfolds nearby….



Fatima’s urban garden in Mitchell’s Plain

The Aloe pays no mind…

It feels disembodied to mention climate change now, amorphous and distant in the urgent realities of this moment…

but there are violences and exigencies that loom close of many kinds.

I am distracted, but the tree speaks again, and I hear its voice in echo now, as if far away…

– Enjoy the view –

Fatima pauses, smiling, eyes considering the grey skies. 'Yes, the climate *is* changing[7] now, isn't it? I can take the covers off my tank because it is not as hot now'. She is pleased. There is shouting nearby. The spekboom have heard this before.

'Winter is coming. I am so excited. I must prepare my water.'

Rhizomatic Conversations

1 *Everyday lives* ----------

You may see no rivers on the ground but we keep the rivers inside us.
That is why all good things and all good people are called rain.
Sometimes we see the rain clouds gather even though not a cloud appears in the sky.
It is all in our heart.

When Rain Clouds Gather
Bessie Head (1969)

Fatima's story begins in the madness of crisis, and at night she toils…

Shady ecologies throw down their darkened veil, and in the forest gaps, moonlight illuminates lifeworlds and livelihoods at work. Like all temporalities that are in flux with the setting of the sun, circadian rhythms turn in their earthly cycles and leaves open and close. The night is a liminal space between the canopy gaps of the day, something that, like the centre-periphery spatialities of the forest, have been imbued through Euromodernism with characteristics of danger, insanities and adversity, where 'shadow' economies and illicit activities emerge from the earth…

In African cosmologies, night is a reverent time… and for the Nyae Nyae !Kung Bushmen, the *inkwenkwezis* ('stars' in *isiXhosa*) are the independent spirits and ghosts of the dead that watch the affairs of the human and more-than-human from their lofty skies.

But, the night has been 'colonised' by capitalist modernities, by the invasive species that avail of the shady gaps, and nocturnal labour of the "night shift" has emerged as subaltern assets of capital (Duijzings and Dušková, 2022). The night has become 'invaded' by modernity's artificial lights… like the kind that illuminate the leaves of the succulent bodies on garden centre or big chain grocery store shelves I had seen in Scotland, far away from the speckled skies of the Karoo, where the *inkwenkwezis* watched over their children of the soils… and labour extends past its diurnal rhythms.

And, at night, in Mitchell's Plain on the Cape Flats, amongst the other 'shadow' bodies that have been made subaltern in an already-constructed subaltern temporal spatiality, Fatima works. It is perhaps of particular significance that Fatima is both a woman and 'Coloured'… identities made subaltern through engendered systemic violences of patriarchal hegemonies and racialisms… and when I imagine Fatima stooping to fill her water receptacles, her back hunched over the buckets as they are refilled with the rains in the moonlight, I am reminded of the way Guha (1987, p.138), in challenging oppressions of the subaltern, writes of gendered bodies of resistance, that "by bending closer to the ground… [we may] pick up the traces of a subaltern's life in its passage through time".

In Western cosmologies, the moon is a divine embodiment, but she has also become associated with 'madness', birthing the term 'lunatic' (*luna*, the 'moon' in Latin).

In thinking about Fatima's night-time 'insanities', her nocturnal labour having become a materiality of the multiple complex traumas faced by the 'disproportionately-disadvantaged', as she is gripped by the 'madness' of drought and water scarcity, I know that Fatima's 'work' is not the stuff of dreams of unbridled linear progress (Tsing, 2015) that aspirations of Euromodernist industrialisation portends, but rather a labour that engages a 'dark ecology' (Morton, 2009), where exposure to the "unfamiliar, strange or unsettling, may in turn prompt new insights into complex relationships between all species" (Roe and Lyons, 2021, p.38).

Like Fatima, lives of the subaltern 'work' towards "the possibility of a future that is not barbaric" (Stengers, 2015, p.48), a "drive for justice" (p.48) that recognises multi-faceted ways-of-being in the world. These are the edge effects between light and dark in the canopy gaps. I engage with this as a 'geopoetic practice' (Lyons, 2018) that reveals "hidden dimensions of human/non-human relationships" (Roe and Lyons, 2021, p. 38) in the "liminal zone between science, society, ecology and art" (Lyons, 2018, p.5), as well as the liminalities of their spatial/temporal and sociopolitical/ecological/economic contexts.

In thinking of such liminalities, I am reminded of Bessie Head, a South African-born writer in the 1930's who became known for her 'madness', a type of 'insanity' produced through her multiple traumas and the crises she faced. Born to a white mother and a Black father in Pietermaritzburg when interracial relationships under apartheid were still illegal, she was given away in shame for adoption, and she grew up in temporary homes, where she was denied access to her white mother and estranged from Black communities… Later pursued for her activism in Cape Town, and thus ultimately fleeing South Africa's apartheid violences for Botswana, where she experienced further ostracisation as a 'refugee', Head lived a life of constant insecurity, finding neither kinship in pan-Africanist ideologies (which form a polity of 'Africa for Africans' (Adi, 2018)) nor acceptance by the racial purism of the apartheid state. At night, by candlelight, she would write her letters of 'madness' that would provide a glimpse into the terrors wrought upon her by the intersections of a life replete with inequalities, racialism, exile, patriarchism and poverty (Talahite, 2005).

And, in the quiet hour of the night, you dared to dream;
You were moved by a vague anguish of spirit –
'Is this what I live for', you asked dumbly…

Mr Nobody
Bessie Head (1996)

Thinking about Fatima's self-conceived 'madness', I was drawn to Head's literature, and her characters that were plagued by an autobiographical sense of alienation, and the 'insanities' created by deep psychological trauma. It is perhaps with teleological significance that the lifeworlds of Head and her characters were interminably shaped by the introduction of the Aliens Act, codifying the racial purism that would become the racially divisive legislation of the Population Registration Act No. 30 of 1950, something that would continue to invade Fatima's lived experiences for years to come. But perhaps more than that, it is the intersection of race and gender, Head's affinity for 'ordinary people', the 'madness' of sociopolitical/ecological traumas, and her decolonising of the idea of the 'garden' as conceptualised in Western literary

tradition that bring significance to her words in thinking through Fatima's lived experiences (Talahite, 2005). Writing from Botswana, "one door away from South Africa" (Dyck and Heath, 2018, p.54), Head's work is reminiscent of Nixon's (2011) call for postcolonialism to operate from positions of bioregionalism, thereby decolonising the binaries of the centre/peripheries, a call that can be heard echoing in the peripheries of Mitchell's Plain.

In *A Question of Power*, Head's literature helps reveal the ontological challenges faced by the subaltern (colonised and female) who has "no language to 'know and speak itself'" (Spivak, 1988, p.285), illustrated in Head's "quest for a language of difference based on symbolic forms that could allow the cultural/gendered 'other' to emerge from textual and representational visibility" (p.142). Head pursues this through the embodiments and symbolism of the 'garden', the 'interstitial', 'in-between' spaces (Bhaba, 1994), which seek to resist the 'invasions' of violent hegemonies. In Head's garden, it is also a space of resistance, as it is in Fatima's, one that specifically challenges patriarchism and acts as a counterpoint to reclaiming the garden as a site of fertility and resilience (Talahite, 2005).

Perhaps most apt in thinking about the 'madness' Fatima feels as she toils to collect rainwater at night in her small garden on the Cape Flats, is the way 'madness' has become a construction of the 'Other'. As Head struggles to 'recover her sanity' from the multiple crises and trauma she has faced, Fatima's garden and her work also become a space that connects the personal and the political towards a resistance of what constitutes 'madness'. For Foucault (1988), "madness has, throughout the history of the Western world, been constructed as a delineated space of exclusion through the process of ritual exiles previously performed by lepers in the medieval period" (Talahite, 2005, p.144). And, I note, they were often exiled to the 'dark unknowabilities' of the forest…

> *It is no longer the end of time and of the world which will show retrospectively that men were mad not to have been prepared for them; it is the tide of madness, its secret invasion, that shows that the world is near its final catastrophe; it is man's insanity that invokes and makes necessary the world's end.*
>
> *Foucault (1961, p.14)*

The way in which Fatima describes her night labour as 'madness', reminds me of UN Secretary-General Antonio Guterres's (2023) words on his visit to Nepal's warming glacial Everest peaks: "We must stop the madness of climate change", he said, as if it were the madness itself that needs to end.

In some senses, the UN Secretary-General is not wrong, as there is a madness to living within the conditions of planetary emergency, a state of deep disruption inaugurated by the 'Great Collapse', an ecocidal Anthropocene in chaos. 'Madness', even supported by 'Mad Studies', has become common parlance within its representation of the Anthropocene, a rhetoric often espousing that only a type of 'insanity' could have led us to these moments of/in crisis, that it is lunacy to have not already halted the catalytic destruction of our environment, that the causation of human affect/effect now rendering our planet near-uninhabitable are 'mad times' indeed.

It is perhaps in keeping with the dominant paradigm of thought, a way-of-thinking-and-being that renders nature the subject of capital, that has led to wider society-thinking of climate change as a single point of crisis (although a crisis it is!), a 'moment of chaos', despite the multiple intersect-ing/ional crises and injustices that have led to it and derive from it. By

framing climate change within the alarmisms of chaos and madness, crisis is all too-often viewed in terms of exceptionalism (Hermann, 2023), rather than as a constant effect of historical systems of oppression and capitalist hegemonies that have been ever-present for generations, presenting themselves in slow (and fast) violences that have been obfuscated by the highly-vaunted forward thrust of ongoing waves of progressivist industrialisation. Such alarmism also absolves the structural and political powers of capital that have made Anthropocentric catastrophe possible, and perpetuates a "neo-Malthusian racism" (Satgar, 2018, p.48) that views all humans as equally culpable for the crisis while failing to account for the disproportionate impacts on those living in precarity. Now, at the edge of crisis, it whips us into panic, calling for a biophilic unity of survival, humans with a common cause as our only plight, romanticising and conveniently paving over the divisive and violent histories that have historically fractured and prevented such solidarities.

> I am reminded of my attendance at the annual United Nations Conference of Parties (COP) 28 in Dubai, where the arts and culture pavilion (green zone) is separated from the UN negotiation spaces (blue zone)… indigenous groups in traditional dress ululated and sang down the boardwalk, unheard by the key decisionmakers sitting behind closed doors. And, as officials whittled down language from 'banning' to 'phasing out' and finally announced their commitment to 'phasing down' fossil fuels, the leaders of small oceanic islands cried as the passivity of this discourse seemed to seal their fate to the rising tides… the 'plight of humanity' unheard by 'strategic essentialism'.

'Madness' has become the "situational neurosis" created by colonialism, where the "juxtaposition of the black and white 'races' has resulted in a massive psycho-existential complex" (Fanon, 2008, p.xvi). The way that Fanon suggests that these become inscribed in a 'colonised mentality' (Pyke, 2010) is through the internalisation of the coloniser's normative values of identity. And, Biko (2004) expands to say that colonisation and its attendant apartheid state have made a "psychological cripple of the postcolonial subject" (Oelofsen, 2015, p.133), where "South Africans tend to think of themselves in racial terms first before they think of other aspects of their identity" (Fischer, 2007, p.11). To 'decolonise the mind', we must walk with the ghosts of these violences so that they may be one day laid to rest. In Head's novels, this decolonisation took place when she gifted her characters her own sense of alienation and her dreams of achieving 'wholeness' (Seingier, 1997, p.9). And, for both Head and Fatima, "the absurd perversity of the apartheid legislation acts passed in South Africa further destabilises ideas about what is sane or insane" (Dyck and Heath, 2018, p.58). To this end, Head was not 'insane' nor 'mad', and similarly neither is Fatima.

Fatima's self-referential conceptualisations of 'madness' are performed in her nightly work (Smith, 1999) saving water after the traumas of the Cape Town water crisis to provide for her family after the violence of systemic inequalities rendered her household 'food insecure', to do 'something' in the wake of global economic crises that have propelled her into unemployment, and for her 'mental health' (as might be framed in privileged terms within neoliberal parlance that linguistically-ameliorates and pacifies the depth of trauma faced by Fatima and those 'others' living in such levels of precarity and their associated violences). Yet, reading Head's novels, I also come to recognise in Head's work, Fatima's resistances…



Mitchell's Plain

The multiple exigencies that (un)citizens like Fatima face, especially in light of climate change and in the wake of the Cape Town water crisis and, more recently, the COVID-19 pandemic, present as 'spectacular' forms of madness, and 'fast' violences. Yet, Head's response to her suffering and 'madness' was through her 'reverence for ordinary people', as a form of resistance to violences both fast-and-slow (Nixon, 2011). In an essay written prior to democratic transition, Ndebele (1984) adapted Barthes' (1957) 'World of Wrestling', likening "'the aggressive Boer' into the 'massive wrestler' who opposes the 'Black writer', whose imagination is overtaken by the 'mind-bogglingly spectacular' injustice and oppression that defines the 'South African social formation'" (Ndebele, 1984, p.184 in Dyck and Heath, 2018, p.55), recognising nevertheless, by way of qualification and the need for nuance, that apartheid-think was also the purview of culturally-English-speaking South Africans, and that resistance came from Afrikaners too, such as Breyten Breytenbach and his Okhela's resistance group. The 'representation of spectacle' (Ndebele, 1984) and which informed Black South African literature prior to the Soweto Uprising in 1976, saw the "culture of the spectacular… run its course" (Dyck and Heath, 2018, p.55). For Ndebele, a "life-sustaining focus on the ordinary [is] more fruitful than the spectacular because the latter lacks detail, forecloses analytic thought, and displaces conviction through an emphasis on emotion; in effect, the spectacular confirms injustice rather than challenges it" (p.55).

This provokes the way Latour (1998), drawing on Arendt, speaks of a turn in environmentalism towards the politics of the 'banal', reflecting the everyday concerns of people, as a response to the "overinflation" (p.235), which he refers to as globalisation, of the ecological movement. For Latour, our focus on the 'spectacular' and the 'dramatics' of ecological threat, has elided an ignorance of the quotidian, and an essentialising of the 'everyday'. Lefebvre's (1971) Marxist orientations of 'daily life' could be understood as "the sphere of banal, commonplace practices and objects, life in its most concrete materiality"; "the 'everyday' (le quotidian) as a historically specific plane of existence produced under the systems of social organisation and control

associated with modernity (in particular, bureaucracy and consumerism); and 'everydayness' (*la quotidiennetê*) – a common arena within which we all live, interact and have our being" (Whitehead, 2005, p.281). Lefebvre (1987, p.3) reminds us that the study of banality is not banal in and of itself, as he asks: "are not the surreal, the extraordinary, the surprising, even the magical, also part of the real? Why wouldn't the concept of everydayness reveal the extraordinary in the ordinary?"…

I think of the water that collects in every available receptacle in Fatima's garden… the way even a droplet that isn't saved seems to be wasteful here in this space.

I think of the pastoral *Khoi* who had followed the rains, and how 'following' is given new meaning amidst the concrete tiles and brick of Mitchell's Plain.

I think of the way, each day this water is shared anew for the spinach, and the tomatoes, and the onions… each day an extraordinary reverence in 'ordinary life'.

I think of the way she toils each night, 'while we are sleeping'…

And, I think of the way that even the beads of rain that collect in our dreams are stored for safe-keeping here in these bathtubs, bins and bottles on the Cape Flats…

I think of the way "all good people are called rain" (Head, 1969, p.191).

These days, when I think of water, I think of Fatima.



Fatima, and behind her, her Aloe

It is perhaps of consequence that, unlike my walks with ***Something About Water*** and ***The Tides That Bind***, Fatima's story take(s) place(s) at her home. The 'everyday' belies geographic parameters, and one's 'home' is considered an archetypal locality for exploration of daily life (Bennett, 2002). It brings into being thought as to how 'home' and the 'everyday' can be considered in the context of Buhlebendalo's experiences in/of Newlands Forest, for whom the

quotidian is spent unearthing invasive species and whose storied life of the 'everyday' is constituted as navigations of invasive socioecologies. I also think of Melumzi, in ***The Tides That Bind***, whose 'everyday/every-night-ness' brings forth quotidians of the 'shadow'… shadow economies, shadow ecologies, and shadows cast upon his friend, Lwandle's nightly work, as they also do for Fatima.

At the same time, in this South African context, (un)homeliness is a vexing (un)materiality in the everyday, and thus is never "a finished product" (Bhabha, 1994, p.51). It also highlights how connotations of the everyday have always-already (Althusser, 1971) gendered undertones, and that the significance of what takes place at her home as she works to provide for her family, brings forth its own conundrums in which Fatima's 'thrownness' (following Heidegger (Dahlstrom, 2013)) is manifested. The everyday is a complex, chaotic, coalescing, and precarious thing, subject to disturbance at every turn…

Thrift's (2000) 'modes of perambulation' gesture to the intersections of space and time in understanding the 'everyday', arguing that "it is the interconnection between time (or rhythms) and space which generates the possibilities for interaction which are so important to our experience of the everyday" (Whitehead, 2005, p.281).

… It is perhaps these 'modes of perambulation' that lend considerable thought to this research throughout, having 'perambulated' with and alongside these stories…

> … our conversational rhythms, our rhythms of story, walking rhythms, and the polyphonic assemblages that are generated through these intersections in their temporal spatialities, in my humble coming-to-witness their 'everydayness'… days which have continued before me, and will continue after me in their multiple quotidians…

For Heidegger (1992), the everyday forms consciousness as "the comprehension of a *self looking at the world*, [which] is forged within the everyday practices and the networks of entities within which humans find their 'Being-in'" (Whitehead, 2005, p.281), although I offer this may also be a *collective feeling with the world* that humans and more-than-humans may find themselves, thrown together, Being-*with.*

For Head, this Being-*with* does not eschew the spectacular for the mundane, and while 'ordinariness' seems contrary to the 'spectacular suffering' that she, and her characters experienced through political exile, racialism and poverty, they are deeply intertwined. Ndebele (1984) notes that a focus only on the spectacle ignores the "nooks-and-crannies" (p.156) of the ordinary. "In contrast to the false hope of spectacular responses to injustice, the ordinary reveals that there is no single, simple, and dramatic solution to the 'problems of the South African social formation'" (Dyck and Heath, 2018, p.56). And, "the 'ordinary day-to-day-lives of people' constitute political force because 'the struggle involves people not abstractions'" (p.56). To this end, Ndebele calls for a just society of "redemptive transformation" (Ndebele, 1984, p.151). For Head, the spectacle in her novel, *A Question of Power,* was articulated through her character's (and indeed her own) 'madness', a madness induced by the violent traumas of structural oppressions and injustice and which is resisted through 'ordinariness', as her character toils her garden, and which acts as a site of 'gathering' for other characters, and for possibilities of 'redemptive transformation'.

… In similar ways, as I, Fatima, the *Soil for Life* employee, Fatima's seedlings, her husband, her water, her Aloe, and the rain that threatens overhead, all gather together in a thrownness in

her garden on this day. The socioecological/economic/political tensions and the resistances of everyday life, ebb-and-flow in our perambulations through the sociomaterial nooks-and-crannies of her home on the Cape Flats… all materialities of the 'ordinary', and not filaments of abstraction.

Head's work offers a visceral reminder that lives of the every(-)day are at once both arrivals-and-departures of the contingencies that press upon daily life outside the quotidian, and do not exist as a "marginal space of authentic resistance" (Whitehead, 2005, p.283). For Fatima's 'everydayness' is continuously shaped by exigencies of the spectacle… of climate change, of the trauma of socioeconomic inequalities, enduring apartheid legacies, and dominant global hegemonic discourse… as it is shaped by her 'ordinary resistances' and world-making activities… her nightly work, her provision for her family, and as Mother for her human and more-than-human children.

I am reminded of the way that this (post)critical reflexive narrative inquiry, and rhizomatic conversations that themselves attend it, may never hope to contribute towards liberatory scholarship, without discernment of their political tethers. And, these conversations themselves, as they elucidate sense-making, meaning-making, troubling, twisting, coalescing contingencies, bring arrivals-and-departures within their 'everyday roots/routes'…

The rhythm of sunrise, the rhythm of sunset, filled her life.

Maru
Bessie Head (1971)

I referred to Fatima's moonlit-work earlier as an effect of daily life for the 'disproportionately-disadvantaged', even as I am discomforted by this language. While this is an oft-heard term that seeks to normatively represent individuals who experience the totalities of structural precarity, it also risks essentialism, acting as another symptom of the capitalist value system that 'flattens' values through general equivalence (Guattari, 2000) and 'simplification', and which ranks and situates peoples within deficit discourses of 'disadvantage'. And, similarly and reflexively, I, myself, am continually being pushed and pulled in rhizomatic ways, even in my telling…

… While it may be one of the critical aspirations of political ecologists to articulate the lived experiences and socioecological invocations for peoples experiencing structural inequalities in relation to the ecological, such taxonomy circumvents the 'nooks-and-crannies' of daily life once more, and becomes a placial miscellany (Dyck and Heath, 2018). It re-enacts the public performance of an undifferentiated totality (Lefebvre, 1987), as the sum of realities that becomes irreducible by human thought… an "everyday, established and consolidated" (p.3) effect that allows Eurocentric productions of knowledge and discourse to divest of the power relations that undergird their terminologies as a marginal space of authentic resistance (Seigworth, 2000). Post-Cartesian analysis has traditionally critiqued such totalities (Seigworth, 2000), yet terminology of the 'disproportionately-disadvantaged' fails to encapsulate the lived experiences of 'ordinary people', who *are* as a posteriori disproportionately *af/effected* by systemic and structural inequalities, even as the complexities of their daily lives cannot be reduced to such a totality. The normative construction of the expression becomes "the unperceived, first in the sense that one has always looked past it; nor can it be introduced into a whole or 'reviewed', that is to say, enclosed within a panoramic vision" (p.14). In this way, the everyday

always 'escapes'. It is through "everyday subjectivity [that is] at the heart of revolutionary politics" (Loftus, 2012, p.xvii).

I am reminded of the way forests are 'made' through the silent, invisible threads of the everyday world-making practices of mycelia, rhizomes, water and roots… we may see the 'familiar' in the trees that stand tall, but their arrivals are made up of the slow, oft-hidden, oft-unnoticed unfolding of the everyday…

But, in the 1970's, Dorothy Smith also queried how we may characterise or identify the daily lives of those living in precarity, or those suffering with mental illness (as Head was said to do), raising questions as to *how* we arrive at these particular constructions, such as 'disproportionate-disadvantage', or 'madness'. Lives can never be understood through disproportionality alone, nor through normativities of disadvantage. Heterogeneity gasps for air amidst the flattening homogeneities at every turn…



Fatima with her nasturtium and strawberries in the rain

Fatima is a woman, and for her, ordinary life is undergirded by its own socioecological contingencies…

… Smith (1987) believed that the sociological (re)productions of knowledge regarding lived experiences of daily lives are undergirded by gendered orthodoxies, which cannot "exclude the presence and experience of particular subjectivities" (Campbell, 2003, p.2). And, offering forms of resistance for women, whose lived experiences have often been precluded from productions of gendered knowledges, their everyday experience has become a "trusted source of knowing from which to speak" (Campbell, 2003, p.13).

In similar ways, Fatima's day/night work saving water, gently tending her seedlings speaks to the socioecological arrivals-and-departures that

collide from her 'place of knowing',
from her experience of the 'everyday',
which act as a form of 'decolonising the mind'…

Bearing witness, even for a moment, to Fatima's 'everyday' life, these contingencies became visceral reminders that daily life is made up of daily *lives* (Whitehead, 2005), as *interstices of substance*, a politics that embodies "a diffuse mix of human and non-human, corporeal and noncorporeal, organic and inorganic life and matter" (p.283).

Understanding the complex interplays that undergird 'daily lives', and the forms of madness thrust upon them, offer a turn away from the 'spectacle' towards a deeper (and more affective) understanding of how these lives are at the intersection of a "potentially infinite range of environments [within] their spectrum of political ecology" (Whitehead, 2005, p.284), and how "they facilitate a perpetual shifting in the spatial emphasis of political action" (p.284).

These socioecological relationalities allow us to understand Fatima's feelings of 'madness' in ways that don't carry with them the violences of neoliberal catastrophism, but to rather stay 'with the madness' (as Haraway (2016) implores us to 'stay with the trouble') as an ethico-onto-epistemological way-of-being and the possibilities these relationalities hold in our current conditions of multiple, complex, temporal crises.

2 *Something about water* ----------

There is a certain type of intimacy to stand attentively with another in the rain… not rushing for shelter, not waiting for it to pass… hearing the voices of the Earth announce their arrival in the present moment in the drops that fall on leaves, stone, tin roofs, and cement… our human voices hushed amidst the always-already presence of the world.

Hesitation might hang heavily in the air, for who knows how long it shall last?

The present/ce of rain is always bringing forth the tides of dualisms in South Africa… it is either relief after a long drought that the dams may be filled and the fynbos' thirst parched, or sorrow at the torrential floods that threaten at the doorsteps of informal settlements along the Cape Flats.

Each day here is always a negotiation of the 'affective intensities' of water, or its absence.

Together, these affective intensities are negotiations of the country's layered histories, and the increasing extremities that arise through catalytic climate change. For Fatima, a Muslim woman of Cape Malay heritage living on the Cape Flats, her story within the poetics of water carries the threads of temporal/spatial histories, tentacled to aspects of religion, culture, gender, socio-economics, and the political and ecological. Her lived experiences of the Cape Town water crisis are intertwined with these entanglements, forming an embodiment of everyday life within this mediated 'Anthropocene moment' of Day Zero. It is through her eyes, through her hands that turn the taps and nurture the soil, and through the seedlings she lovingly sows, that we bear witness to a 'moment of articulation' (Swanson, 2004, 2008) that negotiates the affective contingencies and embodied conundrums that arise on a day with/out rain.

The exceptionalism of neoliberal and Euromodernist catastrophism ideates a relationship to water based on extractivism, and its attendant crises that emerge in sporadic bursts, rather than

the intimate, embodied and subjective experiences of water and the layered, temporal crises it has been a part of that has emerged from political ecology studies. Nixon (2011) engages a response to posthuman catastrophism in terms of slow violence, and Shepherd borrows from this interpretation to describe it as the "unfolding human tragedy, the exponential failure of governance, the slow seeping away of will, the folding inwards of expectations" (Shepherd, 2019, p.1745).

Posthuman and sociomaterial ecologies increasingly argue that crises-in-the-Anthropocene are not characterised by the catastrophic exceptionalism indicative of late modernity, but are rather socially, economically, politically and culturally entangled and mediated across temporal scales (Shepherd, 2019, p.1744). In these terms, "fresh drinking water is a complex object constructed at the intersection between natural systems, cultural imaginaries, and social, political and economic interests" (p.1744), rather than an inert resource.

> The buckets, bottles, tanks and bathtubs in Fatima's garden may seem like temporal fixtures, but it is in the very viscosity of their contents, the multiple precarities that water exacts on human and ecological subjects, which make it a transboundary object that moves across temporal scales and which speak to these sociomaterial ecologies, offering possibilities for 'wonder in the midst of dread' (Tsing, 2021)…

Posthuman ecologies ask that we turn our attention away from the kind of catastrophe that is "the territory of the explosion, the tidal wave, the deluge, the unstoppable burn, but rather something else–" (Shepherd, 2019, p.1745), towards the slow violences that require us to 'stay with the trouble' (Haraway, 2016) and with the affectivity of the everyday.

While Day Zero discourses burst into the media in 2017/18, frenzied with panic ecologies and doomsday narratives, vivid imaginings of taps literally running dry – a countervailing image to one of the basic tenets of the Euromodernist order of unlimited supply – the Cape Town water crisis sits at the nexus of hydrosocial realities, slow catastrophe, and chaos, in a form of 'waterworld' (Hastrup, 2015) that agentifies the more-than-human in its geopolitics of location, making other relations and embodiments also infinitely possible.

Fatima tells me of a drought – have I heard?



A sign in the Cederberg region of the Western Cape, erected during Day Zero, but which still stands today

On the 15th January 2018, then-Cape Town Mayor Patricia de Lille announced that "Cape Town's average daily consumption is still too high… For each day that Cape Town uses more than 500 million litres, the city moves closer to Day Zero" (TimesLive, 2018). In 2017, *Bloomberg Businessweek* reported: "if 'Day Zero' comes, the 4 million residents of South Africa's second-biggest city will face a catastrophe". De Lille commented: "we have to change our relationship to water. We have to plan for being permanently in a drought-stricken area" (Cohen, 2017)… as though indigenous residents had not been permanently living in conditions of drought – imposed through colonial access restrictions or because of the country's already-arid nature – for generations, their relationship to water inextricably shaped by histories of layered crises embattled by invasive socioecologies. De Lille named a date for Day Zero, which as Shepherd (2019) notes, moved the crisis from a transcorporeal ideation to an 'imminent catastrophe'.

This temporality of the crisis can be underwritten by a political ecology that speaks from 'positions of knowing' shaped by 'assumptions of what is real'. Through the visceral analogy of a 'Day Zero', Aronson et al (1994, p.6-7) write that "ontological atomism is replaced by global-ontological relationalism… scientific discourses [are] seen through the eyes of the metaphor".

> … But for many, who have already experienced a type of 'Day Zero' through the slow/fast violences of a torrid colonial history of dispossession, and for whom a dry tap is not necessarily the 'burst' of catastrophe Euromodernist discourse defines it as such, political ecology illuminates how the 'truth conditions' for the material consequences of Day Zero is structured, differentiated, stratified, and changing (Danermark, et al, 2019) and dependent on whose discourse we pay attention to.
>
> *I am left wondering… whose relationship to water do we require that changes?*

The naming of a date for Day Zero also draws on the political ecology of time. Both slow-and-fast violences, crisis and catastrophe are all temporal. A Newtonian notion of time suggests the element of reversibility (Nustad, 2020), that all things can go 'backwards in time'. While political

ecologists understand that the present is ultimately shaped by the past and these things cannot return to as they were, the danger of viewing crisis within terms of Euromodernist exceptionalism is that it draws on a panic ecology to respond to crisis with such urgency, that it reinforces rhetorics of human imperialism over nature, that we are capable of restoring the status quo and returning to things as they were, which I explore in ***Something About Water*** in reference to conservation conflicts. Climate change discourse is replete with 'reversibilities':

… we must 'undo' the damage we've done
… we must 'restore' the planet to the way it was
… we must 'reverse' the damage of industrialisation.

In Day Zero discourse and climate change more broadly, "rapid human-imposed change is contrasted to an imagined, stable past and an equally imagined future of yet more destructive change" (Nustad, 2020, p.96). It creates an 'anticipatory nostalgia' (Choy, 2011) that is rooted in an imagined future: "action has to be taken now to prevent an undesirable future from unfolding" (Nustad, 2020, p.96). This creates a 'temporal contradiction', where 'post-crisis' is envisioned as a return to 'pre-crisis', a state that is "often implicitly located in a past, a past that itself is a result of human and non-human entanglements" (p.96).

Water, which is often viewed as an evolutionary, ancient and timeless element is thus re-temporalised and respatialised as a marker that cuts across the hyphens of pre-during-post crisis, and sits at a nexus of 'temporal contradiction'.

What current crisis discourse ignores, and which political ecologists enthuse, is that, in a post-Day Zero world, to negate the traces of the past (of the complex histories that led to the water crisis) by seeking to 'return to the way things were', leads to, what Adorno (2020, p.119) calls, a 'double negation': "to negate a negation of industrial transformation". The urgency to return to an 'imagined, stable past' through the 'reversal' of the conditions that led to the date of Day Zero (and the climate crisis more broadly) could not restore Cape Town (or the world) to a state of pre-crisis, it creates something new (replete with possibility)…

… I think of Suzanne Simard's (2021) study of 'Mother Trees',
which revealed the way forests thrive through cooperation and mutualism, not competition,
and how, through their complex mychorrizal network,
they send 'fluid intelligence' to saplings, even those who are not of their kin…
though 'clear-cutting' and monoculture plantations
prevent the energy flows necessary to support heterogeneity.
But, even if a forest is robbed of its Mother Trees,
a new forest will slowly reorganise into a new network…
the original network will never be the same,
becoming more and more precarious as its carbon, soil, mycelia and roots are weakened
without the defence mechanisms of the Mother Tree,
and the new forest becomes more susceptible to pests and disease,
exacerbated by climate change…
but pathways of solidarity through 'strange attractors' (Tsing, 2015) emerge,
mapped by new conditions of crisis,
engendering further disturbances, revealing new modalities for socioecosystem survival,
'life in the ruins' (Tsing, 2015)…
hidden mychorrizae will provide the conditions for a young sapling to emerge
from the remains of its Mother Tree,

even long after she has fallen,
creating new possibilities altogether…

This is what happens, Shepherd (2019, p.1748) writes, "when anxieties about the future and apocalyptic imaginaries mesh with conditions on the ground"… "the rhetorical power of the notion of Day Zero – a powerfully compressed metaphor containing within itself the idea of a countdown, the scene of a disaster (a ground zero), and an apocalyptic end-time (the end of days) – captured public and media attention and expressed the particular nature of the unfolding catastrophe" (p.1748).

A number of factors were believed to have contributed to the water crisis, which all draw threads from ***Viscous Histories***: a water regime that is not reflective of the material impacts of the nation's historical legacies (Ziervogel, 2019); local government crisis mismanagement; inadequate planning; failure to account for national predictions; an over-reliance on the success of its previous water conservation efforts (Muller, 2018); population growth (WWF SA, 2017) (although this bears uncomfortable familiarity with racialised Malthusian ideas); the privileging of water resources being distributed to the agricultural sector despite drought conditions (Muller, 2018); reduced rainfall as a result of climate change (Wolski et al, 2017); and the lesser known impacts of water-hungry invasive alien species (Slingsby and Botha, 2018), as explored in ***Something About Water.***

Chaos was extolled widely in public rhetoric as an inevitability, and discourse abounded with predictions of anarchy. In a Day Zero world, municipal water would be available through 200 'points of distribution' (PoD's), and residents were allocated 25 litres per person. In a city of four million residents, Shepherd (2019) writes that between ten and fifteen thousand would be forced to accumulate at one PoD per day. For inhabitants of the city peripheries, where 20% of the population of Cape Town lives in informal structures such as those on the Cape Flats, and 97.3% of all households were dependent on municipal water (Shepherd, 2019), transport to PoD's would be essential, leaving many forced to choose between their livelihoods or employment and time sourcing water.

Meanwhile, Shepherd (2019, p.1750) also writes of the stark disparities within the city, giving credence to its high Gini coefficient, noting that the other side of Cape Town, closest to Table Mountain, with its beauty and biodiversity coupled with extreme wealth, sits in schizophrenic juxtaposition to the "abject poverty and scenes of bare life" (p.1750) characterised by existing racialised spatial segregation and histories of dispossession, resettlement and colonial violence. As Shepherd (2019, p.1750) writes, "the theme here is not that of South Africa's, or Cape Town's, exceptionalism, but rather the opposite… this sense of intensification makes Cape Town a useful prognosticator of future trends and developments; of [a] stoicism and fatalism [but also a] Black humour, irony, and a peculiar intensity to the pitch and sensation of everyday life that it is difficult to be replicated elsewhere… it makes for a city characterised by simmering social, political and economic tensions and a deep sense of historical grievance".

But Forsyth (2001) reminds us that 'crisis' is not always the only outcome, and it is only one of many potential scenarios. Many inhabitants of Cape Town turned to the Table Mountain springs, which are widely available through upwelling, for their water sources.

I, myself, rely on the Newlands Spring on the Main Road of Newlands in Cape Town's Southern Suburbs, for my water, filling up four 5 litre containers once a week, along with residents of all heritages, ages, and gender. I am amongst many, those filling up water to sell, a

few domestic workers, suburban women, workers from settlement areas, men in suits, an *isiXhosa* car-guard. As Shepherd (2019) reminds us, similar imagery today, as it was during the water crisis, are reminiscent of the visual trope of Cape Town's diverse inhabitants queuing to vote in the 1994 democratic elections. Rare are the circumstances that bring together those of all classes, races and gender. A 'new' type of order has emerged from the disturbances and precarities through an 'embodied' sense of shared crisis – "water as a social leveller" (p.1751). It should be noted, however, that such 'social levelling' does not take place in abstract space (Lefebvre, 1991), which homogenises and paves over difference and where geographies are eviscerated. There is heterogeneity that accumulates around a tap, but heterogeneities that are selective and deeply ontologically political.



Fatima's outdoor bathtub/water-saving receptacle

Similar to Ranganathan's (2015) political ecology of storm drains in Bangalore, she writes of the way they (and, in this case, taps) re-enact "multiple incarnations across pre-colonial, colonial and post-colonial eras as things associated with *flow* (eg. irrigation water, stormwater, sewage, capital) as well as *fixity* (eg social orders, state forms, intransigent discourses, settlements, solid waste), the tension between flow and fixity has always been a defining feature of the socionatural relations" (p.2). Such 'matter-flows' "may align in one moment and disperse in the next, only to resurface and become 'territorialised' (fixed) in a different assemblage with different interactions" (p.5). In such a way, the seeming indeterminacy of chaos and crisis reverberates and makes new relations. The ever-changing subjectivities of taps can, in this way, be said to accumulate temporally and spatially, as they did during the Cape Town water crisis, as they have throughout histories of 'water apartheid', aligning and dispersing according to their enmeshments with capital, colonialism and other agents. Taps then, and where and how they are located, who controls their ability to be turned on and off, as Ranganathan (2015, p.16)

notes, "provide a site-specific materiality, a life-giving force that fuels capitalism's risky becoming-being" and inextricability with formal/informal urbanism, an 'assemblage' that, through posthuman and sociomaterial inquiry, seeks to make visible the less visible agents involved in the politics of water, "disrupting how we conceive of agency and perform critique" (p.16).

> Whether the taps are used in Fatima's household denotes the absence of rain, and they are used sparingly here.

Not only did she religiously save water due to the water crisis and the drought, which she told me she shared amongst neighbours and family, but her embodied sense of shared crisis with the needs of her vegetables, an essential part of alleviating food insecurity in her household, also played out in concomitant ways. Fatima views her seedlings akin to her children, and for her, their needs were just as magnified in the context of the drought. Water, and taps, in Fatima's 'lifeworld', created assemblages and gathered them, forming new meanings and relations that, through the divisiveness of neoliberal crisis rhetoric, was expected to have caused anarchy.

While Day Zero' was concluded on the 12th March, in large part due to the economic losses suffered through the lack of tourism (Shepherd, 2019), a 'new normal', akin to the rhetoric heard during the COVID-19 pandemic, was heralded. And, disaster was ultimately averted in the short-term after an agricultural buffer was reached, augmentation of the City's temporary supply interventions was applied, and winter rainfall arrived (Taing, 2019). While a plethora of literature now exists extolling the lessons learnt from such a crisis (Ziervogel, 2019), I do not linger here, as much of the threads related to the politics of water are still not encapsulated through regime planning, making an affective approach urgently necessary as climate change worsens, and the likelihood of such crises grows, emerging more frequently and extremely.

Crisis management often responds to the urgency of a crisis as it arises, on a governance level, but is absent of the layered and temporal complexities that speak to the affective everyday lived experiences of the multiple threads of crisis and their resistances. To truly pay more than lip-service to the social (in)justice that is complexly entangled with the politics of water in the Anthropocene, a deeply decolonial, posthuman and sociomaterial political ecology approach is required to begin understanding the ways water acts as a transboundary and temporal object that offers possibilities for (post)Anthropocene futures that are not redolent with the violences that created the conditions for crisis. As Neimanis (2017, p.36) notes,

> Colonialism is carried by currents in a weather-and-water world of planetary circulation, where we cannot calculate a politics of location according to stable cartographies or geometries… these waters gather and distribute the liquid runoff of a global political economy and techno-industrial capitalism that produces vastly divergent body burdens, but which nevertheless gather us all.

While Heidegger wrote that the development of a quantitative view of water was inherently linked to the development of science, "to pursue and entrap nature as a calculable coherence" (Heidegger, 1977, p.183 in Wynn, 2010), which still informs much of global water securitisation discourse, especially in light of the urgencies of climate change, political ecology perspectives on water have embraced less technocratic views, drawing on Anand's (2011) consideration of sociopolitical infrastructure through "hydraulic citizenship", Hastrup's (2015) agentive power of water through "waterworlds", and Neimanis's (2017) posthuman feminist phenomenologies.

Latour (2014) writes of the entanglements of water, weather and infrastructure though agency in the Anthropocene, Shepherd (2019) draws on Marxist, feminist, postcolonial and decolonial thought to work against the kind of environmental determinism that enables a nature/culture divide, and Chakrabarty (2009) asks us to challenge what we know about the unknowability of things in the context of planetary conjunction.

I gather these, and other theoretical and paradigmatic literatures together, to attempt to disentangle political ecology approaches to water in their invasive socioecological context, and its related situated and embodied elements, trying to 'stay with the everyday', 'listen with resistance', challenge how we think about crisis, and trouble the liminalities between socioecological/political/economic tensions through indigenous, feminist, and decolonial ecohauntologies, in the hopes that these provide new pathways for possibility, resistance and ways-of-being in the post(-)Anthropocene.

[3] *An aloe by any other name* ----------

Gladys *Is that the price of survival in this country? Thorns and bitterness.*

Piet *For the aloe it is. Maybe there's some sort of lesson for us there.*

Gladys *What do you mean?*

Piet *We need survival mechanisms as well.*

A Lesson from Aloes
Athol Fugard (1981)

The Aloe in Fatima's garden offers strange companionship here in the neighbourhoods of Mitchell's Plain. It is a wild being that roots itself along the open veld of the Cape, and has become symbolic of the spirit and freedom that blows across South Africa's rugged landscapes. Their spike-edged leaves and tubular flowers in varying colours of fire often seem to refract the red-dust of the North and the arid sunsets that shimmer before the setting of a blood-red sun. Even the *Aloe succotrina*, the Fynbos aloe endemic to the Western Cape, finds shelter in the rocky cliff-faces of its mountain ranges, far from the open lands of the Flats.

Here, there is a beauty in its (un)homeliness… and I am drawn to its enduring resistance, its sense of rootedness and placiality, with a spirit undeterred by the grey concrete and chicken wires that have characterised a region that bears the scars of displacement. As Escobar (2006, p. 32) writes, "despite pervasive transnationalisation of social life, there is an embodiment and 'emplacement' to all human life that cannot be denied". The Aloe's drought-resistant rhizomatic roots extend their tendrils into the soil of Fatima's garden as if to tenderly caress these seedlings as it watches Fatima moisten the soil with the rains as if it were a Mother Tree (Simard, 2021) urging on new life in the shoots of saplings nearby in the forest.

Aloes are known for their particular resilience to drought, able to survive in the most inhospitable of conditions – a survivalist being in our world of increasing crisis as a result of climate change. During periods of survival 'stress', such as drought, Aloes increase their photochemical activity, and turn reddish after their production of anthocyanins. Aloes survive water scarcity through their Crassulacean Acid Metabolism (CAM) that make them resilient by closing their leaf stomata during the day (Murillo-Amador, 2015). Each night, like Fatima, they

work… storing carbon dioxide as malic acid with minimal water loss due to evaporation, converting it into sugars, which are released during the day.



Aloe succotrina in Fatima's garden

But, Aloes have also long told of the histories of the land, featuring in San paintings 5,000 years ago, as well as the Bible, for their medicinal properties. They are known as 'the plant of immortality', due to their hardiness, and feature on the medal for the South African Order of Mendi (Mackenzie, 2021), where **three** aloes symbolise resilience and survival, and which gesture towards a direction that can guide the way when assisting those in need during natural disasters (Mackenzie, 2021).

Contemplating the (in)congruities and contingencies of the Aloe here, I am reminded of Athol Fugard's (1978) apartheid-era play, *A Lesson from Aloes,* which seem to offer me a texu(r)al 'temporal signpost' (Shamir, 1996) in thinking through the spatial and historical accumulations of this moment, in this garden, in the *ihlathi lesiXhosa*, and in the Anthropocene. In some senses, my day with Fatima is its own embodied and sociomaterial s/cene in her lived experience, its own 'moment of articulation', which brings forth contingencies and conundrums within her everyday, and the rhizomatic conversations are 'acts', revealing lessons of their own…

Aloes are distinguished above all else for their inordinate capacity for survival in the harshest of possible environments.

Athol Fugard (1971)

They are both set within a drought…

Set in 1963 apartheid South Africa, *A Lesson from Aloes* tells the story of Piet, a white Afrikaner, Gladys, his 'English' wife, and Steve, his friend, a 'Coloured' activist who is preparing to leave South Africa after finding himself exhausted by the trauma of resistance. The play is set within the drought-wrought landscape of a white working-class area outside of Port Elizabeth, a transition zone between the 'Coloured' townships on the outskirts and the city core, home to Piet's Liberal idealist 'Xanadu'. As he painstakingly cultivates and struggles to categorise his Aloes in the "rainless glare" (Fugard, 1978, p.15) of his garden, he holds liberal hopes aloft as he attempts to reconcile the racial and political chaos that weighs heavy against his walls outside, and as he seeks to understand the Aloe's secret to survival in the midst of despair.

I turn to Fatima's story and the parallels Fugard offers in his exploration of the apartheid theo-ideology, themes that explore the failure of hollow Liberal aspirations of the 1960's (Kotze, 2012) and the consequences that the Nationalist Government's triumphant systematic suppression of Liberal hopes would come to have on all South African citizens, including Fatima.

The fact that the protagonists of Fugard's and Fatima's stories are not Black is of specific note in a setting so often dichotomised along monochromatic lines, and can be viewed instead as a form of *chiaroscuro*, Ewing's (2021) 'grey space', with specific legacies of 'Coloured' suppression that bring complexities to the fore. It complicates the tendency towards situating apartheid within the hegemonic leanings of a bifold Black/White dichotomy, akin to the nature/culture divide, which has often acted as an erasure of other demographics who were similarly oppressed and the liminalities of other bodies and spaces. In an excerpt from Durbach (1989, p.9) who encapsulated these divergences, he wrote:

> They are the reef on which all rational arguments for apartheid smashes and sinks, living evidence that its basis is racist and not cultural, that its politics are those of blood-purity and not the much vaunted integrity of the Afrikaner language and faith. The history of the Coloured people of South Africa has been one of systematic deprivation, a tragedy of dispossession, disinheritance, and disenfranchisement unmatched in the fate of any other racial group: humiliated by the Immorality Amendment Act (1950) which extended the prohibition against interracial sexual contact to White/Coloured relationships, racially classified (or reclassified) under the Population Registration Act (1950), segregated from their White neighbours under the Group Areas Act (1950) and forcibly removed where necessary, and struck – after five years of constitutional wrangling – from the voters' roll in the Cape by the Separate Representation of Voters Act (1956).

As Steve says with despair: *"Ons geslag is verkeerd"* (Afrikaans: our race is a mistake). (Fugard, 1978, p.64)

In *A Lesson from Aloes*, Piet has shaped his identity around drought of two kinds: he manages to escape the drought of living within an arid South Africa by taking up arms in solidarity with the liberation struggle. In thinking about Fatima's lived experience, her story holds tension between liberation and oppression, a drought imposed by the devastating effects of climate change and the conditions that enabled the Cape Town water crisis, exacerbated by the politics of invasion and invasive species, which have left an indelible mark; and the drought wrought upon her gendered, religious and sociocultural identities as a 'Coloured Muslim Woman' of 'Cape Malay' descent who lives on the Cape Flats.

Drought, for political ecologists, is considered a complex crisis, linked to interconnected stresses of water scarcity, food insecurity, soil moisture, human activity, micro-climatic alterations and climate change (AghaKouchak et al, 2021), perpetuating deep social and ecological disruption (Van Loon et al, 2016). Social power is embedded within the socioecological transformation (Loftus, 2007) of drought, as well as relationalities between nature, power and capital (Heynen et al, 2006). As such, political ecology has opened pathways for disentangling the socially-constructed nature of water scarcity, rather than attending to physical scarcity alone (Akhter, 2017). As Savelli et al (2022, p.3) note, "naturalising the causes of drought is in itself a political act that shifts human responsibilities onto non-human processes", and that the social (re)production of drought through water use and management discourses that don't account for complex ecologies, "reduce non-humans to objects that humans mobilise rather than active agents that interact, reshape and coevolve with other socioecological processes" (Rusca et al, 2017 in Savelli et al, 2022, p.3).

Many political ecologists have faced criticism for "uncritically accepting existing definitions of environmental degradation derived from positivistic natural science without acknowledging how such terms are constructed" (Forsyth, 2001, p.1) And indeed, some elements thought to be 'degrading' (in this case, Forsyth (2001) mentions soil erosion and deforestation), may not have the same 'degrading' implications they were thought to have, nor be representative of a homogenising crisis discourse. The Himalayan Environmental Degradation theory of the 1970's, for example, posited that population growth in Nepal was triggering deforestation, landslides, and deforestation (Leach and Mearns, 1996), but crisis was "only one of many potential scenarios" (Forsyth, 2001, p.3). It was revealed that many farmers triggered landscapes and other 'disturbances' themselves to bolster agricultural productivity (Thompson et al, 1986).

> In South Africa, some invasive species have 'unintended' benefits for local communities by supporting livelihoods or firewood for fuel, and have a symbiotic relationship in some circumstances with the soil, producing nitrogen… degradation, and crisis, are, in fact, complex and patchy conditions subject to layered, emergent and temporal positionalities.

Contrary to scientistic arguments that might not account for the politics inherent to socioecological transformations, drought cannot be considered a static materiality, akin to the way water is more than the inertia of a tap: they are both transboundary objects. As with other 'natural hazards', such as the landslides in Nepal, not all meteorological droughts result in socioecological crisis (Savelli et al, 2011, p.14), they only do so when they impact a 'vulnerable environment', or rather when they create disturbances in spaces of precarity. For example, Ladismith, in the Eastern Cape, experienced a drought of equal severity to that in the Western Cape between 2015-2019, with media headlines describing the region as 'stricken' or 'ravaged' by drought (Charlers, 2019). Hydroclimatology states that meteorological drought precipitates soil moisture drought, which then manifests as hydrological drought. These are not, in of

themselves, a crisis, but the meteorological drought in 2015 *did* evolve into a soil moisture drought and a hydrological drought, and thus a socioecological crisis, as the land around Ladismith experienced degradation as a result of agricultural transformations during the 20th century, compounded by unequal racialised distribution of water resources during apartheid (Savelli et al, 2011).

Modernist climate crisis rhetoric paves over these differences, subsuming natural ecological disturbances within a humanist discourse that perpetuates a nature/culture divide, thus conveniently 'writing humans out of the story', despite the very material disparities between how crisis is constituted. Such 'vulnerable environments', however, can be understood as "life without the promise of stability" (Tsing, 2015,p.20), as those who are most 'vulnerable' are those who are subject to the 'destabilising' forces of post-industrial capitalism. It offers a deeply posthuman ethos that suggests that "precarity is a condition of our time" (p.20), and that speaking with the everyday, emerging from post-industrial ruin (like a Mother Tree-less forest), requires that we pay attention to the multiple entanglements of which we are a part.

Drought is not only Euromodernist crisis, it is also a lesson in "collaborative survival" (Tsing, 2015,p.29)

As Tsing (2015,p.20) writes,

> Thinking through precarity changes social analysis. A precarious world is a world without teolology. Indeterminacy, the unplanned nature of time, is frightening, but thinking through precarity makes it evident that indeterminacy also makes life possible.

And so, in Piet's 'Xanadu', the Aloe is subjected to stress. A human-induced drought has been imposed upon it. He battles to ascribe to it an identity, undergirding a politics of 'sameness' and 'difference' (Escobar, 2006), which has historically-underpinned the aspirations of the West to "define the identity of the other" (p.30). Yet, in drought, in its perceived indeterminacy to Piet, the Aloe produces a flower in its resistance, a flower that bears the spirit of South Africa as the setting sun disappears into the dust of the veld.

Piet: *If plants have feelings, this is as bad as keeping animals in cages.*
It is the roots that upset me.
Even with all my care and attention they are still going to crawl around inside this little tin and tie themselves into knots looking for the space creation intended for them.

A Lesson from Aloes
Athol Fugard (1971)

The Aloe teaches us that the precarity of its condition makes new assemblages, and new non-normative ethics of encounter. The Aloe's identity is ontologically and ethically-entangled with its vulnerability, and even despite the disturbances and confines of its environment, its destabilising constraints, its roots seek to find the space nature intended for them. It has always preceded the subjectivities and 'civilising structures' thrust upon it.

Drawing on Butler (2004), ethics is intertwined with the precariousness of life of the Other, a shared condition that underscores the ways in which the denial of precarity does further injustices and violences along the lines of gender, race, and class. For Tsing (2015), in borrowing from Emmanual Levinas in her radical challenge of responsibility towards alterity of the Other,

cross-species coexistence is our ethical responsibility of being in the world, a sentiment shared by Haraway (2003) in her *Companion Species Manifesto,* and which also bears convergences with the Southern African ethico-onto-epistemology of *Ubuntu*.

Like the Aloe, Fatima is deeply entangled within the conditions of precarity, post(-)apartheid spatialities and injustices, water scarcity exacerbated by Euromodernist hegemonies, and climate change-exacerbated drought as well as drought of many kinds, as she is also entangled within resistance through her day/night work, her care for her seedlings to feed her family, her multiple wisdoms and cosmological ontologies, and the spaces of possibility (Helfenbein, 2021) she accumulates in her garden.

The Cape Town water crisis, as well as the temporal/spatial crises that are imbricated within Fatima's lifeworld, thrust her into a shifting assemblage, both in her relationship with water, as well as taps, her tanks, her vegetables, and crisis itself… seeking to make 'lifeworlds' within the spatialities 'nature intended for her' despite the inequalities and injustices that seek to enclose her. The constitution and suppression of 'Coloured identities' in spaces of liminality during apartheid, and thereafter through ANC nationalism, have imposed their own droughts of heritage, though there has been a discursive turn towards a reclamation of identity, even if not yet reflected structurally.

Fatima's turn toward forms of 'collaborative survival' produce a flower, as the Aloe does, and creates something new from these liminalities of alterity, a radical indigenous and feminist 'counterapocalypse' (Zylinska, 2018) that does not carry with it the violences of modernist precarity rhetorics.

But, droughts of many kinds are complexly sociomaterial, and like the Aloe, at night Fatima works. These are the edge effects between light and dark in the canopy gaps in ***Climbing the tree***.

We have much to learn from the Aloe, and through 'speculative fabulation' (Haraway, 2019) and a transdisciplinary approach to multispecies matter, we may grasp at the 'affective intensities' of our multiple crises in ways that positivist technoscientific 'truth' cannot.

4 *It is sunnah* ----------

The smooth, luminous-green leaves of spekboom that Fatima gifts me are cold and damp in my palm, and as I hold one between my fingertips, I can almost feel its watery contents press and expand against the margins of its fleshy, turgid tips… they seem small and fragile now, detached from the thriving, sprawling body they were once a part of that grows against the brick walls of her garden. The leaves are nearly circular, and I journey across their delicate edge with my thumb before their lemony taste reaches my mouth.

I watch Fatima as she holds her own spekboom gently in her hand, before its leaves disappear into the folds of her smile and dissolve onto a tongue that speaks with the language-(and spirit)-of-water…

For a moment, her eyes bely a knowing, that the water of the drought-resistant spekboom and that of her own body had formed a current that ebbed and flowed beneath the moon and sun, moving from bathtub to seedling to her kitchen and children, a gentle river in the acid, Capedal

soils (Rono and Cottle, 2014) and sands of the Cape Flats… while the Aloe stands sentry, a steady companion by her tides that nurture the shores of her home.

A discipline I have observed is an attitude of love and reverence to people.
Love is mutually feeding each other, not one living on another like a ghoul.

A Woman Alone
Bessie Head (1990)

I think of the spekboom that lines the verge of my garden allotment in Oranjezicht in Cape Town's city centre. The southeasterly that blows in gusty sheets down the side of Table Mountain's cliff-face, churning and roiling against the bluffs of Devil's Peak, before blowing spekboom leaves into my plot of soil beneath the mountain side… mixing with the waif-like stems of the Dill, the broad adaxial surface of the Aubergine leaves, finding 'nooks-and-crannies' amidst the Tomatoes.

These 20km between us, as we both garden apart, are a myriad of interstitial spatial complexities, above-ground and underground mycelial networks that reveal audible, fractal, active social spaces, alive with heterogeneity, socioecological transformation, and fragmentation.

The communal tap runs freely in Oranjezicht… filling water cans at will, and a leak in the hose leaves trickles that run through the cracks of the stone paths. I may harvest something I have planted that day, but it is not a practice upon which I depend.



*Fatima and I share of her spekboom, eating **three** each*

But, across the rural-urban divide that underscores Cape Town's segregated spatial legacies, Fatima's hand reaches out, sharing her spekboom in an act of equality and love (Talahite, 2005), an image that sits in stark contrast to the images of food that are conjured in the "baroque style, evoking the sensorial stimuli food provides to the starving" (p.152). And, it is not just spekboom-as-food that Fatima shares, but, through its ontological heterogeneity, she gifts its being, its water, its spirit and its cosmologies, bringing the physical and the spiritual together in an act of resistance to the evocation of plants as the objects of human survival alone.

Gardens are not only "a source of food and nourishment [which] stands in direct contrast to notions of the land as a meditative and spiritual space away from the worldly and the physical" (Talahite, 2005, p.152). Fatima's act of sharing transverses the human and more-than-human ethical embodiment, which resists the 'madness' imposed upon her by haunting legacies of the apartheid state, by engaging in a "healing process felt physically through her agricultural work [that] evokes that the route to self-knowledge is through the vehicle of the body" (p.152).

> … her hand reaches for mine, and for a moment, I understand that gifting this spekboom is gifting something of herself, as if she were a Mother Tree, sending nutrients through mycelia… as the canopy gaps open to the light.

As we stand together, savouring the lemony taste, digesting its leaves, I am reminded of the way our gardens, and this act, are part of a system of complex endo-symbiotic relations (Maas and Pasquinelli, 2013), where "each form of life produces and absorbs its own *Umwelt* (semiotics) of relations – a metabolic and aesthetic ecology that Urbanibilism explores beyond the borders of traditional ecology" (Braidotti and Hlavajova, 2018, p.443). While "the traces of millenary wars, colonial invasions and mass migrations" (p.443) press upon the walls of her garden and in the spaces between ours, this embodied moment together is a reminder of the way the "*natureculture* complex [is] a tangle of flows and strata 'where the border between the organic and inorganic life blurs" (p.443) and different natures (social, economic, inorganic, organic) overlap. As we digest these relationalities, histories, legacies, and resistances together, I think of the way Braidotti and Hlavajova (2018) provoke us to recognise that the "craving for the earth is a reminder that our posthuman metabolism has always preceded us" (p.444).

When I first began this research, science writer Leonie Joubert gifted me a copy of her book, *Tomatoes and Taxi Ranks*, inscribing within its cover a personal dedication: 'To Grace, may you and the story of food walk a long path together'. And, indeed, this path has ebbed-and-flowed and journeyed into many nooks-and-crannies, taking me from the allotments of Edinburgh to Fatima's garden on the Cape Flats, to my own allotment in Oranjezicht beneath the slopes of Table Mountain, in circular and rhizomatic ways, a journey that will continue on, long after I write the last words of this research…

> … But the story of food is also interwoven in the textu(r)al journeys I make within/between Bessie Head's and Athol Fugard's gardens, who offer arrivals-and-departures of crisis-and-resistance in the interstitial spaces (Bhaba, 1994), and inbetweening (Pinar and Irwin, 2005) of Fatima's garden, and who, together in **threes**, become an act of *sunnah*, just like the eating of three spekboom leaves...

The sharing of food is a deeply indigenous practice, woven into the fabric of South African sociocultural and socioecologies, and in many ways works alongside the *Ubuntu*-orientations of sharing in struggle, as Fatima tells me, and which I explore in a further rhizomatic conversation.

The struggles and sharedness of the E/earth are intricately interconnected with the politics of water, food and livelihoods, yet these 'vibrant matters' (Bennett, 2010) are also deeply embodied by the "somebodies who touch the earth" (Talahite, 2005, p.152).

As Fatima toils to save her water to feed her seedlings, she is propelled by the need to feed her family, consequential to interrelated complexities of the Day Zero drought, gendered and cultural-racial inequalities, food-and-water precarities, and climate change. Her participation in the work of *Soil for Life* contributes to the (re)turn toward urban gardening, which seeks to engender a welfare-driven sense of independence from the structural inequalities and capitalist agrifood systems that exacerbate food insecurities. Urban agroecology acts as a counter-hegemony to the neoliberal and Euromodernist systems upon which our food systems are hoisted, and which seeks to return to ethical ways of doing/knowing/being that have been historically-invisiblised by settler colonialism. Such methods draw attention to "banal acts of daily subsistence" (Figueroa, 2015, p.502), which "reflect and reproduce capitalist social relations, express their contradictions, and contain the seeds of their overcoming" (p.502). Food production, through urban gardens, represents a (re)connection to the land that helps to "decolonise the diet" (Brown, 2016, p.119) and "break individual and community dependence on the capitalist markets" (McClintock, 2018, p.8) through 'radical' food sovereignty that can "assert self-determination grounded in multiple, nested sovereignties that contest capitalist logics and the boundaries of settler-state institutions" (p.8).

These counter-hegemonic movements through the production of food within the city increasingly reveal the way indigenous peoples have always participated in forms of resistance through "continuing links to non-commodified land [which] offer escape routes from the precarity of 'disarticulated' capitalism ('jobless growth' or 'growth with precarity')" (McClintock, 2018, p.203). Counter-hegemonies reveal a radical agroecological food sovereignty approach within urban spaces, which problematise the urban-rural divide and offer forms of resistance against the 'metabolic rift' that has been maintained as its result. Nevertheless, similar to forest-making today, urban gardens form publics, through rhetorical intersections-and-frictions, enabling cohesion while also revealing rooted conflicts. These practices have given way to a complex, often contradictory, web of entanglements that are said to be "simultaneously radical, reformist, or neoliberal, both undergirding and resisting capitalist accumulation, albeit often at different spatio-temporal scales" (McClintock, 2018, p.1).

In Cape Town, urban agriculture has become widely promoted as a viable solution to food (in)security, (un)sustainable livelihoods, and social (in)cohesion. But, Haysom and Battersby (2016) note that less than 5% of low-income households in Cape Town actually participate in urban gardening. Climate, soil fertility, and spatial legacies of the city are an important variable.

Violent storms have increased their tempo, and, as I write, more than 15,000 residents of the Cape Flats have been displaced by a devastating tempest in July 2024 that has flooded the city and left many homeless due to its torrential downpours, drowning the few vegetable gardens that had been established.

> I had worried deeply about Fatima then… as I imagined her working to save this water amidst the floods… I had remembered the diverse experiences of 'crisis', both the banally expected as well as the shockingly unexpected, that take shape in everyday lives…

But, it is not only climate change that influences whether individuals have the time, resources, space and ecological conditions necessary for these practices to contribute towards sustainable

livelihoods. Critiques illustrate how urban gardening is also reflective of the rural-urban spatial politics that undergird agrarian traditions and land tenure within its socio-material enmeshments, and which have become embroiled in the "racialisation of space and the spatialisation of race" (Lipsitz, 2007, p.1), in a context where "racial capitalism has always produced urban political ecologies" (Heynen, 2016, p.840). Considerable scholarship writes of the ways in which urban gardens are embroiled in the perpetuation of neoliberalism, including the shifting of the burden of responsibility onto the individual and away from the dominant hegemonic forces of capital that maintain the global agrifood system and are responsible for crisis-making (McClintock, 2014).

These burdens are similar to those borne by Buhlebendalo in ***Something About Water*** and Melumzi and Lwandle in ***The Tides That Bind***, who are all constructed as 'failed citizens' (Swanson, 2013) of the state through inequalities produced through education systems, as well as poverty, informal/illicit/shadow economies and food insecurity, all of which bear the legacies of colonialism, Euromodernism and neoliberal development discourses. McClintock (2018) demonstrates the way in which neoliberalism of urban agriculture, in many ways, "mobilises a highly normative set of imaginaries and claims, many of which undergird racial-capitalist and settler logics of Othering" (p.5). And, he notes that the romanticism of 'getting your hands dirty' also acts as an erasure of the "racialised and gendered histories of agricultural exploitation and eliding questions of whose land they are actually 'going back to'" (p.5)… raising, again, questions of the political ecology of time.

Critically, urban agriculture is also at risk of reinforcing "paternalistic power asymmetries and colonial patterns of oppression of people of colour" (McClintock, 2018, p. 5) through "discourses of purity" (p.5) that also act as an erasure of indigenous food systems that are seen as subordinate to global industrial agrifood produce, with widespread discourse propounded on 'regulation' and 'food safety standards' to exert dominance. However, Fatima acknowledges to me that her garden has not replaced all sources of her nutrition, and therefore it does not sit outside the capitalist agrifood systems that pervade our diets (the silent ingredient in our food), but it is rather intermixed and offers small resistances to an otherwise totality of reliance, which can be said to contribute to food precarity and 'food deserts' (Caesar and Crush, 2016) (see ***The Tides That Bind***), in itself, an ontologically heterogenous and complex ecological term, similar to the way I wrote about 'droughts' earlier.

Perhaps with teleological significance to Fatima's relationship with water, which is also invariably shaped by settler colonialism, Saldanha (2007, p.50) writes of the "viscosity" of urban agricultural spaces, which have increasingly become saturated with intentions prescribed through whiteness, further attempting to displace indigenous peoples' ways-of-knowing/being from these spaces. In this way, Pettygrove and Ghose (2018, p.601) write that urban agriculture "racialis[es] revitalisation as whiteness, in that it is a process meant to improve neighbourhoods understood to be black", making urban gardens caught up in a 'performative' (McClintock, 2018) practice that makes 'green' associated with 'livability', 'space' with 'progress', and subsumes food and survival itself within both capitalist and noncapitalist assets and salvage accumulations (Tsing, 2015).

Yet, threaded throughout the ontologically heterogeneous entanglements of garden identities is the ways in which they are often constructed as human achievements, which are subsumed 'within' human culture (Power, 2005), becoming objects-of-culture that are mirrors of the sociocultural/political/economic/ecological conditions of their gardener(s) (Power, 2005). Scholarship on gardens has often revealed the ways in which they expose (feminist subjectivities

(Duruz, 1994), domestic relations (Alexander, 2002), and wider socioeconomic processes, as they also unmask colonial and capitalist topographies and spatialities. Power (2010) reminds us that viewing gardens as objects of human knowledge and control reinforces the nature/culture divide and the subject/object binary, reflective of Western dominion over a 'needing-to-be-tamed Other', allied to humanist projections onto the "raw material of culture" (Haraway, 1991, p.198), concordant with the 'civilising mission' (Mignolo, 2016; 2020).

Despite the racialised capitalism invested in urban agriculture, to understand it only in deficit terms acts as an extended violence on the people who identify with it, and animates an additional erasure of everyday resistances, ways-of-being, and lived experiences of indigeneity. While recognition of the invasive and pervasive social/political/economic processes that haunt food, water, and livelihoods is critical to interrogating the neoliberal structures that enact ongoing racialised capitalism and exacerbate climate change, without which, we are further robbed of possibility and incapacitated in (in)action, a narrow view of critique can also foreclose on possibilities of resistance entirely. A decolonial approach to urban agriculture means recognising these critiques and their inference for shaping collective ways-of-doing/being, but it also means understanding that critique is "not just about limitations, captivities, and erasures; they are also about everyday contestations, philosophical demands, and the possibilities the production of space can engender for subaltern subjects" (McKittrick, 2006, p.121).

Thinking about the complex and heterogenous encounters in Fatima's garden, which can be understood as its own *ihlathi lesiXhosa* through both the arrivals-and-departures of relationalities with its gardener, as its companion rather than its object of control, I am reminded of Head, who attempted to redefine the 'madness' and 'illness' imposed by the apartheid state by writing of the garden as a "hybrid and plural space where the self can be transplanted and recreated outside the hegemonic boundaries set by hegemonic discourses of identity" (Talahite, 2005, p.144). In Head's novel, *A Question of Power,* a community vegetable garden not only brings together diverse participants who represent a "challenge to official structures and an example of sustainable development based on self-help and community support" (p.146), but is also reflective of Head's own garden, where she nursed Cape gooseberries from South Africa in the arid soils of Serowe, in Botswana, as a practice of resistance against the divisiveness of apartheid through 'cross-fertilisation'.

> *… I imagine her inner conflicts at play, as she bent to touch the soil, as she nurtures the seeds of the country into which she was born, which tugged this way and that on the tides of her identity and belonging…*

And, as Talahite (2005) suggests, in imbuing the garden with redemptive multispeciesm and an idealised space of freedom as the antithesis to 'evil' autocratic social orders (Tahalite, 2005) and the deracination of social communities through land expropriation, Head locates her garden within the contexts of power-and-exploitation (Talahite, 2005) that undergirds political ecology and the environmental justice movement.

> *… In similar ways, the diverse participants in Fatima's garden, between her water, her seedlings, and her body, mind, and spirit, offer redemptive companionship, even as the invasions of systemic inequalities and climate change seek to invade her life/waterworld…*

And, part of the broader social critique of Fatima's, Head's and Fugard's gardens is the eternal search for this literal and metaphorical 'space' (Talahite, 2005).

> Both Fugard's and Fatima's Aloe and Head herself undertake these unfolding journeys of identity and belonging… finding the 'space nature intended for them', as they work towards futures that are not characterised by techno-modernist growth (Tsing, 2015), but rather 'spaces of possibility' (Helfenbein, 2021) where the soul can 'roam free' (Head, 1976).

For Head, the garden offers a "counterpoint to social reality by inscribing within it the new political 'sub-texts' of multicultural society and female agency" (Talahite, 2005, p.142), where the plural and hybrid selves emerge as antithesis to the madness and isolation she experienced as a result of colonial and patriarchal hegemonies (p.142). Fugard's main character, Piet, is conflicted by his need to identify his 'nameless' Aloe, which stoically resists the drought(s) of its world and to being ontologically 'captured' within the confines of his apartheid era-located garden. The differential and overlapping literary commentaries of Head and Fugard speak to the dualisms, complexities and contestations at play within discourse around urban gardening.



A corner of Fatima's urban garden, with her spekboom growing against the wall

Beyond the provision of food alone, however, Fatima also recognises her garden for the mental wellbeing it provides, eschewing medication diagnosed for depression, turning towards her produce instead in another act of resistance to Western medicalised 'prescriptions' of mental wellbeing, indicative of the indigenous use of medicinal plants…

… I am reminded of the ways in which indigenous peoples view the ihlathi lesiXhosa, and its importance for mental wellbeing, and the way I, myself, have turned to my spinach and tomatoes in Oranjezicht throughout this research, finding the space to think about the enormities of writing about the complexities herein through the planting of my seeds beneath the different shades of purple Cosmos…

"Thinking in the garden has led me to understand the relationship between the garden and colonialism and the garden and conquest" (Kincaid qtd in Nurse, 1997), in similar ways to thinking with arborescence as tendrilled roots weave between compost and seedlings, world-ending/world-building…

And, as it was for Head, Fatima's garden becomes an "escape from both patriarchal and colonial constructs where the female/cultural 'other' can recreate herself" (Talahite, 2005, p.148), and which "embodies an idealised alternative to social reality" (p.148). These escapes are not immaterial or apolitical, they reclaim indigenous cosmologies in an act of resistance by (re)aligning "the realistic and the spirited as a way of offering a critique of patriarchal and white-dominated definitions of 'reality'" (p.149), especially as the precarities thrust upon her are exacerbated by her husband's unemployment-come-retirement, and the differential burdens emplaced through the gendered, sociocultural 'everyday'.

Fatima's garden is not a utopian 'green world' (Tahalite, 2005), despite the decolonial resistance in reclaiming her land as a healing gesture…
for it adds voice, as it did for Head, to a wider social critique
that uproots the white South African literary pastoralism that depicts the landscape as a garden of Eden, empty and silent…
rather it is a "space of exchange and communication" (p.150)
that reclaims the idea of 'getting your hands dirty'
as a deeply spiritual, indigenous, and relational practice…
one which for Fatima, also holds critique of the Christian 'myths of creation' (Talahite, 2005), imbricating diverse sociocultural relationalities with the land through her Islamic faith.

In many ways, Fatima's garden becomes the 'embodiment' of embodiedness, where socioecological/economic/cultural relationalities and ecological materialities collide with the human and earthly body, the mind, and onto-epistemologies of identity and 'being'. I am also reminded of the way Deleuze and Guattari (1980) proposed the idea of the 'body without organs', which would later inculcate Hayles' (1999) conclusion that 'we have always been posthuman'. For these scholars, the 'body without organs' uncovers the way that "underneath the traditionally coded body with an assigned place and role in society, underneath the organs, there is a chaotic, messy world full of intensive potentiality" (Braidotti and Hlavajova, 2018, p.74). And, "men, women, children; all have their place in a social hierarchy" (p.74), which all perform an organisational structure for their organs. The posthuman 'body without organs' invites forms of 'liberation' against the "stratifying regimes of the socially accepted body" (p.74), as the "subpersonal, not-yet-organised level of affective qualities that allows new perceptions, new connections and new affects" (p.75). In so doing, it can transverse encounters between the human and processes of becoming, between transversal relations with more-than-human species, and with the Earth as a 'body without organs' that is instead 'vibrant matter' (Bennett, 2010). Pertinent to Fatima's affective experiences with drought(s) is the way that the "apocalyptic narrative that indicates the fear of the loss of humanity, loss of control and the dissolution of the human self"" (Hayles, 1999, p.290) is revealed "only if one thinks of the subject as an autonomous self, independent of the environment, is one likely to experience [such] panic" (p.290). However, "when the human is seen as part of a distributed system…[as

Fatima does] it is not a question of leaving the body behind but rather of extending embodied awareness in highly specific, local and material ways" (p.290) that we may extend possibilities for survival by attuning to the deep, mercurial transversal relations with all life on Earth.

But, Fatima, and all of the protagonists that are in encounter in her garden are 'full of embodied organs'…
leaves, mycelium, roots, hands, mouths… that breathe, digest, speak and feel,
and these cannot be surgically removed from our relationalities and ways-of-thinking,
nor should they be exculpated for the purposes of research.

If anything, these 'bodies with *many kinds of* organs' are 'vibrant matter'… deeply embodied, and the sociomaterial complexities of crisis-and-resistance are *viscerally felt* within these organs themselves.

By (re)embodying these organs that are not-only-human, bodies transverse the autonomous subjectivities of these experiences,
rather connecting them with the deeply embodied matter
that extends from within and beyond human organs and into the 'geology of the Earth'…
reaching out to organs of the human and more-than-human,
which, together, engage in our 'messy, chaotic world full of intensive potentiality'.

It is in this way, that 'we may have always been posthuman'.

These embodiments bring me to think of the ontologically heterogenous nature of plants…

These plants/spekboom are food, as they are medicine. They support life on earth, they nurture the soil, save water, amongst other important purposes. For Head, the 'usefulness' of plants was not in the finality of her produce, but in the collective process of 'planting the seeds', "a symbol for what Head saw as the future of South Africa and the structural reorganisation of society that would eventually follow the end of apartheid" (Talahite, 2005, p.147). At the same time, Fatima tells me, 'not every seed will grow… we must first nurture the soil'… soils that have been deracinated by colonial extractivism, invasive species (im)plantation, Euromodernist growth and urbanisation, and climate change.

… Yet, the spekboom are also drought-resistant to the poor soil quality on the Cape Flats and the water-hungry colonially-planted Acacias, and their life and growth contribute to 'mental wellbeing'. The seeds Fatima sows not only enact a resistance to the structural and systemic inequalities that haunt her garden – through colonial legacies, global capitalist hegemonies, and racialised/gendered oppressions – but they are seeded in the everyday lived experience of the mundane, as she 'reorganises' the society of her garden towards a heterogenous space of hybridity and encounters that overlap and weave amongst the stories of food-and-water.

I think of the way I have removed the spekboom leaves from my own allotment, preventing them from seeding
where they may amidst my vegetables… and I feel conflicted.
I feel the unlearning I have (needed to) undergo(ne)…
For what purpose had I deemed them unworthy of belonging…
here, where they nurture the soils of their ancestors…
where the earth awaits their cyclical return,
and the past is joined with the present and future?
What informs mine/our ideas of what constitutes food, and nourishment?

Now, when the spekboom blow into my allotment, beginning to take root amongst the vegetables, I let them grow,
and I imagine the creases of Fatima's smile widen, as we might share of their leaves together.
And, upon reaching a sturdy height, I gift them to friends in stems of **threes**, sharing of their spirit, water, food and being with others;
sharing of Fatima's act of love, her "gesture of belonging" (Head, 1976, p.206)
… as we "place one soft hand on her land" (p.206)…
together bound in *sunnah*.

5 *We are all in the struggle* ----------

Be the same as others in heart; just be a person.

A Question of Power
Bessie Head (1973)

'We are all in the struggle', Fatima tells me. I know that, like crisis, like drought, struggle takes many forms. In South Africa, there are struggles of liberation and there are struggles of inequality, each struggle, a complex interconnectedness of shared relationality. This is not to reduce and smooth over the differential struggle against inequality of subalternate(d) others, for struggle is itself animated by inequality to work *against* inequality.

I am reminded of *Ubuntu*. This is not situated within a deficit view of struggle, rather, it suggests an 'overcoming' of struggle through what it means to be human (Eze, 2001; Vanier, 1998), and as a normative view of ethics, it portends how we *should* treat others with respect and in doing so, we become human (Van der Merwe, 1996). I am reminded of the way Hayles (1999) writes of the dissolution of the self, and that it is only when we think of ourselves apart from the environment, or others, that struggle is no longer an experience shared, nor overcome through collective (more-than-)humanity.

Fatima shares her seedlings and her water, and in doing so, she is faced with her own becoming-*with*-humanity. But, she also becomes-*with* her more-than-human companions, as they become-with-her, as she nurtures their-becoming, their life, and their kinship as they nurture her in turn with the multiplicities of agents that collide in her garden.

With whom Fatima shares her companionship, as she did me, can be understood in some part through Haraway's (2003) companion species in a compost society. Fatima views her water and seedlings as akin to her children, and as Fatima gently wraps the Aloe leaf around a seedling to help it germinate, she becomes intricately interconnected with the "boundary condition of companion species, their intersectional coconstitution and coevolution and prioritisation of an alien relationality in which alliances are formed out of response-ability and respect" (Timeto, 2020, p.316). Through a posthuman and decolonial alignment of *Ubuntu*, they may "facilitate the implementation of a regenerative politics for living together in a multispecies world" (p.316).

Mycelia form symbiotic interspecies interconnections that decompose-and-recompose in a practice of more-than-human worlding (Jones, 2019), which Haraway (2016) refers to as 'composting'. But, "it matters what compostables make compost" (Hamilton and Neimanis, 2018, p.501), and Fatima's night labour and her water/food-labour illustrate how we are constantly being made and remade through material and immaterial labour in relationality

with that which "has not yet been humanised" (Haraway, 1978, p.25), which Jones (2019) refers to as (com)post-capitalism.

Towards an *Ubuntu*-companion-composting way-of-being then, requires a "refiguring the actors" (Haraway, 1992, p.297) that account for the sociopolitical relations that undergird material-semiotic relationalities between the human and more-than-human in order to 'reconfigure' nature-culture that "has many houses with many inhabitants which/who can refigure the Earth" (p.297). As Timeto (2019) writes, this needs to be done *respectfully*, "layering the ontoepistemological plane with a sociopolitical dimension: paying attention, *meeting respectfully*, regardless of species, is the basis for the constitution of the polis" (Haraway, 2008 in Timeto, 2019, p.322). In doing so, composting must always be "materially performed [by] challenging one's actions" (p.322), as we are reminded to do through an *Ubuntu* disposition. Against a ventriloquism of self-awareness that enables a 'speaking for' the 'Other', composting seems to 'speak with' symbiotic relationality that engages with multiple forms of possibility reminiscent of Albrecht's (2021) Symbiocene and Haraway's (2016) process of 'symbiogenesis'.

The idea of companion species accumulates through different entangled webs of posthuman thought throughout this writing, and can be approached through various interdisciplinary critiques, that all ultimately, through their various roots/routes, arrive at a call for a resistance to nature/culture binaries, and a need for inculcating intersectionality within multispecies living to enable a future of radical hope (Lear, 2006), a form of hope that is oriented toward a future 'goodness' that transcends our current ability to understand what that might be. Ecofeminist thinking in this way is critical to understanding the dialogical theory of care (Singer, 1975) that Fatima, and other subjects in this writing deploy, as I also seek to do. As such, "a society of companion species composes – and decomposes – as *compost*, finally burying under the ground, in the humus, the human body politic that has always elevated itself above the body of nature" (Timeto, 2019, p.324). Their 'becoming-with' relationalities challenge the borderwork (Rumford, 2006) of subject-object ontologies. The de/recompositions in the making of more-than-human publics extend to binaries of the alien/indigenous, contamination/purism, as well as invasion politics that sociomaterially and spatially undergird historical violences of colonialism and Euromodernism.



Fatima distils nutrients from lemon peels, banana skins and eggshells in her water to feed her seedlings in the nutrient-deficient soils of the Cape Flats

With teleological relevance to this writing, Haraway (2016) writes of the way a compost society 'troubles' the hegemonies of borders that occur through alien relationalities (Timeto, 2019) by "corridor thinking" (Haraway, 2016, p.218), which is akin to the thought processes I have had that have taken place through 'borderwork'/canopy gaps/ecotonal edge effects/rhizomatic conversations/mycelial interludes, and which "build passages that allow symbionts to travel and flourish in movement" (Timeto, 2019, p.324). Perhaps most crucially, and towards a radical hope for a symbiopoietic future, thinking in terms of a compost society also offers a refugia, like the riverine gorges of Newlands Forest or Fatima's garden, where spaces of possibility are

> not imposed from above (according to a colonised logic), they take place among inherited ruins, in which they cultivate hospitable refugia as a 'basic obligation and source of mutual renewal' (Haraway, 2016) for rebalancing inequalities and losses (Timeto, 2019, p.324).

In many ways, the *ihlathi lesiXhosa* is its own compost society, where all of its inhabitants both share in the struggle and seek to overcome it, while also hoping to answer the call for 'a revolution in kinship' (Rubin, 1997) within its wider compost society *in situ*, one that offers a way forward for a "*symbiotic* body politic, a compost society, in which the Common is doing without Being (Latour, 2010): an *ongoingness* happening in the middle, and in the muddle, of sympoietic involutions" (Timeto, 2019, p.326).

6 *The pecking order* ----------

In Africa, the chicken is a conferral of abundance, a bestowal of blessing, because the chicken, after all, represents food security, either eggs or meat. To give and receive live chickens… is an African soul gesture.

Ode to an African Chicken
Hilton-Barber (2009)

The few days I had spent with members of the Mitchell's Plain community in the back garden of a primary school learning about backyard chicken farming, became one of the most transformative encounters for me throughout this research journey. It was a time to giggle together about Elizabeth's unruly rooster whom she called 'Johnboy', learning from the community leader and those who (mostly *isiXhosa* and mixed heritage women) had chosen to embark on businesses with 'broilers' (for meat) and 'layers' (for eggs), listening to tales shared of these fascinating, otherwise-invisibilised animals of the 'mundane'.

Chickens, like gardens, are ontologically heterogenous, who also seem to exist in daily subversions of spatial inequalities by living as more-than-human city dwellers in many urbanised and 'informal' spaces of African cities today. As food, they are a reminder that "more than with any other of our biological needs, the choices we make around food affect the shape, style, pulse, smell, look, feel, health, economy, street life and infrastructure of the city" (Roberts, 2001, p.4). But, they also are increasingly becoming used in permaculture processes that help regenerate degraded soils, as I saw in the urban gardens of Philippi in ***Something About Water***. And, in the *ihlathi lesiXhosa*, **three** chickens are used during the *ingenisa* initiation process for *thwasas* (*isangoma* trainees) – one under each arm, and one on the head – which can indicate acceptance from the ancestors before they are sacrificed, ultimately connecting the *thwasa's* ancestors to those of their new spiritual family (Kern, 2017).



Philippi Village leader with one of his chickens and Impepho, often used as an antibacterial agent – one of its many medicinal properties

In African cities, the chicken is everywhere…

The commodification of food worldwide and capitalist agrifood systems have long implicated human and non-human actants within the capitalist growth economy web (Lara et al, 2023), and the super-productivisation of animals and agriculture that supports its global hegemony can infer that the chicken has become a technocratic symbol for an Anthropocentric world dominated by humans and an environment that has been inextricably shaped by globalisation, urbanisation, Euromodernist and capitalist efficiencies, and human consumptive demand.

Repeated outbreaks of avian flu in South Africa in recent years, which are interlinked with the Water-Energy-Food nexus, compounded by the COVID-19 pandemic and political instability have revealed the interrelated webs of these moments of crisis by paying attention to animals of the 'everyday', ones that have largely been 'invisibilised' by Euromodernism and hegemonies of capitalism that dominate alimentation in urban life. With especial effect by the outbreaks of zootopic disease, chickens reveal the complex interplays between formal-and-informal economies in the racialised curvatures of socioeconomic/ecological/political processes. Chickens are vital matter/actors that, "in their live form, chickens embody the potential for thickened sociality (White, 2011), holding at bay the undifferentiated equality of liberal subjects in the cultural work of producing social categories of difference" (Cousins and Pentecost, 2018, para 6).

While I cannot engage in all aspects of animal geographies in these rhizomatic conversations alone, their presence in my thoughts here evokes a way-of-thinking about bodies of the subaltern, and other 'forms' of the more-than-human radical Other, rather than those solely reserved for plant matter that I have conversed with more substantively. Chickens offer another node of reference for thinking through invasive socioecologies in posthuman ways that seek to make the historically 'invisibilised' visible. Animals, like plants, exist beyond humanist projections of them as 'natural resources' or as assets of formal economy capital, and their role within human/more-than-human relationalities is just as 'vital'. Indeed, a posthuman understanding of chickens may allow us to "re-imagine the breath, life, soul, and spirit of the city as embodied in its animal life" (Hovorka, 2008, p.96), one which highlights more-than-human matter as influential and agential actors through transspecies theories.

If we understand the city, and the broader *ihlathi lesiXhosa*, as an "always already inhabited achievement of heterogenous social encounters, where all of the actors are not human" (Hovorka, 2008, p.97), then we can come to see the way that "nature is no longer fixed at a distance but emerges within the routine interweavings of people, organisms, elements and machines as these configure in the partial, plural and sometimes overlapping time/spaces of everyday living" (p.97). Tuan (1984) suggests that animals are social agents interlinked in a "relationship (struggle) with humans, generating conflicting power dynamics ranging from reverence to revulsion, compassion to control, and utilitarianism to disinterest" (Hovorka, 2008, p.97), where their conceptual, corporeal and geographical 'othering' is entrenched by humans through situational spatialities/materialities. They have been rendered "so indispensable to the structure of human affairs and so tied up with (human) visions of progress and good life that humans have been unable to fully see them" (p.98).

The wind that exposes the chicken's nakedness blows from the back.

African proverb

To this end, parallels can be made with the way animals and plant matter of the more-than-human participate in transformative socioecological encounters, embroiling animals, as much as plants, within invasive socioecological legacies that pervade urban life. Chickens are caught up in the intersection/alities of sociopolitical struggle, urbanisation, livelihoods, poverty, spatialities, as well as the political economy and ecology of food.

Anima, Latin for 'animal', meaning 'the soul' and the animation of human life (Braidotti and Hlavajova, 2018), has long been the subject of human exceptionalism. Nevertheless, they play a vital role in cosmologies, religion, food, livelihoods and human and more-than-human life on Earth more broadly. However, the parasitic legacies of humanist invasion that bifurcate the nature/culture divide and subject/object binaries in centre/periphery spatialities, continue to beget their subjugation and pave over the vitality of their matter in socialised spaces. As Serres (2007, p.10) wrote on parasitism, "men in clothes live within the animals they devoured. And the same thing for plants". To this end, Serres argues that the parasitic/invasive chains that prop up capitalism are endowed with abuse value, rather than use or exchange. Capitalism thus becomes "a religion in which animal sacrifice is mostly replaced with a massive industrial slaughter" (Braidotti and Hlavajova, 2018, p.36).



Learning about healthy egg yolks at a "Chicken Farmers for Small Business and Backyard Setups' course in Mitchell's Plain

In the Anthropocene, invasions of capital have led to the invisibilisation and eradication of such vital life forms. And, as Lippit (2000, p.1) writes, animals, chickens and plants of the more-than-human will "never *entirely* vanish, but rather continue to exist in a state of *perpetual vanishing*. Their existence becomes *spectral*, or in supernatural terms, modernity finds animals lingering in the world *undead*". Through the eyes of the 'ordinary', we can come to see the way that Demos's (2013) ghosts have still not yet been made to rest.

Intersections of indigenous knowledge, decoloniality and posthumanism reveal the ways in which colonialism has sought to suppress and quash indigenous relationships with the land as "alive and thinking" (Jones and Cloke, 2022, p.21). Chickens are non-human actors full of vital matter and ontological heterogeneity. As food, and forms of matter that can become food that they are in encounter with, such as eggs, permaculture produce, and their feed, chickens are embroiled in a "ready messenger of connectedness" (Whatmore, 2002, p.119), which is "one of the most potent vectors of the 'bodily imperatives' that enmesh us in the material fabric and diverse company of 'livingness'" (p.162). The agential threads tied to eating, as practice, reminds us that "non-humans do not have agency *by themselves*, if only because they are *never* by themselves" (Sayes, 2014, p.144), which means, "you are never alone with the chicken dinner, even if you are dining alone" (Elton, 2019, p.8). As compost companions, they have "capacity to love, work, and even resist – beings who express their agency in many ways" (p. 9).

… I am reminded of 'hands' and 'roots' that do the same…

These are the relationalities that have been understood in many indigenous knowledges for generations, allowing for a much deeper interconnectedness with food, and the more-than-human, itself. By deploying an understanding that we are all companion species in a compost society (Haraway, 2016), we may begin to think through the ways in which these relationalities offer opportunities for collaboration and multispecies co-existence in the everyday, and 'resist' the invasive capitalist hegemonies that have become the silent ingredient in our food.

7 *Climate change or changing climate?* ----------

I wouldn't need to be so very different for sun to seem to be about sun, for green to be about green, for joy and boredom and anguish and terror and death to all be themselves, beyond the need for any killing clarity, and then this – this, *the growing rings of light and water and stone – would take up all of me, and be all the words I need.*

The Overstory
Richard Powers (2018, p.444)

There was, perhaps, a sad irony in the 'urgency' with which I departed Fatima's home, bringing our moment together to a close with another layered, temporal, spatial crisis that emerges from the nooks-and-crannies of the everyday… on this occasion, arising from the country's battles with crime.

But, perhaps, I had enacted my own 'crime' in resorting to the instrumental ways of doing research that seemed so incommensurate with the conversation and togetherness of being in/with her garden… a sense of criminality in its injustice to the affective stories and lives with which she'd shared… 'how do you feel about climate change?', I'd asked her hastily, as I was being ushered to leave before the simmering *status quo,* as a state of constant exception, on the streets outside were upended in fits and bursts once more… fast-and-slow violences in layered moments at every turn…

I had had expectations of her response, informed by my own education and ways-of-thinking, perhaps eliding an awareness that increasing droughts, flooding, and extreme weather events would impact her water supplies, the ability for her seedlings and plants to grow, that there would be growing precarities of many kinds…

But Fatima was pleased. A change in the climate of our present moment as we moved from the slow folding-in of summer into autumn means that winter would bring the rains. Her JoJo tank and buckets and bathtubs would be full. She would be able to feed her family. It wouldn't matter if the onions burnt on the stove… there would be more. She would taste the lemony liquid of the spekboom, bursting with viscosity. The Aloe's reddish tips would turn to green. Her son might be able to bath, and the cogs of taps would grow still and unyielding in their disuse.

Our linguistic push and pull reminds me of the way Styres (2011) differentiates between noun and verb-centred language. While I explore this in relation to the term 'poacher' in ***The Tides That Bind***, here, we may come to understand the way the meaning of 'climate change', as opposed to 'a changing climate', brings forth multiplicities of ontological heterogeneity. 'Climate change' (the noun) has become common parlance, especially in Global North-led frameworks, such as the IPCC, as well as global warming/heating. But, declarative noun-language also offers a "truth that subjugates all other perspectives [which] deny the complexity of the interconnected and interdependent relationship and totality of the essence of being" (p.720). And, with especial reference to the increasingly 'far-right' populist movements of climate denial, it means "we can easily become tangled in the binaries of the 'intrinsic rightness or wrongness' (Ross, 1996, p.111) of the subjected and objectified other" (Styres, 2011, p.720).

While I do not disagree that taxonomy for our current climate crisis is required, my thoughts here engage the way that the creation of these nouns are assumed to have a singular universal meaning, a presumed totalising, self-evident understanding that makes their discourse available for partisan political value. It can be likened to the way those who have been called 'disproportionately-disadvantaged' by the climate crisis, those who have contributed to it the least, now have climate adaptation and mitigation frameworks thrust upon their lifeworlds. Or, the way contemporary education systems have pre-determined learning outcomes (Styres, 2011). Should those who have always lived with mercurial and *changing* climates, suddenly adapt their discourse to reflect the dominant language of 'the universal'? In ***The Tides That Bind***, coastal communities find kinship in the shifting atmospheric conditions brought by the sea, and ancestral spirits reside in the natural 'disturbances' they bring. Must they change their ethico-onto-epistemological ways-of-being with the atmosphere consequential to this 'negative' connotation with 'change'? Fatima reveres the rain, as the pastoral Khoi once did, and for her, a change in the climate, no longer the arid heat of summer, will bring the rains that will feed her family…



Soil for Life headquarters

It is perhaps, of note, that in Khoisan culture, linguistic and social contexts are fluid-and-verb-oriented (Styres, 2011). This is not to be confused with the absence of structurality, but, "like the social fluidity in patterns of settlement and seasonal migration" (Barnard, 1988, p.230), fluidity emerges as an "indigenous creative and explanatory device and as a product of linguistic and social circumstances, both within and beyond broadly-defined structural frameworks" (p.230). The Moon itself has cosmo-semantic ontologies (p.230), being both Rain(ing), the bringer of rain, perpetual life, as well as death and rebirth, and is thus both noun and verb. And, in the Southern Sotho language, references to ethics and morality are references to one's 'doing': a character that behaves morally is *lokileng*, and a character not practicing ethicality is *maemo* (Gyeke, 2004). It is of note in Fatima's story, that Islamic moral philosophy views ethics in similar ways, based on behaviour, as *akhlaq* (Gyeke, 2004). These ontologically-focussed approaches shape the ethicality of humanity, and the sum of these verbs inform togetherness.

Critiques of Western nominalism of 'climate change' often adopt a critical approach that does not necessarily rebuke the reality undergirding this terminology, but rather the "confidence in its representation" (Gough and Price, 2004, p.24), which can lead to a 'performance contradiction' (Bhasker, 1993). Latour (2004, p.246) writes that "if something is constructed, then it means it is fragile and thus in great need of care and caution". Following Latour, Gough and Price (2004, p.27) assert that "caution implies deliberation, an avoidance of rashness and precipitancy, of not judging things by first appearances, and of being alert to possible implications and alternatives". As Derrida (1972, p.231) reminds us, "it is simply a question of (and this is a necessity of criticism in the classical sense of the word) *being alert to the implications*, to the historical sedimentation of the language we use". These authors warn of the determinism inherent to nominalisation, where we must attend to "suppressed tensions or

conflicts within a text, and treat all 'natural' categories, essentialist oppositions and representational claims with suspicion" (Gough and Price, 2004, p.28). This becomes most potent in discourse of 'sustainable development/resilience' in global policy, as well as 'climate change', wherein "ideas that draw upon the authority of nature nearly always have their origin in ideas about society" (Ross, 1994, p.15).

I am conscious of the way I have 'assumed' a translanguaging (academic) universality in my question to Fatima…
not only reducing our viscous and lively relationalities to the jarring technocracies of climate change discourse, but stripping our conversational kinship bare of affectivity.

Perhaps, most of all, nominalist climate change language, which has "become a language of power, global capitalism and government" (Gough and Price, 2004, p.29), has been championed by bioregionalism, and while this approach seeks to move away from the territorialisation of the nation-state, we must remember that "watersheds and landmasses do not delineate and organise themselves into bioregions; we do" (p.29). As such, Fatima and my unintentional linguistic dance between meanings of 'climate change/changing climate' brings forth 'bioregions of discourse' (Eberly, 2000) (like forests), where "being places limits on the discourse through which we establish ourselves on the horizon" (Gough and Price, 2004, p.29), and I am aware that our different experiences and entry-points establish differential horizons in their meeting through our conversation… climate change (noun) carries a different emphasis these days to our changing climate (verb).

For many, changes in the climate have existed for generations, and atmospheric cycles are the stuff of everyday life/lives, rather than abstract nominal concepts that are coined in far-away policymaking locales. And thinking rhizomatically means liberating our approach to climate crisis discourse from 'fixed' points of view… rather thinking through the heterogenous verbs that have always demanded that we 'do' justice to them.

And yet, returning reflexively to the irony in my question and Fatima's answer, I think the presumption might be that 'an educated perspective' might 'recognise' Fatima's answer as a response to her own situated circumstance as to what 'climate change' would likely mean to her, and that by contrast, 'the educated' might assume an understanding of 'climate change' from the all-seeing purview of a global, interconnected whole. This would be a hubristic mistake!

Fatima's appreciation of 'climate change' is no more situated than climate experts' ability to comprehend the amorphous and abstract 'whole' of it in its entirety. Instead, it could be argued that Fatima's access to and ability to live by her eco-cosmology might indeed be the wider 'whole' to which we, educated or otherwise, can only grasp.

The lesson here, for me, in this experience, is one of humility…

Perhaps, that is another lesson from Aloes… another powerful lesson from Fatima… and her spekboom.

The Tides That Bind

Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

Beyond this place of wrath and tears
Looms but the Horror of the shade,
And yet the menace of the years
Finds and shall find me unafraid.

It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate,
I am the captain of my soul.

Invictus[a]
William Ernest Henley (1875)

The squalls that blow through the harbour town of Hout Bay (the Anglicised name for *Houtbaai,* meaning 'wood bay' (Anciano and Piper, 2018) on the backslopes of Table Mountain and the Atlantic Seaboard of the Cape Peninsula, carry with them the briny, mouth-watering smells of fish and chips, freshly battered in the kitchens of a local establishment favourite under its glaring yellow sign on which is printed in garish, bold red: 'Fish on the Rocks: Africa's Favourite Fish 'n Chips'. It is flanked on either side by a South African and British flag, and it sits at the far end of the harbour, the fishing boats nearby idling gently…

The waves shift and swish …

… in
and
out
… in
and
out
… in cyclical rhythms, almost polyphonically…

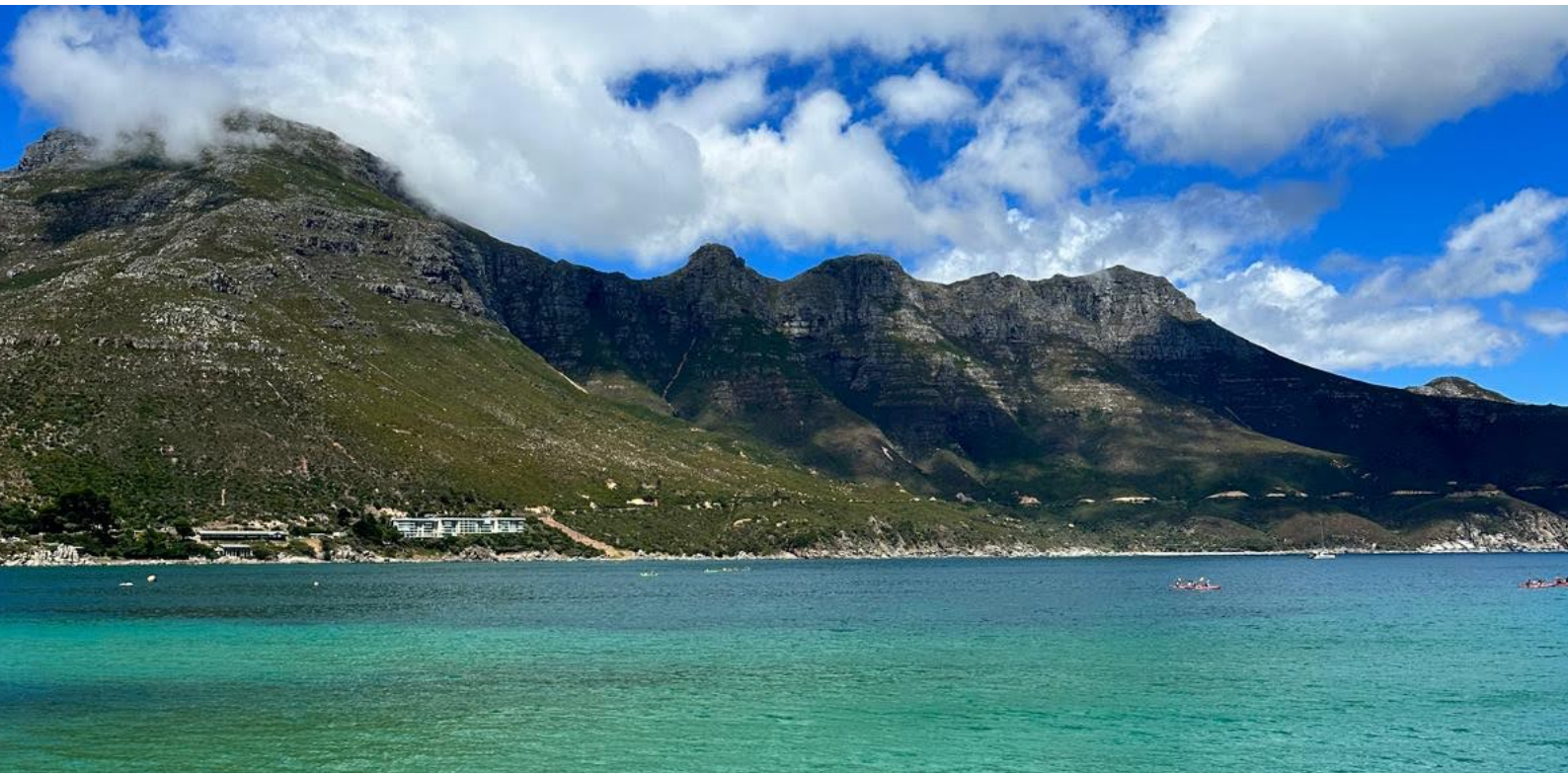
… like the ebbs-and-flows of language itself…

[a] Throughout Nelson Rolihlahla Mandela's 27-year imprisonment, on Robben Island for 18 of those years, he would frequently turn to poetry for courage and hope during apartheid rule. *Invictus* (meaning 'unconquerable' in Latin) became Mandela's most well-recited poem, and his constant companion throughout his struggle in prison. Mandela's African name – Rolihlahla – aptly means: the one who shakes the tree, the one who unsettles the status quo (Breen-Smyth, 2013).

… like the long, slow biome-and-boundary-crossing journeys of elephants that retrace their steps neverendingly across ancient-remembered paths on vast, primordial plains unique to Africa…
… like the *Khoi* people who followed the rains across the elephantine and undulating landscapes of southern Africa…

… amongst the swells of the tide, boats
pulling earnestly against their chains at the dock.

The fishing settlements, such as *Hangberg*, in Hout Bay have long been its most prominent feature. The earliest commercial fishing dated back to 1889 when snoek and crayfish (*kreef* in Afrikaans) were smoked, canned and exported to Mauritius (Heydorn and Morant, 1988). The restaurant seems small against the vast mountains that loom up behind it and curve around the bay like an amphitheatre…



Chapman's Peak and the Twelve Apostles

The Sentinel on one side, a sheer shadowy cliff peak in prominent silhouette against vast green seas and wide open blue sky, marks the western end of the mouth of Hout Bay,
and on the other,

Chapman's Peak
and the Twelve Apostles,
with their unique
geological unconformity
of Table Mountain Sandstone
and grey pre-Cambrian rock (Eriksson et al, 1998),
with peaks awash with the light of many sunsets
in the ancient, stoical calm of their rust-coloured hues.

Behind, are the sloping residential suburbs of the Hout Bay valley, and the informal settlement of *Imazamo Yethu* (in *isiXhosa*, meaning 'all of our efforts together'), enclosed by the tapering back of Table Mountain at the head of the valley. Standing on the docks, looking back towards the mountain, trees dot the spaces between the free-standing homes as paved roads wind through their midst… on the other side of the valley, the sun refracts and glints over the aluminium roofs of *Imazamo Yethu*, its dwellings densely-packed together, washing the mountain side with a prism of metallic silver painted into a kaleidoscope of bright colour.

In the parking lot outside of 'Fish on the Rocks', next to the sea, glistening in the afternoon sun, I meet my guide. He sits perched, waiting for me, on a nearby rock as the sea-froth behind him leaves traces on the white beach sand. As I approach, I see he is gazing down at the indigenous succulents growing near his feet – *Aloes* and *Kalanchoes* – the kind I recognise sold at high prices in plant shops in Edinburgh. I think again of the heartbreak I feel whenever I am in Edinburgh as I think of these small vegetal children, so far from home… and I am grateful to see them rooted next to the sea… here, on the shores of their home.

Amidst the patrons queuing to take their seats at the outdoor benches and tables of the restaurant, I see a person with long, spiralled dreadlocks draping over his knees and hanging softly in the sea air. The long dreadlocks are an outward signifier of Rastafarianism here in Cape Town. He is of *KhoiKhoi* descent, and after meeting him along the way of this research path, I had arranged to walk the mountain with him because of his indigenous knowledge of local plant-life. Many *Khoi* are still indigenous knowledge-holders and carry ancient ways-of-knowing passed on to them despite the epistemicidal (de Sousa Santos, 2015) oppressions metred out to indigenous peoples in this part of Africa under settler-colonialism and now Euromodernist urbanisation.

He greets me warmly and his fingers are weathered and rough under my touch as we shake hands… grains of soil he had imparted, little gifts of the Earth, collect between the creases of my palm. His name is Melumzi, he has told me before (and as I will call him in this story), meaning in *isiXhosa*, 'one who represents home'.

We have agreed to hike the Sentinel together and discuss the indigenous and medicinal plant-life of its surrounds. I know I am fortunate to have such ancestral expertise and indigeneity to guide me.

To reach our starting place, we must first drive through Hangberg on the slopes of the Sentinel, an area labelled under South Africa's former apartheid Group Areas Act (1950) as a 'Coloured' residential area, and that has since been labelled as a site of high crime, where political protests and rife unemployment are common affairs (Anciano and Piper, 2018)… some of the legacies of apartheid that continue to pervade daily life for these residents long after its official dissolution.

Hangberg, is also at the nexus of an ongoing, embittered land battle. The Sentinel itself has been privately owned since 1901, though its rural zoning and surrounding national park land have prevented its owners from erecting formal dwellings without an access road (Underhill, 2009). Residents of Hangberg and Die Sloot, the peoples who dwell in the informal settlements that line the Sentinel's fire break, viewed as a hotbed for illegal drug and perlemoen/abalone smuggling, continue to battle the City of Cape Town, the Western Cape provincial government and South African National Parks (SANParks) for their right to remain on this land (Peer et al,

2022). Each party can be said to have their own vested interests, whether it be for governance and control over historically-indigenous land and self-determination, commercialism, or conservation of the sand dune ecosystems that have been invaded by alien Acacias. Historically and more recently, these clashes, especially with the *boere* (traditionally meaning 'farmer' in Afrikaans, but in this context, it is understood as 'police'), have been violent (Peer et al, 2022). For its hybrid *Khoi-San* and mixed heritage residents this land is ancestral, and the commodification by powerful (mostly white) private and government interests of its breath-takingly sweeping views across the harbour and the mountains is a point of staunch resistance to what 'these powerful interests' view as a commercial entitlement to urban development, based on the prevailing attitude that "it is too good for poor people to enjoy that view" (Mail & Guardian, 2014).

The landscape is not new to me. I have visited Hout Bay often during my South African childhood, and in my subsequent return visits. I have family here, and it holds sweetly familiar significance to me. I have visited 'Fish on the Rocks' many times, with its heady smells and garish yellow sign, so simultaneously appealing-yet-incongruous in this rugged seaside bay…

We pass the familiar red-and-white Coca-Cola-branded corrugated iron dwelling of the local 'spaza' shop (in *isiZulu*, meaning 'hidden'), and I am reminded of Fatima's Coca-Cola water receptacles in her garden...



Coca-Cola branded spaza shops are commonplace in informal settlements. This, taken in Philippi with a minibus taxi in the foreground

These informal enterprises have become vital elements of the economy in informal settlements (Peyton et al, 2014), subverting spatio-material inequalities that bely access to supermarkets for food that are more frequently found in city centres and affluent neighbourhoods. The spaza

shops, however, often provide less nutritious, lower quality, and higher-priced goods, which impact both lives and livelihoods (Peyton et al, 2014), undergirding a complex web of entanglements in everyday urban life. Their role in combatting 'food deserts' (Wrigley, 2002) or 'food swamps' (Joubert, 2018) has become embroiled in a complex exchange between the neoliberal promise of trade liberalisation through Western-style supermarketisation (Peyton et al, 2014) following democratisation (Mubangizi, 2008), and the informal economy. I find these terms troubling, however as 'deserts' and 'swamps' elide a discursive colonisation of vital ecosystems that anthropocentrically-invade these increasingly fragile ecologies, similar to my exploration of 'droughts' in ***A Lesson from Spekboom***.

I feel I am being pushed and pulled in different ways, and almost every aspect of socioeconomic, political and ecological life in South Africa seems to be invested in contradiction and ethical conundrum…

While they both are epistemologically-based on roots/routes of access to 'quality' and culturally-appropriate food, there is irony in the first term-of-its-kind – 'food deserts'. Wrigley (2002) first used this term in reference to the United Kingdom, a country possessing no 'deserts' *per se*, but since then the term has become ubiquitously-associated with food insecurity worldwide, and which normatively positions nature (and peoples living in contexts of food precarity) in deficit terms through another subject/object divide. Labelling these contexts as 'deserts' thus suggests that 'solutions' are an externality (Block, 2019). As Battersby et al (2018) writes, the complex entanglements that contribute to "inequality in access to quality food" (p. 48), is a present-day 'food apartheid'.

… I think of the British flag that blows in the wind on 'Fish on the Rocks'…

There also is juxtaposition in the equally-globalised 'soft power' Americanisation of much of the continent through the promotion of Coca-Cola, the distinctive colourful logos signalling the presence of spaza shops in South Africa, and similarly across much of Africa (Battersby et al, 2019). Cola-Cola provides funding for much-needed refrigeration in exchange for their advertising, an exchange-relation that has produced particular knock-on effects for customers who may purchase higher quality goods, such as chicken (see ***A Lesson from Spekboom***), yet the impoverishment of the diet invades the 'nooks-and-crannies' (Ndebele, 1984) of everyday life through the infiltration of sugary drinks (Mathebula and Motsoeneng, 2014), and whose plastic receptacles have ontologically-transformed their use into water containers in Fatima's garden…

My thoughts are lost in the complex entanglement of threads that emerge from the physical and metaphorical semiotics of the spaza shop, and I am brought back to Melumzi as we reach the foot of the Sentinel. Together, we pause for a moment to look down the steep slopes of Hangberg, with the mountain's white sandy foothills blowing across the road below…

The view from here is new to me. I can see the kelp-lined shores and the gulls that circle opportunistically over 'Fish on the Rocks' from afar. I have mostly visited the gentrified neighbourhoods of Hout Bay before, although my mother took me into the informal settlement of *Imazamo Yethu* a few times when I was a child.

From here, the beauty of the light that mottles the bluffs of Chapman's Peak ahead becomes a somatic experience that grips me deep in my chest…

Another Hangberg resident approaches as we pause, and he begins speaking. He had a dream last night that the plants of the mountain cured cancer. He hopes I will let everyone know. Melumzi laughs… he seems embarrassed… But, I wonder, does the unexpectedness of this interaction bely merit in what this man claims? I am uncertain of how to respond. I laugh too, somewhat feebly, assuring the man that I will let everyone know. I feel I need to assure him through my words that he is believed. I am conscious that dreams play an important role in indigenous cosmologies.



Fynbos of the Sentinel

We begin to climb, and the vegetation shifts from dune fynbos, dune scrub-thicket and dune forest to mountain fynbos… and I can see the brackish roots of the invasive alien, *Acacia cyclops*, that now covers this land. *Restioid, ericoid* and *proteoid* fynbos, typical of Table Mountain National Park vegetation (Helme and Trinder-Smith, 2006), stretch in dappled swathes across the slopes. *Restio Eleocharis* acts as a border between the Hangberg dwellings and the mobile sand, while *Sideroxylon inerme* (white milkwood) dominate the thickets (Helme and Trinder-Smith, 2006).

We walk rhythmically… left, right, left, right… up and down like the swelling of the tides[1]… through the narrow sandy paths… stopping to look, and feel, and touch the plants as we go… I catch his words before the wind blows them down the mountain side, into the sea below…

He begins to tell me his story….

He first describes his love for the land we walk on… before the river of his words turn, and he flows into stories of his home in Hangberg… He is of *KhoiKhoi* heritage… it is a love borne of those whose blood and soil are at once the very fabric of the Earth and have been as far back as the first nations to live on this land.

The wind swirls and blows in fits and starts more fervently now as we begin to crest the top of the mountain ridge… I am eternally reminded of the wind's mutable strength here in the Cape… I have always loved the wind, uncommonly so, for it has always reminded me of an (in)escapable freedom, a yearning, a *suadade*… but here, like all things, it has other meanings, and wind heralds smoke, fire, roiling storms, winter rains, and hardship and precarity. But today, the wind is a warm zephyr amidst the fynbos, and Melumzi's dreadlocks blow in flowing dances through the lively gusts.

As we walk, Melumzi tells me the indigenous, *Khoi* way to cut medicinal plants to ensure regeneration. 'They must not be torn or pulled or over-harvested but cut diagonally and in moderation', he says. I think of the tubers and bulbs on the roadside of Kalk Bay, storied in ***Something About Water***, and I wonder how they were exculpated from their Earthly mother…

He tells me of the importance of indigenous education in South African schools… 'there isn't enough', he says. Melumzi turns to me, speaking meaningfully: 'We need education to help children have a more spiritual relationship with the land. This is key to conservation'.

I think of Styres (2011) who wrote about the 'land as first teacher', and of the universalist Western-style classrooms today that are devoid of indigenous teaching, silent of 'old pedagogies', of praxes that reflect more authentic understandings of what it means to 'teach', ones that invoke the presence of the 'outside-in' (Biesta, 2019) in ways that 'call us forth'…

I think of Buhlebendalo in ***Something About Water***, whose own experiences of the state-directed education system had not afforded him the formal opportunity to further his relationship with the land through hopes of pursuing a career in agriculture, and who derived a love for the land through his family, a very different way of learning local knowledge, but which is dismissed in schools… His closeness to land and the ways of the land fostered through his family, language and sociocultural influence encouraged his love of walking amongst the trees of Newlands Forest as he clears the invasive saplings of his favourite tree…

And, I think of the 'garden classrooms' in which Fatima and Caleb's children learn of a relationship with water-and-food that is instilled beyond the boundaries of 'formal' education systems, and of the lessons they are taught by 'placing their hand on the earth' (Head, 1976)…

As we crest the ridge – to our backs, the familiar inlet of Hout Bay and the corrugated iron roofs of Hangberg glinting in the sun, and in front of us, the wide expanse of the Atlantic Ocean, with a misty view of Duiker[b] Island off the coast… We stop.

Below us is a small stretch of rocky beach (with no known name), sheltered by the high slopes of the Sentinel.

... the wind blows ever more fervently…

And for a moment, I gaze upon the brilliant white reflection glinting in the sun on the shore below… stones, or sea froth, or seagull guano, I assume. The crash and thrust of the waves exerts a push and pull against the beach, the waves' constant negotiation with the sedentary landscape on which they beat, as if to call the shore home into the waves…

But, Melumzi is no longer speaking.

'Do you know what that is?', he asks, quietly, pointing to the 'whiteness' below.

... gusts tug this way and that against our still bodies…

I am conscious of not knowing the answer, and I can feel it spread through my chest, hidden dimensions and canopy gaps yawn and ache between us as I turn towards him… there is a heaviness… there is always more to this land than the things we think we see. I think of the Pine tree in ***A Lesson from Spekboom***… 'Be content with your natural beauty'… 'Enjoy the view'… But there is always-already (Althusser, 1971) more.

'They are perlemoen[c] shells', he says. And I see the way the vowels take shape on his lips, already disappearing in the swells and blows… his eyes remaining fixed on the shore below.

A gravitas envelops us within our silence… amidst the sound of the waves and the steady breaths of midday air and rustle of *Ericaceae* and *Restios* next to our feet… the rhythms of conversation about medicinal plants interrupted and made anew… mycelia dart and weave new paths at disturbances in the soil… a crack in the trunk of the Magic Tree opens wider to the sun…

…

It is important to add here, that Melumzi is a composite of four different companions of Rastafarian background that I met at different points throughout this research journey, a few of whom work with medicinal plants. The nature of this story requires complete anonymity, and 'Melumzi' is a pseudonym I have used to describe this composite character. A couple of these companions have had interactions with poachers, which arose in varying levels of detail through their life stories. For one of the companions, I was told a friend had nearly died due to their involvement in illicit activity, almost leaving behind a child. This companion felt deep sorrow for the child, and a need to take care of them, and he was devastated that his friend had been unable to extricate himself from the poaching industry sooner. And, at least some of these

[b] 'Duiker', the name of a young bush-buck, means in Afrikaans, 'to dive'

[c] 'Perlemoen' is the Afrikaans word for 'abalone', but is commonly used in English, borrowed from the Afrikaans

companions express some form of grief for the inequalities that necessitate such widespread participation in illicit activities, and they speak of deep relationalities with the land and – for some – with their *Khoi* ancestry. They all speak of the importance of education and conservation. While this story takes place in Hangberg, an 'abalone poaching hotspot', poaching takes place across the Eastern and Western Cape, and so my companions were from varying coastal and other locales. The tattoos I describe later are also common amongst Rasta groups, and so are not specific to one person, as are dreadlocks. I thus have changed aspects of the story and characters to ensure non-traceability and to fictionalise aspects of events that are based on real happenings that have been conveyed to me by these companions and relevant others through various conversations throughout this research.

…

'I would rather steal from the shop and spend a few nights in jail than spend 20 years in prison for poaching abalone (*Haliotis midae*)' he says slowly. 'Lwandle (meaning 'sea' in *isiXhosa*) had a child…'



Abalone shells at an informal trading stall in Hout Bay

An air of quiet contemplation seemed to envelop us in this admonition that his friend, Lwandle, had been an abalone poacher. And, I am uncertain too of how to respond at first.

I understand the weight of his story. Perlemoen or abalone is a critically-endangered endemic marine mollusc. The illicit trade has grown with fervour following democratisation, especially after the alleviation of the global sanctions placed against South Africa. As de Greef (2018) writes, fishing communities along the Cape coast suffered deeply under the apartheid regime, and they hoped for reform and economic opportunities under the banner of a 'new' South Africa. But, the canopy gap that opened within the liminalities between two orders had offered hopeful opportunities while, simultaneously and contradictorily, also birthing corruption and political instability, with a concomitant rise in unemployment and general lack of improvement in livelihoods for the economically-disenfranchised[d]. In this transition gap, abalone poaching found root.

In 2023, the Global Initiative Against Transnational Organised Crime reported that an estimated USD 60 million (ZAR 1.1 billion) worth of abalone is exported from South Africa per year (de Greef, 2018).

... How decontextualised and disaffected this sounds in numbers…

I become self-conscious of my original purpose here as researcher. I try to shed the formal rhythms of our previous exchanges… the questions and answers, left, right, questions and answers, up, down… but we are more than the research and the stories…

We, relationally, are the conduits of the vibrant matter about us, the vibrant connections the stories make… We are both human, present in this landscape together, here amongst the mountains, sea and fynbos… And we can feel how the Earth has its own rhythms of which we are part.

He tells me that his friend had been looking to earn some extra income on the side, and another friend had invited him to join. Lwandle had told him it was an easy decision. Melumzi looks down at his hands, and he rubs his fingers as he twists his hands…

I think of Lwandle's hands, wet with sea foam… pulling ropes, navigating the shores… the rough outer edges of the abalone shells against his fingers, abrasions at their tips…

The pink and red ericoids sway in the soft wind.

'Between 2am and 3am, while you are sleeping', he says, 'they are working'[2].

I think of Fatima… both bodies toiling in their 'night shift' in nocturnal rhythms made subaltern through exigencies of many kinds… the *inkwenkwezis* ('stars' in *isiXhosa*) watching over the shady gaps, shadow economies and lifeworlds of their children at work…

Lwandle would carry the oxygen tanks for the divers over the mountain, he tells me, the same route we had just walked together. And while they waited, there would be no light allowed… no cell phones…

[d] The contextualisation of neoliberalism in South Africa aligned perfectly with authoritarian attitudes entrenched under apartheid, so that neoliberalism in this context continued this operation.

… the men would crouch amongst the fynbos who bore witness to their illicit labour in the dark…
I imagine the muted nightly hues of the *Restios* brushing against their backs…
… and they would ball their fists to hide the soft amber glow of their *entjies*[e] in the night…

I imagine the languid plumes of smoke sifting between their fingers as it dissipates like breath in the wind…
'The source of fear for them was not the police, but rival poachers', he tells me.

'Then, that's when everything starts'.[3]

'Lwandle told me that when your eyes adjust to the darkness, it feels like daylight… that he'd just see guys bending down picking the abalone'.

... the wind blows between his dreadlocks, creating contours across his face...

'This is where the syndicates come together'.

He tells me of the dangers of rival abalone poachers… how Lwandle was shot at…how he had nearly lost his life.

… and how that changed everything.

How Lwandle had realised that he needed to stay alive for his child.
How Melumzi feels responsible for not helping Lwandle extricate himself from the poaching industry sooner.

'I'm so sorry', I say, though it feels flat under the weight of his sorrow.

After a long silence, I ask him… 'where does the abalone go?'
'China', he tells me, and Lwandle's wages were paid by the Chinese syndicates too.

Some distance away, cigarette smoke curls thinly, then dissipates quickly on the wind from a man seated amongst the bushes… he is sitting upright, his face towards the sun… he looks down onto the beach below.
He does not see us.

'Some gets distributed to restaurants, but nowadays, most of the time, the abalone goes to farms or properties where they dry the abalone on racks in dry-houses and ship them to China'.

'Drying them makes the abalone lighter and cheaper to ship', he explains.

I think of what the absence of water in this landscape means for all beings, human and more-than-human, in complex, vital ways...

Kimon de Greef, an undercover journalist who investigated the abalone poaching syndicates in Cape Town, wrote extensively on the Chinese demand for abalone, noting that demand

[e] An Afrikaans and Afrikaapse slang word for 'cigarettes'.

coincided with rapid growth in China's economy in the early 1990's… at the same time as sanctions were lifted against South Africa. It was a perfect storm…

At the time, Chinese consumers offered USD 40/kg (de Greef, 2018), a rising price-point that has continued unabated. As one of China's four 'marine treasures', alongside shark fin, sea cucumber, and the swim bladders of other fish, abalone is considered a delicacy and aphrodisiac (de Greef, 2018). Arriving in Hong Kong, illegally-sourced and commercial abalone are undifferentiated, though it is said that the price for poached abalone is considerably higher, valued for their 'natural' growth. Commercial abalone farms now have all but collapsed due to the 'lack of supply', driving the price of illicit abalone ever higher. As de Greef (2018) notes, where poachers were once able to harvest 80kg of abalone in one day, they now return from their efforts with less than 15kg as this mollusc becomes depleted from its home on these shores. According to South Africa's IUCN Red List of Threatened Species, more than 44% of abalone are now threatened with extinction (TRAFFIC, 2022).



Hangberg across the inlet of Hout Bay at night

I think of the time I had visited a friend's farm on the Garden Route, with its sweeping shorelines and rugged mountainscapes… we had swum in the sea, and upon perching on the rocks, we had seen a lone diver in the distance…
'he is a poacher', my friend had explained,
…'they are common here'.

We had silently watched as the diver searched for an entry-point into the rocky pools and distinctive Cape kelp forests that swayed and boughed amidst the waves.
Later, as I left the farm, driving up the private dirt road entry to the single gate…

there he was, the man, no longer in his wetsuit, hair wet from the sea...
at that moment, no longer a poacher,
just a man...

He was having trouble starting his rusty, old car with home-spraypainted doors of different colours… Walking down the path towards me, he smiled, apologising for the hold-up before returning to his car. I heard the whine of the ignition.

Like the Earth, it had its own sonic rhythm too…

And, as I waited behind him, I thought of the abalone that may now be stored in his car… perhaps still wet from the sea that had been their home…

But, I also thought of the man, and I wondered for whom he may be doing the poaching … and, like Lwandle, whether he also had a child at home for which he must provide.

… The tides push and pull…
The sea thrashes in lamentation against unyielding rocks…

Melumzi begins to describe how the abalone is pickled and stored in tinned cans…
a 'shell' of their former selves…

I think of the way plants are broken down, their bodies stripped from their Mothers, and sold across foreign shores…

As I think this, I suddenly become conscious that Melumzi has stopped talking.

He looks down at the white beach below, and I follow his gaze. The beauty of our home we had admired just minutes before feels polluted…

'Enjoy the view', the Pine reminds us…

… and Melumzi's anguish is palpable. His face is wet.

'That's what broke my heart', he says.

He holds his hands tightly, eyes fixed on the crashing waves below. He apologises through his tears.

… there is a gap in the wind… it breaks over the mountain-top above… for a moment, the fynbos is still.
Cigarette smoke nearby curls above the skyline.

Above us, the Sentinel's peak stands stalwart as embodied witness to Melzumi's grief…
it has seen so much… and the tides ebb and swell tenderly against the discarded shells below, as if to mourn the loss of their children.

'The sea is a part of us. That is the name of Table Mountain. In *Khoi*, it is "*Hoerikwagga*".
It means 'mountain in the sea'. We are a part of the mountain and of the sea.
I didn't think that by being *Khoi*, it would clash with their abalone poaching', he says.

‘Now, I think that way. For the *Khoi*, we wouldn’t take much. We just took what we needed for ourselves and that’s it. The same with medicinal plants. We take what we need, and we don’t destroy the whole plant. The next season, we return to the same bush; it stands here and provides again. It’s just like the sea. Take what you need and don’t take too much. Leave some. There are babies that need to grow. It takes up to 10 years for abalone to grow. With indigenous plants, the people that harvest medicinal plants on Table Mountain do it with knowledge… you cut, you don’t tear or break. It used to be this way with *kreef*, but now there is no mention of it. Abalone is more lucrative and the demand for *kreef* isn’t that big anymore.’



The slopes of the Sentinel, part of Table Mountain National Park

He turns to look at me.

‘Grace, I tell you – if I can do anything to stop it, I would gladly do it, for Lwandle’s sake and for all my other friends involved in this business.
It breaks me to know that the police are involved because they get money from it.
The police keep the syndicates out of jail’.

His tears continue to fall into his beard… and into the young shoots of Proteacae at our feet.
They are children too.

As the wind blows and gusts… Melumzi takes out his phone, and shows me a photo of Lwandle…
And, I see his tattoos…
They are a quilt of landscape imagery…
They are a homage to South Africa's breath-taking beauty.

Suadade is etched onto his skin.

'This is why I have dedicated myself to the land', he says. 'Now, I get to walk amongst the land everyday. I need to atone for Lwandle's actions… for he was a part of something that took too much from the sea. It is not the *Khoi* way.'[4]

… the wind carries his words in their gusts once more…

Wetness collects in the wrinkles of his soft eyes… from his tears, from the sea, I am not sure.

'Education is the answer', he concludes…
'and a willingness to be educated'[5].

…

Cry, the beloved country, for the unborn child that's the inheritor of our fear. Let him not love the earth too deeply. Let him not laugh too gladly when the water runs through his fingers, nor stand too silent when the setting sun makes red the veld with fire. Let him not be too moved when the birds of his land are singing. Nor give too much of his heart to a mountain or a valley. For fear will rob him if he gives too much.

Cry the Beloved Country
Alan Paton (1948)

Rhizomatic Conversations

1 *The pulse of the ocean* ----------

the sea is so heavy inside us
and I won't sleep tonight.
i have buckets of memory in a jar
that I keep for days and nights like these.

Song Trials
Nyezwa in Gabeba Baderoon (2009, p.89)

It is, perhaps, ironic that depictions of Cape Town's landscapes are oft-centred around a pictorial view of Table Mountain, this Wonder of Nature, as I have also found myself capturing on photographic film and thus representing it in the circular journey of this research, for such

imagery suggests that to see, or seek to understand this land, one must turn one's back on the sea/e… tides which brought the arrivals of those from foreign shores, and yet which have always connected the *Khoi* peoples with the *ihlathi lesiXhosa* through the rivers and estuaries that wind through their cosmological and everyday ways-of-knowing/being. Yet, I have not embarked on this journey as land-centred, ignoring the ocean's presence as a way of peripheralising this spatio-materiality. Instead, I have recognised it as a vital agent…

The water that surrounds this landscape and which is embedded in the very soils of its *ihlathi lesiXhosa*, sea to which we are indebted for the oxygen we breathe through phytoplankton blooms, tides that remind us that life began under its surface, currents that sway through its kelp forests… for Table Mountain is also *Hoerikwagga* (in *isiXhosa*),

… *it is the 'mountain in the sea'.*

Rather, I have heeded our beloved Nongetheni's advice in ***Something About Water***,
and have tried to walk forwards with my back to the future,
at once looking at,
and facing
the past.

This story, which forms the **third**, and last, of this writing, was the first journey I undertook after returning home to Cape Town to begin this research, and there is great sadness in the closing of my own circular pathway here, as though I am laying one of my own many worlds, and the multiplicities that arrive from those worlds, of my everydays, to rest.

Yet, it is fitting too, for the rhythms of the landscape have returned me and laid me down gently on the shores of my own belonging… faced with the distant tides that lap at the shores of other lands I have also called home, their topographies connected by the temporal metronome of the waves and the heartbeat of the Earth. Water itself is unremittingly non-linear… its rhythms a beating pulse that conduct tempos in our multiple fluxes of becoming (Iparraguirre, 2016) and across this research. Lefebvre (1974) wrote that rhythms are comprised between the interactions of time, the production of space, and everyday life. But, perhaps, these intersections are the rhizome itself… its

> passage will be curved, zigzagging, bending and twisting into weird shapes. Its bends, waves, convex or concave surfaces, parabolas and ellipses, hyperbolas and circles will be neither contingent nor predetermined (Marder, 2024, p.26)…

… much like the ocean waves.

Now, as these stories open at their close… and as I walk with Melumzi over the dune fynbos below the Sentinel in Hout Bay, I am awash with the push-and-pull of time and space, its contraction-and-expansion, as it unfolds into the overlapping encounters that are always in becoming with new beginnings, similar to the ways in which the Magic Tree or the seeds of dormant fynbos break open with the burning heat of fires…

> Stories go in circles. They don't go in straight lines. It helps if you listen in circles because there are stories inside and between stories, and finding your way through them is as easy and as hard as finding your way home. Part of finding is getting lost, and when you are lost you start to open up and listen. (Tafoya, 1995, p. 11)

And so, with my 'back' to Table Mountain and the future of the *ihlathi lesiXhosa* itself, I consider Baderoon's (2009, p.91) question: "if we turn to face the water, what do we see?"

… *Tides push and pull…*
… push and pull…

…

There is a rhythm to this landscape and the epistemes/ontologies it inspires. Seasonal rhythms, the rhythms of time, circadian rhythms, orbital rhythms, tidal rhythms, sonic rhythms, natural and unnatural rhythms – they offer possibilities for pattern, discordance, alienation, synchronicity and dissonance. To associate rhythm with consistency alone, is to reduce our understanding of it to a language of regularity and regulation inside disciplines. What rhythms share is a sense of cyclicity. As Zachos et al (2001, p.686) write: "Orbitally-related rhythms oscillate about a climatic mean that is constantly drifting in response to gradual changes in Earth's major boundary conditions".

In political economy in relation to explanations on the animating functions of capitalism, the concept of 'growth' is widely held not to be unremittingly linear, but "proceeds in fits and starts, or in cycles of expansion and stagnation" (Kaldor, 1959, p.290). Nederveen Pieterse (2010) also critiques 'growth' in developmentalism hinged to capitalist operations.

Every year, growing trees produce layers of new vascular cells beneath their bark, and their growth patterns can be measured in alternating patterns of rings (Jacoby and D'Arrigo, 1997), xylem and phloem,

xylem and phloem,
xylem and phloem;

cyclical responses similarly lead to annual banding in corals, which tell ancient stories of sea-surface temperatures, sea levels and oceanic conditions (Lough and Cooper, 2011). In circular economies, we promote models of reusing, reducing and recycling to extend the life cycles of products (Arruda et al, 2021). Yet, we may ask ourselves whether such promotion of 'circular economies' is not what might be called 'the art of capitalism in disguise'? Is manufacture of new plastics to be 'recycled', truly circular, truly responsible? Does growth in nature act to naturalise growth in capitalist economies? Nederveen Pieterse (2010) draws out the relationship between development, capitalism, 'growth' and other spatial/temporal metaphors. In plants, endogenous rhythms occur in cyclic growth phenomena, and the germination rhythms of seeds themselves measure 'growth' and 'time' through non-linear, cyclical processes – algae and fungi sporulation, photosynthesis, and the CO_2 emissions of succulent plants (Maguire, 1969). For both seeds and new ecologies, circularity, rhythms and their dissonance offer possibilities for new typologies (Tsing, 2015). The concept of rhythmic circularity is also deeply rooted in indigenous epistemologies, a fluid form of storying-and-journeying signalling an interconnectedness between all human and more-than-human elements of the world (Tsing, 2015).

As Tsing and Ebron (2015) write, rhythms are stories and one form of world-making, something I hope has animated ebbs and flows throughout my own relational writing, within and across relational stories. Each narrative, each rhythm, which becomes intertwined with my own, the rhythms of 'fieldwork', the listening to the lives of others interspersed with my own thoughts and reactions, my relational human responses-and-responsiveness, all become a "writing-in-

rhythm" (p.684). There is listening… speaking… writing… there is pause… There are silences… silences of many kinds.

The polyphonic assemblages within the realm of multispecies anthropology offer important praxes for indigenous storytelling, understanding that the multiple lifeways that intersect and intertwine with each other as if in musical fugue, make the fabric of landscape – both the landscape/seascapes of this research, the situated landscape it seeks to read, and the landscape of human and more-than-human worlds of which it is part. The textu(r)al (Swanson, 2013) rhythms of storytelling, of walking, of the Earth's sphere, of spheres of influence, of private and public spheres… linearity is a form of corralling of thought. It is a vector of the monotone. It is a thin narrowness. It is not a path, with all its undulations, dangers, challenges, and entrancing sights of spectacular and sudden beauty that we can come across, a path that we can readily follow within landscapes-of-meaning.

It is not enough, Tsing (2015) writes, to claim that capitalism is supported only by those who claim to be capitalists. Paying attention to the polyphonic voices of livelihoods (human and more-than-human) that shape our political economy/ecology, and that seem 'peripheral' to capitalism (Tsing, 2015), the shadow economies that whisper, are still "central to the accumulation of capital" (p.509). It is about authentically listening to these rhythms, reading these stories, that can reveal how multi-socioecological landscapes, "whether in cities, forests or global institutions, come to emerge" (p.509).

These rhythms play out over temporalities and spatialities, where time is "discernible in the rhythms, intervals, logics, articulations and disarticulations of the world" (Marder, 2024, p.3). For Marder, our world is thus vegetal, and time is a plant…



The fractal rhythms of a burnt Proteaceae from a recent fire

And so, in my journeys across the rhythms of this research, it has led me here, turning towards the sea, looking down onto the tides of a nameless beach on the Atlantic seaboard of Cape Town with Melumzi and the *Restios* at my side; to understand the way that time is not only a plant, but its rhythms and the cosmological embrace of which we all are a part, between the *ihlathi lesiXhosa* and the sea, is none other than our 'oceanic feeling' (Parsons, 1999). It is, perhaps, what Melumzi, and the other protagonists of this writing have come to speak of (through words/hands/epidermal tissues) most of all… that the cosmology of the everyday, of 'ordinary people', of life, are bound by the limitless, unbounded rhythms of eternity, intertwined with uncertainty and fragility. In letters between Freud and Rolland, they described this cosmology as a "feeling of an indissoluble bond, of being one with the external world as a whole" (Freud, 1930, para 4).

In Melumzi's story, his and Lwandle's *Khoi* identity/Lwandle's fatherhood/livelihood/the land/abalone/medicinal plants/and the sea are in an eternal embrace of 'oceanic feeling', a knowing that to interrupt the rhythms of the Earth by 'taking-too-much', is a violence on time itself… a violence on the "embrace of oneself by oneself as (already) other to oneself" (Marder, 2024, p. 27)… a violence to the sea is also violence on our own skin… As Serres (2008) writes, "the soul resides at the point where the I is decided… even on the skin" (p.20). The sea is a tempestuous, nebulous being, much like the land, but is also our very breath and Mother whose aquatic womb has birthed us all… and as such, fulfilment lies in the embrace of the embrace… as the sea and land embrace each other… "imperfectly closed, fragile circles on the verge of falling apart" (Marder, 2024, p.23).

Table Mountain does not rest upon a lonely shore, for it is within and between the sea itself, as we are also.

The wellspring from which the *ihlathi lesiXhosa* draws its roots,
and the soils that reach into the depths of the ocean
are a reminder that it is through the rhythms that bind us all…
where there is 'a time for everything and a *sea*son [emphasis added], a season
to be born and a season to die, a season to plant and a season to uproot' (Ecclesiastes, 3:1-2)…
that we may most clearly make visible the circuitous complexities of our
world… roots and currents and the hands that don't take too much…
that are altogether *oceanic*.

2 *Working night and day* ----------

Just like Fatima, Lwandle had toiled at night 'while we are sleeping'… as lives of the everyday turn into everynights, and which resist the diurnal rhythms that have become our most visible 'measure' of time…

Fatima and Melumzi seem so speak with each other across the/ir water, and across these relational stories… as does Lwandle, toiling in their 'night shifts', with hands wet…

There is a weighted irony in their moonlit conversations that presses heavily on my chest, for one of them works to save water for her seedlings and to feed her family in the aftermath of a terrible hydrological drought and as other 'droughts' endure, while the other, whose ancestral heritage has always lived in companionship with the ocean, he acknowledges that at one time

his friend 'took-too-much-from-the-sea' to provide for his child at home. In their complex interconnectedness, there is a shared experience of crisis-and-liminality… crises-of-precarity, liminalities of 'shadow economies/ecologies', and the systemic inequalities that prevail upon South Africa in haunting perpetuation of its contested legacies. But, there is also mutual resistance in their relationship to the land, in their identities, and in their moonlit subversions of the drought/madness-inducing hegemonic forces that prey upon their life/waterworlds. Fatima and Lwandle are watched over by the *inkwenkwezis* ('stars' in *isiXhosa*) as they pulse in the night-sky, and as the tides of 'oceanic feeling' pool between their fingers…

While the night is its own rhythm of time, with its own "social norms and expectations, gender norms and workers' demography" (Duijzings and Duskova (2022, p.12), the authors aver that it is not antipodean to the day: "it is far more accurate to see the relationship between day and night as dialectical and complementary, whereby the night is really part of the day, not the other way around" (p. 12). Schnepel (2006) views the complex ontology of the night as 'hyper-nights' or 'hypo-nights', where the first offers "spaces for rebellious (or even revolutionary) forms of behaviour, questioning, mocking or transgressing diurnal social life as well as norms and moral values" (Duijzings and Duskova, 2022, p.12), and the latter suggests a control or colonising of the night through light.

I think of the spark of the cigarette lighter in the dark on the side of the Sentinel
as the waves crash below,
as the poachers' fists would ball to hide the burning embers of their *entjies*…
hiding from other abalone syndicates…
the way that light here itself is heterogenous
and holds multiple meanings
with many fragile precarities…

They are not dichotomies, however, and together, hyper/hypo-nights co-exist, like companion species. Duijzings and Duskova (2022) further suggest that where the day is viewed as the 'structure' or social order, the night can be seen as 'anti-structural', while also an always-already 'extension of the structure', as vital matter upon which the daytime turns.

In Lwandle's and Fatima's work at night, whether licit or illicit, the night bears the rhythms of livelihoods being made-and-remade, like the way trees consume carbon at night to make way for photosynthesis during the day (Zweifel et al, 2021), or the way phytoplankton, upon which abalone rely for food in infancy, breathe at night (Ofir et al, 2017), and which produce 50% of the oxygen humans breathe in turn (Mondal et al, 2022).

The night does not lack structurality, for it is its own reverent time that speaks with the day, and breathes, and makes visible vital ecologies/economies, whether they be the capitalist economies of the 'night shift', a metaphorical referent for 'dark unknowabilities' (Zembylas, 2005) and oppressions, or resistant subversions and worlds of alterity. Dark unknowabilities speak to epistemologies of what we cannot know, in/of the dark, and night is that deep (un)knowing, hiding its own light.

In some senses, the 'everynight' is a neologism, for even its very diction belies a subversion of language itself, having not been granted the credibility of a 'word' in the same way as the 'everyday'. These linguistic turns, as well as the way night brings forth complex ecologies/economies highlight its multiple ontologies, which can be thought of through

Derrida's (1968) 'différance', where meanings bear 'traces' of the past, and which are haunted by the possibilities of future meanings, like, 'post(-)apartheid' itself.

> *Like the forest peripheries, which are 'haunted' and 'dark', the night has become a time of the 'unseen', where criminal activity and the trappings of 'failed social orders' lurk.*
> *For many humans, 'night' carries traces of sordid linguistic histories, which carry hauntings into future meanings.*

But, there is also différance in the way 'night' is constituted by humans and by nature. And, for many more-than-human worlds, nighttime is life, and vital for their livelihoods at work, like Fatima's Aloe in ***A Lesson from Spekboom***. Similarly, night bears its own 'structures', even in its 'anti-structuralities', as Fatima resists the oppressive legacies of a post(-)apartheid government that failed to re/address South Africa's divisive politics of water, and as Melumzi and Lwandle are burdened by the structural/systemic inequalities made manifest through (un)sustainable livelihoods.



Tides of the Atlantic Ocean

The cosmological and multiple onto-epistemologies of the 'night' can also be thought through Morton's (2018) 'dark ecologies', based on Naess's (1972) 'deep ecology' movement. Morton takes Naess's call further to view nature as having 'deep' intrinsic value, rather than taking a

'shallow' anthropocentric approach (Madsen, 2023). Morton achieves this by critiquing the 'biocentric egalitarianism' of 'deep ecology', instead suggesting that the world should be seen through 'ecocognosis', or ecological awareness (Morton, 2016), which is dark and strange. Based on Harman's speculative materialist Object-Oriented Ontology (OOO), which suggests that "things exist in a profoundly 'withdrawn' way: they cannot be splayed open and totally grasped by anything whatsoever, including themselves" (Morton, 2016, p.16). In this way, 'night', like language, can be considered a 'hyper-object' (Morton, 2013), like a hyper-night, as climate change can be too, which aims to recognise the deeper onto-epistemological relations of things (and things-in-themselves, or their reifications) and their infinite ontological unknowabilities.

These philosophies offer important contributions to the dimensionalities of 'night', grasping at complexities that transverse temporal and spatial rhythms, but are also subject to Haraway's (1988) 'god-trick', where structural tethers and power relations embedded in these rhythms can be flattened and smoothed over by 'assumed neutrality' through a horizontal ontology, and where claims to being/appearing/existence are subject to differential 'truths'. 'Night-work' in this sense, as Fatima and Lwandle engage in it, are neither neutral nor strange. While ecocognosis may attune us to the deeper/darker relations of their work and livelihoods, the assemblages that form in their lifeworlds are deeply material and relational and 'grasp' at the multiple ethico-onto-epistemologies of survival in a country, and world, facing crises-of-precarity.

The "nocturnalisation of society and diurnalisation of the night" (Straw and Gwiazdzinski, 2018, p.1) requires attention be paid to the 'nocturnality' of intra-actions, noting that nocturnality is a "spatio-temporal concept" (p.1). It is also an ontologically-heterogenous and discursive practice, which critiques the way 'night-time economies', which Shaw (2022) notes is a political phrase, have been "concocted to appeal to local authorities under neoliberal urban governance seeking to increase economic activity at night as part of strategies of urban generation and competition" (p.1150). At the same time, 'night-time economies' also have been foregrounded as the rhythms of the hidden, the shadows, the subaltern, and the illicit. The push-and-pull of nocturnal tides belies the altogether 'invisibilised' night-time economies, which are the livelihoods and breath of lifeworlds being made and remade, whether through phytoplankton or trees, Fatima's 'waterwork' (which I explored through Smith's (1999) 'day/night' lives), or Melumzi and Lwandle's strategies of survival.

I am conscious of these conversations I have had with Melumzi and Fatima in the light of day, and the way their work continues while 'I am sleeping',
the way the night means something altogether different for me in the realm of dreams…

Yet, how we speak about the 'everynight' reveals lives of alterity that have thus far been shadowed by a colonising preoccupation with the light/day, in similar ways to how urban peripheries ('anti-structural') have become entrenched as the productions of labour of the city ('structural') (Peberdy et al, 2017), or how nature has become colonised for human value, noting, as Derrida (1982, p.27) does, that "Being/speaks/through every language;/everywhere and always/".

3 *When everything starts* ----------

a time when the sea could still
speak and all the world's stories
stayed under water

he thinks of the voices in his veins
uncle Grootvis Visser thinks of his people
his people and the santekraam

grond/Santekraam
Ronelda S. Kamfer (2011)

Abalone, or perlemoen, are haemophiliacs (Branch and Branch, 1981), and when they are sharply cut and damaged, they will bleed to death until they are scavenged by whelks, which 'eat them alive'. For fishers that have always lived by/with/from the sea, a blunt, flat-edged knife is used to separate the abalone from its bedding ground, and young abalone in areas that have already been harvested are left to grow. Without a blood clotting mechanism (Branch and Branch, 1981), sharp, quick, unsustainable cuts precipitate abalone to meet a slow, and untimely death…

I think of the way the sharp serrated edges of knives strip the bark from trees in 'bark-stripping' by some medicinal traders,
trees without a 'blood-clotting' mechanism…
their translocation through phloem
and transpiration through xylem interrupted (Stoffel et al, 2020)
… as a quick cut to their skin leaves them to 'bleed to death'…
both the tree and abalone left in a drought without water…

I think of the way phenomenological solidarities invite critique of the 'everyday/night'… the 'knee-jerk' assumptions and prejudices (Malksoo, 2015) we may hold that act as swift, clumsy cuts to the intra-actions (Barad, 2003) and deep, slow relationalities of lived experience… the way urgent, 'sharp' responses to the climate crisis, which don't follow considered and careful indigenous onto-epistemologies that have been practiced for generations, precipitate lifeworlds to meet slow and untimely deaths…

And, I think of the way skilled *isangomas* cut the tubers and bulbs of their medicinal herbs diagonally, in slow, relational ways, so that the plant may regenerate, and the young are left to grow…

But, the abalone's death does not only 'start' at the advent of a quick slice of the blade, and the violences it faces are not only fast, but slow… (Nixon, 2011). Its flat shells and securing 'foot' that resist the turbulent rhythms of waves (Branch and Branch, 1981) are not reminiscent of the flat ontologies that 'assume neutrality' through Haraway's (1988) 'god-trick'… their lived experiences are undergirded by an assemblage of interconnected structural tethers and power relations that, if subject to the swift cut of 'knee-jerk' assumptions and governance responses, may 'eat them alive'.

Hasan and Bleibleh (2023, p.3) assert that "whenever a power apparatus imposes laws or 'strategies' of control, people find coping 'tactics' that allow them to act on or *poach* [emphasis added] opportunities within their environment". In the case of the abalone economy, these power apparatuses have been undergirded by a 'perfect storm', which have created the conditions for Lwandle's night-work. Steinberg (2005) lists them as: the weakened Rand against the US dollar beginning in the 1990's, the longstanding Chinese organised crime networks in South Africa, South Africa's ineffective border policing, and the sociopolitical dynamics of mixed heritage and indigenous fishing communities along South Africa's coast that were ignited

during democratic transition. While I cannot delve deeply into each of these contingencies in Melumzi's story alone, there are a few threads that bear witness to the hauntologies and assemblages that intersect in his and Lwandle's lifeworlds, and which cast shadows in the canopy gaps of 'everyday/night' existence and human and more-than-human liveabilities in our current 'climate'.

The trade routes between South Africa and East Asia paved the way for the significant presence of the "much-abused term" (Steinberg, 2005, p.3) of the 'Triads' emerging in the early 1990's, dominated by the 14k, the Wo Shing Wo and the Table Mountain Gang (Steinberg, 2005). At the time, most government 'crime units' had been focused on antiapartheid resistance, with little attention being paid to these **three** international crime syndicates that had subversively embedded themselves within the Cape. Most abalone do not make their way by sea to Hong Kong from South African ports, rather first being smuggled across borders to Mozambique, Namibia, Tanzania, Swaziland and Zimbabwe. Notably, in the past, border control of Lanseria, Polokwane and Nelspruit airports worked during the day, leaving little visibility for smuggling to take place at night (Steinberg, 2005)…

As Steinberg (2005) notes, abalone shrinks to one tenth of its size when dried, a state in which it can be preserved indefinitely, before being rehydrated.

… Tides swell and recede…

While a natural, 'sun-drying process' of up to two months is practiced in China (Steinberg, 2005), in South Africa, these methods are not indigenous practice, and here, abalone is "shucked, simmered in a preservative chemical, hung on racks in a room heated to 38°C, and left there to dry over a three-week period" a process which 'devalues' the abalone to a quarter of the price (Steinberg, 2005, p.5).

I think of abalone… turning towards the sun… the beating blows of 'drought(s)' 'eating them alive'…

These dry-houses now subversively occlude South Africa's shoreline (Steinberg, 2005), in the way invasive Water Hyacinth colonises river surfaces through its tendrilled growth (Mitan, 2019)…

Steinberg (2005, p.6) writes that "the transition to democracy carried with it a universal expectation that access to the sea ought to open up quickly and dramatically". For 'apartheid-oppressed' mixed-heritage residents of coastal towns and villages, this was exacerbated by a deep suspicion of the ANC's African nationalist movement, fearing further dispossession of the kind experienced by Bessie Head, Fatima and Athol Fugard's characters referenced in ***A Lesson from Spekboom***. For Steinberg (2005, p.6), there was,

> on the one hand the expectation that democracy ought to be coupled with the speedy implementation of a just fishing regime; on the other, a deeply held suspicion that the new government would betray the Coloured working class.

In keeping with the right to 'shared natural heritage' (in this case, the sea) that was enshrined in the post(-)apartheid constitution, "a great many people who had lived their lives on the coastline believed that they were entitled to it, and to a share of the benefits that accrued from harvesting it" (p.6). For these coastal communities, 'abalone money' has "quite literally changed the physical landscape" (p.6), and children could "earn more in a week helping the poachers than their teachers earned in a month. So who wanted to go to school?" (p.6).

I think of Melumzi's call for education, especially indigenous education, to help children have a more spiritual relationship with land…
and his appeal to the fact that 'this is the key to conservation'.
How apt!
How far away we are from such aspirations,
from such (un)common sense!



Abalone and marine-life skulls, sold at an informal trading stall in Hout Bay

But, how do they access this education if the systemic and structural inequalities that prey upon their lifeworlds, that oppress the alternative/imagined futures and hopes for the Anthropocene child (Ashton, 2023), keep education and survival distinct and divergent from each other instead of in continuous dialogue?...
Without indigenous education systems, they are denied access to spaces of onto-epistemological knowledge that may invoke deep relationality with the land.
Without 'good grades' in traditional education systems,
they are positioned as 'failed citizens' (Swanson, 2013) as Buhlebendalo has been constituted, filtered-out of the realms of educational, societal, and hence ecological possibility, precipitating the conditions for participation in informal and possibly illicit economies as an act of

'desperate survival'?
Who then carries the burden of construction of 'failure? (Swanson, 2013).
Is the failure their 'criminality' before the state; or the state's failure to their most precarious citizens?
For whom are they a 'failed citizen'?
Whose life is grievable, and who is 'let die'? (Butler, 2009)

Yet, the conditions that undergird spaces of education are shadowed by human-induced hegemony-and-crisis in the Anthropocene.

Biesta (2015) asserts that education is a teleological practice, and is constituted through stated/enacted purposes, shaping what is possible in education. If education cannot hold a life-affirming teleology, then it is devoid of meaning, stripped bare, instrumentalised to pay homage to the economy and coercive state interests, turning students into pawns. Biesta proposes three purposes for education that need to be in balance: socialisation, qualification, and subjectification. *Socialisation* initiates "young people in traditions and ways-of-being and doing, such as cultural, professional, political, religious traditions", but also, problematically, "reproduces existing social structures, divisions and inequalities"; *qualification* "allows … young people to 'do' something – it qualifies them"; and *subjectification* references the way "young people come to exist as subjects of initiative and responsibility (rather than of objects of the actions of others)" (p.4).

For Buhlebendalo and Meluzmi, formal education does not offer the necessary cultural traditions and ways-of-being and knowing for conservation and a life-affirming relationship to 'the socioecological', in the spaces where they and other young people in their communities live; nor does it enable them 'to do' meaningful things in these terms; nor does it enable initiative and responsibility in ways where they are not the objects of the actions of others, where they become constituted as 'not understanding' or as economically-failed citizens of the state. Who has failed whom here? What does it take for an education to carry the socialisation, qualification, and subjectification that accords with ways-of-being and knowing indigenously and *with* the socioecological? Likewise, for Biesta, 'the who' of education is mostly disregarded in the forward thrust of performativity, 'attainment' and economic utilitarianism, but teaching is the act of being in relation with others, not transmitting information, such that we might learn-and-teach *together*. Melumzi's call for indigenous education is a call (for help) to be *in relation with others* (human and more-than-human) in these life-affirming ways. How have young people in South Africa like Melumzi and Buhlebendalo been so failed?

These thoughts echo amongst my other storied conversations as they lap against the shoreline and,
as they already recede,
they meet the steadiness of oncoming waves,
intermingling with the anticipation
of what comes next (Ashton, 2023)…

But, as Steinberg (2005) reminds, the assemblages that gather around abalone poaching are not limited to the ANC's lack of redress in the systemic inequalities that remained following democratisation, neither are they only motivated by the political injustice of the denial of 'shared natural heritage' that was promised, for illicit abalone trade is also enmeshed with deep awareness and suffering. Steinberg (2005) writes of the ways in which residents of coastal communities are plagued by grief of the damage being done to marine ecosystems.

Coastal peoples, many of whom are *Khoi* descendants, personhood/livelihood is deeply embedded within oceanic humanities, and what it means to be an *aquapelagic* human (Boswell, 2022), just as indigenous people are interconnected with the *ihlathi lesiXhosa* and all aspects of the land/seascape. Boswell's (2022, p.368) research reveals the ways discursive 'marine frames', such as waves and tides, are used to "place themselves as humans-in-the-making in a climate-worried world". Drawing on Helmreich's (2010) idea that humans are "not briny" (Boswell, 2022, p.368), and that they are "bacterial, microbial, and even viral" (p.368), in similar ways to Haraway's (2016) 'compost society', Boswell (2022) suggests that humans can also be "salty: they are profoundly embedded in the coastal world" (p.369). With the diverse ontogenesis of an 'ocean world', Boswell (p.369) further notes,

> achieving 'personhood' is a sensory experience, in which there is a dialogic relationship between sensorial immediacy and semiotic reflexivity. South Africans are not only partible, porous, acted-upon bodies: their sensory experiences are profoundly socially mediated.

These complexities underscore a sociocultural-political-economy engagement with illicit economies, which calls "into question capitalocentric theories of economic change, moving away from grand narratives towards a performative rethinking of the economy to reveal the diverse landscapes of human practices", supported by a "materialist perspective considering economic processes as co-constituted of both cultural and political economic dimensions" (Inverardi, 2021, p.1650). Contributions of *critical race theory* scholarship, much aligned by conservative politics in the US (Safarpour et al, 2024), also engenders critique of how "a politics of criminality haunted by moral panic over deviant behaviours rather than legal concerns" (Gilmore, 1999, in Inverardi, 2021, p.1650) positions abalone poachers as dispossessed of ecological relationality with the sea. There is little recognition that they experience the 'double grief' of having to 'take-too-much-from-the-sea' in order to survive in contexts of systemic inequality in ways that further alienate them from themselves and their indigenous ethico-onto-epistemologies. This accords with medicinal plant traders whose livelihoods elide a 'moral panic' for 'taking-too-much-from-the-land', against state-imposed conservation regulations, while needing to survive.

If there is an assumption that laws are founded on moral order, and that those engaging in criminal activity are automatically presumed to be immorally flaunting environmental regulations, what does it mean for us to think of the ordinary lives who have always held deep ecological relationalities, yet whose methods of survival have been constrained by structural and systemic inequalities imposed in a precarious, heating, capitalist world facing 'Great Collapse'? Perhaps this is yet another dimension of 'failed citizen' that needs grieving, one who is placed in an impossibly invidious situation, with no way out. I wonder:

Whose lives are considered worthy of moral panic?
Whose version of 'morality' do our laws protect?
Whose behaviours are considered deviant?
Whose lives are haunted?

Boswell (2022) similarly writes that these ecological relationalities with the sea, which challenge 'abyssal line thinking' (de Sousa Santos, 2007), perform a 'break' "from established (i.e. state and community sanctioned) personhoods" (Boswell, 2022, p.369), leading to 'epistemic disobedience' (de Sousa Santos, 2007). Thus, the complex life/seaworlds of abalone poachers enter a sociocultural politics of the illicit, requiring an urgent reorientation of how we constitute

'disobedience' and who engages in 'epistemicide' (de Sousa Santos, 2007), and 'cides', (like 'cenes') of many kinds. It also requires critique of how 'personhood' has come to be determined, in law and in other regulatory frameworks, whereby 'epistemic disobedience' is performed through an ethico-onto-epistemological struggle between subjective identities and relationalities with the land-and-sea, and with state-sanctioned 'moral order'.

As Inverardi (2021, p.1650) argues in the context of policing and surveillance in urban geography,

> homelessness and survival have described how changing legal and institutional landscapes, linked to revanchist political economies, have profoundly transformed contemporary cities, creating new patterns of criminalisation and exclusion. (p. 1652)

I think of the forced removals some days of homeless peoples by the roadside
on my daily drive home …
Where will they go next, I wonder?
How long will they be allowed to remain until they are moved again?
What space, if any, for the subalternated can be considered 'home'?

The creation of 'punitive landscapes' in the context of state-conditioned *harmscapes* (Holley et al, 2020) has promulgated the deprivation of "vulnerable social groups of the right to the city, annihilating the space they inhabit, both in the open areas of the city and in the closed places of care" (Inverardi, 2021, p.1650). Through its segregationist ideological operations, apartheid nationalism punished its racialised citizens for their 'identities', sustaining diverse punitive landscapes through 'personhood' policing and surveillance, systemically-depriving these citizens of land, sea and human rights. Thus, a cost has been exacted on these citizens for retaining their ancient and cosmological 'epistemic disobedience'. Such policing, as a legacy of violence under apartheid, is now complicit in the systemic corruption of the poaching crisis. South Africa's apartheid and colonial histories have exacted a heavy toll on the present and future in complex, intertwined, and often invisible ways.

The commodification of the urban space, such as through the 'land war' for Hangberg, through the competing interests of commercial property owners, conservationists, and the long-standing coastal community, has also rendered "particular social and racial groups illicit" (Inverardi, 2021, p.1650) through the extension of legal governmentality into everyday life (Inverardi, 2021), making the human body a frontier of the illicit (Jeffrey, 2020), and "making life itself a site of speculation, when rights over bodily integrity are subjected to different legal authorities and moral regimes" (p.1653).

I wonder,
for the residents of Hangberg,
whose lifeworlds already have been impacted by water-and-food insecurity,
in part, due to planting of invasive species during colonisation…
must they surrender their right to their land (again) now too?
Must these residents now bear the multi-scalar impacts
of global and national adaptation interventions for climate change,
the causes of which they have contributed to the least?

As such, the human body, as frontier of 'the illicit', comes to embody punitive landscapes/harmscapes, mapped onto subjectivities of personhood-and-identity, 'annihilating the spaces these bodies [originally] inhabit' through Euromodernist hegemonies of control, as

well as increasingly through environmental regulations in light of climate change. These oppressions dispossess individuals of land/sea/livelihoods and the sensory/semiotic relationalities with our world that make us who we are.

Coastal peoples have long-standing histories of fishing *kreef* and abalone, before both became endangered species due to overdemand (and thus, the term 'poacher' has adopted new ontologies). Thus, Hangberg today has become a

> site of conflictual political economic interests, engendering value struggles and… co-determining the emergence of new accumulation regimes, through subsumption of previously accepted activities within new spatio-temporal fixes. (Inverardi, 2021, p.1659)

Besides the human body's subjectification, the mollusc encased in 'mother of pearl' calcium carbonate 'nacre' shell (Morash and Alter, 2014) has also become an increasingly precarious more-than-human frontier of the illicit, enmeshed in harmscapes through the illicit economy, but also through its dwindling existence as human livelihoods are increasingly threatened by climate change and 'unconcluded' apartheid legacies. Abalone faces the double threat of unabated poaching due to increasingly precarious livelihoods, but also rising levels of CO_2, changing the pH balance it requires to grow, interrelated with rising global heating, limiting its dissolved oxygen supply and affecting its metabolic rate (Monash and Alter, 2014).

Today, abalone has become the currency of *guanxi* in the Capitalocene, an edible-value product in Asia through which social capital is acquired, and which exchanges hands within elite Asian groups to accrue social rank and human connection (de Greef, 2018). Abalone finds itself at the nexus of economic/social/ecological/political/cultural capital, having been exchanged and converted into an unrecognisable form far from its home on the seabed of a nameless beach below the Sentinel, its right to existence stolen. Dispossession becomes embodied-and-materialised through the extraction-and-conversion of abalone into the illicit capital economy, where their dehydrated bodies become visceral nodal referents to the human bodies who have, like abalone, been dispossessed of water, and their oceanic worlds.

I think of Boswell's (2022) 'epistemic break' from established identities, and ask who is exerting 'epistemic disobedience' as bodies are broken down, acquired, and subsumed into the capital economy?

These debates create new dichotomies: "the anthropocentric vs ecocentric; human utility vs non-human intrinsic value; poverty alleviation vs wildlife protection; indigenous autonomy vs international imperialism; sustainable development vs wildness" (Spash, 2022, p.2), and the licit vs the illicit. But, these conflicts lose

> track of the substantive social and economic mechanisms causing both human exploitation and species loss, social depravation and mass extinction. The link between the actual forces causing nature to be corrupted, dominated and destroyed are treated as if divorced from the forces causing suffering and exploitation of humans (Spash, 2022, p.2).

My engagement with the politics of 'the illicit' in Hangberg does not eschew the need for conservation. In fact, this critique of the systems that seek to prevent abalone poaching may *de facto* appear to support its practice, which I do not, but it rather seeks to offer an example of the

oft-dichotomised nature of conservation itself, whereby human livelihoods and survival are positioned at odds with, or completely disconnected to, ecological welfare. I explored this earlier in relation to invasive species in ***Something About Water***, but these vexations are also present in Hangberg. Here, two conservation conflicts unfold: the protection of abalone, and the removal of invasive species from Hangberg's dune ecologies. Intersecting these conflicts, are the 'ordinary lives' and everyday/night waterworlds of peoples who have long resided in this coastal bay, who are not responsible for the planting of invasive species that contribute to the deracination of their landscapes, waterscapes and attendant foodscapes, and who have long derived their livelihoods and ancestral identities from the sea.

Much of these conflicts are exacerbated by the way "historical development of conservation and how control of land [and sea] use can (under specific institutional conditions) harm innocent people" (Spash, 2022, p.2). This situation often fails

> to place expropriation, land grabbing and violation of indigenous peoples' human rights in its social and political context – racism, patriarchy, materialism, imperialism, and colonialism. (p.2)

The abalone conflicts in Hangberg, and elsewhere in the Cape also require attention to the way conservation itself is caught up in the exchange and conversion of capital: endangered abalone now fetches a higher price due to its dwindling supply, and the high degree of human risk required in securing it due to strict regulatory laws makes it an even more lucrative business (de Greef, 2018). Kereiva and Marvier (2012, p.967, in Spash, 2022) wrote, that a social Darwinist approach to conservation requires recognition that "corporations are the 'keystone species' of global ecosystems", yet, as Tercek (2014) expressed in the *New Yorker* (in Spash, 2022, p.3), this means "trusting the main forces behind ecological ruin to reverse it", in a sentiment that echoes throughout this research in the way that capitalism has established itself as the "most efficient 'remedy'" (Hartman and Degeorges, 2019, p.456) to the crisis it has created.

He is one of those who are racing out over the glistening sea-bed, the past –
detritus-treasure, one and the same – stripped bare.

Loot
Nadine Gordimer (2012)

Conservation conflicts, like the ones I address here, ignore the subjective *experience* of conflict for those who have become enmeshed within the capital economy because of systemic inequality. These conflicts are deeply felt by Melumzi in reference to Lwandle, and other abalone poachers, who experience deep ecological grief for 'taking-too-much-from-the-sea', which I explore in later conversations. These poachers often experience an 'epistemic break' from their ocean worlds, and yet their livelihoods have been 'acquired' by an illicit economy of capital. As Falla et al (2024, p.2) writes, conservation, which reflects the efforts to incorporate "mainstream adaptation into current development interventions fails to recognise the critical importance of power imbalances and climate injustices that reproduce imposed and often damaging 'development as usual' situations", becoming 'sources of unfreedom', in response to Amartya Sen's (1999) advocacy of 'development as freedom'. While conservation debates are taking place in elite policy-making contexts "about different ethical values that underpin why conservation should be done and for whom" (Homes et al, 2017, in Spash, 2022, p.7), such as at the annual COP, and while laws and regulations are being debated in order to effect 'urgent

responses', 'ordinary lives' (of abalone and humans) continue to 'work night and day', their lifeworlds slowly turning rhythmically with the rise and setting of the sun…

I remember the way I had stopped at a stall near the Hout Bay market one morning,
walking amongst the informal traders along the dock…
There, giant abalone shells lay on the concrete on display…
The trader had smiled and greeted me warmly.
I had 'tried my luck' and asked him where the shells were from…
'Everywhere/anywhere', he'd said vaguely,
gesturing to the sea and mountains behind him, wary of me now…
And, I had walked away, turning to see him watch me go, his smile gone,
the iridescence of the shells glinting in the morning light
as tourists approached to purchase one…
'Both near and far from home', I'd thought again,
just like the tubers on the side of Main Road in Kalk Bay in ***Something About Water****…*
'everywhere/anywhere'…
to know where one is from is to be known,
and I wept salt for the 'unknowing' that would trickle through the cracks
of their new owners' shelves on which this abalone would come to sit…
immobile, with no foot to grip the land, no longer ebbing with the tides.

And, while these debates push-and-pull between vested interests that do not hear the voices of the abalone, Melumzi, or the sea… far away from the boats that will crest the tide that evening and the divers that will hide the glow of *entjies* in the moonlight… far from the abalone that sway on the racks of subversive dry-houses somewhere along the shoreline, I am reminded of the way it is through the visibility of 'ordinary lives' that we may come to find 'resistancescapes' (Hasan and Bleibleh, 2023) amidst the 'harmscapes'.

Everyday resistance is "unlike open and visible rebellions or demonstrations; rather, it is typically creative, not politically oriented, and practiced collectively or individually, consciously or unconsciously, in hidden, quiet, and invisible forms" (Hassan and Bleibleh, 2023, p.4). Given the spatial and temporal dimensions of resistance, 'scapes' refer to the sociomaterialities of resistance as enacted within urban environments (Hassan and Bleibleh, 2023) as they are also embodied-and-embedded within the land/seascapes. 'Resistancescapes' brings to the fore the way spatialities form "the central political ground of collective resistance against any form of oppression that 'can be real and imagined… spaces can be interrupted, appropriated, and transformed'" (p.4). Thus, resistancescapes "reflect the tension between communities and state actors in the dynamics of everyday life" (p.4) and the everynight…

Even the "continuous expansion of informal settlements, despite relocation initiatives or forced evictions" (Falla et al, 2024, p.5),
and despite the systemic inequalities that precipitate the conditions of growing informality,
such as those that grew during the COVID-19 pandemic,
are acts of defiance against state power over daily life (Falla et al, 2024), as are urban gardens,
and Fatima's water-saving practices…

Resistancescapes seek to work against the 'wound culture' (Seltzer, 1997) of 'wounded cities', where "trauma sees subjectivity as shattered and fragmented" (Baelo-Allué, 2022, p.1)… and, when, looking down at the shells below, it would be easy to view Melumzi's story in these deficit terms of 'traumascapes', with the discarded bodies of abalone on the shore… the way they are ground into powders, or dehydrated and rehydrated… the human bodies who are positioned

as 'epistemologically broken' from their ancestral shared relationalities with the sea… but this would, again, pave over the often subtle, often hard to locate everyday resistances (Lilja, 2017) that take shape in our heterotopias (Foucault, 1984) and in the body itself…

Resistance is not always the deluge of the tides, the surge of collective assembly,
but it often forms quiet assemblages in individual bodies and small associations, which is missed through the
placial miscellanies of 'disproportionately-disadvantaged',
or 'poacher'.

Lwandle is no longer a poacher, nor is his identity 'governed' by the meanings ascribed to this label...
a label only given as state-sanctioned fishing rights evolved.
He has taken up employment with Melumzi that allows them to traverse the lands of the Cape, teaching others of its beauty,
disseminating the epistemologies of old pedagogies.
Lwandle's body itself has resistancescapes mapped onto his skin…
… tattoos that speak to Melumzi's ancestral and cosmological 'oceanic feeling' he shares with this country…
… of the 'bodies' of water which 'embody' his home…
… of the mountain that colonisers first gazed upon from their ships on the sea…
… the mountain around which the journey through this research now circularly turns…
… reclaiming the mountain
that was appropriated by one of the abalone-poaching Triads in the Cape,
the 'Table Mountain Gang'…

"God dwells in the flesh!", Rivera (2007, in Jahnel, 2023, p. 19) wrote, of embodied resistancescapes for both humans and the more-than-human: "The world is a labyrinth of incarnations" (Rivera, 2007, p156), where "each body is different and carries the visible marks of social relations, social norms, the injustices of racial or gender related hierarchies and violence which embody and materialise themselves in the concrete body – 'in water, air, and soil, as much as in flesh and blood'" (p.156). For Melumzi, these marks may be through his multiple forms of grief, his 'need to atone' for the work of the poachers, the dispossession of his land and sea through post(-)apartheid legacies and inequalities, as they are also on Lwandle's skin, in the water that runs through his veins, his heritage, and his soul. Likewise, abalone, and the sea itself, have become frontiers of these hegemonic incarnations/incarcerations, as they are also the ancient and cosmological materialities and 'vital matter' of the Earth, and their everyday/night work are worldbuilding resistancescapes in spite of the harmscapes that press upon their bodies. I think of all the hands I have held throughout this research journey… the hands of humans-epidermal tissues-water.

With Melumzi walking beside me, I come to understand the way that his and Lwandle's resistances – the way their lives, unerringly shaped by poaching in differential ways, did not enact a return to a pre-crisis state, but rather made something new altogether, like the Magic Tree – enacts its own form of 'reincarnation'.

I watch as the shells below recede a little more with each wave… back into the oceanic arms of their Mother.

4 *Whose way is grievable?* ----------

We die. That may be the meaning of life. But we do language. That may be the measure of our lives.

Toni Morrison (1993)

In what would come to be considered one of the first (Western) 'orally-recorded' histories of the *Khoi*, written by German philologist, Dr Wilhelm Bleek, in his pejoratively-named *Hottentot Fables and Tales* in 1864, a story is told…

The gift of enduring life is given by the moon and brought forth by the mantis (the 'trickster god' of the *San*)…
But, the mantis is outwitted, and his "message of lasting life distorted and inverted by the hare, bringing the doom of death on man – the hare getting his lip split as punishment" (Gagiano, 1999, p.159).
For Gagiano (1999), the hare's "image of disruption"
may be an "unintended evocation" of the white settler colonies invading this land,
a "type of power figure who wants and manages to 'take over'
and who displays his force by controlling the words which determine and rule the future" (p.159).

What then, is the hare's split lip, I wonder,
in the multiplicities of crises-in-the-Anthropocene
that ultimately have created distortions of many kinds?
What punishment now, do we face,
in the exigencies of climate change and structural inequalities?
And what of the moon, who gave Earth its gift,
and the mantis, the god that was outwitted?
Do they grieve for the lives no longer able to endure?
Who grieves for them?

While Gagiano (1999) writes of the ways these stories were intended to 'ventriloquise' the voices of the *Khoi*, especially in terms of "political protest and self-sufficient culture" (p.160), and despite the inherent racialised objectifications implicit in these colonial works, much of the transcriptions and interpretations of a *Khoi* 'worldview' reveals the significance of the body, deeply interconnected with nature, whether earthly flesh-or-human, which are still 'visible' in ancestral belief systems today.

The tattoos on Lwandle's body are topographies of 'worldviews' on his skin…

The interconnectedness of social worlds through the ecological, cosmological and conceptions of personhood, a deeply sensory experience that is socially-mediated, informs an African biocommunitarian worldview that underscores the country's biocultural heritage. In similar ways, the multiplicities of biocultural heritages with which authors such as Kohn (2013) and Tsing (2015) have engaged, and which I have attempted to bring to the fore within this research, their transspeciesm and transmaterialities undergird both posthuman and indigenous human agencies in socioecologies. In South Africa, where continued race-dominant intersectional prejudice pervades much of social life in complex ways for humans and the more-than-human, its diverse forms of heritage, however, continue to be constituted in ways that resemble European/Western categorisations, tribalisms, and homogenous 'bounded' groups (Boswell, 2022), reminiscent of my conversations in ***Something About Water*** on 'ecotones'.

As Boswell (2022) asserts, International Cultural Heritage, known as Living Heritage in South African law, still celebrates "clear-cut and identifiable ethnic groups" (p.365), and heritage is further divided between cultural and natural heritage management, the former of which pertains predominantly to the issuing of permits and management of monuments, and the latter governs the country's national parks programme (p.365). Despite scholarship noting the importance of integrative biodiversity, culture and natural resource management, some of which revealed the spiritual sociomaterialities of the *ihlathi lesiXhosa* (Cocks and Vetter, 2019), which has been inspirational to me and highly relevant to this research, these are not reflected in the country's policy frames. This is further underscored by the limited acknowledgement of ancestral indigenous belief systems, which have been overshadowed by the rise of Christian theologies following democratisation in the TRC – unity under one God – hallmarked by principles of *Ubuntu*, despite the creolised and fluid navigations that many citizens embody through "multiple worldviews" (Boswell, 2022).

And out of the shifting patterns of tenderness and cooperation before her gaze, she formulated her own broad definition of God: God is the totality of all great souls and their achievements, the achievements are not that of one single, individual soul, but of many souls who all worked to make up the soul of God, and this might be called God, or the Gods.

A Question of Power
Bessie Head (1973)

This is also the case for indigenous knowledges, which are oft-invisibilised, or otherwise romanticised and commodified, even by posthuman thinkers (which I have instead sought to make visible and celebrate). As Jahnel (2023, p.5) notes, Tallbear (2017) critiques Jane Bennett (2010) "because in her deliberations of 'vital materialism', she 'neglects to mention that similar views can be found in the cultural traditions of many indigenous peoples'". But, despite their constant inferiorisation by hegemonies of scientistic knowledge, in South African indigenous knowledges, normative communitarian ethics (Ibanga, 2016) have always been deeply interconnected with ethics of nature-relatedness (Ogungbemi, 1994), and an egalitarian ethics of 'live and let live' (Abrha, 2019) (in contrast to Foucault's (2003) critique of biopower and modern sovereignty, which 'makes live and lets die'). These ethics are temporal and spatial and transverse pre-during-'post'(-)colonialism (Grim, 1989). As Meyer (2020 in Jahnel, 2023, p.7) writes,

> this grounded sense of relationality […] and personal permeability is part of a different sense of being in the world than that stipulated by modern Western models that emphasize individualism.

Within the broader *ihlathi lesiXhosa*, Boswell (2022) reveals the way indigeneity is 'sociomaterialised' with respect to 'oceanic feeling' in the Eastern Cape, in 'the *Khoi* way'…

Similar to the way *isangomas* are called by the ancestors in dreams and use medicinal plants, 'healer-diviners' (*igqhiras*) draw their healing abilities and medicines from the sea, who

> navigate between moral worlds and biological domains, the botanical world of herbs important for healing measures, the fleshly illnesses of their patients, and the world of bodily fluids… which form part of the spiritual experience (Boswell, 2022, p.372).

"Spiritual coastal heritage and forms of personhood that shift between realities and realms" (p.372), also means they believe that

> the ancestors and the spirits of those yet to be born reside in the ocean – specifically on the seabed. These spirits are also wherever 'living' water is: moving, eddying water, water that flows into estuaries and waterfalls (p.372).

In other words, they believe their ancestors are present where water is "aurally experienced… which may signal the experience to come" (p.372), the sounds and smells of which are essential for healing.

Like the Philippi Village farmer who told me to place *impepho* under my pillow to invoke a visit from my ancestors in ***Something About Water***, sea salt will do the same… (Boswell, 2022). And, salty seawater is drunk alongside the *Kankerbossie* (Cancer Bush) for good health (Boswell, 2022)…

I think of the man who stopped Melumzi and I on our ascent up the Sentinel…
perhaps he had been right all along that the plants of the mountain cured cancer in these material realms…
I wish I had known this when we spoke.



A view of Chapman's Peak and the Atlantic Ocean

Even in 'disturbed waterways', ancestral spirits reside (Boswell, 2022), and their very disturbance alludes to their presence. I am reminded of the differences between natural/unnatural disturbances… worldbuilding/worldending:

> Failure to notice such signs and act upon them can result in personal strife… Humans are guided by water eddies, birds, dreams and the dead. Their stories also tell of the long durée of time. [They] can bypass colonisation and apartheid to reach a replenishing *ancestral time* via ancestrally constituted personhood. (p.373)

It reminds me of the political ecology of time in ***A Lesson from Spekboom*** during Day Zero, and the 'loud urgencies' of crisis that silence the quiet, slow progression of daily resistance… "The ocean is said to not only contain the ancestors of the Xhosa but the ancestors of all humans. Thus, the sea is a *container and mediator of spirit life*" (Boswell, 2022, p.373).

In Boswell's (2022) research, which I draw on substantively in this conversation, fishermen felt a deep sense of responsibility for protecting the sea, and a need for humility in this noble charge given the ocean's capricious and transcendent nature:

> Being human is not something unique to humans. Sentience, vulnerability, violence, playfulness, and intelligence – human capacities, can be found in varying locales/species of the oceanic world. (p.374)

Perhaps, here, we find an ancestral relational anthropomorphism that has always preceded our Western-led critiques of embodied personification.
It gives 'food for thought',
as to whether our critiques may, at times, forget, that in our pursuit of socioecological justice, there are ways-of-being that have always preceded us...
I am reminded of the scholars who denigrate the use of 'invasive species' for its pejorative taxonomy…
forgetting that this non-decolonial, humanist critique, in itself, perpetuates and keeps alive an ontological violence.

Of particular significance in Melumzi's story, perhaps, is the way fishers, subjugated by ongoing legacies of the state, have developed deep relationalities with the sea as their protector:

> the sea, however, was there to provide the empathy that the state could not and would not offer. The sea was [the] constant… One must revere the ocean, respect it, and dance with it when it is full of storms. (Boswell, 2022, p.375)

The interconnections between wind-and-water (both personified) make coastal atmospheric and climatic cycles a deeply mediated relationality beyond the physical. There is also balance between the sea-and-moon (twinned), and the night-time shadow work of illicit activity at sea speaks of a 'break' from these symbiotic relationalities, where "humans seemingly sink back into their conceit…" (Boswell, 2022, p.377). I am reminded of Tsing's (2015) similar charge of the modern human conceit in political ecology…

Many of these relationalities with the sea echo that of those with the land… and together, they offer a 'container and mediator' of our world, replete with complexities and natural disturbances, in rhythmic balance. They bring me to a state of wonder…

What then, of lives whose aural experiences of the world are also undergirded by grief for that which has 'taken-too-much-from-the-sea/land'?
What of the ancestors in human-disturbed waterways?
What of those who no longer 'notice the signs' of living water,
and what of those when the water no longer runs?
What of the unborn spirits and children who are no longer able to lie on the seabed?
What of the climatic cycles that become ever-more turbulent and unpredictable?
Whose 'way', like the Khoi's, is allowed to endure?

Fatima is plagued by eco-anxieties spurred on by drought(s), as Melumzi experiences immeasurable heartbreak for Lwandle 'taking-too-much-from-the-sea' in pursuit of his livelihood, a push and pull between the ancestral humility to protect while faced with sociomaterialities of precarity. With deeply symbiotic relationalities between the *ihlathi lesiXhosa* and the sea, what of these land/seascapes who have always provided protection when the state has not?

Today, many have begun to experience sensory semiotics of 'eco-grief' and 'eco-anxiety' in the exigencies of climate change, yet, in the multiple hauntings (both invasive and ancestral) of our world, for those for whom Day Zero has been everyday/night, and where 'loss' has become "life's quiet companion" (Vargas et al, 2020, p.186) for many who have endured losses for generations, both fast-and-slow, whose way-of-being is allowed to be mourned? As Butler (2016) asks, whose lives are grievable?

I wonder about the empty days, more frequent,
the solitary standing in the dark at the edge
of something vast, sea and sky,
throwing a thin line into the give of it
and waiting, silent and waiting,
until something pulls
against your weight.

Give
Gabeba Baderoon (2013)

As Tuan (1980, in Boyd et al, 2023, p.2) wrote, much of our climate anxieties are manifest in "the paradoxical fear that plants and animals, even rivers and lakes, may die through human abuse. The fragility of nature, not its power, now makes us almost constantly anxious", a 'topophobia' (Boyd et al, 2023) that has arisen as a "dynamic anxiety prompted by the social and economic conditions, contested aesthetics and degradation of places and landscapes" (p.2). In the realm of 'psychoterratic emotions' (Albrecht, 2019), which acknowledges that ecological emotions matter, 'solastalgia' (Boyd et al, 2023) has emerged: "a form of psychological and existential distress connected to the earth, particularly to pain or distress caused by the loss of solace and sense of desolation connected to the state of one's home or territory" (p.3). I think of the way the sea and *ihlathi lesiXhosa* has always provided the solace when (un)homeliness could not…

Solastalgia, Albrecht et al (2007) argue, is a kind of 'homesickness' that can arise for someone who remains located within their home environment – rather than having moved away from it – precisely because the place (the local environment or nature) has changed, maybe itself become 'sick' in some way (if we speak of '(un)healthy' places). (p.3)

Solastalgia is then an "existential outsiderness" (p.3).

I am reminded of my own feelings of *suadade*, and the privilege afforded me by having left-and-returned…
'home'sickness takes many forms,
but my 'existential outsiderness' has never 'remained located'…
insiderness/outsiderness takes many forms.

And, as a moment of deep somatic learning and a 'moment of articulation', I am reminded of a man whom I sat with during our backyard chicken workshop in ***A Lesson from Spekboom***, who told me I was lucky to have been *able* to leave South Africa…

What then, of those, who already grieve for the dispossession of land, identities and homeliness by settler colonialism and extractive capitalism, who now also grieve for the loss of the Earth facing climate change? Boyd et al (2023, p.3) refer to the latter as 'ecological grief', or 'eco-grief': "the grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change"… with especial reference to the anticipatory grief that entails "witnessing the end of a beloved species, as well as the erosion and degradation of related complex knowledge systems" (Cunsolo et al, 2020 in Boyd et al, 2023, p.3).

I think of the way the moon and the mantis mournfully watched the hare's lip being split…

Perhaps with especial relevance for Demos's (2013) ghosts is the way 'arrogant death' (Lehman, 1997) is enacted through the necropower (Mbembe, 2003) of global hegemonies, such as through the apartheid state, industrialisation and now Euromodernist approaches to climate change, and how mourning itself is "embedded in powerful, colonial discourses of white melancholia, intertwined with modern Western humanism" (Vargas et al, 2020, p.187). For the *Khoi*, and abalone, the systems that have transformed them into "disposable, ungrievable bodies" (p.187) have now also engaged a coloniality of mourning, where the "embodiments of ancestral knowledge can only be mourned as relics of the past, while denied access to futurity" (p.187).

South Africa's 'Living Heritage', now reduced to the management of monuments while abalone grow fewer and fewer… the way even ecological grief is viewed as incommensurate with 'illicitness' because of the 'epistemic disobedience' of being a 'poacher'… the way one is "viewed as 'undeserving' of public sympathy and/or mourning if one is believed to have caused one's own condition through ill-advised behaviours" (Spratt, 2022, p.474). Such is the case for Butler's (2016) critique of noun-centred language terms, like 'poacher', which,

> label, fix, classify and 'freeze' individuals and carry within their structure an embodiment of judgement… you cannot label someone… as bad or good and expect him/her/it to be anything else. (p.720)

Melumzi weeps salt…

As such, Boyd et al (2023, p.3) call for a "new form of mourning, a new form of ecological ethics and politics to mourn beyond our species, beyond human bodies, to expand what constitutes a mournable body". In the context of abalone poaching, and the politics of water-food-livelihoods, where 'default trust in the state' (Spratt, 2022) through regulatory frameworks has

led to what Giroux (in Spratt, 2022) drawing on Foucault refers to as a 'biopolitics of disposability', the label of 'poacher' has been ascribed an objective identity of what constitutes 'good'-or-'bad' (as 'invasive species' have been also, as in ***Something About Water***) predicated on the idea that "freedom of choice is available to all in equal measure for those who supposedly live in democratic societies" (Spratt, 2022, p.474). Yet, 'deservability' measures some lives as more valuable than others, lives that are 'grievable' (Butler, 2016), "lives that are deemed worthy of mourning after they are lost because they are initially recognised and valued as lives" (Spratt, 2022, p.474) as opposed to those "that cannot be lost, and cannot be destroyed, because they already inhabit a lost and destroyed zone" (Butler, 2016, p.xix). I wonder…

Whose lives, then, are deemed grievable when abalone already inhabits a zone made lost and destroyed through capitalist extractivism, climate change and a nature/culture divide?
Whose bodies are mournable in a context haunted by the legacies of settler colonialism, in landscapes 'lost' through dispossession and segregation?

I ask these questions, knowing that they are difficult to answer, but with the intention to raise their contributions in my thinking here, as I hope to contribute in turn towards similar kinds of 'emancipatory' research, wherein what 'binds' us in socioecological justice studies are "*common questions*, and not *common answers*" (Biesta, 2019, p.551).

What determines a grievable body in our current crises of the Anthropocene find their roots in Western-led ecophobias and Panphobias, which have historically positioned "the inclusion of humans in the political order of the state [as] achieved through exclusion of all the ecological, cultural, and ethical bonds that connected and rooted them in their previous living world" (Hartman and Degeorges, 2019, p.462) – the biopolitical body of sovereign power versus subaltern collective living through *zoë*. It is like the concrete buildings and tarred (asphalt) roads that bar nature from us, like the motorway outside Newlands Forest. 'Catastrophe-in-the-Anthropocene' now "blurs the separation between supposedly passive objects (de-animated matter) and the agency of (human) subjects" (p.463)… although this human agency is still understood to be the agency of the West… and wild(er)ness's "feral ghost, freed from the constraints of time and space, can now suddenly appear and prey upon us when we are least prepared – in the form of extreme climatic events" (p.463). As Hartman and Degeorges, 2019, p.464) write of Panphobia:

This is the panic that…

> takes hold as we slowly awake to an understanding that the ecophobic civilisational balms developed over the Holocene are in fact the poisons that are now killing us and compromising the integrity of our home… [And] in a paranoid way (this is reflexive modernity after all), our fear of nature turns back onto the works and accomplishments of civilisation itself… should we save sheep from the wolves or protect the wolves in order to save the mountain from the grazing sheep? (Hartman and Degeorges, 2019, p.464)

But, these phobias are also in reference to Western(ised) humans,
as this is not the way of the Khoi,
and Hayles (1999) reminds us that it is only when one sees oneself
as separate from nature that one is likely to experience such panic.
In this 'reflexive modernity',
do we now dispossess the residents of Hangberg from their land (again)

to eradicate detrimental invasive species?
How do we protect abalone without entrenching further livelihood precarities for ancient coastal peoples?

Posthuman approaches remind us that

> while never denying the 'slow violence' of environmental degradation (Nixon, 2011)… Consolo (2017) communicates the hope that incorporating grief of and for the non-human into climate change discourse and action, 'staying with the trouble' (Haraway, 2016) of loss and 'tarrying with grief' (Butler, 2004), may propel a fuller, richer identity with the non-human (Boyd et al, 2023, p.3).



A reminder from Heldeberg Nature Reserve

If "climate anxiety is not simply an individual problem, but something arising out of our perceived human vulnerability in relation to the environment or nature" (Boyd et al, 2023, p.4), then "vulnerability as the power of exposure is defined as an ethical and political means to come to terms with – rather than disavow – the untenable, painful and unacceptable aspects and disasters of posthuman times" (Braidotti (2019, p.168).

Such an affirmative stance encourages an ethics of care as a "way of valuing *what we are already capable of becoming*" (Braidotti, 2019, p.168) through embracing pluralities of ways-of-knowing/being. Socioecological grief thus also "affirms the value of the relationship with the thing that we have lost, or are in the process of losing" (Boyd et al, 2023, p.4). Whereas climate anxiety pertains to the fear for the individual, that climate change will cause loss for humans

and thus is felt "narrowly, about a possible passing of the human" (p.4), "ecological grief is a concern for the fate of *zoë*" (p.4).

While I engage with these arguments in ***Turning Towards the Light***, this thinking leads our hauntologies here: to an understanding that "'rather than emotional resilience, learning to live with climate change aspires for affective transformation' (Verlie, 2022, p.8). If we are to live differently, then we must learn to feel and think differently" (Boyd et al, 2023, p 5).

But, if we are to live with climate change, 'feeling' and 'thinking' must embrace the ways-of-being of those that have *always* 'felt' and 'thought' with affective transformation, and those who already live with the slow-and-fast untenability of disaster, as we also cannot ignore the unjust and unequal spread of how climate change is *experienced.* But, addressing such injustices, how do we reach back into ways-of-knowing/being of the past, that we can use to think with/think through for a radically hopeful future? Without a romantic nostalgia, how might some life-affirming ancient ways-of-knowing/being help us make possible the possibilities of a hopeful future anew, as a way of rebirthing such futures?

I think of Demo's (2013) ghosts…
the way the coloniality of mourning has trapped their embodiments
in a liminality of past relics… 'living heritage'… and denied access to futurity…
lives that have been denied their grief,
yet who continue to live with it
as a 'quiet companion'.

And, I think of the way I have carried my own grief on the tides of these shores
for the land that I love…
the way I have wept for those in the informal settlements during the increasingly catastrophic deluges of rain in this Cape of Storms…
the tears I shared with Melumzi as he gave me the gift of his and Lwandle's story on a windy day on the slopes of the Sentinel…
the way each walk across the veld with CREW,
identifying threatened species felt fragile and precarious…

I think of the way Melumzi's eco-grief is not the grieving of white melancholia, rather a grief borne of the feeling that his people have betrayed the sea and the way-of-the-*Khoi*, because of the precarities that press upon their lifeworlds and livelihoods… that Lwandle was 'forced' into a position of – in his terms - having to 'take-too-much-from-the-sea' and feel he was betraying their own way-of-being.

I think of Fatima, who mourned the water that no longer ran during the drought, and the socioeconomic precarities facing her family.

I think of Buhlebendalo, who grieved the loss of his opportunities to study agriculture, and now grieves for having to kill the colonially-planted invasive Gum, his favourite tree…

But, I also think of the way the *Khoi* visit the sea to *feel* the climatic cycles and atmospheric changes…
to smell and to hear the 'living water' in order to heal, and that there is hope to be found in these old sensory pedagogic rhythms.

I think of the way Melumzi mourns the sea, and in turn, 'gives back' to the land…
a sensorily and semiotically mediated 'reincarnation' of an embodied resistancescape…
I think of the way Fatima saves her water for her seedlings, and finds resistance in her own *ihlathi lesiXhosa*…
I think of Buhlebendalo, who walks amongst the land each day…

And, I think of the moon and the trickster-god mantis who were deceived of the gift of enduring life…

I am reminded of the way the sea is also 'trickster'…

Perhaps to lay these ghosts to rest, to turn towards our land/seascapes to collectively mourn our grief that is a threatened coming but also an already past/present, it has brought us here: to turn away from the individualistic, Western, internalised dichotomies that have led us to the brink of crises-in-the-Anthropocene and the 'arrogant deaths' of white melancholic ecophobic anxieties, towards the "distributed, atmospheric, more-than-human 'becoming'" (Boyd et al, 2023, p.5) with the Earth, the 'quiet companions' of ancestral hauntings, the sensory experience of the rhythms of our world that heal us all… that which has always been the *Khoi* way.

5 *Land as first teacher* ----------

Cry, the beloved country, for the unborn child that's the inheritor of our fear…

Cry the Beloved Country
Alan Paton (1948)

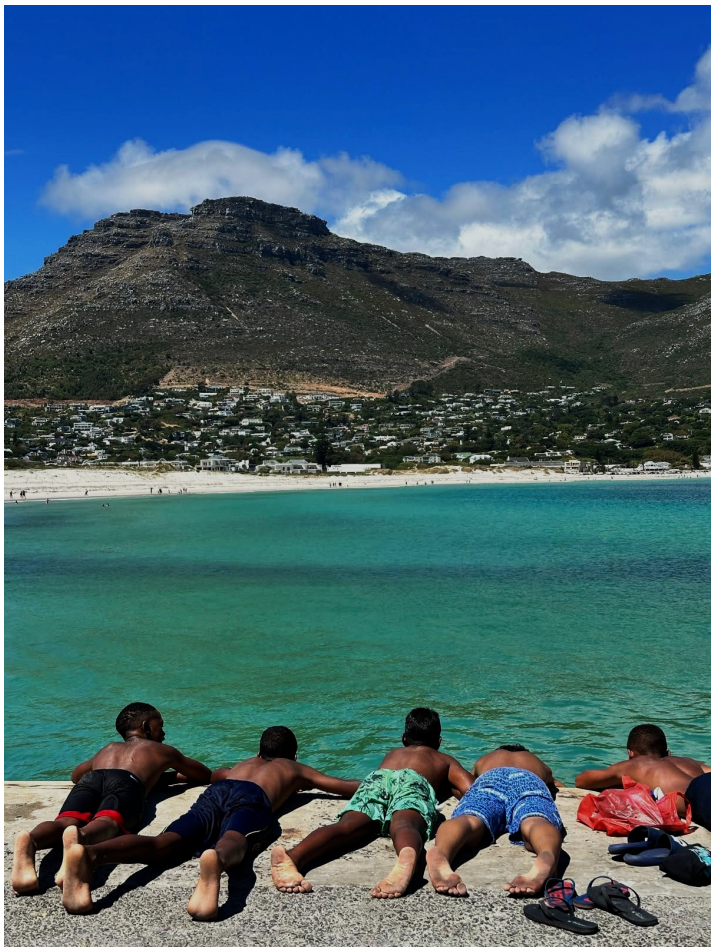
The Anthropocene child figures an 'unseen' shadow throughout this writing… the idea that for all the worldending/worldbuilding enactments that take place in constant rhythms in our world, they are endlessly asking questions of reproductive futurism (Edelman, 2004 in Ashton, 2023) to engender hope-and-resistance for those who both precede and may follow us… the 'unborn spirits' that may be birthed from the seabed… perhaps.

For Buhlebendalo, Fatima's children, Caleb's children, Lwandle's child, and the children who are always present in these stories and who exist within-and-alongside the ecotones of this research, *education* ebbs-and-flows-and-weaves like mycelia through their own worldviews and their 'becoming-withs' in our world. Towards engendering hope, childhood, for many scholars, has increasingly turned towards 'reconstructive' practices (Ashton, 2023, p.14) which

> represents the symbolic encapsulation of a desired social order made through a desirable future: the figure of the Child is *the* 'redemptive agent ensuring futurity' (Sellers, 2013, p.71). Yet, the Child is a figure of the horizon – always ahead, always obscured, always out of reach.

And, I am aware how, even in my own writing, they may appear to be always 'out of reach' within the enormity of the complexities I face in these conversations. But my engagements do not hold fast to 'centralised' figures, albeit that some may seem to be more prominent protagonists, for my companions, and myself, are perpetually engaged in "webs of world-making relations" (Palsson and Swanson, 2016, in Ashton, 2023, p.14). The Child is thus not a forgotten figure, and in some respects, I, myself, feel as though I have not lost my grasp on my

own childhood while walking the same paths I once walked in the early 1990's, and education is not a 'complete' journey that I will close and dispense with as one might do a chapter.



Hout Bay

Today, the child-figure is often spoken of as "renewal of the barren world through the miracle of birth" (Edelman, 1998, in Ashton, 2023, p.14), which has become increasingly precarious in a multi-crises world, which "now stands for a future out-of-date" (Gill-Peterson et al, 2016, in Ashton, 2023, p.14), no longer "the pledge of a covenant that shields us against the persistent threat of apocalypse now – or later" (Edelman, 1998, in Ashton, 2023, p.14). Barnsley (2010, in Ashton, 2023, p. 14) now asks: "what happens if the child-image fails to suggest a future?", while Ashton (2023, p.15) counter asks, "what if the future fails to suggest a child-figure?".

I think of the way Fatima's children beg for their bath,
water that is no longer for them, but instead for the seedlings that provide them with food…
and I think of Caleb's children who toil in the garden before school each morning,
and who tell their peers of this work.
But, I also think of Lwandle's child,
who nearly lost her father to the abalone syndicates (and the precaritising capitalisms) that
prey upon Hangberg…

The idea of 'no-future', however, is not the case for all children, and for children who have always been born into the violences of racialised contexts or spaces of alterity, "the Native Child is not the guarantor of the reproductive future of white supremacy; it is the nit that undoes it" (Smith, 2010, in Ashton, 2023, p.15). As Muñoz (2009, in Ashton, 2023, p.15) writes: "The

future is the stuff of some kids. Racialised kids, queer kids, are not the sovereign princes of futurity", and Black children have often been denied these assurances of futurity, while also being denied innocence… a relationality where a "universalised conception of the innocent child effaces gender, class and racial differences, even if it holds those differences in place" (Jenkins, 1998, in Ashton, 2023, p.15). Perhaps, most significant of all, is the way "the ongoing colonial theft of minerals, bodies, and lands gets reframed in positive terms of accumulation, modernisation, and progress – a #BrightFuture" (p.17), yet "the racial blindness of the Anthropocene as a wilful blindness" (p.17) simultaneously enacts a spectral figuration of the child as a "not-quite human being" (p.17), in similar ways to how the more-than-human is still positioned as 'not-quite being' in its subordination for human value.

it's me
your mother
but his eyes are on the brink of leaving me
the earth lies unfinished
the wind splinters from him the last that is child
and I tighten about him
past all guilt past all neglect
I love him
way
way beyond my heart

Summer poems for the beloveds
Antjie Krog (1997)



One of the three 'Thembis' (grandmother, mother and daughter) of Philippi Village, representing the past, present and future

For Styres (2011), 'land as first teacher' is based on old pedagogies of circular reflexive storying, wherein land is the primary caregiver of the child and source of rebirth. Land, in this sense, "includes the earth and its relation, water" (Archibald, 2008, p.73), but also the "way discourses, ideologies and philosophies embedded in land in the form of ancient knowledges and storying are used to inform pedagogy from a holistic perspective that seeks to balance the physical, cognitive, emotive, and spiritual elements of human interaction *with* and *within* the learning environment" (Styres, 2011, p.722). With land as primary caregiver, "the learner enters into the environment to explore and gain knowledge and understanding of how to be in relation to land… with every storied (re)membering (lived and embodied experiences), journey, struggle, process and transformation" (p.722).

When Melumzi speaks to 'education being the answer', his statement is referential to the 'way of the Khoi'… peoples that have always learned from the land, land that became their primary caregiver, an 'education' that is no longer the stuff of modern classrooms with four walls, and neoliberal curricula that do not 'teach' the Anthropocene Child of that which is "on the very point of speech, a kind of articulated thinking that fails to reach the ultimate translation in proposition or concepts, in messages" (Kulchyski, 2005, in Styres, 2011, p.722)… for 'land as first teacher' "extends beyond the borderlands of traditional mainstream conceptualisations of pedagogy" (p.722).

This 'education' shapes how "practices can be (re)membered, (re)claimed, (re)constructed and (re)generated within diverse contexts (Styres, 2022, p.722), informed by "ongoing reflexive inquiry, stories, relationships" (p.723), that does "not take away from land or otherwise harm the natural world to create and deliver curriculum thereby perpetuating colonial relations of exploitation" (p.722). It is through *this* kind of education, and learning, that Melumzi hopes will engender futurities for children who may not find survival by 'taking-too-much-from-the-sea', betraying their own ways-of-being, and sense of selves, in the process.

As with my own circular journeying through this research in Cape Town, and in the forms of reflexive and *critical rhizomatic narrative* as research methodology that I have embraced in this writing journey, these pedagogies that Melumzi calls for are based on circularities of indigenous storytelling. "Learning stories… about the land, while being on the land" thus becomes imperative for "understanding one's place in the past in order *to be* in the present" (Archibald, 2008, p.74). And, as the self can be understood through these journeys, they become a continuous unfolding of self-reflective inquiry, as I have sought to honour, and imbricate within this research. However, this way of storying, and of education, where 'land is first teacher', means that the journey does not start with and return to the self (Cole and Knowles, 2000) as an individualistic self-referential practice, but rather it "starts with and returns to the land, [where] self is not/cannot be set apart from the interconnected and interdependent relationships embodied in land" (Styres, 2022, p.719).

It is through this, the *Khoi* way, through the indigenous circularities of story that I have sought to engender my own journey through this research, hoping to honour a praxis of education that does not perpetuate forms of exploitation and extractivism…
and it is a lifelong story that will extend long after I write the last words here. For education is an ongoing, unfolding inquiry of *becoming-with* all the humans and more-than-humans of our world, and like 'tree-texts' (and in Melumzi's story, perhaps, 'sea-texts'), our lives are deeply entwined in storied acts as living texts.
My story has begun and returned to the land, as it has in my writing, and in my roots/routes that returned me to my birthplace.

Lwandle, one of the souls born onto the seabed of the Atlantic on the shores of Cape Town, has returned to the land, where he walks amongst the fynbos as a teller of its tales.

Old pedagogies are themselves, resistancescapes, against the modernist contemporary modes of education, which see students as passive objects, waiting to be 'filled' with content knowledge for the attainment of pre-specified learning outcomes (Biesta, 2019). Biesta (2017, 2019) and many other critical educationalists, advocate for a conception of education and teaching as the exercise of ethical relationships and communion with others, where human beings learn and come-into-their-own through deep senses of relationality with others and the land, and where education is the text by which dispositions of care, curiosity, ethical awareness, attunement to the world and others are fostered, where love may be learnt. To achieve the kinds of emancipatory education of which Melumzi speaks – for both the human and more-than-human child – this would require resisting the idea that education is about transmission of pre-existing 'accredited' knowledge, and to receive such knowledge passively and unquestioningly.

Many educational research scholars have challenged the transmission model of education, offering critiques from different perspectives and arguments (Morrow and Torres, 1995; Green, 2013; Safari and Rashidi, 2015; Tolgfors, Backman, Nyberg, and Quennerstedt, 2020). One of the most pre-eminent educational theorists, Paulo Freire (1970), a Brazilian scholar and critical educational philosopher, countered what he referred to as the 'banking model' of education, seen as a necessary constituent of and functional mechanism for perpetuating capitalist relations in society. As a counterpoint, Freire forwarded a critical pedagogy that fostered 'critical consciousness' or conscientisation. A follower of Freire, Moacir Gadotti (2009, 2010), revised Freire's thinking to consider 'ecological consciousness' as a necessary contribution to social justice in education through a praxis of 'ecopedagogy', thus extending critical pedagogy conceptually and in practice. Artsbased educational researchers, such as Rita Irwin (2017), in respect of A/R/Tography, Carl Leggo and Holmes, (2020), Poetic Inquiry, Lynn Fels and Belliveau (2008), Performative Inquiry, Dalene Swanson (2004, 2008), critical rhizomatic narrative, and others, have critiqued transmission and normative models of education through emergent critical, creative, narrative, and/or experiential pedagogies, concepts and practices of education in counterpoint to the assumption of the 'transfer of knowledge'. In this view, knowledge is no longer 'content' that is transmitted from a knower to non-knower, but is relational, reciprocal, every emergent and becoming, and it might feel, touch, listen, and love with others.

Transmission approaches to education are but one area of critique and contestation in education, but who holds sway over policy and national curriculum of public education, (mostly national governments of all ideological varieties but also increasingly 'big business' and the private sector), may be at the heart of the politics of education and its public discourses. Prevalent, taken-for-granted understandings of education in the public sphere, about what it is, what its purposes are and for whom such education is intended, and what education can or cannot do, or what it should or should not do, are at the forefront of such contested discourses, nationally and internationally. Critical sociological discourses on education have included commentary on how education may operate to transmit or engender particular values and dominant ideologies that are invested in discourses of power and control, often in ways that construct racialised, gendered and othered identities [see Bernstein (2000)]. Such discourses of power through education not only shape identities, but also what is possible to know, see, or be through education, or indeed whose life is dispensable and whose counts (Butler, 2009). There are few better examples of a national education system that is so highly contested and that has arguably failed the children of South Africa so consistently over an extended period of time

than the South African one, from before the implementation of a highly-racialised Christian National Education (CNE) of apartheid South Africa, to the current system for which interventions around a national transformation agenda have been ongoing since the country's 'transition to democracy'. One of the most pre-eminent educational scholars to weigh in on the political sociology of the South African education system over an extended period of its recent history is Crain Soudien (2010, 2021), who so clearly articulates the ways in which race, class, gender, and other forms of social difference have been produced and reproduced in South African schools and higher education institutions through the national education system, curriculum and policy across its history [see Soudien and Chisolm (2021)]. In so doing, Soudien, and other critical education scholars, highlight the failure of the South African education system to achieve the transformative aims of an inclusive, non-racial South Africa.

While Soudien addresses the issue of transformation on a political scale that is national, in grappling with the struggle for democracy in/through education in the South African context, others have engaged differently with the concept of 'transformation' as it relates to education. Freirean critical pedagogy embraces a notion of transformative education/learning that becomes the avenue through which critical consciousness is fostered. Others, such as Swanson (2011), have remarked on the limitations of transformative education in that it privileges and centralises the individual above the collective or the structural, and advances linear, progressivist modes of learning that hold the status quo in place. In accordance with its tenets, as Mezirow (1991) asserts, it is the individual, purportedly free from the fetters of cultural historical ways of learning and intergenerationalism, who is to be transformed by transformative education. In critique, Chet Bowers (2005) sees the Freirean approach to transformative learning as 'the Trojan Horse of Western Globalisation'. This is distinct from an education that can foster collective consciousness towards anti-oppressive, collective actions and make possible the promise of structural change (Swanson, 2011). Alternatively, Elizabeth Lange's (2000) research in Adult Education breaks the linearity and counters the concept of "transformation" with "restoration" as pedagogy that enables one to re-turn to who one was as a child. Dalene Swanson (2011) also offers an alternative to transformative education, one that works against a modernist, progressivist, individualistic education, "a rhizomatic pedagogy and praxis of glocalization" (p. 129).

Old pedagogies or Indigenous pedagogies are resurfacing or re-turning through the teachings and writings of Indigenous scholars (and allies), such as Vicki Kelly (2014, 2016), Gregory Cajete (2015), Peter Cole and Pat O'Riley (2020), Sara Florence Davidson (2021), Cynthia Chambers (2006), Four Arrows (Wahinkpe Topa, aka Don Trent Jacobs) (2024), among others, and elders who are re-awakening these lost/ forbidden/ forgotten/ re-remembered practices and their ghosts. These are scholars who seek to interrupt the monotone, standardised, forward march of progressivist, capitalist education systems, and instead speak to a pedagogical relationship with the human, more-than-human, and landscape.

In South Africa, there has been some attempt to bring Ubuntu philosophy, which is more attuned to the land, to educational praxis, albeit that Euromodernist thinking is still dominant and attempts to cement what it is possible to think and do in education in South Africa. It is unfortunate that such rigidity and lack of compromise is often achieved in the name of 'transformation', not without it (Soudien, Kallaway, Breier, 1999).

Walking with and engaging with the land is an Indigenous practice, as Gillian Judson (2010; 2018) and Styres (2011) remind us, one which offers the potential for restoration (Lange, 2023), renewal (Arendt, 1958), and radical hope (Lear, 2008), as an alternative to the ghostly

deathliness of a modernist status quo. We would be (other)wise to remember that Education might be conceived of and practiced as a deep responsiveness to others – human and more-than-human, to the land and to the world as it is and as it might be.

I am also reminded of the way Naess (1993) speaks formatively of the way the socialisation and education of children in early-years' classrooms are often formed within the vicissitudes of poverty, and teachers are not obligated to 'teach' them of life-as-beautiful, or nature-as-love, "nor to reveal the difference between life quality and standard of living in their interaction with the children" (p.70).



Philippi Village

I wonder what Fatima, and Caleb's children, and now Lwandle's, may learn from
things taught beyond the institutional classroom
and how this shapes their everyday 'quality of life'…
watching as life grows amidst the invasive thickets,
and as bathtubs store water to be shared with others, as they are shared with the spinach.
I wonder how these relationalities shape their lifeworlds
and the lifeworlds of others (human and more-than-human)
they encounter in turn.

I think about the way my own upbringing instilled such a relational ethic both within-and-outside the 'classrooms' of British Columbia's forests and the peaks of the Western Cape…
more-than-human beings have always been my siblings and my family and my teachers.

We share roots, no matter the distances I have traversed. I think about what it *means* and what is *sensed* as a child of the Anthropocene today, as the ecotones of the 'classroom' become increasingly porous and precarious and face their own invasions of many kinds.

Perhaps with teleological significance to this research, Naess (1993) also writes that in university classrooms, "even when life forms are studied, the style in which they are taught is that of an observer, not a participant. Excursions are rarely conducted in silence so that those involved can hear clearly what trees, tiny animals and plants are telling" (p.70), and a result,

> they are not taught to express what they *really* experience and what gestalts they participate in, leaving out subject/object relations. They may get their doctor's degrees without *sensing* what they are talking about. And if they *have* gained 'cognition' (not only knowledge), they are not stimulated to consider how to *inspire* or *lead* others, without many words, to acquire what Spinoza calls 'understanding love', or 'loving understanding' (Naess, 1993, p.70).

I feel this deeply in my own research and writing, and the 'affective intensities' that arise through my love of this land…

But, Biesta (2019, p.551) asks, what can education offer children of our many 'cenes' instead, if

> we start from the idea that our subject-ness is not constituted from the inside-out – from our needs or desires, for example, or from our intentions or our acts of sense-making – but rather emerges from the outside-in, as a response to what speaks to us, to what addresses us, calls us, and through this, calls us *forth*, calls us into existence and into the world?

The kind of urgent education Melumzi seeks thus teaches us to ask ourselves "whether what we desire is what we should be desiring; whether, in what way and to what extent our desires are going to help or hinder in living our own life and our life with others well" (Biesta, 2019, p.551). As a result, "existing as subject, or better, trying to exist as subject is therefore about being in the world – in dialogue with what and who is other – without thinking or positioning ourselves in the centre of the world" (p. 551), but rather…

… starting from land, and returning to it, without ever having left it at all…

For Arendt, (1998, p.177), it is this kind of education and being in the world that undergirds our *natality* rather than our mortality, wherein the beginning of a story (and life), "is not the beginning of something out of something but of somebody, who is a beginner himself"/herself. And, we begin again, when we begin to *learn* that self-recreation is germinated *with* others through speech and shared action (Marder, 2023, p.9)… beginnings, which are altogether phytogenically (derived from *phuton*, which means 'child' or 'tree', from *phusis*, or nature, and *phuein*, to grow and to be born (p.9)), *vegetal*: "plants are the perpetual beginners, who recommence over and over again, thanks to their inventive self-articulations and communicative interactions with other plants, with fungi and bacteria in the soil… In this, they are also consummately political, reborn together with others…" (p.9).

Beginning, learning, and returning to the land.

– Turning towards the light –



A beginning without end

The best arguments in the world won't change a person's mind.
The only thing that can do that is a good story.

The Overstory
Richard Powers (2019, p.336)

In *Khoisan* legend, a girl of the first peoples put her hands into the ashes of wood, and throwing them into the sky, she announced that they must together become the Milky Way.

During the day, as the Earth turns and the Sun shines bright, the Milky Way makes the stars shine white. But as darkness falls, and Moon arrives, the stars begin to wax an earthly red… for the girl threw roots into the sky so that they would become the stars, stars which are the eyes of the ancestors (Fraser, 1995).

And, as each day begins and ends in eternity, the star-roots watch over their children below, ever-turning in perpetual kinship with the ashes of wood that came before…

How *does* one come to the 'end' of a story, having tried to story a world in which every character, human and more-than-human, are protagonists, a story which ends-at-its-beginning?

Tsing's (2015) question at the 'beginning' of this thesis echoes back to me now, as my steps along these pathways begin to grow slower and come to a pause, somewhere in the middle of the woods…

I confess, her challenge has only brought forth more questions along this journey of similar kinds, questions I know now I will forever pursue. The words of the Pine in Powers' (2019, p.1) *The Overstory* repeats back to me… that "sun and water are questions endlessly worth answering… a good answer must be reinvented many times, from scratch". I am comforted in the perpetual wo/andering of these words, and the reminder that in times like these, there can only be common questions, and not common answers (Biesta, 2019).

But perhaps, Tsing's question never required an answer at all, and that to ask it, is to resign oneself to the act of trying, a lifelong unfolding inquiry that 'calls us forth' from the outside-in (Biesta, 2019), a response that can only be given by what speaks to us, as all good stories do. Stories themselves are vibrant matter (Bennett, 2010), and it is within the stories of South Africa's landscapes that I have built my 'house of being', that which has made me become who 'I am' (Spirn, 1998), that, like Tsing's question, I will forever Become-with. When it comes to stories, "what is important is not so much *what* is told… but rather *that* telling occurs" (Sanders, 2000, p.18). In the multiplicities of crises-of-the-Anthropocene, and the haunted landscapes of South Africa, our act of trying, the reinvention of our answers, that which *calls us forth*, as Antjie Krog (1998, p.261) wrote in *Country Of My Skull*, is the responsibility to "tell stories not to die of life".

It is true, for if our stories make us who we are, and if landscape has birthed language in the vernacular of landscapes, which has birthed story in turn, as they are all born again in their perpetual (re)becoming, then wherein else lies the heart of our humanity other than with landscape itself?

In our prevailing Western/Northern narratives of the Anthropocene, in many ways, we have forgotten the language-of-landscape, and we can no longer tell of stories in which humans are only one kind of participant (Tsing, 2015). This forgetting has been reified in histories of hegemonic domination, urban expansion, Euromodernism, (neo)colonialism and racial capitalism undergirded by logics of development and progress, which have converted landscapes into harmscapes (Holley et al, 2020) and dispensed with the language-of-landscape in a forgotten past. It is this language-of-landscape that has long been spoken by those who have built a home in its 'house of being' (Krell, 1993), homes that have been deracinated throughout history and become further precaritised in the age of the Sixth Extinction. Adorno (in Bewes, 2002, p.208) writes,

> all reification is a forgetting: objects become purely thing-like the moment they are retained for us without the continued presence of their other aspects: when something of them has been forgotten.



Soil for Life headquarters in the Southern Suburbs

As Swanson (2017, p.9) adds, this is "when such forgetting shapes experience, it becomes an 'epic for-getting'". It is in the forgetting, that we lose our humanity, even as we are haunted by it.

But, stories are perhaps our greatest form of resistance,
for "the past has a way of talking to the future.
It's called memory…[and] memory is always a collaboration in progress" (Powers, 2018, p.404),
just as the star-roots turn in perpetual wandering
with the ashes of trees that came before…

While human-centric narratives of the Anthropocene speak only with the present, ahistoricising, flattening and homogenising the complexities of our world, storying the daily-acts-of-resistance that are perpetually taking place in oft-invisibilised ways becomes an act-of-resistance that, through their telling, "extends temporally and socially what might otherwise be a discrete or ephemeral victory" (Ewick, 2003, p.1332). World-making is not only grand, but also exists in the quiet idiosyncrasies of ordinary existence, just as world-ending exigencies are

not only the stuff of apocalyptic narratives in policy discourse, but also are experienced in slow violences (Nixon, 2011). While critiques of everyday resistance position these storied acts as merely an excrescence of power and as an anterior order to hegemony (Ewick, 2003, p.1330), it is precisely in the unseen ways in which these orders e/affect daily lives, and the ability for those lives to respond in quiet, differential, relational resistances, that emboldens the power of story. As Tordzro (2018, p.18) reminds us,

> We have to tell the stories of the lived experience – the many continuous life events – (of action, cause and effect) to communicate knowledge, feelings, thought, ideas, emotions; that which we have learnt, what we know, what we do, what we conceptualise in our thinking; what we encounter; our hopes, fears and aspirations in dealings with others, the spaces we occupy in time.

Daily life in the Anthropocene is a constant negotiation of storied-landscapes; how, and of what, we story and how those stories shape us and what is *felt* in their storied acts co-constitute the telling: "Story lifts and carries 'Voice' with which we can express what we sense" (Tordzro, 2018, p.1). Storied practices and rituals, which are deeply indigenous, are what fulfils our spectral oath (Derrida & Stiegler, 2013) to that which has been forgotten.

The star-roots of our ancestors watch from above…

I return to Heilbrun's (1988, p.37) words, as they are made anew here:

> It is a hard thing to make up stories to live by. We can only retell and live by the stories we have read or heard. We live our lives through texts. They may be read, or chanted, or experienced… or come to us, like the murmurings of our mothers… Whatever their form or medium, these stories have formed us all; they are what we must use to make new fictions, new narratives.

Throughout this journey, the texts that I have lived by have been those of the human and more-than-human, and my perambulations, like stories, have been rhizomatic and circular. Like the ghosts that haunt our landscapes, this research has foreclosed the idea that I will be able to 'finish' these stories in any 'complete' way, and already, the human and more-than-human lives within the porous edges of these tales are making new encounters, watched over by the roots of their ancestors. Each story has held a myriad of possibilities of paths to follow that bring contingencies of the past-present-future into their (vibrant) subject matter. I have been able to follow only a few of those paths, and not even to all their rhizomatic ends, but I hope to return to some of them, even if only part of the way, before taking another path out-and-into the woods again.

I am reminded of Rivers (2015, p.576) who 'wrote' that: "Writing moves (in) the world. As writing moves, it bumps into things, generating effects. Writing shapes and becomes a part of the environment. Writing composes connections: its agonism produces publics", and it does so in many ways, which I have likened to the ways that forests similarly make publics, as I have written-and-thought with tree/sea-texts.

But, writing is not the only thing that moves (in) the world, and in some ways, each 'moment of articulation' that arose reminds me of the 'tropism' of the plants that reside in the *ihlathi lesiXhosa*, responding to encounters with multidirectional stimuli.

Through 'shady ecologies', the openings in canopy gaps, day/night lives, and the seasonal climactic changes that have grown in fervour over the years of this research and that have become intensified more-than-ever-before, my thoughts have elided a '*phototropic*' (Britannica, 2022) response to light and dark, of both the sun and moon… 'questions endlessly worth answering'…

Through the sociocultural and geopolitical currents of water carried by mycelia and taps, through drought, rain, leaves, roots and sea, they have sought to be '*hydrotropic*' (Britannica, 2022)…

Through the invasive historical legacies and enduring hegemonic forces that transverse the liminal hyphen of post(-)apartheid South Africa, they have been, in fast-and-slow, mundane-and-grand ways, '*traumatotropic*' (Britannica, 2022)…

And, while no such ecological word exists, they have also hoped to honour the companionship and multispecies coexistence that abounds in 'ordinary', oft-less visibilised ways in this land, which I offer here as '*resistancetropic*'.

Perhaps, most of all, my thoughts and my own ethical alignments of seeking to engage a responsible 'Being-with' our world and the companions, find solidarity in their '*orthotropism*' (Britannica, 2022), choosing to *face* these disturbances, to engage with their encounters, and to 'visibilise' the stimuli that unerringly necessitate a considered response, rather than act '*plagiotropically*'… avoiding, dispensing with, or eschewing the affective intensities that 'stimulate' the complexities-of-our-time.

In these ways, these stories have been filaments of the *ihlathi lesiXhosa* itself, following the circular cosmologies and ethico-onto-epistemologies of the indigenous South African traditions that birthed its spiritual conceptualisation, weaving their way through *rhizomatic conversations*, *mycelial interludes*, through sociomaterialities, through embodiments of the human and more-than-human, through beginnings-without-end as plants do through *phytogenesis*…where "every beginning is a plant and every plant is a beginner" (Marder, 2023, p.10).

I wonder from where the Magic Tree's story begins and ends as it resprouts epicormic buds from its fallen trunk, somewhere in the middle… as roots and wood-ashes float eternally in the sky…

Arendt (1998) reminds us that it is through these very 'capacities to begin' and begin again (like story), that engender our capacity to act (like an unfolding inquiry-of-resistance). But 'beginning' does not imply the proclamation of an 'origin': "it is not at all inconsistent with being in the middle and with commencing always in and from the middle of actual existence" (Marder, 2023, p.11). Marder explains:

> In contrast to the origin, which is but a head cut from the rest of the body, the beginning does not stay enclosed in itself, immune to external changes and inner transformation… it bursts forth into generation, a moving lineage in an ongoing tension with the starting point. (p.11)

Like 'good' stories themselves, "a beginning, or a rebeginning, configured as nature-plant (*phusis-phuton*) grows, decays and metamorphoses, refuses a definitive end in ending, indefinitely returns (perhaps: and this *perhaps* is more and more uncertain in the twenty-first century) after the end" (Marder, 2023, p.11). Plants, and stories, thus simultaneously embody both beginning-

and-end, worldbuilding-and-ending, which "illuminates multiple temporalities of vegetal existence, their anarchic beginnings without beginning below and above ground-level, their rootedness in all elements" (p.11), elements which are the 'roots/*riza*' (like roots/routes) of all things (Marder, 2023), and which are 'rooted'/rhizomed in the activities of plants: "two become four, and four strive to infinity" (p.11)… just like the star-roots and its Milky Way. And, even in the *riza*-of-this-research, the encounters and contingencies of these stories bring forth infinite elemental fractals…

Similarly, this (re)beginning has echoed my own journey returning to South Africa, this land that was 'my first teacher' (Styres, 2011) from birth, and which has taught me that to try to understand, or read a landscape, our stories must begin-*with*, exist-*with*, and end-*with* the landscape itself, where they will begin again, somewhere in the middle. And, it is true, for while my journeys have taken me to other shores, I have carried this country's soils with me wherever I go, only for it now, to lay me down gently within its arms once more.

By orthotropically-conversing with the tales that landscape has to tell, the rootedness of *riza* (rhizomes) attune us to "the movements and time of celestial bodies, while also staying in touch with the subtler time of subterranean transformations, of decay, of micro-organismic communities" (Marder, 2023, p.11) that make simultaneous worldbuilding-and-ending possible. The idea of an 'origin',

> attempts to break, once and for all, with the already constituted beginning, and to position itself after, as much as behind, that beginning as the true origin and end of all things… (p.10)

Instead, plants and their rhizomes split the fictitious, universal origin through "mutually complementary facets of becoming: metamorphosis in the light and metabolism in the dark obscurity of the soil" (p.11)…

Thinking in E/arthly ways, as I have hoped to do, in small contribution, through *critical rhizomatic narrative* with its 'rhizomatic conversations', mycelial interludes, arboreal discourse, compostism, and even with 'oceanic feeling', undercuts the narratives of our world that pursue an 'origin', which I also read as 'truth-seeking', in its essentialist, solutionist, or phallogocentric (Derrida, 1983) form, that which seeks to constitute an 'after, as much as behind', as 'post'apartheid does. But there can be no fictitious, unified and coherent 'origin/truth', especially when the Western humanist *logos* has "subjugated actuality to the demands of representation" (Marder, 2014, p.1), versions of 'actuality' and 'representation' that have propelled nature/culture divides and 'flattened' the differential ecologies, capital, human and more-than-human onto-epistemologies that allow us to listen to the language-of-landscape and what tales the *riza* tell. In this pursuit, we have deferred to the same Western *logos* that has rested upon humanist ideas of "will, deed, mind, 'idea', 'God', supreme being, the pure subject, the absolute ego, and spirit" (Klages, 2013, p.49), the Eurocentric exceptionalism that has enacted a "de-souling [of] the body and disembodying [of] the soul" (Marder, 2014, p.2) by reducing our understanding of crises to the origin of their *effect*, the same effects that have catalysed forms of racialised, de(more-than-)humanising disembodiments.

Now, while we have been walking the linear paths of modernity and 'progress', endlessly pursuing 'origin/truth', our backs to the beginning, burdened by our modern human conceit (Tsing, 2015), we are confronted with the only language we have given authority to speak, and it foretells of an 'end'. As Colebrook (2019, p.179) writes,

> There is very little sense, however, that—despite the common recognition that the Anthropocene has a violent, destructive, and barbarous human history as its cause—other (less robustly global and relational) forms of existence might be viable, desirable, or recognisable. Those other forms of human existence, which were erased in order to achieve the state-centred history of humanity that recognises itself as "Anthropos," are deemed to be the "end of the world".

It is precisely through the projection-of-landscape as subject to a universal Western-oriented humanist origin/truth, undergirded by Euromodernist/capitalist aspirations, as well as the language of scientistic and hegemonic crisis discourse, that 'cuts the head from the rest of its body' – an act of disembodied bifurcation that has become operationalised as our salvation from socioecological decay, even as we are haunted by our own humanity. It has paved over and eschewed the deeply-experiential and pluralist *affectivities* of crisis-and-resistance in the Anthropocene that make up the metamorphoses-and-metabolisms of 'daily lives', and which have always embodied the ability to begin, and begin again…

Where pursuit of the origin has become forms of solutionism (Nicoletta, 2022), we have yet to understand that we have prevented ourselves from finding a 'solution' precisely because we have yet to recognise that we need something different. As I have written throughout this inquiry, we have positioned ourselves as the only authority with which to combat the crises these very systems have created. There may be solutions, or there may be multiple, but they cannot be found within the presentist essentialisms in which they are attempting to be found. Perhaps, it is rather about being-in-the-world collectively, learning from the (bio)diverse heterogeneities of plants, that will enable us to find other paths, other possibilities.

Thinking phytocentrically, which have posthuman and indigenous orientations in their earthly, rhizomatic, circular and temporal embodiments, resists the very idea of a vegetal universality in its wide heterogeneity, which challenges these Western humanisms, "both modern and ancient, bent on setting knowledge and existence within exact epistemic and ontological limits" (Marder, 2014, p.8). Indeed, in the exigencies of our multitemporal/scalar crises of the Anthropocene,

> when [can] we consider an apocalypse to have begun and ended? Because in a lot of cases, what's considered an apocalypse for some people is what other people have been living every day. It's not the apocalypse, it's just, it's an apocalypse for you. (Shapiro and Jemisin, 2018, para 3)

Instead, it is through recognising "the ineluctable vacillation between the particularity and the generality of growing things" (Marder, 2014, p.6)…

between the banal and the catastrophic,
between the human and the more-than-human,
between affect and effect,
between diurnal and nocturnal rhythms,
between metaphor and teleology,

all of which are interconnected, that may attune us to the increasing disturbances and crisis-stimuli facing our world, and allow us to meet them, in the beginning-middle-end, 'resistancetropically'. It is here, in these interstitial spaces, where we might 'begin' to articulate

a "difficult 'glocalising' relationship with 'the general' and 'universal' in the global interconnectedness of injustice and the effects of a dehumanising ideology", as well as "the indomitability of the human spirit [that] rallies to rise above such adversity" (Swanson, 2013, p.194).

In similar ways to plants, the rhizomes-of-this-research became (un)rooted in 'all elements' of the subject matter with which I have grappled, and they brought forth multiple facets of becoming in their worldbuilding-and-ending encounters. Like the language-of-landscape, they seemed to evade my own human translation, and it is a difficult task to be faced with writing of complexity (without a declaration of 'truth') in order to participate meaningfully in political ecology conversations, without plagiotropically reducing the affectivities of these stories to the nihilistic indifference of conventional scholarship, further violencing my companions of humans and more-than-humans. My commitment is that my own voice does not hold a presumption of authority to 'speak' for, rather than 'speak with', those I have perambulated with in this research.

Nevertheless, my journey through the *ihlathi lesiXhosa* has led me here, and I am comforted by Haraway's (2015, p.160) words:

> "We need stories (and theories) that are just big enough to gather up the complexities and keep the edges open and greedy for surprising new and old connections".

…

> *We found that trees could communicate, over the air and through their roots. Common sense hooted us down. We found that trees take care of each other. Collective science dismissed the idea… 'Here's a little outsider information, and you can wait for it to be confirmed. A forest knows things. They wire themselves up underground. There are brains down there, ones our own brains aren't shaped to see. Root plasticity, solving problems and making decisions. Fungal synapses. What else do you want to call it? Link enough trees together, and a forest grows aware'.*
>
> *The Overstory*
> *Richard Powers (p.566)*

Whenever I used to look for peace of mind, I would go to the woods. The forests of Canada and Scotland held me in their wide arboreal embrace and whispered of the polyphonic voices that resided below their shady canopies. Now, in South Africa, I find solace in the diverse landscapes of sea, and veld, and mountains, and trees that are each kept in place by the unseen networks of fungi, algae, bacteria, roots, soils and atmospheres that connect forest-atmosphere-heaven-and-ocean (Beresford-Kroeger, 2010), and I am comforted in the knowing I have gathered over these years that no matter where I go, I have never truly left the forest at all. And, when her ecotones burn, soils are washed away, seas warm, and her canopies grow patchier,

… I confess I have not found any simpler ways to describe the grief.

In the no-longer forested Western Cape, what is left, after these forests have albeit disappeared, is a gritty phenomenological/ontological/epistemological/cosmological contradiction – the ghosts of forests past haunt the landscape today, altered and changed by human impact, as they seek to find new ways of world-making/world-building within their own precarity. And so, in such "dangerously unpromising times" (Haraway, 1992, p.319), I turn to the landscape for its

continual gift of radical hope (Lear, 2006)… and I remember the Resurrection Plant unfurling its leaves with the touch of rain after a long drought, that the Magic Tree will resprout somewhere in the middle of its trunk, that Buhlebendalo will walk the forests amongst his favourite trees, that Fatima will toil to save water amidst the floods in the moonlight, and that Melumzi will keep telling the tales of this land for his friend, Lwandle, who no longer 'takes-too-much' from the sea.

In many ways, my thoughts have sought to plant their own forest, their own *ihlathi lesiXhosa*, as they have sought to honour the many *ihlathi lesiXhosas* that surround us, as my own roots are watched over and guided by my ancestors above, and as they remind me of the metamorphoses-and-metabolisms that connect all things… like the mycelia and roots that interweave amongst my rhizomatic conversations and make new-and-old connections and converse with each other.

Somewhere 'in the middle' of the hyphen between post(-)apartheid South Africa, I came to see the ways in which the haunting legacies of the country's traumatic colonial past transverse the liminalities in which its peoples find themselves today, ghosts that have not been laid to rest (Demos, 2013) through the 'incompleteness' of a violent racial structure that continues to invade daily life for residents who face 'disproportionate' precarities in the Anthropocene. And, as storms and droughts and fires grow in fervour in the exigencies of climate change on the urban peripheries of Cape Town, the legacies of colonially-planted invasive species continue to shape daily life for residents by drawing on precious water resources across the landscape, contributing to soil degradation on already-nutrient deficient soils, and increasing fire-risk through their high fuel-loads.

Through the spatial inequalities that pervade the landscape because of racialised resettlements and segregation of displaced peoples through the (post-)colonial project, these invasive legacies (and species) have now tautologically-invaded the lived experiences of peoples who have historically always held deep relationalities with the land, and with water. These conditions have been enacted through and precipitated by the pressing advent of 'Day Zero' (a crisis that grows ever-more likely to affect metropolitan cities worldwide). It has been achieved through ontological accumulation into eco-spatial sites of crime in a country with one of the highest GBV rates in the world, and through the 'salvage heritage' of plantation economies that convert bodies, who have already-lived within diverse forms of harmscapes, into assets of capital, as Buhlebendalo has been. Such is also the case for illicit economies, as in abalone poaching, where the structural and systemic inequalities that prey upon Melumzi and Lwandle's lifeworlds through their domination, and through the continuation of divisive governance policies through neoliberal forms of 'development' and 'progress', have forced those whose ancestral and cosmological heritage has never 'taken-too-much', to contribute to a conservation crisis and the loss of South Africa's oceanic biodiversity. This is also played out on land through the now-commercialised medicinal plant industry, where untrained harvesters have been forced to participate in biodiversity-loss economies, where trees are stripped or cut in ways that prevent regeneration, in order to secure livelihoods in a country with exceedingly high unemployment, a country that has failed to redress the inequalities that remain following democratisation.

These multiple forms of 'drought' – racialised histories, Euromodernism, apocalyptic narratives, global crisis discourse, disproportionate effects of climate change, in the form of growing 'Day Zeros' (as well as 'Day Zeros' of the everyday/night) and in invasive inequalities today, have now positioned those whose livelihoods and lifeworlds are in ever-growing precarity as 'failed citizens' (Swanson, 2013) of the state, forcing the burdens of survival and welfare onto

the individual and already economically-disenfranchised settlement residents. As Fatima toils to save water amidst the floods under the moonlight on the Cape Flats, traumatised by her experiences of drought-of-many-kinds, she works to feed her family with the seedlings of her urban garden in a country 'invaded' by forms of racial capitalism, a country with the highest levels of inequality in the world, and on land that has been degraded-and-depleted of water as a result of colonially-planted invasive species.

Across the mycelia, bacteria and fungi that connect them all, the more-than-humans of the Western Cape lie trodden, and forgotten, with throats parched…

But, at the same time, the girl of the first peoples reminds me that the ashes of the Milky Way make the root-stars shine with the red dust of our South African soils in their perpetual wa/ondering, a journey without end…
and that in the metabolisms of the E/arth, in decay… there is also life.

Despite the invasive legacies that haunt the landscape, these **three** stories taught me that our cosmological metabolisms have always preceded us, and that by following the ghosts of our spectral sociomaterialities, our ancestors watch over the small resistances that take place in the quotidian.

As the sun and moon rise and set over the daily lives that reside around *Hoerikwagga*, the language-of-landscape is spoken amidst the tendrilled roots of the wildflowers that bloom along the coast, the Aloe and spekboom in Fatima's garden, and the gall rust fungus that grows on the boughs of invasive Acacias.

The mycelial threads reach for the impepho, the spirit of the ancestors, that find purchase on the degraded soils of Philippi Village's cement factory ruins, where it is now used as a pesticide for the chickens that roam, as they provide eggs that support the local community to combat food insecurity, and restore the quality of the soils through permaculture practices.

These sylvan fibres whisper to these invisibilised subaltern animal beings that have become a critical market product for those living in informality, as well as a deeply-cosmological agent of indigenous tradition.

Mycelia weave amongst the woodchips of the invasive Acacias that are cut down and help restore the earth's nitrogen through Rhizobacteria.
But the mycelia also thread themselves into the fibres of a jacket worn by a man who 'shook the tree' of his country,
crossing ecotones and borders as Rosheda weaves her petition for the rights of informal traders on the Grand Parade of Cape Town,
and as they create something new from the spatial legacies of inequality that remain following colonial invasion.

The roots weave in and out of the soils that surround Table Mountain, speaking to the Aloe and spekboom that grow resiliently amidst the cracks of suburban life, nurturing Fatima's garden as if they were Mother Trees and her water that feeds the seedlings that in turn feeds her family, whispering to the ontological heterogeneity-of-life that grows in spaces invaded by unhomeliness, echoing with the voices of the peoples who always followed the rains…as the words 'Ubuntu' painted onto the pillars of Philippi's towers nearby blow across the Cape Flats, past the sign that reads 'the Winds of Change', and settle on the hands that share of her water.

Arboreal voices ebb-and-flow amongst the waves that shelter the abalone that take 10 years to grow,
with the phytoplankton that produce the oxygen we breathe,

and with Melumzi and Lwandle with embodied resistancescapes
that extend beyond the skin into the land they walk on
as they 'give back' to the land and hear its language once more.

The voice of the fungi that climb in steps up the bark of Pines whisper to the husks of indigenous fynbos seeds that break open in the fires, as the smoke recedes into the shadows-of-night and the Aloe turns towards the moon's silvery gaze…the moon's eyes watching the houses being built and fires cooking food from the branches of invasive Acacias and Gums in Capricorn.

And the Moon and Mantis watch over those who visit the sea to feel the climactic changes in the air, and collect its salt to place under our pillows along with the impepho… where we are visited by our ancestors in our hauntological dreams once more.

A re-made taxonomy of 'invasion' metamorphosises-and-metabolises into the compost society (Haraway, 2006) of which we are all a part, making something new as the epicormic buds of the Magic Tree sprout from its broken canopy, as the symbiopoiesis that transverses the leaky borderlands of the Anthropocene-Plantationocene-Capitalocene… make way for the holobionts (Tsing, 2015) that work towards a multispecies coexistence for a Symbiocene future, hands and epidermal tissues bound together in 'oceanic feeling'…

… a radical hope, one which calls forth some future 'goodness' even as we are yet to know what that is or might be, a radical hope for the Anthropocene child where we are able to learn of the land that has always been our first teacher (Styres, 2011), and call forth a way-of-being-with the ihlathi lesiXhosas of our world, a way which has always been spoken with the language-of-landscape.

…

In our world of crisis-and-resistance in the Anthropocene, we are called upon to (re)imagine new ways of understanding the narratives of disenchantment that now pervade daily life and our material crises of climate change and systemic inequality, as well as how ordinary resistance(s) make possible philosophical/empirical complexities that engender sources of radical hope. While the everyday/night experiences of crisis have been largely invisibilised through universalist frameworks/policies/processes, likewise posthumanism, new materialism, decoloniality and other philosophical offerings present nuanced and novel ways of challenging our contingent perceptions of past/present/future socioecological degradation. By thinking with both the humans and the more-than-humans of our world in sociomaterial and allegorical ways, we may come to understand the ways that crisis-and-resistance transverse complex relations in competing, mutually-coexisting ways that move towards kinship-and-solidarity in the Anthropocene.

While we have come to understand the ways these crises have disproportionate effects on lives who have been precaritised, what is often missed within scholarship and global policy is how these relations are felt and experienced in deeply-nuanced ways. In the fast-and-slow violences of our world, we can no longer privilege only the *effect* of crises-of-the-everyday, without their *affect* too. And, in the emotional geographies of our lives, which are embedded in our act of storying and make-us-who-we-are, we may come to see how precarities are accompanied by resistances in ways that have been invisibilised by Western/humanist/'truth-seeking' scholarship and other hegemonies. Yet, it is in the affectively (bio)diverse lives of ordinary humans and more-than-humans and their worldmaking, that we may truly begin to find a radical hope amidst socioecological decay.

To honour the emotional geographical landscapes of this inquiry, I purposely chose to reappropriate 'the sentimental' in my narrativised inquiry/writing, even as it heralds complexity-and-contradiction. This has been an attempt to thwart the detached/dispassionate/judgemental academic voice of Social Science, with its colonising voice and 'strategy of containment' of alternative, more vibrant academic and indigenous voices. It is this colonising voice that I have intentionally repelled-and-replaced.

Thinking with the *ihlathi lesiXhosa* and the multispecies coexistences I engage with in this inquiry, has afforded me a 'way-through-the-wilderness' of the myriad complexities of our world, and has offered a way of tra(ns)versing the liminalities of crisis-and-resistance through its decolonial and cosmological ecologies. As the forests of our world burn and become monocultures for human extractivism, the *ihlathi lesiXhosa* has afforded me companionship in the deep relationalities and hopes that still abound with(in) the E/earth, and in the slow, quiet, filamental resistances that go unnoticed amidst the chaos. It has taught me that by reading-the-landscape through an art of noticing, of listening to the polyphonic voices of the more-than-human beings with which we share our world, of journeying and Becoming-with as the sun and moon turn each day, that here may lie our hope. As Tsing et al (2019, p.187) writes,

> We humans are suspended in many webs that go far beyond those of signification, in webs that human animals are far from alone in weaving (Geertz 1977, p.5). Studying the structures and histories of such multispecies webs in a time of global environmental frenzy means thinking about the suspension of human life in more-than-human landscape histories in new methodological and transdisciplinary ways… Such deconstructions of hegemonic universal claims about the world are a critical and crucial dimension of anthropology. But we claim that dispatches from specific sites, which conclude that 'just-here-where-I-did-my-fieldwork,' everything is different, are no longer enough. Everything is arguably different in every place now. How are we to understand this radical difference when it happens both site specifically and on a planetary scale?

In the context of this research, predominantly in the Western Cape of South Africa, there can be no 'just-here-where-I-did-my-fieldwork', not in the pressing exigencies of climate change and in the affective understandings of inequality experienced by humans and more-than-humans today. As Derrida (1985, p.36) asked,

> What is South Africa? A concentration of world history. We might be tempted to look at this region of the world as a giant tableau or painting, the screen for some geopolitical computer. Europe, in the enigmatic process of its globalization and its paradoxical disappearance, seems to project onto this screen, point by point, the silhouette of its internal war, the bottom line of its profits and losses, the double-bind logic of its national and multi-national interests.

In the remaining spaces left to us and our more-than-human companions that have not yet been deracinated by global industrialisation, racial capitalism and Euromodernism, these landscapes are the spaces in which our lives are constructed and negotiated, and they are being reconstructed as-we-speak. As Gruenewald (2003, p.628) notes: "space is alive, pulsing with beliefs, thoughts and actions that shape who we are as people". As a result, in our haunted spaces and suspended webs, it also means following the ghosts, as Gordon (2008, p.22) urges: it is about,

> making a contact that changes you and refashions the social relations in which you are located. It is about putting life back in where only a vague memory or a bare trace was visible to those who bothered to look… to strive to understand the conditions under which a memory was produced in the first place, toward a countermemory, for the future.

In the pressing circumstances that now threaten to pave over the slow, relational, quiet resistances-of-the-everyday, mowing down and dispensing with the structural conditions that have precipitated these crises in the first place, with biophilic unity as our only salvation, I am comforted by the invisible tendrilled growth of mycelia and roots in the soils, as they respond to the crises-of-the-Anthropocene in considered ways, exploring, choosing new paths, branching and branching…

> Life will cook; the seas will rise. The planet's lungs will be ripped out. And the law will let this happen because harm was never imminent enough. *Imminent*, at the speed of people, is too late. The law must judge imminent at the speed of trees. (Powers, 2018, p.498)

My storied contributions to political ecology scholarship, with their decolonial and posthuman orientations, bringing in a different more-heartful/hopeful aesthetic (of literary narrativity and poetics) to do so, has drawn on different disciplines, transdisciplinarily, in recognition that a "truly theoretical approach is not allowed to sit smugly outside the area it is examining. It must mix thoroughly with it" (Morton, 2007, p.12). I have purposefully embraced an 'alternate', non-conventional approach to inquiry that purposefully repels 'crisis framings' of the Anthropocene. As Butler (2009) reminds us,

> the frame does not simply exhibit reality, but actively participates in a strategy of containment, selectively producing and enforcing what will count as reality… this means the frame is always throwing something away, always keeping something out, de-realising and de-legitimating alternative versions of reality. (p.xiii)

And, while I embraced the enormity of the task of grappling with research that attempts to address such multiplicities and magnitude of complexities, I am aware that this may not fit well within criteria set out for conventional scholarship. But, it is precisely because I wished to avoid perpetuating violences of 'containment', throwing deeply affective nuances away, enforcing my own versions of 'reality', that I chose to 'mix thoroughly' within the (soil-of-the) vexed matters that are the subject of this inquiry, picking things up and putting them down to be picked up later again on my journey. I chose to let the 'moments of articulation' that arose through these stories guide the way, knowing that many other moments may have led me to other rhizomatic conversations in the process.

This hopes to offer a further contribution to political ecology, where responses to well-recognised complexity/systems theories are still oft-trapped by colloquialisms, where "'complex' is often mistaken for complicated" (Riva, 2023, p.2). The trappings of deterministic, reductionist and 'disjuncted' approaches, however, lie in their essentialist/solutionist aims. Complexity becomes a "placeholder for the unknown" (p.9). Contributions of/to posthumanism and decoloniality in political ecology, however, remind us that it is in the *questions* (Biesta, 2019), the '*unknowabilities*' (Zembylas, 2005), and the *incalculable* (Mbembe, 2000) that we may begin to afford a 'way-through', embracing complexity as if it were a spectre, where the 'ghosts' secret' is not a puzzle to be solved (Davis, 2005).

I am reminded of the way the viscosity of geo-poetic currents ebb-and-flow in perpetuity, in similar ways to which my own stories are threaded throughout, as a way-of-doing research that is inextricably part of the landscape as much as it is part of the 'woods' of this inquiry. Its relational/reflexive narrativity as a way of Being-with the humans and more-than-humans of this landscape rises to Naess's (1993) challenge to researchers and seeks to bring forth a way of *sensing* the matters I write about. My embodied encounters with those I have walked with in this research are inextricably linked to the landscape, not only through my birthplace and my ethical responsibility to Become-with others, but also in the sense that,

> our living bodies themselves, of course, are far from being entirely human; aside from the vegetal capacity for growth that permeates them, they are home to hundreds of microbial cultures, cross-species genetic material, and so forth. We cannot help but anthropomorphise (and in anthropomorphising, normalise) even these aggregates we call 'our bodies'. (Marder, 2014, p.10)

And, while the Euromodernist narratives of our time produce a "contrived centre of existence, [where] we act to transfigure and to disfigure every single being we encounter into a wanting reflection of ourselves" (p.10), I have sought to embrace a deep companionship and relationality with my companions in the interweavings of my own/relational stories, in conversational relationality in our togetherness. Alongside my companions, I am reminded that the everyday forms consciousness as "the comprehension of a *self looking at the world*, [which] is forged within the everyday practices and the networks of entities within which humans find their 'Being-in'" (Whitehead, 2005, p.281). While stories "are not the truth of the human but the 'truth-for' a specific version of the human – not humanity in toto but 'partial humanisms'" (Wynter, 2000, p.196), stories are sense and meaning-making onto-epistemologies that may help to "give humanness a different future" (Wynter and McKittrick, 2015, p.9).

While it is my hope that I have been able to contribute, in some part, towards the affective, ethical and literary turns in political ecology through posthumanism and decolonial explorations, and to scholarship that is increasingly revealing the quieter, unseen aspects of lived experience in the Anthropocene, there is one other contribution that may be one of the most substantive, which, yet – like a few others I have mentioned throughout – does not fit within the paradigm set in conventional terms for an 'acceptable' research contribution…

In its non-conformity therefore, it also acts as a contribution *in itself* by flagrantly and intentionally disregarding the assumption of the disavowal of sentimentality, of sensitivity, of sensemaking, of a literary and affective aesthetic in social science 'development' research, and that another 'rigour', or more appropriately – another 'vigour', may be possible, indeed necessary in this glocal political moment we find ourselves in… One of the crucial contributions this research makes is its *constant efforts to 'bear witness'* . It is a bearing witness to widespread structural injustice with which the 'disproportionately-disadvantaged' are burdened; to the abalone's loss of their abiding place from which they are bled away; of Melumzi's and Buhlebendalo's suffering for existing educational systems that would deny their own and the Anthropocene Child's right to an education that is life-affirming, one in which they can learn to come-into-being in the world with the means-to-act-within-it, one that gives abiding courage to act with care and ethicality in the world towards others (human and more-than-human), one whose main purpose and pedagogy is to foster a sense of renewal and imaginative possibilities for radically-hopeful futures. It is a *bearing witness* to Fatima's constant toiling with her water and

seedlings to help her family not only survive, but through their own learning from her and bearing witness to her efforts, that *they* may thrive.

But 'bearing witness' holds an important responsibility, a responsibility to act-in-the-world in ways that give meaning, purpose, and hope through what has been witnessed and what has been shared… Bearing witness comes with the responsibility to act-in-the-world in ways that make radically-hopeful futures imaginable and hence possible. But there is one other contribution bearing witness enables: it is the commitment to carry some of the burden of trauma, of the wound-of-a-world in states of 'constant exception', of multiply-intertwined crises. The wound-of-the-world is only bearable if we all carry a vestige of it rather than divesting ourselves of it and burdening more precarious others with its weight. Receiving this woundedness as a gift-of-recognition, is important in that it alerts us constantly to the multiple, yet differential, ways in which we (all) are complicit in ongoing systems of oppression, and that we have a duty to act in accordance with that knowledge and its attendant responsibilities. Receiving such an apparently-contradictory 'gift of woundedness' presents us with the compelling 'responsibility of an overarching ethic of care' towards the Other (human and more-than-human) in our 'face-to-face' (or 'ear-to-ear' or 'touch-to-touch') 'encounter' with another, even beyond our 'radical unknowability' of 'the Other' (Levinas, 1974).

Bearing witness and receiving small vestigial gifts of Earth's woundedness in the relational sharing of humanity and *more-than-humanity* with others, might be simultaneously the biggest gift… the biggest responsibility… and the biggest contribution that this thesis offers.

To this 'end', an end that 'ends' somewhere in the middle, and which begins again as my ethical responsibility to this research is brought forth in new encounters throughout my lifelong journey, I know that the humans and more-than-humans I have walked with, held hands with, shared water, leaves, and roots with, will be my perpetual companions. Of me, and of us all, I am left with the understanding:

> It means embracing oneself as well as all of creation as being flesh and thus being vulnerable. It means celebrating the diversity of the flesh and standing up for justice for all other living fleshly beings, especially for those who are denied a life of fullness… Decolonial ecojustice and planetary ethics based on this recognition demand the development of an attitude of *creative (un)certainty*, that is: a mindset that abandons the position of interpretative power and welcomes the 'frisson of uncertainty' (Schneider, 2011, p.29), the liberating courage to prophetically decolonise hegemonic systems and forms of knowledge, the frankness to unlearn and to learn anew, and the curiosity and joy to live in fleshly and planetary conviviality and solidarity with the suffering human and more-than-human life. (Jahnel, 2023, p.19)

…

As I come to a pause, here in the middle of the woods, as the root-stars and wood-ashes of the Milky Way watch over me from above, I know that I am not alone. Nongetheni's words echo back to me, reminding me that the only way forward is to walk with my back to the future, facing my past…

And from the gaps in the canopy above, my late grandfather's voice whispers through the trees…

In the final hours of his passing in a hospital in Johannesburg, the noise of nurses rushing to-and-fro, machines whirring and doctors calling had been a loud mêlée of activity amidst the quietude that envelops the coming-of-the-end-of-a-life. I had held his hand in what seemed like an eternal embrace, capturing in my mind's eye the meeting of skin that spanned two generations, with his creases and wrinkles, and the fingertips that were weathered from years of labour. Every once in a while, with his eyes closed, he would give me a gentle squeeze, reminding me that he was still there, as he still does through the hands of my mother. His white moustache would bunch above his mouth as he'd silently prompt me for another kiss on his soft, papery cheek.

When I think of my granddad, I can see him bending down amidst the garden, legs boughed like the branches of a tree from years of silently tending to his rockery and his fishpond and the plants he nurtured under his green thumb… I think of his quiet reverence for the small things that grow amidst the suburbs of the East Rand, and within a life worn by years of hardship.

I knew he would have disliked it here, in this sterile room enclosed with white walls, another space that teeters on the fragile edges of worldbuilding-and-worldending, away from the open skies and the wind that would brush his skin. Sitting by his side in this hospital, my mother on his other side as his eyes stayed closed and his body still, after hours of silence, a generator sprang into life,

a jarring, unyielding, discordant buzz

that filled the hospital wing with a garishly loud sound. Nurses and doctors continued to rush by, and the machines added to the din. My mother had jumped:

'What is that?' she had asked aloud reflexively.

And, from the quiet stillness of his bed, from the hands that nurtured and found companionship in all things that grow, from beneath his white moustache that spoke of love without words… he whispered:

it's a mossie[a].

For, amidst the noise, the rushing urgencies, the crises that were being attended to, the loud din of the world around us, in his final hours before he left the E/arth we share, before he would come to join the root-stars that watch over us all, red with the dust and soils of this land that he loved… from outside, in the form of a tiny bird sitting on the window ledge, where the air of the forest spirits called… he heard the only thing left that mattered:

the quiet, hopeful, loving embrace of ecological-spirit life.

…

Are we capable of rediscovering that each of us belongs to the same species, that we have an indivisible bond with all life?
Perhaps that is the question – the very last – before we draw our last dying breath.

Mbembe (2021, p.62)

[a] A little bird, or Cape Sparrow, believed to be symbolic of love and forgiveness



The path made anew

Bibliography

Abrha, M. H. (2019). Experiences of deep ecological thinking in African traditional environmental thought: A philosophical reflection in perspective. *Journal of Philosophy, Culture and Religion*. https://www.iiste.org/Journals/index.php/JPCR/article/view/49873/0

Adams, J. S., & McShane, T. O. (1996). *The myth of wild Africa: Conservation without illusion*. University of California Press.

Adams, W. (2013). *Against extinction*. Routledge eBooks. https://doi.org/10.4324/9781849770415

Adams, W. (2015). The political ecology of conservation conflicts. *ResearchGate*. https://doi.org/10.1017/9781139084574.006

Adeel, Z., & Wirsing, R. G. (Eds.). (2017). *Imagining Industan—Overcoming water insecurity in the Indus Basin*. Springer. https://doi.org/10.1007/978-3-319-32845-4

Adhikari, M. (2004). 'Not Black enough': Changing expressions of Coloured identity in post-apartheid South Africa. *University of Cape Town*. https://open.uct.ac.za/items/fa77ca2c-0fb2-4a0e-abf6-4bf9a883378d

Adi, H. (2018). *Pan-Africanism: A history*. Bloomsbury.

Agbor, A. M., & Naidoo, S. (2011). Knowledge and practice of traditional healers in oral health in the Bui Division, Cameroon. *Journal of Ethnobiology and Ethnomedicine, 7*(1). https://doi.org/10.1186/1746-4269-7-6

AghaKouchak, A., Mirchi, A., Madani, K., Di Baldassarre, G., Nazemi, A., Alborzi, A., et al. (2021). Anthropogenic drought: Definition, challenges, and opportunities. *Reviews of Geophysics, 59*(2). https://doi.org/10.1029/2019rg000683

Ahmed, S. (2004). *The cultural politics of emotion*. Edinburgh University Press.

Aitken, M., Rangan, H., & Kull, C. A. (2009). Living with alien invasives: The political ecology of wattle in the eastern highveld, Mpumalanga, South Africa. *Etudes Océan Indien, 42*, (pp. 115–141). https://doi.org/10.4000/oceanindien.769

Akhter, M. (2017). The political ecology of the water scarcity/security nexus in the Indus Basin: Decentering per capita water supply. In Z. Adeel & R. G. Wirsing (Eds.), *Imagining Industan—Overcoming water insecurity in the Indus Basin* , (pp. 21–33). Springer.

Alaimo, S., & Hekman, S. (Eds.). (2008). *Material feminisms*. Indiana University Press. http://www.jstor.org/stable/j.ctt16gzgqh

Albrecht, G. (2020). The extinction of rights and the extantion of ghehds. *Griffith Law Review, 29*(4), (pp. 513–533). https://doi.org/10.1080/10383441.2020.1878596

Albrecht, G. A. (2019). *Earth emotions: New words for a new world*. Cornell University Press. http://www.jstor.org/stable/10.7591/j.ctvfc5563

Alcoff, L. M. (1997). Immanent truth. *Science in Context, 10*(1), (pp. 97–112).

Alloula, M. (1986). *The colonial harem*. University of Minnesota Press.

Althusser, L. (1971). Ideology and ideological state apparatuses (Notes towards an investigation). In *Lenin and philosophy and other essays* , (pp. 142–147, 166–176). Monthly Review Press.

Anand, N. (2011). Pressure: The PoliTechnics of water supply in Mumbai. *Cultural Anthropology, 26*(4), (pp. 542–564).

Andaiye (2020) The angle you Look from determines what you see. In: Trotz A (eds) *The Point Is to Change the World*. London: Pluto Press, pp. 5–20.

Anders, A. D. (2019). Post-critical ethnography. *Oxford Research Encyclopedia of Education*. https://doi.org/10.1093/acrefore/9780190264093.013.342

Anderson, B. (2014). *Encountering affect: Capacities, apparatuses, conditions*. Routledge.

Anderson, B., & McFarlane, C. (2011). Assemblage and geography. *Area, 43*(2), (pp. 124–127).

Anderson, B., Romani, J., Wentzel, M., & Phillips, H. (2010). Awareness of water pollution as a problem and the decision to treat drinking water among rural African households with unclean drinking water: South Africa 2005. *Population Studies Center Research Report, (pp. 10-701)*. University of Michigan, Institute for Social Research, Ann Arbor.

Anderson, D., & Grove, R. (1987). *Conservation in Africa*. Cambridge University Press.

Anderson, J. (2004). Talking whilst walking: A geographical archaeology of knowledge. *Area, 36*(3), (pp. 254–261). http://www.jstor.org/stable/20004390

Anderson, P. M. L., & O'Farrell, P. J. (2012). An ecological view of the history of the city of Cape Town. *Ecology and Society, 17*(3). https://www.jstor.org/stable/26269089
Aoki, T. T. (2005). *Curriculum in a new key: The collected works of Ted T. Aoki*. Lawrence Erlbaum Associates.

Arendt, H. (1970). *On violence*. Harcourt Brace Jovanovich.

Arendt, H., & Canovan, M. (1998). *The human condition* (2nd ed.). University of Chicago Press.

Aronson, J. L., Harré, R., & Way, E. C. (1995). *Realism rescued: How scientific progress is possible*. Open Court.

Arruda, E. H., Melatto, R. P. B., Levy, W., & De Melo Conti, D. (2021). Circular economy: A brief literature review (2015–2020). *Sustainable Operations and Computers, 2*, (pp. 79–86). https://doi.org/10.1016/j.susoc.2021.05.001

Arnold, M., Bertelsen, P., de Saint-Laurent, C., & Sinha, A. (2020). *Border studies: Development of the theory and major trends in a changing geopolitical environment*. In J. W. Scott (Ed.), A Research Agenda for Border Studies (pp. 1-224). Edward Elgar Publishing. https://doi.org/10.4337/9781788972741

Ashton, E. (2022). *Anthropocene childhoods: Speculative fiction, racialization, and climate crisis*. https://library.oapen.org/handle/20.500.12657/58880

Aslamy, S. (2021). Marxism, capitalism, and nature-society relations: An introduction. *Liberation School*. https://www.liberationschool.org/marxism-and-nature/

Austin, P. (2020). A rustling in *The Overstory*: More-than-human storytelling in Richard Powers's novel. *Sensus Historiae, 38*(1), (pp. 13–28).

Baderoon, G. (2009). The African oceans—Tracing the sea as memory of slavery in South African literature and culture. *Research in African Literatures, 40*(4), (pp. 89–107). https://www.jstor.org/stable/40468163

Baderoon, G. (2013). Gabeba Baderoon: Poems. *Cultural Studies, 27*(3), (pp. 482–486). https://doi.org/10.1080/09502386.2013.769153

Baderoon, G. (2015). Geography and memory. In S. O'Toole & T. Tavengwa (Eds.), *Cape Town: A city desired* , (pp. 8–9). ACC & Tau Tavengwa.

Baelo-Allué, S. (2022). Posthumanism and Trauma. In *Springer eBooks*, (pp. 1119–1138). https://doi.org/10.1007/978-3-031-04958-3_40

Bähre, E. (2007). Reluctant solidarity. *Ethnography*, *8*(1), (pp. 33–59). https://doi.org/10.1177/1466138107076136

Baissac, C. (2020, September 7). An essay: South Africa's economic decline in detail and the narrow path away from failure. *Daily Maverick*. https://www.dailymaverick.co.za/opinionista/2020-09-06-an-essay-sas-economic-failure-in-detail-and-the-narrow-path-away-from-failure/

Bakhtin, M. (1990). *Art and answerability: Early philosophical essays* (V. Liapunov & M. Holquist, Trans.). University of Texas Press.

Banks, S. (2008). Writing as theory: In defense of fiction. In *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues* , (pp. 155-165). SAGE Publications, Inc. https://doi.org/10.4135/9781452226545

Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs, 28*(3), (pp. 801–831). https://doi.org/10.1086/345321

Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.

Barnard, A. (1988). Structure and fluidity in Khoisan religious ideas. *Journal of Religion in Africa*, *18*(3), (pp. 216). https://doi.org/10.2307/1580940

Barnsley, V. (2010). The child/the future. *Feminist Theory, 11*(3), (pp. 323–330).

Barone, T. (2001). Science, Art, and the Predispositions of Educational Researchers. *Educational Researcher*, *30*(7), (pp. 24–28). https://doi.org/10.3102/0013189x030007024

Barthes, R. (1972). *Mythologies* , (pp. 15–25). Jonathan Cape.

Bartlett, J., & Merino, T. (2024, March 5). Fast fashion goes to die in the world's largest fog desert. The scale is breathtaking. *Environment*. https://www.nationalgeographic.com/environment/article/chile-fashion-pollution

Bartlett, R., Koncul, A., Lid, I. M., George, E. O., & Haugen, I. (2023). Using walking/go-along interviews with people in vulnerable situations: A synthesized review of the research literature. *International Journal of Qualitative Methods, 22*. https://doi.org/10.1177/16094069231164606

Bartolini, N. (2013). Rome's Pasts and the Creation of New Urban Spaces: Brecciation, Matter, and the Play of Surfaces and Depths. *Environment and Planning D: Society and Space*, *31*(6), (pp. 1041–1061). https://doi.org/10.1068/d11012

Bartolini, N. (2021). Brecciation, post-geographies, and spaces in transition. *Dialogues in Human Geography, 11*, Article 20438206211030052. https://doi.org/10.1177/20438206211030052

Bassett, T. J., & Peimer, A. W. (2015). Dossier: « À propos des relations natures/sociétés » – Political ecological perspectives on socioecological relations. *Natures Sciences Sociétés*, *23*(2), (pp. 157–165). https://doi.org/10.1051/nss/2015029

Basu, S., & Kumar, G. (2020). Nitrogen Fixation in a Legume-Rhizobium Symbiosis: The Roots of a Success Story. In *Springer eBooks,* 35–53. https://doi.org/10.1007/978-3-030-36248-5_3

Bateson, G. (1972). *Steps to an ecology of mind: Collected essays in anthropology, psychiatry, evolution, and epistemology*. Jason Aronson Inc.

Battersby, J., & Haysom, G. (2016). Urban Agriculture: The answer to Africa's food crisis? *Quest*, *12*(2), (pp. 8–9). ResearchGate. https://www.researchgate.net/publication/320805362_Haysom_G_and_Battersby_J_2016_Urban_Agriculture_The_answer_to_Africa's_food_crisis_Quest_122_8-9

Battersby, J., Joubert, L., & Watson, V. (2018). Tomatoes & Taxi Ranks: Running Our Cities To Fill The Food Gap. In *ResearchGate*. African Centre for Cities, University of Cape Town.

Battle, M. (2000). A Theology of Community. *Interpretation: A Journal of Bible and Theology*, *54*(2), (pp. 173–182). https://doi.org/10.1177/002096430005400206

BBC News. (2024, September 28). *Video: BBC News* [Video]. https://www.bbc.co.uk/news/videos/cwy3nqy4nydo

Beck, U. (2016). *The metamorphosis of the world*. Polity Press.

Bell, M. (1997). The ghosts of place. *Theory and Society, 26*, (pp. 813–836). https://doi.org/10.1023/A:1006888230610

Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press.

Bennett, J., & Khan, G. (2009). Agency, nature and emergent properties: An interview with Jane Bennett. *Contemporary Political Theory*, *8*, (pp. 90–105). https://doi.org/10.1057/cpt200843

Bennett, T., & Watson, D. E. (2002). *Understanding everyday life*. Wiley Blackwell.

Benston, K. W. (2025). *Black hauntologies: Slavery, modernity and spectral re-vision* (Vol. II). Anthem Press.

Beresford-Kroeger, D. (2019). *The global forest: Forty ways trees can save us*. Greystone Books.

Berg, J., & Shearing, C. (2024). 'Everything-old-is-new-again': Private urban security governance responses to new harmscapes. Urban Studies. https://doi.org/10.1177/00420980241231240

Bernstein, B. (2000). *Pedagogy, symbolic control, and identity: Theory, research, critique*. Rowman & Littlefield. https://books.google.co.uk/books/about/Pedagogy_Symbolic_Control_and_Identity.html?id=_V0L-6eTYUAC

Besky, S. (2013). The Darjeeling Distinction. In University of California Press. University of California Press

Bhabha, H. K. (1990). *Nation and narration* (1st ed.). Routledge. https://doi.org/10.4324/9780203823064

Bhabha, H. K. (1994). *The location of culture*. Routledge.

Bhattacharya, K. (2022). Homecoming With Culturally Situated Philosophies of Being in Qualitative Inquiry. *Qualitative Inquiry*, *29*(1), (pp. 117–125). https://doi.org/10.1177/10778004221111378

Bhugeloo, A., Ramdhani, S., Peerbhay, K., Kambaj, O. K., & Sershen. (2021). Forest canopy gaps offer a window into the future: The case of subtropical coastal forests within an urban matrix in South Africa. *Forest Systems, 30*(1), e003. https://doi.org/10.5424/fs/2021301-16914

Biesele, M. (n.d.). [PDF document]. Retrieved from https://journals.co.za/doi/pdf/10.10520/AJA10231757_257

Biesta, G. (2017). *The rediscovery of teaching* (1st ed.). Routledge. https://doi.org/10.4324/9781315617497

Biesta, G. (2019). Teaching for the possibility of being taught: World-centred education in an age of learning. *E-Journal of Philosophy of Education*, 4, 55–69. https://doi.org/10.1002/ejpe.211

Biggs, R., Clements, H. S., Cumming, G. S., Cundill, G., De Vos, A., Hamann, M., Luvuno, L., Roux, D. J., Selomane, O., Blanchard, R., Cockburn, J., Dziba, L., Esler, K. J., Fabricius, C., Henriksson, R., Kotschy, K., Lindborg, R., Masterson, V. A., Nel, J. L., Reyers, B. (2022). Social-ecological change: insights from the Southern African 3 Program on Ecosystem Change and Society. *Ecosystems and People*, *18*(1), (pp. 447–468). https://doi.org/10.1080/26395916.2022.2097478

Bignall, S., & Rigney, D. (2019). Indigeneity, posthumanism, and nomadic thought: Transforming colonial ecologies. In R. Braidotti & S. Bignall (Eds.), *Posthuman ecologies: Complexity and process after Deleuze* , (pp. 159–182). Rowman & Littlefield.

Bignall, S., Hemming, S., & Rigney, D. (2016). Three ecosophies for the Anthropocene: Environmental governance, continental posthumanism, and indigenous expressivism. *Deleuze Studies, 10*(4), (pp. 455–478). https://www.jstor.org/stable/45331750

Biko, S. (2004). *I write what I like: Selected writings*. Picador Africa.

Blackman, L. (2007). Researching Affect and Embodied Hauntologies: Exploring an Analytics of Experimentation. In *Palgrave Macmillan UK eBooks*, 25–44. https://doi.org/10.1057/9781137483195_2

Blaikie, P., & Brookfield, H. (Eds.). (1987). *Land degradation and society* (1st ed.). Routledge. https://doi.org/10.4324/9781315685366

Block, D. R. (2019). Food Deserts. In *Springer eBooks* , (pp. 1127–1133). https://doi.org/10.1007/978-94-024-1179-9_196

Boehi, M., & m'Afrika Xaba, P. (2021). Decolonising Kirstenbosch: Confronting the violent past of South Africa's botanical gardens. *The Architectural Review*, 40–44. https://www.architectural-review.com/essays/decolonising-kirstenbosch-confronting-the-violent-past-of-south-africas-botanical-gardens

Bond, P. (2002). *Unsustainable South Africa: Environment, development and social protest*. Merlin Press and University of KwaZulu-Natal Press.

Bond, P. (2006). Reconciliation and economic reaction: Flaws in South Africa's elite transition. *Journal of International Affairs*, *60*(1), (pp. 141–156). https://www.jstor.org/stable/24358017

Bondi, L. (1995). [Review of the book Feminist Review]. *Feminist Review, (51)*, (pp. 133–135). https://doi.org/10.2307/1395515

Bondi, L. (2006). Emotional geographies. In J. Davidson (Ed.), *Emotional geographies* (1st ed.). Routledge. https://doi.org/10.4324/9781315579245

Boswell, R. (2022). Salted Identities: Biocultural Heritage for a Rehumanized Ocean Management in South Africa. *Anthropology & Humanism*, *47*(2), (pp. 363–380). https://doi.org/10.1111/anhu.12402

Bourdieu, P. (1972). *Outline of a theory of practice*. éditions Droz.

Bowers, C. A. (2005). Is transformative learning the Trojan horse of western globalization? *Journal of Transformative Education*, 3(2), 116–125. https://doi.org/10.1177/1541344605275293

Bowers, C. A. (2012). The false promises of the digital revolution: How computers transform education, work, and international development in ways that are ecologically unsustainable. *Educational Philosophy and Theory*, 44(8), 891–905. https://doi.org/10.1177/1541344612453880

Boyd, C., Parr, H., & Philo, C. (2023). Climate anxiety as posthuman knowledge. *Wellbeing, Space and Society*, *4*, 100120. https://doi.org/10.1016/j.wss.2022.100120

Bozalek, V., & Zembylas, M. (2016). Critical posthumanism, new materialisms and the affective turn for socially just pedagogies in higher education. *South African Journal of Higher Education*, *30*(3), (pp. 193–200). https://doi.org/10.20853/30-3-652

Bozalek, V., Gachago, D., Alexander, L., Watters, K., Wood, D., Ivala, E., & Herrington, J. (2013). The use of emerging technologies for authentic learning: A South African study in higher education. *British Journal of Educational Technology*, *44*(4), (pp. 629–638). https://doi.org/10.1111/bjet.12046

Bradburd, D. (1984). Marxism and the study of pastoralists. *Nomadic Peoples, 16*, (pp. 3–14). http://www.jstor.org/stable/43123217

Bradlow, E. (1994). Human history of Table Mountain. In D. Hey (Ed.), *The mountain: An authoritative guide to the Table Mountain Chain*. Tafelberg.

Braidotti, R. (2013). Posthuman Humanities. *European Educational Research Journal*, *12*(1), (pp. 1–19). https://doi.org/10.2304/eerj.2013.12.1.1

Braidotti, R. (2018). A Theoretical Framework for the Critical Posthumanities. *Theory, Culture & Society*, *36*(6), (pp. 31–61). https://doi.org/10.1177/0263276418771486

Braidotti, R., & Bignall, S. (2019). *Posthuman ecologies: Complexity and process after Deleuze*. Rowman & Littlefield.

Braidotti, R., & Hlavajova, M. (Eds.). (2018). *Posthuman glossary*. Bloomsbury Publishing.

Brambilla, C. (2014). Exploring the Critical Potential of the Borderscapes Concept. *Geopolitics*, *20*(1), (pp. 14–34). https://doi.org/10.1080/14650045.2014.884561

Branch, G. M., & Branch, M. (1981). *The living shores of southern Africa*. Cape Town: Struik Publishers.

Braun, B. (2005). Environmental issues: Global natures in the space of assemblage. *Progress in Human Geography, 30*(5), (pp. 644–654).

Breen-Smyth, M. (2013). Mandela: Spirit of Rolihlahla, the one who shook the tree. *The Conversation*. https://theconversation.com/mandela-spirit-of-rolihlahla-the-one-who-shook-the-tree-15490

Britannica, T. Editors of Encyclopaedia. (2022, February 14). Tropism. *Encyclopedia Britannica*. https://www.britannica.com/science/tropism

Brown, C., & Magoba, R. (2009). *Rivers and wetlands of Cape Town: Caring for our rich aquatic heritage*. Water Research Commission.

Brown, D. L. (2016). Daughters of the drum: Decolonizing health and wellness with Native American women. *AlterNative: An International Journal of Indigenous Peoples, 12*(2), (pp. 109–123).

Bruchac, M. M. (2014). Indigenous Knowledge and Traditional Knowledge. In *Springer eBooks*, (pp. 3814–3824). https://doi.org/10.1007/978-1-4419-0465-2_10

Brunbjerg, A. K., Bruun, H. H., Moeslund, J. E., Sadler, J. P., Svenning, J., & Ejrnæs, R. (2017). Ecospace: A unified framework for understanding variation in terrestrial biodiversity. *Basic and Applied Ecology*, *18*, (pp. 86–94). https://doi.org/10.1016/j.baae.2016.09.002

Burbery, T. J. (2021). *Geomythology: How common stories reflect earth events*. McFarland & Company.

Burke, J. (2021, April 19). Cape Town fires: Police investigate causes after library damaged. *The Guardian*. https://www.theguardian.com/world/2021/apr/19/cape-town-fire-table-mountain-evacuate-university-jagger-library

Butler, J. (2004). *Precarious life: The powers of mourning and violence*. Verso.

Butler, J. (2009). *Frames of war: When is life grievable?* Verso Books.

Butler, L. (2004). The Spirit is Willing and the Flesh is Too: Living Whole and Holy Lives Through Integrating Spirituality and Sexuality. In *Palgrave Macmillan US eBooks,* (pp. 111–120). https://doi.org/10.1057/9781403980342_7

Butler-Kisber, L. (2020). Poetic inquiry. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (2nd ed., (pp. 140–154). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780429202117-3/poetic-inquiry-lynn-butler-kisber

Butt, R., Raymond, D., & Yamagishi, L**.** (1987). Autobiographic praxis: Studying the formation of teacher's knowledge. *Curriculum Inquiry, 17*(4), (pp. 87–164).

Caesar, M., & Crush, J. (2022). Urban food deserts: Food security, food access, and climate change. In *Food security and food sovereignty in Africa* , (pp. 335–349). Routledge. https://doi.org/10.4324/9781315469737

Cajete, G. (2015). *Indigenous community: Rekindling the teachings of the seventh fire*. Red Earth Press.

Camelia, D., & Nustad, K. G. (2024). Fluid dispossessions: Contested waters in capitalist natures. *Ethnos, 89*(3), (pp. 389–400). https://doi.org/10.1080/00141844.2023.2214340

Campano, G., Nichols, P., & Player, G. (2020). Multimodal critical inquiry. In P. J. Dunston, S. K. Fullerton, C. C. Bates, P. M. Stecker, M. W. Cole, & D. A. Herro (Eds.), *The twenty-first century teacher educator: Building a multimodal and multigenre classroom* (pp. 109–125). Routledge. https://doi.org/10.4324/9781315676302-8

Campano, G., Nichols, T. P., & Player, G. D. (2020). Multimodal critical inquiry. In *Handbook of reading research, volume V* (1st ed., (pp. 137–152). Routledge. https://doi.org/10.4324/9781315676302-8

Campbell, M. (2003). Dorothy Smith and knowing the world we live in. *Journal of Sociology, 30*(1). Western Michigan University.

Campbell, N., McHugh, G., & Dylan-Ennis, P. (2018). Climate change is not a problem: Speculative realism at the end of organization. *Organization Studies, 40*(5), (pp. 725–744). https://doi.org/10.1177/0170840618765553

Cape Town Biodiversity. (2018, July 10). *Renosterveld remnants of the Swartland*. City of Cape Town. Retrieved from https://resource.capetown.gov.za

Capricorn | Living Hope. (n.d.). https://www.livinghope.co.za/about/communities/capricorn/

Carnie, T., & Sikhakhane, N. (2023). *Bitter Harvest (Part One): 'We don't have jobs': Post-1996 farmland restitution projects sow a costly legacy of failure.* Daily Maverick. https://www.dailymaverick.co.za/article/2023-09-18-bitter-harvest-part-one-post-1996-farmland-restitution-projects-failure/

Carnie, T. (2023). *South Africa's service delivery challenges: Protests, promises, and public frustration*. Daily Maverick. https://www.dailymaverick.co.za/article/2023-09-20-service-delivery-challenges-south-africa/

Carey, G., & Sorensen, R. L. (Eds.). (1996). *The Penguin book of death*. Penguin Books.

Carolyn Forche. (2014). https://www.albany.edu/writers-inst/webpages4/archives/forche_carolyn14.html

Castree, N., Amoore, L., Hughes, A., et al. (2020). Boundless contamination and progress in geography. *Progress in Human Geography, 44*(3), (pp. 411–414).

Chakrabarty, D. (2009). The climate of history: Four theses. *Critical Inquiry, 35*(2), (pp. 197–222). https://doi.org/10.1086/596640

Chakrabarty, D. (2021). *The climate of history in a planetary age*. University of Chicago Press.

Chambers, C. (2006). "The land is the best teacher I have ever had": Places as pedagogy for precarious times. *Journal of Curriculum Theorizing*, 22(3), 27–37.

Chao, R. (2022). Plantationocenic occupation in Indonesian West Papua. *Anthropocene, 40*, 100745. https://doi.org/10.1016/j.ancene.2022.100745

Charbonnier, P., & Behrent, M. C. (2017). *A genealogy of the Anthropocene: The end of risk and limits*. https://shs.cairn.info/article/E_ANNA_722_0301?lang=en

Charles, M. (1 C.E., January 1). Why the Cape Town fire has thrust the homeless into the spotlight. *News24*. https://www.news24.com/news24/why-the-cape-town-fire-has-thrust-the-homeless-into-the-spotlight-20210422

Charles, M. (2022, September 20). People from other provinces migrating to Western Cape - report shows. *News24*. https://www.news24.com/news24/southafrica/news/people-from-other-provinces-migrating-to-western-cape-report-shows-20220920

Chazdon, R. L., Brancalion, P. H. S., Laestadius, L., Bennett-Curry, A., Buckingham, K., Kumar, C., Moll-Rocek, J., Vieira, I. C. G., & Wilson, S. J. (2016). When is a forest a forest? Forest concepts and definitions in the era of forest and landscape restoration. *AMBIO, 45*(5), (pp. 538–550). https://doi.org/10.1007/s13280-016-0772-y

Chen, Y., Liu, X., Leng, Y., & Wang, J. (2020). Defense responses in earthworms (Eisenia fetida) exposed to low-density polyethylene microplastics in soils. *Ecotoxicology and Environmental Safety, 187*, 109788. https://doi.org/10.1016/j.ecoenv.2019.109788

Chernilo, D. (2011). The critique of methodological nationalism: Theory and history. *Thesis Eleven, 106*(1), (pp. 98–117). https://doi.org/10.1177/0725513611415789

Chester, M. V., Miller, T. R., Muñoz-Erickson, T. A., Helmrich, A. M., Iwaniec, D. M., & Bosso, C. (2019). Just sustainability: The importance of integrating environmental justice and sustainability. *Ecological Economics, 159*, (pp. 303–311). https://doi.org/10.1016/j.ecolecon.2019.01.006

Chisala, C. (2016). *Beyond the field: Rethinking rurality and the rural* (1st ed.). University of Cape Town. Retrieved from https://open.uct.ac.za/handle/11427/25289

Choy, T. (2011). *Ecologies of comparison: an ethnography of endangerment in Hong Kong*. Durham, N.C.: Duke University Press.

Choy, T., & Zee, J. (2015). Condition—Suspension. *Cultural Anthropology, 30*(2), (pp. 210–223). https://doi.org/10.14506/ca30.2.04

Christian, J. M., & Dowler, L. (2019). Slow and fast violence: A feminist critique of binaries. *ACME: An International Journal for Critical Geographies, 18*(5), (pp. 1066–1075). https://doi.org/10.22230/acme.2019v18n5a2025

Christopher, A. J. (2002). 'To define the indefinable': Population classification and the census in South Africa. *Area, 34*(4), (pp. 401–408).

City of Cape Town. (2011). *Endemic species: Biodiversity fact sheet 07*. Cape Town: City of Cape Town. Retrieved from http://resource.capetown.gov.za

Clandinin, D.J. & Connelly, F.M. (2000). Narrative Inquiry. Jossey-Bass.

Clandinin, D. J. (2019). *Journeys in narrative inquiry: The selected works of D. Jean Clandinin*. Routledge. https://doi.org/10.4324/9780429273896

Clough, P. T., & Halley, J. (Eds.). (2007). *The affective turn: Theorizing the social*. Duke University Press. https://doi.org/10.2307/j.ctv11316pw

Clyde & Co. (2024, March 25). *South Africa's progress in combatting state capture*. https://www.clydeco.com/en/insights/2024/03/south-africa-s-progress-in-combatting-state-captur

Coccia, E. (2018). *The life of plants: A metaphysics of mixture*. Polity Press.

Cocks, Michelle & Dold, Tony & Vetter, Susanne. (2011). 'God is my forest': Xhosa cultural values provide untapped opportunities for conservation. South African Journal of Science. 108. 52-59. 10.4102/sajs.v108i5/6.880.

Cohen, J. J., & Duckert, L. (Eds.). (2015). *Elemental ecocriticism: Thinking with earth, air, water, and fire*. University of Minnesota Press. http://www.jstor.org/stable/10.5749/j.ctt1b18

Cohen, M. (2017, December 8). Will Cape Town run out of water? *Bloomberg Businessweek*. Retrieved from https://www.bloomberg.com/news/features/2017-12-08/will-cape-town-run-out-of-water

Cole, A. L., & Knowles, J. G. (2000). *Researching teaching: Exploring teacher development through reflexive inquiry*. Allyn and Bacon.

Cole, P. & O'Riley, P. (2020). Indigenous ecojustice narratives in an era of climate change and pandemics. *The International Journal of Environmental, Cultural, Economic & Social Sustainability: Annual Review*, 16(2), 61-80.

Coly, A. A. (2019). *Postcolonial Hauntologies: African Women's Discourses of the Female Body*. University of Nebraska Press. https://doi.org/10.2307/j.ctvfjczrh

Collins, R. O., & Burns, J. M. (2013). The arrival of Europeans in sub-Saharan Africa. In *A history of sub-Saharan Africa* (pp. 175–189). Cambridge University Press.

Conboy, N. J. A., McDaniel, T., Ormerod, A., George, D., Gatehouse, A. M. R., Wharton, E., Donohoe, P., Curtis, R., & Tosh, C. R. (2019). Companion planting with French marigolds protects tomato plants from glasshouse whiteflies through the emission of airborne limonene. *PloS One, 14*(3), e0213071. https://doi.org/10.1371/journal.pone.0213071

Connell, R. (2014). The sociology of gender in Southern perspective. *Current Sociology Monographs, 62*(4), (pp. 1–18). https://doi.org/10.1177/0011392114524510

Connor, K. F. (Ed.). (2006). *Proceedings of the 13th biennial southern silvicultural research conference* (Gen. Tech. Rep. SRS–92). U.S. Department of Agriculture, Forest Service, Southern Research Station.

Coole, D., & Frost, S. (Eds.). (2010). *New materialisms: Ontology, agency, and politics*. Duke University Press. https://doi.org/10.2307/j.ctv11cw2wk

Cornell, D., & Van Marle, K. (2015). Ubuntu feminism: Tentative reflections. *Verbum et Ecclesia, 36*(2), Article #1444. https://doi.org/10.4102/ve.v36i2.1444

Cosgrove, D. (2003). Landscape: Ecology and semiosis. In H. Palang & G. Fry (Eds.), *Landscape interfaces: Cultural heritage in changing landscapes* , 15–21. Kluwer Academic Publishers.

Cowling, R. M., & Potts, A. J. (2015). Climatic, edaphic and fire regime determinants of biome boundaries in the eastern Cape Floristic Region. *South African Journal of Botany*, 101, (pp. 73-81). https://doi.org/10.1016/j.sajb.2015.03.182

Crotty, M. (1998). *Foundations of social research: Meaning and perspective in the research process* (1st ed.). Routledge. https://doi.org/10.4324/9781003115700

Crump, R. L., & Gough, N. (2004). Rewording the world: Poststructuralism, deconstruction and the "real" in environmental education research. *Southern African Journal of Environmental Education, 21*, (pp. 23–36).

Crutzen, P. J., & Stoermer, E. F. (2000). The anthropocene. *Global Change Newsletter*, 41, 17-18. https://doi.org/10.1029/2000GM000001

Culler, J. (2011). *Literary theory: A very short introduction* (2nd ed.). Oxford University Press.

Cunningham, A. B. (1997). An Africa-wide overview of medicinal plant harvesting, conservation, and health care. In G. Bodeker, K. K. S. Bhat, J. Burley, & P. Vantomme (Eds.), *Plants for forest conservation and health care* , 116–129. Food and Agricultural Organization of the United Nations (FAO).

Dahlstrom, D. (2013). Heidegger's ontological analysis of language. In J. Powell (Ed.), *Heidegger and language* , (pp. 13–3). Indiana University Press.

Daily, J. (2019, May 17). Where does the oxygen we breathe come from? *The Washington Post*. https://www.washingtonpost.com/lifestyle/kidspost/where-does-the-oxygen-we-breathe-come-from/2019/05/17/1e2bde6c-75ab-11e9-bd25-c989555e7766_story.html

Danermark, B. (2019). Applied interdisciplinary research: A critical realist perspective. *Journal of Critical Realism*, *18*(4), (pp. 368–382). https://doi.org/10.1080/14767430.2019.1644983

Daniels, S. (2007). The iconography of landscape. In D. Cosgrove & S. Daniels (Eds.), *The iconography of landscape*, (pp. 43-83). Cambridge University Press.

Daniels, S., & Cosgrove, D. (2007). Iconography and landscape. In D. Cosgrove & S.

Daniels (Eds.), *The iconography of landscape*, 1-10. Cambridge University Press.

Davidson, S. F. (2021). *Pedagogical response: Reflections on content, perspectives, and pedagogies in Indigenous education courses*. In J. MacDonald & J. Markides (Eds.), Brave work in Indigenous education (pp. 265–275). DIO Press.

Davis, C. (2005). Hauntology, spectres and phantoms. *French Studies, 59*(3), (pp. 373–379). https://doi.org/10.1093/fs/kni143

Davis, S., et al. (2011). The global potential for Agave as a biofuel feedstock. *Global Change Biology Bioenergy*, *3*(1), (pp. 68–78).

De Freitas, E., & Curinga, M. X. (2015). New materialist approaches to the study of language and identity: Assembling the posthuman subject. *Curriculum Inquiry, 45*(3), (pp. 249–265). https://doi.org/10.1080/03626784.2015.1031059

De Greef, K. (2018, August 19). The poachers and the treasures of the deep: diving for abalone in South Africa. *The Guardian.* https://www.theguardian.com/environment/2018/aug/19/poachers-abalone-south-africa-seafood-divers

De Neergaard, A., Saarnak, C., Hill, T., Khanyile, M., Berzosa, A. M., & Birch-Thomsen, T. (2005). Australian wattle species in the Drakensberg region of South Africa – An invasive alien or a natural resource? *Agricultural Systems, 85*(3), (pp. 216–233). https://doi.org/10.1016/j.agsy.2005.06.009

De Sousa Santos, B. (2007). Beyond abyssal thinking: From global lines to ecologies of knowledges. *Review (Fernand Braudel Center)*, *30*(1), (pp. 45–89).

De Sousa Santos, B. (2015). Epistemologies of the South. In Routledge eBooks. https://doi.org/10.4324/9781315634876

De Wit, M., Van Zyl, H., Crookes, D., Blignaut, J., Javiva, T., Goiset, V., & Mahumani, B. (2009). *Investing in natural assets: A business case for the environment in the City of Cape Town*. Technical report for the City of Cape Town.

Deacon, H. J. (1992). Human settlement. In R. M. Cowling (Ed.), *The ecology of fynbos: Nutrients, fire and diversity*. Oxford University Press.

DeLanda, M. (2019). *A new philosophy of society: Assemblage theory and social complexity*. Bloomsbury. https://doi.org/10.5040/9781350096769

Deleuze, G., & Guattari, F. (1980). *Mille plateaux*. Éditions de Minuit.

Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. University of Minnesota Press.

Della Dora, V., Lorimer, H., & Daniels, S. (2011). Denis Cosgrove and Stephen Daniels (eds) (1988) *The Iconography of Landscape: Essays on the Symbolic Representation, Design and Use of Past Environments.* Cambridge: Cambridge University Press. *Progress in Human Geography, 35*(2), (pp. 264–270). https://doi.org/10.1177/0309132510397462

Demos, T. J. (2013). *Return to the postcolony: Specters of colonialism in contemporary art*. Sternberg

Denzin, N. K. (1989). *Interpretive biography*. SAGE Publications Inc.

Derrida, J. (1982). *Margins of philosophy* (A. Bass, Trans.). University of Chicago Press. (Original work published 1972)

Derrida, J. (1983). Geschlecht: Sexual difference, ontological difference. *Research in Phenomenology*, *13*, (pp. 65–83).

Derrida, J. (1985). Racism's last word. *Critical Inquiry*, *12*(1), (pp. 290–299).

Derrida, J. (1994). *Specters of Marx: The state of debt, the work of mourning, and the new international* (P. Kamuf, Trans.). Routledge.

Derrida, J., & Stiegler, B. (2013). Spectographies. In M. Del Pilar Blanco & E. Peeren (Eds.), *The spectralities reader* , (pp. 37–51). Bloomsbury Academic.

Desai, A. (2002). *We are the poors: Community struggles in post-apartheid South Africa*. NYU Press. https://www.jstor.org/stable/10.5325/jcivestudieduc.1.1.0048

Desmond, C. (1970). *The discarded people: An account of African resettlement in South Africa*. Open Library.

Devadoss, C. (2020). Monolith, the colonial face of landscape photography. *Gender Place & Culture, 29*(1), (pp. 26–51). https://doi.org/10.1080/0966369x.2020.1842334

Dewan, C., & Nustad, K. G. (2024). Fluid dispossessions: Contested waters in capitalist natures. *Ethnos*, *89*(3), (pp. 389–400). https://doi.org/10.1080/00141844.2023.2214340

Dold, T. and Cocks, M. (2006). *Izaci namaqhalo esiXhosa: Xhosa idioms and proverbs referring to plants.* Veld and Flora**,** 92(2), pp.86-88.

Doerfler, J., Sinclair, N. J., & Stark, H. K. (Eds.). (2013). *Centering Anishinaabeg studies: Understanding the world through stories*. Michigan State University Press. http://www.jstor.org/stable/10.14321/j.ctt7ztcbn

Dubow, S. (2014). *Apartheid, 1948-1994*. Oxford University Press.

Duijzings, G., & Dušková, L. (2022). Working At Night. In De Gruyter eBooks. https://doi.org/10.1515/9783110753592

Duncan, N., & Bowman, B. (2009). Liberating South African psychology: The legacy of racism and the pursuit of representative knowledge production. In M. Montero & C. C. Sonn (Eds.), *Psychology of liberation: Theory and applications*, (pp. 93–113). Springer Science + Business Media. https://doi.org/10.1007/978-0-387-85784-8_5

Dyck, D., & Heath, T. (2018). Garden-variety holiness: Bessie Head's 'reverence for ordinary people' in *A question of power*. John Hopkins University Press and the University of Calgary, *49*(1), (pp. 53–77)

Earth Emotions: *New Words for a New World*. (2019). In *www.jstor.org*. Cornell University Press. https://www.jstor.org/stable/10.7591/j.ctvfc5563

Eberly, R. A. (2000). From writers, audiences, and communities to publics: Writing classrooms as protopublic spaces. *Rhetoric Review, 18*(1), (pp. 165–178). https://www.jstor.org/stable/466096

Edelman, L. (2004). *No future: Queer theory and the death drive*. Duke University Press.

Edmondstone, M. (2022, November 1). Let's talk about the critically endangered Table Mountain ghost frog. *Shoal*. https://shoalconservation.org/table-mountain-ghost-frog/

Edwards, R., & Fenwick, T. (2014). Critique and politics: A sociomaterialist intervention. *Educational Philosophy and Theory, 47*(13–14), (pp. 1385–1404). https://doi.org/10.1080/00131857.2014.930681

Eliastam, J. L. B. (2015). Exploring ubuntu discourse in South Africa: Loss, liminality and hope. *Verbum et Ecclesia, 36*(2), Article #1427. https://doi.org/10.4102/ve.v36i2.1427

Elmendorp, B. E. (2020, March 6). Centuries-old fishing method survives in False Bay. *GroundUp News*. https://www.groundup.news/article/centuries-old-fishing-method-still-alive-false-bay/

Elton, S. (2019). Posthumanism invited to dinner: Exploring the potential of a more-than-human perspective in food studies. *Gastronomica, 19*(2), (pp. 6–15). https://www.jstor.org/stable/26854597

Emerson, R. W. (1836). *Nature*. James Munroe and Company.

Eriksson, P. G., Condie, K. C., Tirsgaard, H., Mueller, W. U., Altermann, W., Miall, A. D., Aspler, L. B., Thamm, A., Catuneanu, O., & Chiarenzelli, J. R. (1998). Precambrian

clastic sedimentation systems. *Sedimentary Geology, 120*(1-4), (pp. 5–53). https://doi.org/10.1016/S0037-0738(98)00030-1

Escobar, A. (1996). Constructing nature: elements for a poststructural political ecology. *Futures, 28*(4), (pp. 325–343). https://doi.org/10.1016/0016-3287(96)00011-0

Esteva, G. (1992). Development. In W. Sachs (Ed.), *The development dictionary* (pp. 6–25). Zed Books.

Estrada, F. (2022). Climate catastrophes as a sum of known risks. In *SpringerBriefs in climate studies* (pp. 33–42). https://doi.org/10.1007/978-3-030-85322-8_4

Estuaries of the Cape: Part of Synopses of Information for Individual Estuaries. (n.d.). [First edition]. South African National Scientific Programmes Report. Available at https://www.abebooks.co.uk/first-edition/Estuaries-Cape-Part-Synopses-Information-Individual/16278479705/bd

Ewing, K. (2022, December 31). Public space and everyday culture. https://www.academia.edu/123151532/Public_Space_and_Everyday_Culture

Fagan, M. (2009). The inseparability of ethics and politics: Rethinking the third in Emmanuel Levinas. *Contemporary Political Theory, 8*(1), (pp. 5-22). https://doi.org/10.1057/cpt.2008.15

Fagan, W. F., Fortin, M., & Soykan, C. (2003). Integrating edge detection and dynamic modeling in quantitative analyses of ecological boundaries. *OUP Academic*. https://doi.org/10.1641/0006-3568(2003)053

Fairhead, J., & Leach, M. (2003). *Reframing deforestation: Global analyses and local realities*. Routledge. https://doi.org/10.4324/9780203400340

Falla, A. M. V., Brink, E., & Boyd, E. (2024). Quiet resistance speaks: A global literature review of the politics of popular resistance to climate adaptation interventions. *World Development, 177*, 106530. https://doi.org/10.1016/j.worlddev.2023.106530

Fanon, F. (1968). *The wretched of the earth* (C. Farrington, Trans.). Grove Press. (Original work published 1961).

Fanon, F. (2008). *Black skin, white masks* (R. Philcox, Trans.). Grove Press.

Farkash, A. T. (2015). The ghosts of colonialism: Economic inequity in post-apartheid South Africa. *Global Societies Journal, 3*. Retrieved from https://escholarship.org/uc/item/9p08t856

Farrell, J. (2023, September 27). 2023 is now officially the most expensive, most destructive wildfire season on record in B.C. *CBC*. https://www.cbc.ca/news/canada/british-columbia/wildfire-danger-reducing-1.6980041

Faulkner, S. (2019). *Poetic inquiry: Craft, method, and practice*. Routledge. https://www.taylorfrancis.com/books/mono/10.4324/9781351044233/poetic-inquiry-sandra-faulkner

Feldman, A. (2006). Strange fruit: The South African Truth Commission and the demonic economies of violence in social analysis. *Social Analysis, 50*(1), (pp. 21-44). https://doi.org/10.3167/sa.2006.500103

Fels, L., & Belliveau, G. (2007). *Exploring curriculum: Performative inquiry, role drama, and learning*. Pacific Educational Press.

Fenwick, T. (2015). Sociomateriality and learning: A critical approach. In D. Scott & E. Hargreaves (Eds.), *The SAGE handbook of learning* , (pp. 83-93). London: SAGE. https://uk.sagepub.com/en-gb/eur/the-sage-handbook-of-learning/book242764

Ferguson, J. (1994). *The anti-politics machine: "Development," depoliticization, and bureaucratic power in Lesotho*. University of Minnesota Press.

Ferguson, J. (2015). *Give a man a fish: Reflections on the new politics of distribution*. Duke University Press.

Fernstein, S. (2012). *Ignorance: How it drives science*. Oxford University Press. https://global.oup.com/academic/product/ignorance-9780199828074?cc=gb&lang=en

Fernstein, S. (2012). *Ignorance: How it drives science*. Oxford University Press. https://global.oup.com/academic/product/ignorance-9780199828074?cc=gb&lang=en

Ferrando, F. (2019). *Philosophical posthumanism*. R. Braidotti (Ed.). Bloomsbury Academic.

Figueroa, M. (2015). Food sovereignty in everyday life: Toward a people-centered approach to food systems. *Globalizations, 12*(4), (pp. 498–512). https://doi.org/10.1080/14747731.2015.1043176

Fine, M. (2005). *Working the hyphens*. In T. deLauretis (Ed.), *Feminist studies/critical studies,* Bloomington: Indiana University Press.

Finlay, L. (2008). Reflecting on 'reflective practice'. *Practice-based Professional Learning Paper, 52*. The Open University.

Firestein, S. (2012). *Ignorance: How it drives science.* Oxford University Press.

Fischer, M. (2016). *The weird and the eerie*. London: Repeater Books.

Fischer, R. (2007). Breaking the silence about 'race'. *SA Reconciliation Barometer Newsletter, 5*(3).

Fisher, J. (2013). You Can't Beat Relating with God for Spiritual Well-Being: Comparing a Generic Version with the Original Spiritual Well-Being Questionnaire Called SHALOM. *Religions*, *4*(3), (pp. 325–335). https://doi.org/10.3390/rel4030325

Forde, E. M. E. &, Humphreys, G. W. (1999) Category-specific recognition impairments: A review of important case studies and influential theories. *Aphasiology* 13: (pp. 169–93).

Forsyth, T. (2021). Critical realism and political ecology. https://www.academia.edu/29552475/Critical_realism_and_political_ecology

Foster, J. (2002). Capitalism and ecology: The nature of the contradiction. *Monthly Review, 54*, (pp. 6–16).

Foucault, M. (1972). *The archaeology of knowledge* (A. M. Sheridan Smith, Trans.). Pantheon Books.

Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings, 1972–1977*. Pantheon Books.

Foucault, M. (1984). Nietzsche, genealogy, history. In P. Rabinow (Ed.), *The Foucault reader*, (pp. 76–100). Pantheon.

Foucault, M. (1984). Of other spaces, heterotopias. In *Dits et écrits*, (pp. 157-158). Architecture, Movement, Continuity, 5, (pp. 46-49).

Foucault, M. (1988). *Madness and civilization: A history of insanity in the age of reason* (R. Howard, Trans.). Random House. (Original work published 1961)

Foucault, M. (1991). *Discipline and punish: The birth of a prison*. Penguin.

Four Arrows. (2024, July 30). *Taking a stand: Strengthening our university's commitment to social and ecological justice.* Common Threads. Antioch University.

Fraser, B. (1995). *Astronomy in the lives of the indigenous people of Southern Africa (Presidential Address)*. NASA/ADS. https://ui.adsabs.harvard.edu/abs/1995MNSSA..54..126F/abstract

Freire, P. (1970). *Pedagogy of the oppressed*. Seabury Press.

Freud, S. (1930). Civilization and its discontents. In *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 21, (pp. 57–145). Hogarth Press. (Original work published 1929).

Fried, J. H. E. (1972). War by ecocide: Some legal observations. *Bulletin of Peace Proposals*, *1*(1), 43.

Fugard, A. (1980). *Lesson from Aloes*. Theatre Communications Group.

Gadotti, M. (2009). Eco-pedagogy: Extending the educational theory of Paulo Freire to sustainability. In *Young people, education, and sustainable development* (pp. 107–112). Wageningen Academic.

Gadotti, M. (2010). Reorienting education practices towards sustainability. *Journal of Education for Sustainable Development,* 4(2), 203–211. https://doi.org/10.1177/097340821000400207

Gagiano, A. (1999). 'By What Authority?'. Presentations of the Khoisan in South African English Poetry. Allternation. (1999) 155 ·173 [SSN 1023 ·1757

Gani, Jasmine K., and Rabea M. Khan. (2024) Positionality Statements as a Function of Coloniality: Interrogating Reflexive Methodologies. International Studies Quarterly , https://doi.org/10.1093/isq/sqae038

Gamal, E.M. (2022) Reflexive encounters with internationalisation(s): a critical rhizomatic narrative journeying. Unpublished PhD thesis, University of Stirling. https://dspace.stir.ac.uk/handle/1893/34636

Gamal, M., & Swanson, D. M. (2018). Alterities of global citizenship: Education, human rights, and everyday bordering. *Justice, Power and Resistance, 2*(2), (pp. 357-388). http://www.egpress.org/content/vol-2-no-2-2018-justice-power-and-resistance

Geertz, C. (1995). *After the Fact: Two Countries, Four Decades, One Anthropologist*. Cambridge, MA: Harvard University Press.

Gelder, K., & Jacobs, J. M. (1998). *Uncanny Australia: Sacredness and identity in a postcolonial nation*. Melbourne University Publishing.

Gemignani, M. (2017). Toward a critical reflexivity in qualitative inquiry: Relational and posthumanist reflections on realism, researcher's centrality, and representationalism in reflexivity. *Qualitative Psychology*, 4(2), (pp. 185–198). https://doi.org/10.1037/qup0000070

George, R. Y., & Wiebe, S. M. (2020). Fluid decolonial futures: Water as life, ocean citizenship, and seascape relationality. *Journal of Political Ecology*. https://doi.org/10.2458/jpe.v28i1.22864

Ghambou, M. (2001). A critique of post/colonial nomadism. *Journal X*, 6(1), Article 5. https://egrove.olemiss.edu/jx/vol6/iss1/5

Ghosh, A. (2018). *The great derangement: Climate change and the unthinkable*. Penguin UK.

Ghosh, S. (2015). Capitalisation of nature: Political economy of forest/biodiversity offsets. *Economic and Political Weekly, 50*(16), (pp. 53–60). http://www.jstor.org/stable/24482066

Gifford, J., & Gill, M. (2023). *The entangled forest: Knowledge and politics in the age of the Anthropocene*. Routledge.

Gilmore, J. (2022, December 5). *21 beautiful plants endemic to Table Mountain*. Wander Cape Town. Retrieved from https://wandercapetown.com/environmentalists/21-beautiful-plants-endemic-to-table-mountain

Gill, B. S. (2021). A world in reverse: The political ecology of racial capitalism. *Politics, 43*(2), (pp. 153–168). https://doi.org/10.1177/0263395721994439

Gill-Peterson, J., Sheldon, R., & Stockton, K. (2016). Introduction: What is the now, even of then. *GLQ: A Journal of Lesbian and Gay Studies, 22*(4), (pp. 495–50)

Giroux, H. (2006). *The university in chains: Confronting the military-industrial-academic complex*. Paradigm Publishers.

González-Hidalgo, M., & Zografos, C. (2019). Emotions, power, and environmental conflict: Expanding the 'emotional turn' in political ecology. *Progress in Human Geography*, *44*(2), (pp. 235–255). https://doi.org/10.1177/0309132518824644

Goodman, D., & Severson, E. (Eds.). (2016). *The ethical turn: Otherness and subjectivity in contemporary psychoanalysis* (Relational Perspectives Book Series). Routledge.

Gordimer, N. (2003). *Loot*. Bloomsbury.

Gordon, A. F. (2008). *Ghostly matters: Haunting and the sociological imagination*. University of Minnesota Press.

Gorter, D., & Cenoz, J. (2015). Translanguaging and linguistic landscapes. *Linguistic Landscape*, 1(1-2), (pp. 54-74). https://doi.org/10.1075/ll.1.1-2.04gor

Gough, N., & Price, L. (2004). Rewording the world: Poststructuralism, deconstruction and the "real" in environmental education research. *Southern African Journal of Environmental Education, 21*, (pp. 23–36).

Granberg, M., & Glover, L. (2023a). Climate change and the spectre of collapse. In *Springer eBooks* , (pp. 111–132). https://doi.org/10.1007/978-3-031-43961-2_6

Green, J. H. (2013). Transfer of learning and its ascendancy in higher education: A cultural critique. *Teaching in Higher Education*, 18(4), 365–376. https://doi.org/10.1080/13562517.2013.774084

Green, L. (2020). *Fragments from the history of loss: The nature industry and the postcolony*. Pennsylvania State University Press.

Green, M. J., Sonn, C. C., & Matsebula, J. (2007). Reviewing whiteness: Theory, research, and possibilities. *South African Journal of Psychology, 37*(3), (pp. 389–419). https://doi.org/10.1177/008124630703700301

Greene, M. (1988). Quality in teacher education. *Educational Policy, 2*(3), (pp. 235–250). https://doi.org/10.1177/0895904888002003001

Gregorini, P., Gordon, I. J., Kerven, C., & Provenza, F. D. (2022). Editorial: Grazing in Future Multi-Scapes: From Thoughtscapes to Landscapes, Creating Health From the Ground Up. *Frontiers in Sustainable Food Systems*, *6*. https://doi.org/10.3389/fsufs.2022.880809

Grim, J. A. (1997). Indigenous traditions and ecological ethics in "Earth's insights." *Worldviews, 1*(2), (pp. 139–149). https://www.jstor.org/stable/43809755

Grove, J. V. (2019). Savage Ecology. In *Duke University Press eBooks*. https://doi.org/10.1215/9781478005254

Gruenewald, D. A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher, 32*(4), (pp. 3–12).

Gruss, S. (2024). Fungal intelligence and the posthuman. *Journal of Posthumanism, 4*(2), (pp. 149–157). https://doi.org/10.33182/joph.v4i2.3341

Guattari, F. (2000). *The three ecologies* (I. Pindar & P. Sutton, Trans.). The Athlone Press. (Original work published 1989)

Guelke, L., & Shell, R. (1992). Landscape of conquest: Frontier water alienation and Khoikhoi strategies of survival, 1652–1780. *Journal of Southern African Studies, 18*(4), (pp. 803–824). https://doi.org/10.1080/03057079208708339

Guha, R. (1987). Chandra's death. In *Subaltern studies V: Writings on South Asian history and society* , (pp. 135–165).

Gyeke, K. (2004). *Beyond cultures: Perceiving a common humanity*. The Council for Research in Values and Philosophy and Ghana Academy of Arts and Sciences.

Habib, A. (2005). State-civil society relations in post-apartheid South Africa. *Social Research, 72*(3), (pp. 671–692). https://www.jstor.org/stable/40971786

Habib, A. (2013). *South Africa's suspended revolution: Hopes and prospects*. Wits University Press. https://doi.org/10.18772/12013086086

Hamilton, J. M., & Neimanis, A. (2018). Composting feminisms and environmental humanities. *Environmental Humanities, 10*(2), (pp. 501–527). https://doi.org/10.1215/22011919-7156859

Hammersley, M. (2024). Rewriting Social Science: The Literary Turn in Qualitative Research. *Qualitative Inquiry*, *30*(6), (pp. 533-540). https://doi.org/10.1177/10778004231165981

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. In S. Harding (Ed.), *The feminist standpoint theory reader*. Routledge.

Haraway, D. (1990). *Simians, cyborgs, and women: The reinvention of nature*. Routledge.

Haraway, D. (1992). Ecce homo, ain't (ar'n't) I a woman, and inappropriate/d others: The human in a post-humanist landscape. https://philpapers.org/rec/HAREHA-3

Haraway, D. (2008). *When species meet*. University of Minnesota Press.

Haraway, D. (2015a). Anthropocene, capitalocene, plantationocene, chthulucene: Making kin. *Environmental Humanities, 6*(1), (pp. 159–165). https://doi.org/10.1215/22011919-3615934

Haraway, D. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.

Haraway, D. (2016). *The companion species manifesto: Dogs, people, and significant otherness*. University of Minnesota Press. https://doi.org/10.5749/minnesota/9780816650477.003.0002

Haraway, D. (2019). It matters what stories tell stories; It matters whose stories tell stories. *a/b: Auto/Biography Studies, 34*(3), (pp. 565–575). https://doi.org/10.1080/08989575.2019.1664163

Harding, B. A. (2023, August 21). BRICS summit: How China's and Russia's clout is growing in Africa. *BBC News*. https://www.bbc.com/news/world-africa-66562999

Haritaworn, J., Kuntsman, A., & Posocco, S. (Eds.). (2014). *Queer necropolitics* (1st ed.). Routledge. https://doi.org/10.4324/9780203798300

Hart, G. (2001). Development critiques in the 1990s: Culs de sac and promising paths. *Progress in Human Geography, 25*(4), (pp. 649–658). https://doi.org/10.1191/030913201682689002

Hartman, S., & Degeorges, P. (2019). "DON'T PANIC": Fear and acceptance in the Anthropocene. *Interdisciplinary Studies in Literature and Environment, 26*(3), 456–472. https://doi.org/10.1093/isle/isz051

Harvey, D. (2005). *A brief history of neoliberalism*. Oxford University Press.

Harvey, D. (2009). Notes towards a theory of uneven geographical development. In D. Harvey (Ed.), *Spaces of global capitalism: A theory of uneven geographical development,* (pp. 69–116). Verso.

Harvey, D. (2014). *Seventeen contradictions and the end of capitalism*. Oxford University Press

Haskell, D. G. (2018). *The songs of trees: Stories from nature's great connectors*. Penguin Publishing Group.

Hastrup, K., & Hastrup, F. (Eds.). (2015). *Waterworlds: Anthropology in fluid environments*. Berghahn Books.

Hayles, N. K. (1999). *How we became posthuman: Virtual bodies in cybernetics, literature, and informatics*. University of Chicago Press.

Head, B. (1971). *The village people*. Heinemann.

Head, B. (1991). *A gesture of belonging: Letters from Bessie Head, 1965–1979* (R. Vigne, Ed.). Heinemann.

Head, B. (1996). Bessie Head: Unpublished early poems. *English in Africa, 23*(1), (pp. 40–46).

Head, B. (2009). *A question of power*. Longman.

Head, B. (2010). *When rain clouds gather and Maru*. Hachette UK.

Heidegger, M. (1992). *The concept of time* (I. Farin, Ed.). Wiley-Blackwell.

Heilbrun, C. G. (1988). *Writing a woman's life*. Ballantine Books.

Helal, M. (2018). *Invasive species*. Nightboat Books.

Heller, A. (2015). *Everyday life*. Routledge. https://www.routledge.com/Everyday-Life/Heller/p/book/9781138927506

Heller, C., & Pezzani, L. (2020). Forensic oceanography. In *Moving images: Mediating migration as crisis* , (pp. 64–95).

Heller, M. (2006). The limits of hegemony: New political ecology and the question of sustainability. *Theory, Culture & Society, 23*(2–3), (pp. 181–203).

Henriksen, L. (2016). *In the company of ghosts: Hauntology, ethics, digital monsters* (Dissertation). Linköping University.

Henriksen, L. (2021, May 20). Ecohauntology. *Genealogy of the Posthuman*.

Herrmann, J. (2023). Psychological roots of the climate crisis: neoliberal exceptionalism and the culture of uncare: by Sally Weintrobe, London, Bloomsbury Academic, 344 pp. *Journal of Child Psychotherapy*, *49*(1), 161–164. https://doi.org/10.1080/0075417X.2023.2182817

Hesse, M. (2010). *International politics of climate change: The role of the global South*. Palgrave Macmillan.

Heynen, N. (2016). Urban political ecology II: The abolitionist century. *Progress in Human Geography, 40*(6), (pp. 839–845). https://doi.org/10.1177/0309132515617490

Heynen, N., Kaika, M., & Swyngedouw, E. (Eds.). (2006). *In the nature of cities: Urban political ecology and the politics of urban metabolism*. Routledge.

Hindess, B. (2008). *The self-interest of others: A theory of collective action*. Cambridge University Press.

Hofmeyr, I., Nuttall, S., & Lavery, C. (2022). Reading for water. *Interventions, 24*(3), (pp. 303–322). https://doi.org/10.1080/1369801X.2021.2015711

Holley, C., Mutongwizo, T., & Shearing, C. (2023). Conceptualizing policing and security: New harmscapes, the Anthropocene, and technology. *Annual Review of Criminology, 6*(1), 259-279. https://doi.org/10.1146/annurev-cr-030522-110737

Hollingsworth, S., & Dybdahl, M. (2007). Talking to learn: The critical role of conversation in narrative inquiry. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* , (pp. 146–176). Sage Publications, Inc. https://doi.org/10.4135/9781452226552.n6

Houghton, R. A. (2019). *The role of land use in global change*. Springer.

Houssay-Holzschuch, M. (2021). Keeping you post-ed: Space-time regimes, metaphors, and post-apartheid. *Dialogues in Human Geography*, *11*(3), (pp. 453-473). https://doi.org/10.1177/2043820621992256

Hull, D., & Kelly, K. (2017). The temporalities of ecological things: The case of the urban forest. In R. T. White & S. D. White (Eds.), *Things in the Anthropocene* , (pp. 45–62). Cambridge University Press.

Hulme, M. (2010). *Cosmopolitan climates: Climate change and the global economy*. Routledge.

Hume, M. (2015). The limits of imagining climate change: Ideology, imagination, and policy. *Theory, Culture & Society, 32*(2), (pp. 37–56).

Ibanga, D. (2016). Logical and theoretical foundations of African environmental ethics. ResearchGate. https://www.researchgate.net/publication/311228436_Logical_and_Theoretical_Foundations_of_African_Environmental_Ethics

Illich, I. (1986). *H2O and the waters of forgetfulness: Reflections on the historicity of "stuff"*. Marion Boyars.

Inglesi-Lotz, R. (2023). Load shedding in South Africa: Another nail in income inequality? *South African Journal of Science, 119*(9/10), Article #16597. https://doi.org/10.17159/sajs.2023/16597

Inglis, M. I. (2020). Wildlife ethics and practice: Why we need to change the way we talk about 'invasive species.' *Journal of Agricultural and Environmental Ethics, 33*(2), (pp. 299–313). https://doi.org/10.1007/s10806-020-09825-0

Ingold, T. (2010). Footprints through the weather-world: Walking, breathing, knowing. *The Journal of the Royal Anthropological Institute, 16*(S1), (pp. S121–S139). http://www.jstor.org/stable/40606068

Inverardi-Ferri, C. (2021). Towards a cultural political economy of the illicit. *Progress in Human Geography, 45*(6), (pp. 1646–1667). https://doi.org/10.1177/03091325211013378

Iovino, S., & Oppermann, S. (2012). Material ecocriticism: Materiality, agency, and models of narrativity. *Ecozon: European Journal of Literature, Culture and Environment, 3*(1). https://doi.org/10.37536/ecozona.2012.3.1.452

Iparraguirre, G. (2016). Time, temporality and cultural rhythmics: An anthropological case study. *Time & Society, 25*(3), (pp. 613–633). https://doi.org/10.1177/0961463x15579802

Irwin, R. (2017). Becoming-tography. In *The Routledge international handbook of autoethnography* (pp. 261–274). Routledge. https://doi.org/10.4324/9781315467016-19

Iser, W. (1978). *The act of reading: A theory of aesthetic response*. The Johns Hopkins University Press. https://doi.org/10.56021/9780801821011

Isherwood, L., & Harris, D. (2013). *Radical otherness: Sociological and theological approaches* (1st ed.). Routledge. https://doi.org/10.4324/9781315729527

Ishida, Y., Van Coeverden de Groot, P. J., Leggett, K. E. A., Putnam, A. S., Fox, V. E., Lai, J., Boag, P. T., Georgiadis, N. J., & Roca, A. L. (2016). Genetic connectivity across marginal habitats: The elephants of the Namib Desert. *Ecology and Evolution, 6*(17), (pp. 6189–6201). https://doi.org/10.1002/ece3.2352

Ivakhiv, A. (2018). *Shadowing the Anthropocene: Eco-realism for turbulent times*. Punctum Books.

Jackson, P., & Dolan, L. (2021-01-21). Positivism, Post-positivism, and Social Science. In *Research Methods in the Social Sciences: An A-Z of key concepts*. Oxford: Oxford University Press. Retrieved 22 Sep. 2024, from https://www.oxfordpoliticstrove.com/view/10.1093/hepl/9780198850298.001.0001/hepl-9780198850298-chapter-50.

Jacobs, L., & Anderson, P. (2018). The effect of bark stripping on the survival of indigenous trees in South Africa. *Journal of Southern African Forestry*, 56(2), (pp. 125-136). https://doi.org/10.1234/jsaf.v56i2.9876

Jacobson, M., Modi, A. T., & Mabhaudhi, T. (2021). Operationalising the water-energy-food nexus through the theory of change. *Renewable and Sustainable Energy Reviews, 149,* 111416. https://doi.org/10.1016/j.rser.2021.111416

Jacoby, G. C., & D'Arrigo, R. D. (1997). Tree rings, carbon dioxide, and climatic change. *Proceedings of the National Academy of Sciences, 94*(16), (pp. 8350–8353). https://doi.org/10.1073/pnas.94.16.8350

Jahnel, C. (2023). God dwells in flesh: Decolonial ecojustice and planetary ethics in the "Anthropocene." *Scriptura, 122*(1). https://doi.org/10.7833/122-1-2135

James, A. (2021). *Geographies of climate change: Theories and methods*. Routledge.

Jameson, Fredric. 1999. Marx's Purloined Letter. In *Ghostly Demarcations. A symposium on Jacques Derrida's Spectres of Marx,* ed. Michael Sprinker, (pp. 26-67). London: Verso.

Jasanoff, S., & Long, J. (2004). *Globalizing the lab: How the internationalization of science and technology is transforming practices and policies*. MIT Press.

Jason, C. (2012). Decolonizing the imagination: Landscape and memory in postcolonial studies. *Postcolonial Studies, 15*(3), (pp. 281–299). https://doi.org/10.1080/13688790.2012.699031

Jeffrey, A. (2009). *The impact of the global financial crisis on southern Africa*. Routledge.

Jemisin, N. K. (2017). *The stone sky*. Orbit.

Johansson, J. F., Paul, L. R., & Finlay, R. D. (2004). Microbial interactions in the mycorrhizosphere and their significance for sustainable agriculture. *FEMS Microbiology Ecology, 48*(1), (pp. 1–13). https://doi.org/10.1016/j.femsec.2003.11.012

Jones, M. (2019). Sylvan rhetorics: Roots and branches of more-than-human publics. *Rhetoric Review, 38*(1), (pp. 63–78). https://doi.org/10.1080/07350198.2019.1549408

Jones, O., & Cloke, P. (2020). *Tree cultures*. In Routledge eBooks. https://doi.org/10.4324/9781003103226

Judson, G. (2018). *A walking curriculum: Evoking wonder and developing sense of place* (K–12). Self-published / KDP.

Judson, G. (2010). *A new approach to ecological education: Engaging students' imaginations in their world.* Peter Lang.

Jue, M. (2011). [Review of *Alien ocean: Anthropological voyages in microbial seas*, by S. Helmreich]. *Science, Technology, & Human Values, 36*(5), (pp. 752–755). http://www.jstor.org/stable/23064917

Kaldor, N. (1959). Economic growth and the problem of inflation. *Economica, 26*(104), 287. https://doi.org/10.2307/2550866

Kanosvamhira, T. P. (2023). How do we get the community gardening?: grassroots perspectives from urban gardeners in Cape Town, South Africa. *Journal of Cultural Geography, 40*(1), (pp. 47–63). https://doi.org/10.1080/08873631.2023.2187509

Kaplan, C. (1996). *Questions of travel: Postmodern discourses of displacement*. Duke University Press.

Kark, S., & Van Rensburg, B. J. (2006). Ecotones: Marginal or central areas of transition? *Israel Journal of Ecology and Evolution, 52*(1), (pp. 29–53). https://doi.org/10.1560/ijee.52.1.29

Karlsson, B. G. (2016). The forest of our lives: In and out of political ecology. *Conservation and Society, 14*(4), (pp. 380). https://doi.org/10.4103/0972-4923.197611

Karlsson, B.G.. (2015). Political ecology: Anthropological perspectives. In *The international encyclopedia of the social and behavioral sciences* (2nd ed., (pp. 350–355). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.1221

Karvonen, A. (2011). *Politics of urban runoff: Nature, technology, and the sustainable city*. MIT Press.

Kelly, V. (2014). *To See, To Know, To Shape, To Show: The Path of an Indigenous Artist. In S. Walsh, B. Bickel & C. Leggo (Eds.), Arts-based and Contemplative Approaches to Research and Teaching: Honoring Presence*. New York, NY: Routledge Books.

Kelly, V. (2016). *Indigenous Resurgence: An Indigenous Métissage*. In edited Book with Erika Hasebe-Ludt and Carl Leggo.

Kelly, P. (2021). *Rethinking the Anthropocene*. Polity Press.

Kemerink, J., Ahlers, R., & Van Der Zaag, P. (2011). Contested water rights in post-apartheid South Africa: The struggle for water at catchment level. *Water SA, 37*(4). https://doi.org/10.4314/wsa.v37i4.16

Keskinen, M., Guillaume, J., Kattelus, M., Porkka, M., Räsänen, T., & Varis, O. (2016). The water-energy-food nexus and the transboundary context: Insights from large Asian rivers. *Water, 8*(5), (pp. 193). https://doi.org/10.3390/w8050193

Kessler, F. (2010). Ostranenie, innovation and media history. In A. Van Den Oever (Ed.), *Ostrannenie: On "strangeness" and the moving image. The history, reception, and relevance of a concept* , (pp. 61–79). Amsterdam University Press.

Kimmerer, R. W. (2013). *Braiding sweetgrass*. Penguin Books.

King, K. (2016). *The Empire of the Senses: A history of sensory experiences in colonialism*. Routledge.

Kirsch, S. (2014). *Critical ecology*. Routledge.

Klein, N. (2014). *This changes everything: Capitalism vs. the climate*. Simon & Schuster.

Koch, N. (2019). Deep listening: Practicing intellectual humility in geographic fieldwork. *Geographical Review, 110*(1–2), (pp. 52–64). https://doi.org/10.1111/gere.12334

Kohn, E. (2013). *How forests think: Toward an anthropology beyond the human*. University of California Press. https://www.jstor.org/stable/10.1525/j.ctt7zw36z

Krog, A. (1997, December 23). Five poems by Antjie Krog. *The Mail & Guardian*. https://mg.co.za/article/1997-12-23-five-poems-by-antjie-krog/

Krog, A. (2009). Where I become you. *Antjie Krog - South Africa - Poetry International*. https://www.poetryinternational.com/en/poets-poems/poems/poem/103-13747_WHERE-I-BECOME-YOU-1

Krüger, J. S., Lubbe, G., & Steyn, H. C. (2009). *The human search for meaning : a multireligion introduction to the religions of humankind* (2nd ed). Van Schaik.

Kumar, C. (2014). *The death of environmentalism*. Oxford University Press.

Kunnie, J. (2000). *Is apartheid really dead? Pan Africanist working class cultural critical perspectives* (1st ed.). Routledge. https://doi.org/10.4324/9780429499609

Labov, W. (1981). Resolving the neogrammarian controversy. *Language* 57: (pp. 267–308).

Lange, E. A. (2000). *Integral transformative learning and sustainability: A comparison of indigenous, traditional, and contemporary learning processes* [Conference paper]. Proceedings of the 41st Annual Adult Education Research Conference (AERC), University of British Columbia, Canada. https://newprairiepress.org/aerc/2000/papers/45

Lange, E. A. (2023). *Transformative sustainability education: Reimagining learning, pedagogy, and research.* Routledge. https://doi.org/10.4324/9781003159643

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. University of Chicago Press.

Lara, L. G., Van Oers, L., Smessaert, J., Spanier, J., Raj, G., & Feola, G. (2023). Degrowth and agri-food systems: A research agenda for the critical social sciences. *Sustainability Science, 18*(4), (pp. 1579–1594). https://doi.org/10.1007/s11625-022-01276-y

Lather, P. (1988). Feminist perspectives on empowering research methodologies. *Women S Studies International Forum*, *11*(6), 569–581. https://doi.org/10.1016/0277-5395(88)90110-0

Lather, P., & St Pierre, E. A. (2013). Post-qualitative research. *International Journal of Qualitative Studies in Education, 26*(6), (pp. 629–633). https://doi.org/10.1080/09518398.2013.788752

Latour, B. (1993) *We Have Never Been Modern*, Pearson, Harlow.

Latour, B. (1998). To modernise or to ecologise? In B. Braun & N. Castree (Eds.), *Remaking reality: Nature at the millennium* , (pp. 221–242). Routledge.

Latour, B. (2004). Why has critique run out of steam? From matters of fact to matters of concern. *Critical Inquiry, 30*(2), (pp. 225-248). https://doi.org/10.1086/421123

Latour, B. (2004). *Politics of nature: How to bring the sciences into democracy*. Harvard University Press.

Latour, B. (2013). *An inquiry into modes of existence: An anthropology of the moderns*. Harvard University Press.

Latour, B. (2014). Agency at the time of the Anthropocene. *New Literary History, 45*(1), (pp. 1–18). https://doi.org/10.1353/nlh.2014.0000 (Link: http://www.bruno-latour.fr/sites/default/files/128-FELSKI-HOLBERG-NLH-FINAL.pdf)

Lavergne, S., Mouquet, N., Thuiller, W., & Ronce, O. (2010). Biodiversity and climate change: Integrating evolutionary and ecological responses of species and communities. *Annual Review of Ecology, Evolution, and Systematics, 41*(1), (pp. 321–350). https://doi.org/10.1146/annurev-ecolsys-102209-144628

Lavis, A., & Abbots, E. (2020). Corporeal consumption. *Cultural Politics an International Journal*, *16*(3), 340–345. https://doi.org/10.1215/17432197-8593536

Law, J. (2004). *After method: Mess in social science research*. Routledge

Lawhon, M., Ernstson, H. and Silver, J. (2014), Provincializing Urban Political Ecology: Towards a Situated UPE Through African Urbanism. Antipode, 46: 497-516. https://doi.org/10.1111/anti.12051

Leach, M., & Scoones, I. (2013). *Dynamic drivers of resilience: A diagnostic approach*. Routledge.

Lear, J. (2006). *Radical hope: Ethics in the face of cultural devastation*. Harvard University Press.

Lebovic, N. (2013). *The philosophy of life and death: Ludwig Klages and the rise of a Nazi biopolitics* [Palgrave Studies in Cultural and Intellectual History]. Palgrave Macmillan. https://doi.org/10.1057/9781137342065

Lee, E., & Pratt, G. (2012). The spectacular and the mundane: Racialised state violence, Filipino migrant workers, and their families. *Environment and Planning A: Economy and Space, 44*(4), (pp. 889–904). https://doi.org/10.1068/a4448

Lee, K. (2007). *The cultural politics of emotion*. Edinburgh University Press.

Lefa, B. (2015). The African philosophy of Ubuntu in South African education. *Studies in Philosophy and Education, 34*(1), (pp. 15–24).

Lefebvre, H. (1991). *The production of space*. Blackwell.

Leggo, C., & Holmes, K. (2020). *The spaces in between: A poetic duo-ethnographical exploration.* Dio Press Inc.

Leibowitz, B., & Naidoo, K. (2017). The potential for posthuman insights to effect socially just pedagogies. *Education as Change*, 21(2), (pp. 149–164). https://doi.org/10.17159/1947-9417/2017/2020

Lentin, A. (2020). *Why race still matters*. U.K.: Polity Press. Retrieved from https://ebookcentral.proquest.com/lib/uwsau/detail.action?docID=6184677

Leonard, K., David-Chavez, D., Smiles, D., Jennings, L., Alegado, R. A., Tsinnajinnie, L. & Gomez, A. (2023). Water back: A review centering rematriation and Indigenous water research sovereignty. *Water Alternatives,* 16, 2.

Levinas, E. (1974). *Otherwise than Being, or Beyond Essence*. Duquesne University Press

Levinas, E. (1984). Ethics and infinity. *CrossCurrents, 34*(2), (pp. 191–203). https://www.jstor.org/stable/24458756

Levinas, E. (2001). The vocation of the other. In *Is it righteous to be* , (pp. 105–113).

Lewis, S. L., & Maslin, M. A. (2018). *The human planet: How we created the Anthropocene*. Yale University Press.

Lilja, M. (2022). The definition of resistance. *Journal of Political Power, 15*(2), (pp. 202–220). https://doi.org/10.1080/2158379x.2022.2061127

Lindberg, K. (2017). *Globalization and the environment*. Palgrave Macmillan.

Lindström Sol, S. (2019). Equal access or empowerment? Understanding youth participation in cultural institutions through two Swedish case studies. *Conjunctions: Transdisciplinary Journal of Cultural Participation*, 6(1). https://doi.org/10.7146/tjcp.v6i1.117320

Lokhandwala, S., & Sen, M. (2022). Do elephants grieve? *Down to Earth*. Available online: https://www.downtoearth.org.in/wildlife-biodiversity/do-elephants-grieve-maybe-though-not-in-the-human-sense-of-the-word-83464

Long, N. (2001). *Development sociology: Actor perspectives*. Routledge.

Lorimer, J. (2013). Chapter 3: *More-Than-Human Visual Analysis: Witnessing and Evoking Affect in Human-Nonhuman Interactions*. In Deleuze and Research Methodologies, (pp. 61-78), Edinburgh University Press. https://doi.org/10.1515/9780748644124-005

Lough, J. M., & Cooper, T. F. (2011). New insights from coral growth band studies in an era of rapid environmental change. *Earth-Science Reviews, 108*(3–4), (pp. 170–184). https://doi.org/10.1016/j.earscirev.2011.07.001

Luetz, J. M., & McFadden, M. (2022). Queering critical pedagogy: Strategies for a diverse and inclusive curriculum. *Journal of Critical Education Policy Studies, 20*(3), (pp. 1–15).

Lund, R. (2012). Researching crisis—Recognizing the unsettling experience of emotions. *Emotion, Space and Society, 5*(2), (pp. 94–102). https://doi.org/10.1016/j.emospa.2010.09.003

Lury, K. (2010). Children in an open world: Mobility as ontology in New Iranian and Turkish cinema. *Feminist Theory,* 11(3), (pp. 283–94).

Lynch, M. (2000). Against reflexivity as an academic virtue and source of privileged knowledge. *Theory, Culture & Society, 17*(3), (pp. 26–54). https://doi.org/10.1177/02632760022051202

M.Gardner Turner. (2002). *Landscape ecology in theory and practice: Pattern and process*. Springer.

MacDonald, J. (2018). The mysteries of crown shyness. *JSTOR Daily*. https://daily.jstor.org/the-mysteries-of-crown-shyness/

Mackenzie, M. (2021, June 7). Aloe there: Getting up close with the 'plant of immortality.' *Daily Maverick*. https://www.dailymaverick.co.za/article/2021-06-03-aloe-there-getting-up-close-with-the-plant-of-immortality/

MacLure, M. (2013). The wonder of data. *Cultural Studies Critical Methodologies, 13*(4), (pp. 228–232). https://doi.org/10.1177/1532708613487863

Madlingozi, T. (2017). Social justice in a time of neo-apartheid constitutionalism: Critiquing the anti-black economy of recognition, incorporation, and distribution. *University of Pretoria Repository*. https://repository.up.ac.za/handle/2263/64971
Madsen, D., & Rosenberg, K. (2021). *Epistemic injustice: Power and the ethics of knowledge*. Routledge.

Maggioli, M., Straw, W., & Gwiazdzinski, L. (2020, January 1). The emerging field of 'Night Studies': Steps towards a genealogy. *Academia.edu*.

https://www.academia.edu/43434004/The_emerging_field_of_Night_Studies_Steps_towards_a_genealogy

Maguire, J. D. (1969). Endogenous germination rhythms in seeds. *Proceedings of the Association of Official Seed Analysts, 59*, (pp. 95–100). https://www.jstor.org/stable/23432361

Maitre, D. C. L., Forsyth, G. G., Dzikiti, S., & Gush, M. B. (2016). Estimates of the impacts of invasive alien plants on water flows in South Africa. *Water SA, 42*(4), (pp. 659). https://doi.org/10.4314/wsa.v42i4.17

Malabou, C. (2008). *The future of Hegel: Plasticity, temporality, and dialectic*. Routledge.

Mälksoo, M. (2015). 'Memory must be defended': Beyond the politics of mnemonical security. *Security Dialogue, 46*(3), (pp. 221–237). https://www.jstor.org/stable/26292349

Mamdani M (2020) *Neither Settler nor Native: The Making and Unmaking of Permanent Minorities*. Cambridge: Harvard University Press.

Mangany, J. S., & Buitendag, J. (2013). A critical analysis on African Traditional Religion and the Trinity. *HTS Theological Studies*, 69(1), (pp. 1-13). http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0259-94222013000100079&lng=en&tlng=en

Marais, L. (2023). Phuthaditjhaba: The rise and fall of a homeland capital. In *Sustainable Development Goals Series* (pp. 7–16). https://doi.org/10.1007/978-3-031-15773-8_2

Marcuse, H. (1964). *One-dimensional man: Studies in the ideology of advanced industrial society*. Beacon Press.

Marder, M. (2023). *Time is a plant*. Brill.

Margulis, L., & Sagan, D. (1995). *What is life?* University of California Press.

Marshall, D. J., Staeheli, L. A., Smaira, D., & Kastrissianakis, K. (2017). Narrating palimpsestic spaces. *Environment and Planning A: Economy and Space, 49*(5), (pp. 1163–1180). https://doi.org/10.1177/0308518x17690531

Marx, K., & Engels, F. (1848). *The communist manifesto*. Penguin Classics.

Masenya, T. (2022). Decolonization of Indigenous Knowledge Systems in South Africa: Impact of Policy and Protocols. *International Journal of Knowledge Management*, 18, (pp. 1-22). https://doi.org/10.4018/IJKM.310005

Massey, D. (2013). Reflections on gender and geography. *Taylor & Francis*. https://doi.org/10.4324/9781315072333-28

Mathibela, M. K., Egan, B. A., Du Plessis, H. J., & Potgieter, M. J. (2015). Socio-cultural profile of Bapedi traditional healers as indigenous knowledge custodians and conservation

partners in the Blouberg area, Limpopo Province, South Africa. *Journal of Ethnobiology and Ethnomedicine, 11*(1). https://doi.org/10.1186/s13002-015-0025-3

Mayes, E. (2019). The mis/uses of 'voice' in (post)qualitative research with children and young people: Histories, politics, and ethics. *International Journal of Qualitative Studies in Education, 32*(10), (pp. 1191–1209). https://doi.org/10.1080/09518398.2019.1659438

Mazzei, L. A. (2003). Inhabited silences: In pursuit of a muffled subtext. *Qualitative Inquiry, 9*(3), (pp. 355–368). https://doi.org/10.1177/1077800403009003002

Mazzei, L. A., & Jackson, A. Y. (2016). Voice in the agentic assemblage. *Educational Philosophy and Theory, 49*(11), (pp. 1090–1098). https://doi.org/10.1080/00131857.2016.1159176

Mbembe, A. (2000). At the edge of the world: Boundaries, territoriality, and sovereignty in Africa. *Public Culture, 12*(1), (pp. 259–284). https://doi.org/10.1215/08992363-12-1-259

Mbembe, A. (2001). *On the postcolony* (1st ed.). University of California Press. http://www.jstor.org/stable/10.1525/j.ctt1ppkxs

Mbembe, A. (2003). Necropolitics. *Public Culture, 15*(1), (pp. 11–40). https://doi.org/10.1215/08992363-15-1-11

Mbembe, A. (2015). Decolonizing knowledge and the question of the archive. *Africa is a Country*. In A. Okune (Ed.), *Platform for Experimental Collaborative Ethnography*. Last modified August 14, 2018. Retrieved September 23, 2024, from https://worldpece.org/content/mbembe-achille-2015-"decolonizing-knowledge-and-question-archive"-africa-country

Mbembe, A. (2021). The universal right to breathe, *Critical Inquiry* 47 (2): (pp. 58–62).
McCarthy, J., & Prudham, S. (2004). Neoliberal nature and the nature of neoliberalism. *Geoforum, 35*(3), 275–283. https://doi.org/10.1016/j.geoforum.2004.01.003

McClintock, N. (2010). Why farm the city? Theorizing urban agriculture through a lens of metabolic rift. *Cambridge Journal of Regions, Economy and Society, 3*(2), (pp. 191–207). https://doi.org/10.1093/cjres/rsq005

McClintock, N. (2018). Urban agriculture, racial capitalism, and resistance in the settler-colonial city. *Geography Compass, 12*(6). https://doi.org/10.1111/gec3.12373

McKenzie, R. (2013). Arctotis. In J. Manning & P. Goldblatt (Eds.), *Plants of the Greater Cape Floristic Region, vol. 1: The core Cape flora* . Strelitzia 29.

McKenzie, R. J. (2013). Arctotis. In: Manning, J., & Goldblatt, P. (Eds.), *Plants of the Greater Cape Floristic Region, vol. 1: The Core Cape Flora. Strelitzia, 29*. https://www.researchgate.net/publication/236624983_Arctotis_In_Manning_J_Goldblatt_P_eds_Plants_of_the_Greater_Cape_Floristic_Region_vol_1_The_Core_Cape_flora_Strelitzia_29

McKenzie, S. (2022). *Community and public health: A critical examination*. Springer.

McMahon, K. (2013). *The colonization of nature: Conservation and the new politics of ecology*. Cambridge University Press.

McMichael, P. (2012). *The political economy of global environmental change*. Routledge.

Meehan, K. M. (2014). Tool-power: Water infrastructure as wellsprings of state power. *Geoforum, 55*, (pp. 142–152). https://doi.org/10.1016/j.geoforum.2014.06.006

Mehta, L. (2014). *The politics and poetics of water: Naturalizing scarcity in Western India*. Oxford University Press.

Meillon, B. (2020). *Dwellings of enchantment: Writing and reenchanting the earth*. https://philpapers.org/rec/MEIDOE

Meine, C., Soulé, M., & Noss, R. F. (2006). "A mission-driven discipline": The growth of conservation biology. *Conservation Biology, 20*(3), (pp. 631–651). https://doi.org/10.1111/j.1523-1739.2006.00449.x

Meiring, P. G. J. (2022). Forgiveness, reconciliation and justice á la Desmond Tutu. *Acta Theologica, 42*(2), (pp. 86–103). https://doi.org/10.18820/23099089/actat.v42i2.8

Mellamphy, N. B., & Vangeest, J. (2024). Human, all too human? Anthropocene narratives, posthumanisms, and the problem of "post-anthropocentrism." *The Anthropocene Review*. https://doi.org/10.1177/20530196241237249

Metz, S. (1990). Containment in Southern Africa. The Evolving Rules of Engagement. *Strategic Studies*, *13*(4), (pp. 78–99). http://www.jstor.org/stable/45182033

Meyersfeld, B. (2020). The South African Constitution and the human-rights obligations of juristic persons. *South African Law Journal*, *Volume* 137, 3, (pp. 439-478), ISSN: 1996-2177

Mezirow, Jack. (1991). *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass, 247 pages https://journals.sagepub.com/doi/10.1177/074171369204200309

Michael, M. (2016). Notes toward a speculative methodology of everyday life. *Qualitative Research, 16*(6), (pp. 646–660). https://doi.org/10.1177/1468794115626245

Mignolo, W. D. (2011). *The darker side of Western modernity*. Duke University Press. https://doi.org/10.2307/j.ctv125jqbw

Mignolo, W. (2013). Geopolitics of sensing and knowing: On (de)coloniality, border thinking, and epistemic disobedience. *Confero: Essays on Education, Philosophy, and Politics, 1*(1), (pp. 129–150). https://doi.org/10.3384/confero.2001-4562.13v1i1129

Miller, P. (2005). *Critical realist approaches to the sociology of culture*. Routledge.
Mirzoeff, N. (2011). *The right to look: A counterhistory of visuality*. Duke University Press. https://doi.org/10.2307/j.ctv11vc8rg

Mitan, N. M. M. (2019). Water hyacinth: Potential and threat. *Materials Today: Proceedings, 19*, (pp. 1408–1412). https://doi.org/10.1016/j.matpr.2019.11.160

Mokgoatsana, S., & Sebola, M. (2022). Appropriating and exploiting dreams as technology in Kgasane's narrative of conversion. *Studia Historiae Ecclesiasticae*, 48(1), 1-25. https://dx.doi.org/10.25159/2412-4265/10106

Mol, A. (2002). *The body multiple: Ontology in medical practice*. Duke University Press.

Moll, E. (2006). The magic tree: Learning about biodiversity. *Veld & Flora*. https://journals.co.za/doi/abs/10.10520/EJC112917

Mondal, S., Samanta, G., & De La Sen, M. (2022). Dynamics of oxygen-plankton model with variable zooplankton search rate in deterministic and fluctuating environments. *Mathematics, 10*(10), (pp. 1641). https://doi.org/10.3390/math10101641

Moore, J. W. (2015). *Capitalism in the web of life: Ecology and the accumulation of capital*. Verso.

Moore, J. W. (2017a). The Capitalocene, Part I: On the nature and origins of our ecological crisis. *The Journal of Peasant Studies, 44*(3), (pp. 594–630). https://doi.org/10.1080/03066150.2016.1235036

Morash, A. J., & Alter, K. (2015). Effects of environmental and farm stress on abalone physiology: Perspectives for abalone aquaculture in the face of global climate change. *Reviews in Aquaculture, 8*(4), (pp. 342–368). https://doi.org/10.1111/raq.12097

Morozov, E. (2013). To Save Everything, Click Here: The Folly of Technological Solutionism. Public Affairs.

Morrell, R., & Clowes, L. (2016). The growth of gender research in South Africa and southern theory. *Gender Questions*, 4(1), (pp. 1–18). https://doi.org/10.25159/2412-8457/1517

Morrison, T. (1987). *Beloved*. Knopf.

Morton, T. (2007). *Ecology without nature: Rethinking environmental aesthetics*. Harvard University Press.

Morton, T. (2013). *Hyperobjects: Philosophy and ecology after the end of the world*. University of Minnesota Press.

Morton, T. (2016). *Dark ecology*. Columbia University Press. https://doi.org/10.7312/mort17752

Moser, S. C. (2016). *Climate change and human security: Sustaining the future*. Cambridge University Press.

Moss, L. (2016). Assemblage and social theory: A review. *Sociological Review, 64*(4), (pp. 710–730). https://doi.org/10.1111/1467-954X.12364

Mouton, J. (2021). *Theory and practice of urban regeneration*. Routledge.

Moyo, S. (2018). *The land question in Zimbabwe*. African Books Collective.

Moyo, S. (2020). *The politics of land reform in Zimbabwe*. Routledge.

Mubangizi, J. C. (2010). Democracy and development in the age of globalization: Tensions and contradictions in the context of specific African challenges. *Law, Democracy and Development, 14*(1), (pp. 1-21). https://doi.org/10.4314/ldd.v14i1.6380

Muckelbauer, J. (2011). Domesticating animal theory. *Philosophy and Rhetoric*, 44(1), (pp. 96-100). https://doi.org/10.5325/philrhet.44.1.0096

Mudimbe, V. Y. (1998). *The invention of Africa: Gnosis, philosophy, and the order of knowledge*. Indiana University Press.

Muir, J. (1938). *John of the mountains, the unpublished journals of John Muir* (L. M.

Muñoz, J. E. (2009). Cruising the toilet: LeRoi Jones/Amiri Baraka, radical black traditions, and queer futurity. *GLQ: A Journal of Lesbian and Gay Studies, 13*(2–3), (pp. 353–367).

Mungi, S. & Qureshi, M. (2018). Invasive species and their impacts on biodiversity. *Journal of Environmental Management*, 200, (pp. 7-19).

Murillo-Amador, B., Nieto-Garibay, A., Troyo-Diéguez, E., García-Hernández, J. L., Hernández-Montiel, L., & Valdez-Cepeda, R. D. (2015). Moderate salt stress on the physiological and morphological traits of *Aloe vera* L. *Botanical Sciences, 93*(3), (pp. 639–648). https://doi.org/10.17129/botsci.73

Murray, S. J. (2006). Thanatopolitics: On the Use of Death for Mobilizing Political Life. Polygraph: An International Journal of Politics and Culture, 18, (pp. 191–215).

Murris, K., & Bozalek, V. (2019). Diffracting diffractive readings of texts as methodology: Some propositions. *Educational Philosophy and Theory, 51*(14), (pp. 1504–1517). https://doi.org/10.1080/00131857.2019.1570843

Myburgh, J. (2008). Eskom: The real cause of the crisis. *PoliticsWeb*. https://www.politicsweb.co.za/iservice/eskom-the-real-cause-of-the-cris

Naess, A. (1973). The shallow and the deep, long-range ecology movement. A summary. *Inquiry*, 16(1–4), (pp. 95–100). https://doi.org/10.1080/00201747308601682

Naess, A. (1993a). Beautiful action: Its function in the ecological crisis. *PhilPapers*. https://philpapers.org/rec/NAEBAI

Naess, A. (1993b). Beautiful action: Its function in the ecological crisis. *Environmental Values, 2*(1), (pp. 67–71). https://www.jstor.org/stable/30301309

Nagy, R. (2004). The ambiguities of reconciliation and responsibility in South Africa. *Political Studies, 52*(4), (pp. 709–727). https://doi.org/10.1111/j.1467-9248.2004.00504.x

Naidoo, D., Nhamo, L., Mpandeli, S., Sobratee, N., Senzanje, A., Liphadzi, S., Slotow, Nail, T. (2016). Introduction. In *Oxford University Press eBooks*, (pp. 1–18). https://doi.org/10.1093/acprof:oso/9780190618643.003.0001

Nail, T. (2016). Introduction: Moving borders. In *Theory of the border* (Online ed.). Oxford Academic. https://doi.org/10.1093/acprof:oso/9780190618643.003.0001

Nair, V. (2017). *Decolonizing development: Theoretical perspectives from postcolonial theory*. Routledge.

Nayar, P. K. (2014). *Posthumanism*. Polity Press.

Neely, A. H. (2010). 'Blame it on the weeds': Politics, poverty, and ecology in the new South Africa. *Journal of Southern African Studies, 36*(4), (pp. 869–887). https://doi.org/10.1080/03057070.2010.527642

Neimanis, A. (2017). *Bodies of Water: Posthuman Feminist Phenomenology*. London: Bloomsbury Publishing.

Neumann, R. (2014). *Making political ecology*. In *Routledge eBooks*. https://doi.org/10.4324/9780203764206

Ngcamu, B. S. (2023). Climate change effects on vulnerable populations in the Global South: A systematic review. *Natural Hazards, 118*(2), (pp. 977–991). https://doi.org/10.1007/s11069-023-06091-2

Ngugi, W. T. (1986). *Decolonising the mind: The politics of language in African literature*. James Currey.

Nicoletta, G. C., & Carpentier, N. (2022). Shades of technocratic solutionism: A discursive-material political ecology approach to the analysis of the Swedish TV series *Hållbart näringsliv* ('Sustainable business'). *Empedocles: European Journal for the Philosophy of Communication*, 13(2), (pp. 117–134). https://doi.org/10.1386/ejpc_00045_1

Nitzke, S., & Braunbeck, H. G. (2021). Arboreal imaginaries: An introduction to the shared cultures of trees and humans. *Green Letters, 25*(4), (pp. 341–355). https://doi.org/10.1080/14688417.2021.2072633

Nixon, R. (2011). *Slow violence and the environmentalism of the poor*. Harvard University Press. https://doi.org/10.2307/j.ctt2jbsgw

Nkrumah, K. (1965). *Neo-colonialism: The last stage of imperialism*. International Publishers.

Northover, N. (2012). Abject blackness, hauntologies of development, and the demand for authenticity: A critique of Sen's "Development as Freedom." *The Global South, 6*(1), (pp. 66). https://doi.org/10.2979/globalsouth.6.1.66

Noyes, J. (2004). Nomadism, nomadology, postcolonialism: By way of introduction. *Interventions, 6*(2), (pp. 159–168). https://doi.org/10.1080/1369801042000238300

Nünning, A., & Sommer, R. (2008). Diegetic and mimetic narrativity: Some further steps towards a narratology of drama. In J. Pier & J. García Landa (Eds.), *Theorizing narrativity* (pp. 331–354). Berlin, Boston: De Gruyter. https://doi.org/10.1515/9783110969801.331

Nurse, Donna Bailey. "Jamaica Tends her Garden." Globe and Mail 2 December 1997: D3

Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. Harvard University Press.

Nustad, K. G. (2021). On water and the politics of everyday life: A critical realist perspective. *The Journal of Political Ecology, 28*(1), (pp. 1–14). https://doi.org/10.2458/v28i1.23498

Nxele, M. (2022). Crony capitalist deals and investment in South Africa's platinum belt: a case study of Anglo American Platinum's scramble for mining rights, 1995–2019. *Review of African Political Economy*, *49*(173), (pp. 395–416). https://doi.org/10.1080/03056244.2022.2098009

O'Brien, J. (2019). Reimagining water: Assemblage thinking and environmental justice. *Political Geography, 72*, (pp. 67–76). https://doi.org/10.1016/j.polgeo.2018.12.003

O'Connor, J. (1998). *Natural causes: Essays in ecological Marxism*. Guilford Press.

O'Donnell, M., & Moffat, T. (2020). *Green economy and environmental sustainability: A critical approach*. Routledge.

O'Donovan, G. D. (2023). Socioecological entanglements, invasive ecology, and climate injustice. In *Climate Justice in the Majority World,* Routledge eBooks, 221–237. https://doi.org/10.4324/9781003214021-12

O'Neill, S., & Hulme, M. (2020). *Rethinking climate change communication: The role of trust and emotion*. Routledge.

O'Neill, S. (2023). Arborealities, or making trees matter in Elif Shafak's *The Island of Missing Trees*. *ISLE: Interdisciplinary Studies in Literature and Environment*. https://doi.org/10.1093/isle/isad04

Odum, E. P. (1971). *Fundamentals of ecology* (3rd ed.). W.B. Saunders Co.

O'Farrell, P. J., Anderson, P. M. L., Le Maitre, D. C., & Holmes, P. M. (2012). Insights and opportunities offered by a rapid ecosystem service assessment in promoting a conservation agenda in an urban biodiversity hotspot. *Ecology and Society, 17*(3), 27. https://doi.org/10.5751/ES-04886-170327

Ofir, E., Heymans, J. J., Shapiro, J., Goren, M., Spanier, E., & Gal, G. (2017). Predicting the impact of lake biomanipulation based on food-web modeling—Lake Kinneret as a

case study. *Ecological Modelling*, 348, (pp. 14–24). https://doi.org/10.1016/j.ecolmodel.2016.12.0

Ogungbemi, S. (1997). An African perspective on the environmental crisis. In L. P. Pojman (Ed.), *Environmental ethics: Readings in theory and application* . Jones and Bartlett Publishers.

Olivier, A. (2019). The African other. *Angelaki, 24*(2), (pp. 2–9). https://doi.org/10.1080/0969725x.2019.1574071

Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher, 45*(3), (pp. 241–251). https://doi.org/10.1080/0142159x.2022.2057287

Oosterling, H. (2009). Living – in between – cultures. In A. Van den Braembussche, H. Kimmerle, & N. Note (Eds.), *Intercultural aesthetics* , 9, (pp. 57–70). Springer. https://doi.org/10.1007/978-1-4020-5780-9_3

Oppermann, S. (2016). From posthumanism to posthuman ecocriticism. *Relations Beyond Anthropocentrism, 4*(1), (pp. 23–37). https://doi.org/10.7358/rela-2016-001-oppe

Oreskes, N. (2019). *Why trust science?* Princeton University Press.

Ouma, S., & Marais, H. (2022). *The anthropology of environmentalism: Climate change, sustainability, and environmental politics*. Routledge

Ozguc, U., & Burridge, A. (2023). More-than-human borders: A new research agenda for posthuman conversations in border studies. *Geopolitics, 28*(2), (pp. 471–489). https://doi.org/10.1080/14650045.2023.2169879

Palmer, D. (2015). *The history of climate science*. Cambridge University Press.

Palsson, G., & Swanson, H. (2016). *Down to earth: Geosocialities and geopolitics*. " Environmental Humanities 8, no. 2, (pp. 149–71).

Paphitis, T. (2020). Haunted landscapes. *Time and Mind*, *13*(4), (pp. 339–340). https://doi.org/10.1080/1751696x.2020.1835092

Parker, N., & Vaughan-Williams, N. (2009). Lines in the Sand? Towards an Agenda for Critical Border Studies. *Geopolitics*, *14*(3), (pp. 582–587). https://doi.org/10.1080/14650040903081297

Parsons, T. (1964). *Social structure and personality*. Free Press.

Parsons, W. B. (1999). The enigma of the oceanic feeling: Revisioning the psychoanalytic theory of mysticism. Oxford University Press.

Patel, R. (2020). *The value of nothing: How to reshape market society and redefine democracy*. Picador.

Paterlini, M. (2007). There shall be order. *EMBO Reports*, *8*(9), (pp. 814–816). https://doi.org/10.1038/sj.embor.7401061

Pato, L. L. (1997). Being fully human: From the perspective of African culture and spirituality. *Journal of Theology for Southern Africa, 97*, (pp. 53–61).

Paton, A. (1948). *Cry, the Beloved Country*. Scribner.

Peberdy, S., Harrison, P., & Dinath, Y. (2017). *Uneven Spaces: Research Report. https://wiredspace.wits.ac.za/items/56a2a09e-b1bf-4185-915e-f4e4496ebf02*

Peer, N., Muhl, E., Janna, J., Brown, M., Zukulu, S., & Mbatha, P. (2022). Community and Marine Conservation in South Africa: Are We Still Missing the Mark? *Frontiers in Marine Science*, *9*. https://doi.org/10.3389/fmars.2022.884442

Peet, R. (2016). *Theories of development: Contentions, arguments, alternatives*. Guilford Press.

Pelias, R.J. (2004). *A Methodology of the Heart: Evoking Academic and Daily Life*. Altamira Press.

Penn, N. (1996). 'Fated to perish': The destruction of the Cape San. In P. Skotnes (Ed.), *MISCAST: Negotiating the presences of the Bushmen* , University of Cape Town Press.

Pentecost, M., Gerber, B., Wainwright, M., & Cousins, T. (2018). Critical orientations for humanising health sciences education in South Africa. *Medical Humanities*, *44*(4), (pp. 221–229). https://doi.org/10.1136/medhum-2018-011472

Pepperell, R. (2004). *The posthuman condition: Consciousness beyond the brain* [Review of the book *The posthuman condition* by R. Pepperell]. *Leonardo, 37*(4), (pp. 347–348). https://doi.org/10.1162/leon.2004.37.4.347a

Petersen, L. M., Charman, A. J. E., Moll, E. J., Collins, R. J., & Hockings, M. T. (2014). "Bush Doctors and Wild Medicine": The Scale of Trade in Cape Town's Informal Economy of Wild-Harvested Medicine and Traditional Healing. *Society & Natural Resources*, *27*(3), (pp. 315–336). https://doi.org/10.1080/08941920.2013.861558

Petersen, L. M., Moll, E. J., Collins, R., & Hockings, M. T. (2012). Development of a compendium of local, wild-harvested species used in the informal economy trade, Cape Town, South Africa. *Ecology and Society*, 17(2), (pp. 26). https://doi.org/10.5751/ES-04755-17

Petersen, L., Reid, A. M., Moll, E. J., & Hockings, M. T. (2017). Perspectives of wild medicine harvesters from Cape Town, South Africa. *South African Journal of Science*, *113*(9/10), (pp. 8). https://doi.org/10.17159/sajs.2017/20160260

Pettinger, L. (2017). *The politics of nature: Environmental ethics and eco-criticism*. Palgrave Macmillan.

Pfeiffer, A., & Smith, D. (2016). *Geography and climate change: A critical approach*. Routledge.

Philippopoulos-Mihalopoulos, A. (2021). Performing Metaphors. *Theory & Event*, *24*(1), (pp. 268–293). https://doi.org/10.1353/tae.2021.0010

Phillips, C. (2001). A new world order. *Wasafiri*, *16*(34), (pp. 39–41). https://doi.org/10.1080/02690050108589754

Phipps, Alison. (2006). Learning the Arts of Linguistic Survival: Languaging, Tourism, Life. 10.21832/9781845410551.

Pickles, J. (2012). A History of Spaces. In *Routledge eBooks*. https://doi.org/10.4324/9780203351437

Pieterse, J. N. (2004). Globalization or Empire? In *Routledge eBooks*. https://doi.org/10.4324/9780203488843

Pieterse, J. N. (2013a). What is Global Studies? *Globalizations*, *10*(4), (pp. 499–514). https://doi.org/10.1080/14747731.2013.806746

Pike, A., & Tomaney, J. (2009). *Local and regional development*. Routledge.

Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education*, *16*(2), (pp. 175–196). https://doi.org/10.1080/0951839032000060635

Plaatjie, S. R. (2013). Beyond Western-Centric and Eurocentric Development: A Case for Decolonizing Development. *Africanus Journal of Development Studies*, *43*(2), (pp. 118–130). https://doi.org/10.25159/0304-615x/2306

Platzky, L., & Walker, C. (1986). *The surplus people: Forced removals in South Africa*. Ravan Press.

Ponce de Leon, I., & Gotangco, C. K. (2012). Reconciling post-positivist and post-modern worldviews in climate research and services. *World Meteorological Organization (WMO) Bulletin, 62*.

Pooley, S. (2009). Jan van Riebeeck as Pioneering Explorer and Conservator of Natural Resources at the Cape of Good Hope (1652-62). *Environment and History*, *15*(1), (pp. 3–33). https://doi.org/10.3197/096734009x404644

Porter, T. M. (1995). *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton University Press.

Postman, N. (1992). *Technopoly: The surrender of culture to technology*. Vintage Books.

Povinelli, E. (2011). *Economies of abandonment: Social belonging and endurance in late liberalism*. Duke University Press.

Power, E. R. (2005). Human–Nature Relations in Suburban Gardens. *Australian Geographer*, *36*(1), (pp. 39–53). https://doi.org/10.1080/00049180500050847

Powers, R. (2018). *The Overstory*. Penguin Random House.

Prezelj, B. (2017). Unfamiliar territory: Alternative landscape reading of disturbed sites' particularities. *SPOOL, 3*(2).

Price, Catherine & Chao, Sophie. (2023). Multispecies, More-Than-Human, Non-Human, Other-Than-Human: Reimagining idioms of animacy in an age of planetary unmaking. Exchanges The Interdisciplinary Research Journal. 10. 177-193. 10.31273/eirj.v10i2.1166.

Quaz. (2020, April 27). We are bark by Ntaoleng Labane. *Poetry Potion*. https://www.poetrypotion.com/we-are-bark-by-ntaoleng-labane/

Quijano, A. (2000). Coloniality of power and Eurocentrism in Latin America. *International Sociology, 15*(2), (pp. 215–232). https://doi.org/10.1177/0268580900015002005

Rabinow, P. (1991). French modern: Norms and forms of the social environment. *Tijdschrift voor Filosofie, 53*(4), (pp. 729).

Ramphele, M. (2008). *Laying ghosts to rest: Dilemmas of transformation in South Africa*. Cape Town: Tafelberg Publishers.

Ramose, M. B. (2002). *African Philosophy Through Ubuntu.* Mond Books.

Ramose, M. B. (2015). Introduction: Contrasts and contests about philosophy. *South African Journal of Philosophy*, *34*(4), (pp. 391–394). https://doi.org/10.1080/02580136.2015.1124510

Randall, P. (1982). *Little England on the veld: English private school system in South Africa*. Ravan Press.

Ranganathan, M. (2015). Storm Drains as Assemblages: The Political Ecology of Flood Risk in Post-Colonial Bangalore. *Antipode*, *47*(5), (pp. 1300–1320). https://doi.org/10.1111/anti.12149

Ras, I. F. (2017). Broken bodies and present ghosts: Ubuntu and African women's theology. *HTS Theological Studies*, 73(3). https://doi.org/10.4102/hts.v73i3.4620

Rasethe, M. T., Semenya, S. S., & Maroyi, A. (2019). Medicinal Plants Traded in Informal Herbal Medicine Markets of the Limpopo Province, South Africa. *Evidence-based Complementary and Alternative Medicine*, *2019*, (pp. 1–11). https://doi.org/10.1155/2019/2609532

Rassool, C., & Thorne, J. (2001). A timeline for District Six: A parallel text. In C. Rassool & S. Prosalendis (Eds.), *Recalling community in Cape Town*, District Museum Foundation.

Rebelo, A., Holmes, P., Dorse, C., & Wood, J. (2010a). Impacts of urbanization in a biodiversity hotspot: Conservation challenges in Metropolitan Cape Town. *South African Journal of Botany*, *77*(1), (pp. 20–35). https://doi.org/10.1016/j.sajb.2010.04.006

Rebelo, A., Holmes, P., Dorse, C., & Wood, J. (2010b). Impacts of urbanization in a biodiversity hotspot: Conservation challenges in Metropolitan Cape Town. *South African Journal of Botany*, *77*(1), (pp. 20–35). https://doi.org/10.1016/j.sajb.2010.04.006

Rebughini, P. (2017). Critical agency and the future of critique. *Current Sociology*, *66*(1), (pp. 3–19). https://doi.org/10.1177/0011392117702427

Redham, C. (2011). Social-ecological transformations in urban landscapes – A historical perspective. In J. Niemela, J. Breuste, T. Elmqvist, G. Guntenspergen, P. James, & N.

MacIntyre (Eds.), *Urban ecology: Patterns, processes and applications,* Oxford Biology, Oxford University Press.

Reid, D. (n.d.). *Edinburgh Geological Society*. https://www.edinburghgeolsoc.org/edingeologist/z_41_06c.html

Reisz, E. (2024). Photoanthropocene: The decentered lens of colonial photography. *Curator the Museum Journal*. https://doi.org/10.1111/cura.12588

Richards, P. (1985). *Indigenous knowledge systems and the politics of environmental change*. Routledge.

Riessman, C. K. (2008). *Narrative methods for the human sciences*. Sage Publications, Inc.

Ringrose, J., Warfield, K., & Zarabadi, S. (Eds.). (2020). *Feminist posthumanisms, new materialisms and education*. Routledge. https://doi.org/10.4324/9780367585914

Riva, F., Ghedini, G., Berdugo, M., Carlo, T. A., Katul, G. G., & Bulleri, F. (2023). Toward a cohesive understanding of ecological complexity. *Science Advances, 9*(15), eabq4207. https://doi.org/10.1126/sciadv.abq4207

Rivers, N. (2014, December 17). *Geocaching in the Writing Classroom — Nathaniel A. Rivers*. Nathaniel a. Rivers. https://www.nathanielrivers.org/pure-sophist-monster/2014/12/16/geocaching-in-the-writing-classroom

Robbins, P. (2012). *Political ecology: A critical introduction* (2nd ed.). Wiley-Blackwell.

Robbins, P. (2012). The politics of the Anthropocene. In *The end of the end of the world* (pp. 25–45). University of California Press.

Roberts, G. W. (1994). Brother to brother: African American modes of relating among men. *Journal of Black Studies*, *24*(4), (pp. 379–390). https://doi.org/10.1177/002193479402400401

Roberts, J. (2020). Political ecology. In F. Stein (Ed.), *The open encyclopedia of anthropology* (Facsimile of the first edition in *The Cambridge Encyclopedia of Anthropology*). http://doi.org/10.29164/20polieco

Ronson, J. (2022). *So you've been publicly shamed*. Riverhead Books.

Rorty, R. (1979). *Philosophy and the mirror of nature*. Princeton University Press.

Rosiek, J. L., & Snyder, J. (2018). Narrative Inquiry and New Materialism: Stories as (Not Necessarily Benign) Agents. *Qualitative Inquiry*, *26*(10), (pp. 1151–1162). https://doi.org/10.1177/1077800418784326

Rossetti, D. G. (1912). *Jan Van Hunks*. T. Watts Dunton.

Rountree, M. (2021, June 24). *Fire & lies: Cape Town's homeless deserve an apology*. For Good. https://forgood.org.za/fire-coct/

Roy, A. (2019). *The geopolitical economy of global environmental change*. Routledge.

Ruin, Hans. 2017. "Review Essay: History and its Dead." History and Theory 56 (3): (pp. 407–417).

Rumford, C. (2006). Theorizing Borders. *European Journal of Social Theory*, *9*(2), (pp. 155–169). https://doi.org/10.1177/1368431006063330

Rusca, M., Boakye-Ansah, A. S., Loftus, A., Ferrero, G., & Van Der Zaag, P. (2017). An interdisciplinary political ecology of drinking water quality. Exploring socio-ecological inequalities in Lilongwe's water supply network. *Geoforum*, *84*, (pp. 138–146). https://doi.org/10.1016/j.geoforum.2017.06.013

Rusca, M., Mazzoleni, M., Barcena, A., Barcena, A., Savelli, E., & Messori, G. (2023). Speculative Political Ecologies: (re)imagining urban futures of climate extremes. *Journal of Political Ecology*, *30*(1). https://doi.org/10.2458/jpe.4827

Rutherford, M., & Strathern, M. (2020). *Anthropologies of the future*. Cambridge University Press.

Ryan, J. C. (2020). Ecocriticism. *The Year S Work in Critical and Cultural Theory*, *28*(1), (pp. 21–43). https://doi.org/10.1093/ywcct/mbaa018

Safari, P., & Rashidi, N. (2015). Teacher education beyond transmission: Challenges and opportunities for Iranian teachers of English. *Issues in Educational Research*, 25(2), 187–203. https://www.researchgate.net/publication/279201899

Safarpour, A., Trujillo, K. L., Green, J., Pippert, C. H., Lin, J., & Druckman, J. N. (2024). Divisive or Descriptive?: How Americans Understand Critical Race Theory. *The Journal of Race Ethnicity and Politics*, *9*(1), (pp. 157–181). https://doi.org/10.1017/rep.2023.39

Said, E. W. (1978). *Orientalism*. Pantheon Books.

Saka, A., Bunderson, W., Itimu, O., Phombeya, H., & Mbekeani, Y. (1994). The effects of Acacia albida on soils and maize grain yields under smallholder farm conditions in Malawi. *Forest Ecology and Management*, *64*(2–3), (pp. 217–230). https://doi.org/10.1016/0378-1127(94)90296-8

Sakupapa, T. C. (2019). The Trinity in African Christian theology: An overview of contemporary approaches. *HTS Teologiese Studies / Theological Studies*, *75*(1). https://doi.org/10.4102/hts.v75i1.5460

Salazar, N. B. (2021). *Tourism, migration, and diaspora: Networks and relations*. Routledge.

Salleh, A. (1992). The ecofeminism/deep ecology debate. *Environmental Ethics*, 14(3), (pp. 195-216). https://doi.org/10.5840/enviroethics199214318

SANBI (2010). Threatened Species: A guide to Red Lists and their use in conservation. Threatened Species Programme, Pretoria, South Africa.

Sanders, M. (2000). Truth, telling, questioning: The Truth and Reconciliation Commission, Antjie Krog's *Country of My Skull*, and literature after apartheid. *Modern Fiction Studies, 46*(1)

Santos, R. M., & Bakhshoodeh, R. (2021). Climate change/global warming/climate emergency versus general climate research: comparative bibliometric trends of publications. *Heliyon*, (11), e08219. https://doi.org/10.1016/j.heliyon.2021.e08219

Sassen, S. (2007). *The global city: New York, London, Tokyo*. Princeton University Press.

Satgar, V. 2018. 'The Anthropocene and imperial ecocide: prospects for just transitions', in *The Climate Crisis: South African and Global Democratic Eco-Socialist Alternatives*, ed. Vishwas Satgar, Johannesburg: Wits University Press, 47–68.

Savelli, E., Rusca, M., Cloke, H., Flügel, T. J., Karriem, A., & Di Baldassarre, G. (2022). All dried up: The materiality of drought in Ladismith, South Africa. *Environment and Planning E Nature and Space*, 251484862211266. https://doi.org/10.1177/25148486221126617

Savransky, M. (2022). Ecological uncivilisation: Precarious world-making after progress. *The Sociological Review*, *70*(2), (pp. 367–384). https://doi.org/10.1177/00380261221084782

Schmidt, S., Janßen, L., & Möslang, T. (2018). *The last leg of the Polarstern's journey*. EUMETSAT. https://www.eumetsat.int/features/last-leg-polarsterns-journey

Schnepel, B. (2006). Strangers in the night: The making and unmaking of differences from the perspective of an anthropology of the night. In R. Rottenberg, B. Schnepel, & S. Shimada (Eds.), *The making and unmaking of differences: Anthropological, sociological, and philosophical perspectives*, (pp. 123-144). Piscataway, NJ: Transaction Publishers.

Scholte, J. A. (2005). *Globalization: A critical introduction*. Palgrave Macmillan.

Scott, J. C. (1998). *Seeing like a state: How certain schemes to improve the human condition have failed*. Yale University Press.

Schuld, M. (2013). The Prevalence of Violence in Post-conflict societies: A case study of Kwa-Zulu Natal, South Africa. *Journal of Peacebuilding & Development*, *8*(1), (pp. 60–73). https://www.jstor.org/stable/48603441

Seema Lokhandwala, Mihika Sen, Seema Lokhandwala, & Mihika Sen. (2022, June 28). *Do elephants grieve? Maybe, though not in the 'human' sense of the word*. Down to Earth. https://www.downtoearth.org.in/wildlife-biodiversity/do-elephants-grieve-maybe-though-not-in-the-human-sense-of-the-word-83464

Seixas, P. (2006). What is historical consciousness? In R. W. Sandwell (Ed.), *To the past: History education, public memory, and citizenship in Canada* (pp. 11–22). University of Toronto Press.

Seltzer, M. (1997). *Wound Culture: Trauma in the Pathological Public Sphere*. October, 80, 3.

Sen, A. (1999). *Development as freedom*. Alfred A. Knopf.

Seroto, J. (2011). Indigenous education during the pre-colonial period in southern Africa. *Indilinga: African Journal of Indigenous Knowledge Systems*, 10(1), (pp. 77–88).

Seroto, J. (2018). Dynamics of Decoloniality in South Africa: A Critique of the History of Swiss Mission Education for Indigenous People. *Studia Historiae Ecclesiasticae*, *44*(3). https://doi.org/10.25159/2412-4265/3268

Serres, M. (2008). *The five senses : a philosophy of mingled bodies*. Continuum.

Shackleton, S., Taylor, A., Gammage, L., Gillson, L., Sitas, N., Methner, N., Odume, O. N. (2023). Fostering transdisciplinary research for equitable and sustainable development pathways across Africa: what changes are needed? *Ecosystems and People*, *19*(1). https://doi.org/10.1080/26395916.2022.2164798

Sharma, A., & Gupta, A. (2006). *The anthropology of the state: A reader*. Blackwell

Publishing.

Sharp, J. (2009). Geography and gender: what belongs to feminist geography? Emotion, power and change. *Progress in Human Geography*, *33*(1), (pp. 74–80). https://doi.org/10.1177/0309132508090440

Shaviro, S. (2019). *The universe of things: On speculative realism*. University of Minnesota Press.

Shaw, R. (2022). Geographies of night work. *Progress in Human Geography*, *46*(5), (pp. 1149–1164. https://doi.org/10.1177/03091325221107638

Shepherd, N. (2019). Making sense of "Day Zero": Slow catastrophes, Anthropocene futures, and the story of Cape Town's water crisis. *Water, 11*(9), 1744. https://doi.org/10.3390/w11091744

Shildrick, M. (2002). *Embodying the monster: Encounters with the vulnerable self.* Sage Publications.

Shutte, A. (1993). *Philosophy for Africa. Rondebosch University of Cape Town Press. – References - Scientific Research Publishing*. (n.d.). https://www.scirp.org/reference/referencespapers?referenceid=1455203

Silliman, J. (2021). *The dynamics of indigenous politics*. University of Arizona Press.

Simmons, I. G. (1993). *Environmental history: A concise introduction*. Blackwell Publishers.

Simons, P. (2023, October 18). Plantwatch: the bamboo that flowers once every 120 years. *The Guardian*. https://www.theguardian.com/science/2023/oct/18/plantwatch-the-bamboo-that-flowers-once-every-120-years

Simonsen, K. (2017). Spatiality, temporality and the construction of the city. In *Space, Difference, Everyday Life: Reading Henri Lefebvre* (pp. 81-97). Routledge. https://doi.org/10.4324/9781315242705-4

Singh, C. P. a. K. (2018, August 13). Hangberg protests turn violent, father demands answers on missing fisherman son. *News24*. https://www.news24.com/news24/hangberg-protests-turn-violent-father-demands-answers-on-missing-fisherman-son-20180813

Slingsby, J., & Botha, M. (2018). Aliens are greatest threat to Cape Town's water security. *GroundUp*. https://www.groundup.org.za/article/aliens-are-greatest-threat-cape-towns-water-security/

Smith, A. (2010). Queer theory and native studies: The heteronormativity of settler colonialism. *GLQ: A Journal of Lesbian and Gay Studies, 16*(1–2), (pp. 42–68).

Smith, C. (2005). The 'new' politics of identity: Displacement, diaspora, and the aesthetic. *Interventions*, 7(3), (pp. 331–344). https://doi.org/10.1080/13698010500161014

Smith, D. (1989). Sociological theory: Methods of writing patriarchy. In R. Wallace (Ed.), *Feminism and sociological theory,* Newbury Park, CA: Sage.

Smith, D. E. (2005). *Institutional ethnography: A sociology for people*. Altamira Press.

Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples*. Zed Books.

Smith, N. (2007). *The rush to the urban: New frontiers of capitalist development*. University of California Press.

Snir, I. (2021). Walter Benjamin in the age of post-critical pedagogy. *Studies in Philosophy and Education*, *40*(2), 201-217

Soja, E. W. (1989). *Postmodern geographies: The reassertion of space in critical theory*. Verso Books.

Soja, E. W. (1991). Henri Lefebvre 1901–1991. *Environment and Planning D Society and Space*, *9*(3), (pp. 257–259). https://doi.org/10.1068/d090257

Soudien, C., Kallaway, P., & Breier, M. (Eds.). (1999). *Education, equity and transformation*. Springer. https://doi.org/10.1007/978-94-011-4076-8

Soudien, C. (2010). The reconstitution of privilege: Integration in former White schools in South Africa. *Journal of Education*, 50, 75–103. https://doi.org/10.10520/EJC37660

Soudien, C. (2015). Nelson Mandela, Robben Island and the Imagination of a New South Africa. *Journal of Southern African Studies*, *41*(2), (pp. 353–366). https://doi.org/10.1080/03057070.2015.1012915

Soudien, C., & Chisholm, L. (2021). A re-examination of key curriculum debates and directions in South Africa. In *Oxford Research Encyclopedia of Education*. https://doi.org/10.1093/acrefore/9780190264093.013.1327

South Africa: Tree plantations render corporation profits but fire, damages and death for the people World Rainforest Movement. (2003). World Rainforest Movement. https://www.wrm.org.uy/bulletin-articles/south-africa-tree-plantations-render-corporation-profits-but-fire-damages-and-death-for-the-people

South African National Parks Week 2016 | Department of Environmental Affairs. (n.d.). https://www.dffe.gov.za/south-african-national-parks-week-2016

Spash, C. L. (2022a). Three Decades of Environmental Values: Some Personal Reflections. *Environmental Values*, *31*(1), (pp. 1–14). https://doi.org/10.3197/096327122x16386102423930

Spash, C. L. (2022b). Conservation in conflict: Corporations, capitalism and sustainable development. *Biological Conservation*, *269*, 109528 https://doi.org/10.1016/j.biocon.2022.109528

Spinage, C. (1998). Social change and conservation misrepresentation in Africa. *Oryx*, *32*(4), (pp. 265–276). https://doi.org/10.1046/j.1365-3008.1998.d01-56.x

Spirn, A. (1998). Language of Landscape. In *Spirn, Professor Anne Whiston; Spirn, Anne Whiston: 9780300082944 - AbeBooks*. Yale University Press.

Spirn, A. W. (1998). *The language of landscape*. Yale University Press.

Spivak, G. C. (1999). *A critique of postcolonial reason: Toward a history of the vanishing present*. Harvard University Press.

Spratt, T. J. R. (2022). Reconceptualising Judith Butler's theory of 'grievability' in relation to the UK's 'war on obesity': Personal responsibility, biopolitics and disposability. *The Sociological Review*, *70*(3), (pp. 474–488). https://doi.org/10.1177/00380261221078063

St Pierre, E. A. (2019). Post Qualitative Inquiry, the Refusal of Method, and the Risk of the New. *Qualitative Inquiry*, *27*(1), (pp. 3–9). https://doi.org/10.1177/1077800419863005

Staddon, S., Byg, A., Chapman, M., Fish, R., Hague, A., & Horgan, K. (2021). The value of listening and listening for values in conservation. *People and Nature*, *5*(2), (pp. 343–356). https://doi.org/10.1002/pan3.10232

Star, S. L., & Griesemer, J. R. (1979). Institutional Ecology, "Translations" and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19(3), (pp. 387-420). https://doi.org/10.1177/030631279019003001

Staszak, J.-F. (2009). Other/Otherness. In *Encyclopedia of Human Geography*, Elsevier. https://doi.org/10.1016/B978-008044910-4.00980-9

Steinberg, J. (2005). *The illicit abalone trade in South Africa | Institute for Security Studies Papers*. Institute for Security Studies Papers. https://journals.co.za/doi/abs/10.10520/EJC48761

Stengers, I. (2013). Introductory Notes on an Ecology of Practices. *Cultural Studies Review*, *11*(1), (pp. 183–196). https://doi.org/10.5130/csr.v11i1.3459

Sterling, C. (2021a). Becoming Hauntologists: A New Model for Critical-Creative Heritage Practice. *Heritage & Society*, *14*(1), (pp. 67–86). https://doi.org/10.1080/2159032x.2021.2016049

Sterling, C. (2021b). Becoming Hauntologists: A New Model for Critical-Creative Heritage Practice. *Heritage & Society*, *14*(1), (pp. 67–86). https://doi.org/10.1080/2159032x.2021.2016049

Stoffel, M., Slaveykova, V. I., Corona, C., & Cánovas, J. a. B. (2020). When scientists become detectives: investigating systematic tree poisoning in a protected cove. *Heliyon*, *6*(2), e03386. https://doi.org/10.1016/j.heliyon.2020.e03386

Stoler, A. L. (2013). *Rethinking colonialism: Gender and power in the colonial past*. Routledge.

Strayer, D. L., Power, M. E., Fagan, W. F., Pickett, S. T. A., & Belnap, J. (2003). A Classification of Ecological Boundaries. *OUP Academic*. https://doi.org/10.1641/0006-3568(2003)053

Stroebel, R. (2022). *Storying Elderliness in Hangberg: A Critical Rhizo-linguistic Narrative Journey* (PhD thesis). University of Stirling.

Stronach, I., Garratt, D., Pearce, C., & Piper, H. (2007). Reflexivity, the Picturing of Selves, the Forging of Method. *Qualitative Inquiry*, *13*(2), (pp. 179–203). https://doi.org/10.1177/1077800406295476

Strydom, M., Veldtman, R., Ngwenya, M. Z., & Esler, K. J. (2019). Seed survival of Australian Acacia in the Western Cape of South Africa in the presence of biological Control agents and given environmental variation. *PeerJ*, *7*, e6816. https://doi.org/10.7717/peerj.6816

Stuart, D. (2020). *The role of technology in environmental sustainability*. Routledge.

Styres, S. D. (2011). Land as first teacher: a philosophical journeying. *Reflective Practice*, *12*(6), (pp. 717–731). https://doi.org/10.1080/14623943.2011.601083

Sultana, F. (2015). Emotional political ecology. In R. Bryant (Ed.), *The international handbook of political ecology* , (pp. 633-645). Edward Elgar Publishing.

Swanson, D. M. (2004). *Voices in the silence : narratives of disadvantage, social context and school mathematics in post-apartheid South Africa* (T). University of British Columbia. Retrieved from https://open.library.ubc.ca/collections/ubctheses/831/items/1.0058236

Swanson, D. M. (2008). Breaking silences. In Jacobs Don Trent (Four Arrows) (Ed.), *The authentic dissertation: Alternative ways of knowing, research and representation* , (pp. 83–94). Routledge. http://www.routledge.com/books/details/9780415442237/

Swanson, D. M. (2008). Ubuntu: An African contribution to (re)search for/with a 'humble togetherness.' *Journal of Contemporary Issues in Education*, *2*(2). https://doi.org/10.20355/c5pp4x

Swanson, D. M. (2011). Parallaxes and paradoxes of global citizenship: Critical reflections and possibilities of praxis in/through an international online course. In L. Shultz, A. A. Abdi, & G. H. Richardson (Eds.), *Global citizenship education in post-secondary institutions: Theories, practices, policies* (pp. 120–139). Peter Lang.

Swanson, D. M. (2013). Neoliberalism, education, and citizenship rights of unemployed youth in post-apartheid South Africa. *Sisyphus – Journal of Education*, 1(2), (pp. 194–212). https://revistas.rcaap.pt/sisyphus/article/view/3635

Swanson, D. M. (2015). Ubuntu, radical hope, and an onto-epistemology of conscience. *Scholarly Research & Exchange*, (pp. 1–20).

https://d1wqtxts1xzle7.cloudfront.net/48052991/Swanson_-_Ubuntu_Radical_Hope_and_an_Onto-Epistemology_of_Conscience_--_Dec_2015_final-libre.pdf

Swanson, D. M. (2017). Mathematics education and the problem of political forgetting: In search of research methodologies for global crisis. *Journal of Urban Mathematics Education, 10*(1), (pp. 7–15). http://education.gsu.edu/JUMED

Swyngedouw E (2011) "H2O does not exist!? Retooling the Washington-Brussels Consensus." Paper presented to the Water and Sanitation Symposium, STEPS Centre, Universityof Sussex. http://www.youtube.com/watch?v=pQPak5tyHKg (Accessed 12 June, 2024)

Szokolszky, A., Read, C., Palatinus, Z., & Palatinus, K. (2019). Ecological approaches to perceptual learning: Learning to perceive and perceiving as learning. *Adaptive Behavior*, 27(6), (pp. 363–388). https://doi.org/10.1177/1059712319854687

Takacs, D. (2016). South Africa and the human right to water: Equity, ecology, and the public trust doctrine. *Berkeley Journal of International Law, 34*(2), (pp. 55–108). http://scholarship.law.berkeley.edu/bjil/vol34/iss2/2/

Talahite, A. (2005). Cape Gooseberries and Giant Cauliflowers: Transplantation, Hybridity, and Growth in Bessie Head's "A Question of Power." *Mosaic: An Interdisciplinary Critical Journal*, *38*(4), (pp. 141–156). https://www.jstor.org/stable/44030091

TallBear, K. (2017). Beyond the life/not life binary: A feminist-Indigenous reading of cryopreservation, interspecies thinking, and the new materialisms. In J. Radin & E. Kowal (Eds.), *Cryopolitics: Frozen life in a melting world*. MIT Press.

Tafoya, T., (1995). Finding harmony: balancing traditional values with western science in therapy. *Canadian journal of native education*, 21, 7–27.

Tarantino, R. (2019). *South African water rights and the legacies of apartheid*. Bridgewater State University.

Tarr, A., & White, D. R. (Eds.). (2018). *Posthumanism in young adult fiction: Finding humanity in a posthuman world*. University Press of Mississippi. https://doi.org/10.2307/j.ctv5jxn92

Taylor, C. A. (2013). Objects, bodies and space: Gender and embodied practices of mattering in the classroom. *Gender and Education, 25*(6), (pp. 688–703). https://doi.org/10.1080/09540253.2013.834864

Taylor, L. (2017). *Digital capitalism: Networking the future*. Polity Press.

Taylor, M. (2022). *Critical perspectives on environmental policy*. Palgrave Macmillan.

Taylor, M. L. (2011). *The theological and the political: On the weight of the world*. Fortress Press. Kindle Edition.

Tempelhoff, J. (2017). The Water Act, No. 54 of 1956 and the first phase of apartheid in South Africa (1948-1960). *Water History, 9*(2).

Tewolde, A. I. (2024). Experiencing Negative Racial Stereotyping: The Case of Coloured People in Johannesburg, South Africa †. *Social Sciences*, *13*(6), (pp. 277). https://doi.org/10.3390/socsci13060277

Thamm, A. (1998). Contributions to the Geology of the Table Mountain Group. *ResearchGate*. https://doi.org/10.13140/RG.2.2.32500.30085

Tham, J. (2014b). Lessons learned. In J. Tham (Ed.), *Religious perspectives on human vulnerability in bioethics* (pp. 215–224). Springer.

Thambinathan, V., & Kinsella, E. A. (2021). Decolonizing Methodologies in Qualitative Research: Creating Spaces for Transformative Praxis. *International Journal of Qualitative Methods*, *20*. https://doi.org/10.1177/16094069211014766

The ILO and the BRICS. (2024, September 2). International Labour Organization. https://www.ilo.org/about-ilo/how-ilo-works/ilo-and-multilateral-system/ilo-and-brics

Thom, H. B. (1958). *Journal of Jan van Riebeeck: Volume III*, 1659-1662. A.A. Balkema.

Thomas, J. (1979). *Jay: The Dialectical Imagination-A History of the Frankfurt School*. https://philpapers.org/rec/THOJTD-3

Thoreau, H. D. (1854). *Walden; or, Life in the woods*. Ticknor and Fields. https://www.environmentandsociety.org/mml/walden-or-life-woods

Thornton, R. (2009). The transmission of knowledge in South African traditional healing. *Africa*, 79(1), 17-34. https://doi.org/10.3366/E0001972008000582

Till, K. E. (2012). Wounded cities: Memory-work and a place-based ethics of care. *Political Geography*, *31*(1), (pp. 3–14). https://doi.org/10.1016/j.polgeo.2011.10.008

Timeto, F. (2020b). Becoming-with in a compost society — Haraway beyond posthumanism. *International Journal of Sociology and Social Policy*, *41*(3/4), (pp. 315–330). https://doi.org/10.1108/ijssp-08-2019-0158

Todd, Z. (2016). An Indigenous Feminist's Take On The Ontological Turn: 'Ontology' Is Just Another Word For Colonialism. *Journal of Historical Sociology*, *29*(1), (pp. 4–22). https://doi.org/10.1111/johs.12124

Tolgfors, B., Backman, E., Nyberg, G., & Quennerstedt, M. (2021). What physical education teachers learn through research participation in a school-based research project. *European Physical Education Review*, 27(4), 907–924. https://doi.org/10.1177/1356336X20949575

Tomlinson, B. R. (2003). What was the Third World? *Journal of Contemporary History*, 38(2), (pp. 307-321). https://doi.org/10.1177/0022009403038002135

Tordzro, G. K. (2018). *Story, storying and storytelling: A reflection on documentary film, music, and theatre as creative arts research practice*. (PhD thesis). College of Social Sciences, University of Glasgow.

TRAFFIC. (2022). *First-ever global Red List assessment of abalone underlines urgency of combatting illegal trade - Wildlife Trade News from TRAFFIC*. https://www.traffic.org/news/first-ever-global-red-list-assessment-of-abalone-underlines-urgency-of-combatting-illegal-trade/

Tsing, A. (2005). *Friction: An ethnography of global connection*. Princeton University Press.

Tsing, A. L. (2015). *The Mushroom at the End of the World*. Princeton University Press. https://doi.org/10.2307/j.ctvc77bcc

Tsing, A., & Ebron, P. (2015). Writing and rhythm: call and response with Anna Tsing and Paulla Ebron. *Journal of the Royal Anthropological Institute*, *21*(3), (pp. 683–687). https://doi.org/10.1111/1467-9655.12256

Tsing, A. L., Mathews, A. S., & Bubandt, N. (2019). Patchy Anthropocene: Landscape Structure, Multispecies History, and the Retooling of Anthropology. *Current Anthropology*, *60*(S20), (pp. S186–S197). https://doi.org/10.1086/703391

Tuan, Y. (2004). Dominance and Affection: The Making of Pets. *ResearchGate*. https://www.researchgate.net/publication/284765926_Dominance_and_Affection_The_Making_of_Pets

Tuan, Y. F. (2013). *Landscapes of fear*. University of Minnesota Press.

Turok, I., Visagie, J., Scheba, A. (2021). Social Inequality and Spatial Segregation in Cape Town. In: van Ham, M., Tammaru, T., Ubarevičienė, R., Janssen, H. (eds) *Urban Socio-Economic Segregation and Income Inequality*. The Urban Book Series. Springer, Cham. https://doi.org/10.1007/978-3-030-64569-4_4

Tutu, D. (1999). *No future without forgiveness*. Doubleday.

Underhill, G. (2009, July 27). *Cloud over the Sentinel*. The Mail & Guardian. https://mg.co.za/article/2009-07-27-cloud-over-the-sentinel/

United Nations World Water Assessment Programme (WWAP). (2015). *Water for a sustainable world*. In The United Nations world development report. UNESCO.

Valladares, F., Laanisto, L., Niinemets, Ü., & Zavala, M. A. (2016). Shedding light on shade: ecological perspectives of understorey plant life. *Plant Ecology & Diversity*, *9*(3), (pp. 237–251). https://doi.org/10.1080/17550874.2016.1210262

Van Der Watt, A. S. J., Menze, N., Moxley, K., Mbanga, I., Seedat, S., & Dass-Brailsford, P. (2021). Self-identification, mode of diagnosis and treatment, and perceptions of relationships with medical providers of South African Xhosa-speaking traditional

healers. *Transcultural Psychiatry*, *58*(4), (pp. 573–584). https://doi.org/10.1177/13634615211015071

Van Sittert, L. (2003). Making the Cape Floral Kingdom: The discovery and defence of indigenous flora at the Cape ca. 1890-1939. *Landscape Research*, *28*(1), (pp. 113–129). https://doi.org/10.1080/01426390306529

Van Wilgen, B. W. (2018). Research, politics and conservation in South Africa's national parks. *South African Journal of Science*, *114*(1/2), 1. https://doi.org/10.17159/sajs.2018/a0254

Van Wilgen, B., & Van Wilgen-Bredenkamp, N. (2021, May 19). *The Table Mountain fire: what we can learn from the main drivers of wildfires | Centre for Invasion Biology*. Centre for Invasion Biology. https://blogs.sun.ac.za/cib/the-conversation-table-mountain-fire/

Van Wilgen, B., Cowling, R., Marais, C., Esler, K., McConnachie, M., & Sharp, D. (2012). Challenges in invasive alien plant control in South Africa. *South African Journal of Science*, *108*(11/12). https://doi.org/10.4102/sajs.v108i11/12.1445

Van Wyk, A., & Prinsloo, G. (2018). Medicinal plant harvesting, sustainability and cultivation in South Africa. *Biological Conservation*, *227*, (pp. 335–342). https://doi.org/10.1016/j.biocon.2018.09.018

Vandome, C. (2023, August 25). *Symbolism over substance for South Africa as Ramaphosa announces BRICS 3.0*. Chatham House – International Affairs Think Tank. https://www.chathamhouse.org/2023/08/symbolism-over-substance-south-africa-ramaphosa-announces-brics-30

Vargas, H. M., Marambio, C., & Lykke, N. (2020). Decolonising Mourning: World-Making with the Selk'nam People of Karokynka/Tierra del Fuego. *Australian Feminist Studies*, *35*(104), (pp. 186–201). https://doi.org/10.1080/08164649.2020.1774865

Veldman, J. W., Overbeck, G. E., Negreiros, D., Mahy, G., Stradic, S. L., Fernandes, G. W., Durigan, G., Buisson, E., Putz, F. E., & Bond, W. J. (2015). Where Tree Planting and Forest Expansion are Bad for Biodiversity and Ecosystem Services. *BioScience*, *65*(10), (pp. 1011–1018). https://doi.org/10.1093/biosci/biv118

Verlie, B. (2021). *Learning to Live with Climate Change*. https://doi.org/10.4324/9780367441265

Verma, A. (2018). *Reimagining the human: Critical perspectives on human rights and ethics*. Routledge

von Schnitzler, A. (2016). *Democracy's infrastructure: Techno-politics and protest after apartheid*. Princeton University Press. http://www.jstor.org/stable/j.ctt1q1xrh4

Waddington C. H. (1957). *The Strategy of the Genes: A Discussion of Some Aspects of Theoretical Biology*. London: Allen & Unwin.

Walker, C. (2005). *The Limits to Land Reform: Rethinking 'the Land Question'*. Journal of Southern African Studies, 31(4), 805–824. https://doi.org/10.1080/03057070500370445

Walkington, Z., Wigman, S. A., & Bowles, D. (2020). The impact of narratives and transportation on empathic responding. *Poetics*, 80, (pp. 1–8). https://doi.org/10.1016/j.poetic.2019.101423

Wallerstein, I. (2004). *World-systems analysis: An introduction*. Duke University Press.
Walshe, P. (1991). South Africa: Prophetic Christianity and the Liberation Movement. *The Journal of Modern African Studies*, *29*(1), (pp. 27–60). https://www.jstor.org/stable/160992

Wankhammer, J. (2017). Anthropomorphism, Trope, and the Hidden Life of Trees: On Peter Wohlleben's Rhetoric. *Literatur Für Leser*, *40*(2), (pp. 139–152). https://doi.org/10.3726/lfl022017k_139

Warner, J. F., & Meissner, R. (2021). Cape Town's "Day Zero" water crisis: A manufactured media event? *International Journal of Disaster Risk Reduction*, *64*, 102481. https://doi.org/10.1016/j.ijdrr.2021.102481

Waterton, E., & Saul, H. (2020). Ghosts of the Anthropocene: spectral accretions at the Port Arthur historic site. *Landscape Research*, *46*(3), (pp. 362–376). https://doi.org/10.1080/01426397.2020.1808957

Watts, M. (2015). *The anthropology of oil: Petrocultures and the politics of extraction*. Routledge.

Weber, S. (2024). Reconsidering Freud's uncanny: The Coppola perspective. *Humanities, 13*(1), 4. https://doi.org/10.3390/h13010004

West, C. (2007). *Democracy matters: Winning the fight against imperialism*. The Penguin Press.

West, C. (2014). The new cultural politics of difference. In *The identity in question* (pp. 147-171). Routledge.

Western Cape Government. (2023). *WC Government disappointed at latest murder statistics*. https://www.westerncape.gov.za/news/wc-government-disappointed-latest-murder-statistics

Whatmore, S. (2002). *Hybrid Geographies: Natures Cultures Spaces*. https://doi.org/10.4135/9781446219713

White, D. (1998). Postmodern Ecology: Communication, Evolution, and Play. *ResearchGate*. https://www.researchgate.net/publication/200027510_Postmodern_Ecology_Communication_Evolution_and_Play

White, P., & Pickett, S. (1985). Natural Disturbance and Patch Dynamics: An Introduction. In *Elsevier eBooks* , (pp. 3–13). https://doi.org/10.1016/b978-0-08-050495-7.50006-5

Whitehead, M. (2005). *Spaces of sustainability: Geographical perspectives on the sustainable society*. Routledge.

Wieczorek, M. (2023). Portuguese Saudade, the Trajectories of Longing and Desire. *Current Anthropology*, *64*(3), (pp. 269–285). https://doi.org/10.1086/725080

Wiens, J. A. (1989). Spatial Scaling in Ecology. *Functional Ecology*, *3*(4), (pp. 385). https://doi.org/10.2307/2389612

Wilhite, H. (2020). *Climate change and human behavior: Theoretical perspectives*. Routledge.

Williams, R. (1973). *The country and the city*. Oxford University Press.

Williams, Vivienne & Wojtasik, E.M. & Byrne, Marcus. (2021). A chronicle of alien medicinal plants used as traditional medicine in South Africa, and their status as invasive species. *South African Journal of Botany*. 142. (pp. 63-72). 10.1016/j.sajb.2021.05.027.

Willinsky, J. (1998). *Learning to divide the world: Education at empire's end*. Minneapolis, MN: University of Minnesota Press.

Wolff, M., Cockburn, J., De Wet, C., Bezerra, J. C., Weaver, M. J. T., Finca, A., De Vos, A., Ralekhetla, M. M., Libala, N., Mkabile, Q. B., & others. (2019). Exploring and expanding transdisciplinary research for sustainable and just natural resource management. *Ecology and Society, 24*(4), Article 14. https://doi.org/10.5751/ES-11077-240414
Wolfe, Ed.). Scholarly Commons. https://scholarlycommons.pacific.edu/jmb/444/

Wolfe, P. (2016). *Traces of the dragon: Understanding the colonial encounter*. Routledge.

Wolpe, H. (1980). Towards an analysis of the South African state. *International Journal of the Sociology of Law*, 8(4), (pp. 399–421).

Wolpe, H. (1983, May 30–June 1). *The analysis of the South African state* [Conference presentation]. Conference on Southern African Studies: Retrospect and Prospect, University of York, York, UK.

Wood, A. R., & Morris, M. J. (2007). Impact of the gall-forming rust fungus Uromycladium tepperianum on the invasive tree Acacia saligna in South Africa: 15 years of monitoring. *Biological Control*, *41*(1), (pp. 68–77). https://doi.org/10.1016/j.biocontrol.2006.12.018

Worden, N., Van Heyningen, E., & Bickford-Smith, V. (1998). *Cape Town: The making of a city*. David Philip Publishers.

Working for Water (WfW) programme | *Department of Environmental Affairs*. (n.d.). https://www.dffe.gov.za/working-water-wfw-programme

World Bank. (2022). South Africa Economic Update: Inequality and Poverty**.** Retrieved from https://www.worldbank.org/en/country/southafrica

Wrigley, N. (2002). "Food Deserts" in British Cities: Policy Context and Research Priorities. *Urban Studies*, *39*(11), (pp. 2029–2040). https://doi.org/10.1080/0042098022000011344

Wynter, S. (1995). 1492: A "new world" view. In V. L. Hyatt & R. Nettleford (Eds.), *Race, discourse, and the origin of the Americas: A new world view* , (pp. 5–57). Smithsonian Institution.

Wynter, S. (2003). Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation--An Argument. *CR the New Centennial Review*, *3*(3), (pp. 257–337). https://doi.org/10.1353/ncr.2004.0015

Wynter, S., & McKittrick, K. (2015). Unparalled catastrophe for our species? Or, to give humanness a different future: Conversation. In K. McKittrick (Ed.), Sylvia Wynter: *On being human as praxis. (pp.* 1–55), Duke University Press.

Yiftachel, O. (2009). Theoretical notes on 'Gray Cities': The Coming of Urban Apartheid? *Planning Theory*, *8*(1), (pp. 88–100). https://www.jstor.org/stable/26165887

Youatt, R. (2017). Personhood and the Rights of Nature: The New Subjects of Contemporary Earth Politics1. *International Political Sociology*, *11*(1), (pp. 39–54). https://doi.org/10.1093/ips/olw032

Young, R. (2024, September 23). You are walking on graves. *News24*. https://www.news24.com/news24/you-are-walking-on-graves-20150429

Yountae, A. (2013). Beginning in the Middle: Deleuze, Glissant, and Colonial Difference. *Culture, Theory and Critique/Culture, Theory & Critique*, *55*(3), (pp. 286–301). https://doi.org/10.1080/14735784.2013.856768

Young, I. M. (2003). *Justice and the politics of difference*. Princeton University Press.

Young, R. J. C. (2016). *Postcolonialism: An historical introduction*. Blackwell Publishing.

Zachos, J., Pagani, M., Sloan, L., Thomas, E., & Billups, K. (2001). Trends, Rhythms, and Aberrations in Global Climate 65 Ma to Present. *Science*, *292*(5517), (pp. 686–693). https://doi.org/10.1126/science.1059412

Zachos, J., Shackleton, N., Opdyke, N., & Parrish, R. (2001). *The history of climate change* [PDF document]. Retrieved from https://macegroup.chpc.utah.edu/class/1020/Zachos_etal_Science_65MA-Present_Climate.pdf

Zalasiewicz, J. (2016). *The earth after us: What legacy will humans leave?* Oxford University Press.

Zalasiewicz, J., Williams, M., Smith, A., Barry, T. L., Coe, A. L., Bown, P. R., Brenchley, P., Cantrill, D., Gale, A., Gibbard, P., Gregory, F. J., Hounslow, M. W., Kerr, A. C., Pearson, P., Knox, R., Powell, J., Waters, C., Marshall, J., Oates, M., Stone, P. (2008). Are we now living in the Anthropocene. *GSA Today*, *18*(2), 4. https://doi.org/10.1130/gsat01802a.1

Zavala, M. (2013). What do we mean by decolonizing research strategies? Lessons from decolonizing, Indigenous research projects in New Zealand and Latin America. *Decolonization: Indigeneity, Education and Society, 2*(1), (pp. 55–71). http://decolonization.org/index.php/des/article/view/19113

Zembylas, M. (2005). Beyond teacher cognition and teacher beliefs: the value of the ethnography of emotions in teaching. *International Journal of Qualitative Studies in Education*, *18*(4), (pp. 465–487). https://doi.org/10.1080/09518390500137642

Zembylas, M. (2018). Affect, race, and white discomfort in schooling: Decolonial strategies for 'pedagogies of discomfort'. *Ethics and Education*, 13(1), (pp. 86–104). https://doi.org/10.1080/17449642.2018.1428714

Zembylas, M. (2020). Toward a decolonial ethics in human rights and peace education. *International Journal of Human Rights Education*, 4(1). Retrieved from https://repository.usfca.edu/ijhre/vol4/iss1/2

Ziervogel, D., & Mokgokong, P. C. (1985). *Groot Noord-Sotho woordeboek: Noord-Sotho-Afrikaans, Engels / Comprehensive Northern Sotho dictionary: Northern Sotho-Afrikaans, English / Pukuntshu ye kgolo ya Sesotho sa Leboa: Sesotho sa Leboa-Seburu, Seisimane* (2nd ed.). Pretoria: J.L. van Schaik; University of South Africa (UNISA).

Ziervogel, G. (2019). *Unpacking the Cape Town drought: Lessons learned*. Report for Cities Support Programme. Climate Resilience Paper. African Centre for Cities.

Zigon, J. (2018). *Disappointment: Toward a critical hermeneutics of worldbuilding*. Fordham University Press. https://doi.org/10.2307/j.ctt1xhr762

Zimmerer, K. S., & Bassett, T. (2003). Political Ecology: An Integrative Approach to Geography and Environment-Development Studies. *ResearchGate*. https://www.researchgate.net/publication/266373948_Political_Ecology_An_Integrative_Approach_to_Geography_and_Environment-Development_Studies

Zschocke, S., Rabe, T., Taylor, J., Jäger, A., & Van Staden, J. (2000). Plant part substitution – a way to conserve endangered medicinal plants? *Journal of Ethnopharmacology*, *71*(1–2), (pp. 281–292). https://doi.org/10.1016/s0378-8741(00)00186-0

Zweifel, R., Sterck, F., Braun, S., Buchmann, N., Eugster, W., Gessler, A., Häni, M., Peters, R. L., Walthert, L., Wilhelm, M., Ziemińska, K., & Etzold, S. (2021). Why trees grow at night. *New Phytologist*, *231*(6), (pp. 2174–2185). https://doi.org/10.1111/nph.17552

Zylinska, J. (2018). *The End of Man: A Feminist Counterapocalypse*. King's College London. https://kclpure.kcl.ac.uk/portal/en/publications/the-end-of-man-a-feminist-counterapocalypse

Appendix: Botanical Index

Acacia cyclops: Rooikrans
Acacia mearnsii
Acacia nicotida
Acacia pycnantha
Acacia saligna: Port Jackson
Agathosma spp.: Buchu
Alepdiea amatymbica: Large tinsel flower
Aloe arboroscens: Aloe
Aloe succotrina: Fynbos Aloe
Arctotis hirsute: Gousbloms
Calodendrum capense: Cape Chestnut
Carissa macrocarpa: Natal plum
Carpobrotus acinaciformis: Elandsvy
Celtis Africana: Stinkwood Tree
Conophytums
Curtisia Assegai: Assegais
Cyclopia spp.: Honeybush tea
Dorotheanthus bellidiformis: Bokbaai vygies
Eichhornia crassipes: Water Hyacinth
Ericaceae: Genus Erica
Eriocephalus africanus: Wild Rosemary
Ficus
Haliotis Midae: Abalone (perlemoen)
Hadeda Ibis
Helichrysum: *Impepho*
Hypoxis hemerocallidea: African potato
Ixia monadelpha: Pied Kalossie
Kiggelaria africana: Wild Peach
Laetiporus Suphlureus: Chicken of the Woods
Leucadendron Argenteum: Leucadendron
Leucadendron Grandiflorum: Wynberg Conebush
Ligustrum japonicum: Waxleaf Privet
Myrothamnus flabellifolius: Resurrection Plant
Oceata bullata: Black Stinkwood
Olea Capensis: Giant Ironwood Trees
Peltophorum africanum: African weeping wattle
Pinus: Pine Tree
Podocarpus elongatus: Breede River Yellowwood
Portulacaria afra: Spekboom
Proteaceae: Genus Protea
Rapanea melanophloeos: Cape Beech
Restios: Genus Restionaceae
Saligna gum: Bluegum
Salvia Africana-caerulea: Sage
Siphonochilus aethiopicus: African ginger
Syncarpha vestita Asteracae: Cape Snow
Tropaeolum: Nasturtium
Uromycladium tepperianum: Gall Rust Fungus