Co-creating a pedagogy of care for our hydrocommons in South Africa

A thesis by publication submitted in fulfilment of the requirements for the degree

Doctor in Education
Of
Rhodes University

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July 2024

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Abstract

My research focuses on watery relations in a South African context. Our planet, predominantly covered by water, relies on healthy oceans to sustain life by producing oxygen. Oceans, rivers, and wetlands constitute our natural water resources, integral to the hydrological cycle, collectively forming what Neimanis (2009) terms as hydrocommons. Hydrocommons encompass the shared water bodies and resources vital for human and more-than-human inhabitants alike. Caring for our hydrocommons is imperative for the well-being of the planet and all its inhabitants. Yet, the notion of responsibility for their upkeep sparks debate, as it intertwines with concepts of justice, extensively explored in academic discourse (Bozalek & Zembylas 2023). In South Africa, historical patterns of privilege tied to skin colour significantly influence perceptions of responsibility and care. This doctoral research engages with the enduring impacts of the apartheid legacy, which continues to shape notions of belonging, especially for Black and Brown South Africans who were forcibly displaced and restricted from accessing various areas, including urban spaces and natural environments such as beaches and game reserves. My perspective stems from my background as a scientist in the conservation field for over two decades, and transitioning into an educational doctorate with an emphasis on feminist, posthumanist, and care frameworks to address environmental and social justice concerns. Furthermore, I am a Brown Creole woman who was raised as a Muslim in Camissa, South Africa. The overarching question this dissertation seeks to address is; *How can reparative care pedagogies reshape the hydrocommons for Black and Brown communities in post-apartheid South Africa?*

In order to respond to this question, I think diffractively with theory from feminism(s), posthumanism, research-creation and Slow scholarship - all of these are predicated on relational ontologies which embrace diverse ways of knowledge production in caring and meaning-making ways (Springgay & Truman, 2018; Stengers, 2011; Taylor et al, 2020). The research question I have posed is addressed through two key methods of enquiry namely *strandlooping* (beach walking) and hydro-rugging (stitching and mending). While there has been some literature on walking and mending methodologies from Northern contexts, I have opted to contextualise them within a South African framework with indigenous origins. By developing such methodologies

in the local context, I aim to understand their application and relevance within South Africa's diverse cultural and environmental landscape. I have deliberately incorporated indigenous perspectives and practices in order to contribute to a more holistic and nuanced exploration of watery relations through iterative and collaborative events with participants.

Chapter One provides an overview of my positionality and research practice by giving voice to those who have been marginalised, silenced and erased for three decades. The 30th anniversary for our first democratic elections was celebrated on the 27th April 2024 whilst I have been finalising my manuscript. The silence and erasure persist today, even though apartheid laws and regulations are no longer in effect. This lingering silence continues to permeate our lives and linger as a haunting presence. Consequently, *strandlooping* and hydro-rugging emerge as methods of enquiry that foster and provide avenues for care and healing. Chapter Two shares the stories of four Brown bodies and a tidal pool each of whom have a relationship with False Bay. The chapter shows how watery stories are shared through the process of hydro-rugging at the tidal pools. Chapter Three unravels the practice of *strandlooping* and develops propositions or watermarks to assist other researchers with this practice in their own contexts. Chapter Four articulates hydro-rugging as a method of enquiry and elucidates how the individual hydro-rugs are stitched alongside each other to create the Mother Hydro-rug. Chapter Five introduces three experiential research-creation events with fourth year students to meander and learn from them with regards to care for our hydrocommons.

Drawing on relational ways of understanding and engaging with the world, this research culminates in several key implications for reparative care pedagogies in reshaping the hydrocommons. It underscores the importance of not only acknowledging but including diverse modes of knowledge and existence, particularly within Black and Brown communities marginalised by apartheid's racial and ethnic divisions. Additionally, it highlights the significance of challenging traditional educational paradigms entrenched in colonial and apartheid legacies. By prioritising embodied, experiential, and inclusive methodologies, the doctoral thesis advocates for a pedagogical shift toward relationality and process-oriented learning. This thesis prompts a reevaluation of extractive and exploitative educational practices, advocating instead for conviviality and the exploration of relational and embodied meanings and approaches.

Keywords: care pedagogy, reparation, research-creation, posthumanism, feminism, higher education, environmental and social justice

Acknowledgements

I am deeply thankful for the nurturing guidance provided by Prof. Vivienne Bozalek and Dr Dylan McGarry. Viv, meeting you at St. James tidal pool through Joanne was serendipitous, and I'll forever treasure our swims amidst discovering myriad sea creatures like octopus, cuttlefish, nudibranchs, and pipefish, followed by our supervision meetings. Dyl, your unwavering support has reignited the artist within me, especially through the creation of the Mother Hydro-rug and the numerous exhibition opportunities you have facilitated. Thank you both for transcending the role of supervisors to become my doulas, guiding me through the birthing process of this deeply personal research journey, which has also connected me to my ancestry.

I extend my gratitude to Prof. Heila Lotz Sistika from the Education Learning Research Centre at Rhodes University for providing the space for research at the intersection of art, environmental, and social justice. A heartfelt thank you to the One Ocean Hub for their financial support throughout my doctoral journey. Additionally, I'm indebted to individuals, universities and organisations who supported me by covering travel expenses, materials for the Mother Hydro-rug, and other general costs. In particular, I would like to acknowledge Sarah Munawar and Joan Tronto for inviting me to the Cosmologies of Care Conference in Houston.

Shukran to my Mommy and Papa for instilling in me a curiosity for learning and growth. You are my eternal inspiration, and I'm grateful for the sacrifices you've made to ensure our prosperity despite the constraints imposed by apartheid laws. To my sisters Ayesha and Yumna, thank you for your ongoing support, encouragement and love in all the ways that only sisters can be. Muneera Darries's hands played a crucial role in massaging my back and body in the last year of my studies, thank you for easing and loosening the knots in my body to allow for the words to flow and to continue sitting behind a computer screen for many hours. Tina Schouw, thank you for guiding me to use my singing voice - I look forward to more lessons with you now that the writing is complete. The cuddles from my friends' pets while I wrote - Forty, Pearl and Sengi- you have made me want to get a hound for the family post PhD. Gratitude also goes to the Barad reading group, Carole Scott, Cleo Droomer, Daaiyaan Petersen, Esethu Mbooi, Greta Francesca Iori, Joanne Peers, Kim Slot, Keiskamma Project, Maria Suarez, Mirjam McCloud, Rah Busby, Roushanna Gray, Sanele Masuka, Sandra Schonbachler, Shamier Magmoet, Thania

Petersen, Traci Kwaai and Toni Stuart for their support from swimming to chatting to walking to knitting to cooking to stitching to protesting to enacting ritual to holding vigil; all of these ways of being together has helped me get through. Thanks to all the participants that willingly shared their watery stories and contributed to making the Mother Hydro-rug what it is and what it will become. The plastic beach litter that I have been collecting and interfacing with for a decade, has also played a crucial role in how I understand the world and the interface of humans and their relationship with the environment. I feels somewhat strange to thank the plastic beach litter, but the act of collecting it and using it as one of the materials to co-create the Mother Hydro-rug whilst sharing stories of our relationship to water, has transformed my relationship with plastic and how I engage with the world and the humans and more-than-human entities.

For the past four years of this learning journey, I have been supported dearly by my husband Riyadh Omardien - thank you Ri for giving me the space to pursue this goal and for caring for the children in my absence, and being the soccer mom I have always struggled to be.

I dedicate this dissertation to my three sons Madyo, Kahlil, and Haroun and my nephews and niece Amal, Sama, Rumi and Amir. Thank you for being my life-long teachers. It has been a difficult time in the world with the killing of many innocent children through genocide and war in Palestine. May we continue to strive for peace and a justice-to-come, ensuring the safety and well-being of all children the world over.

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Introduction

Context and reasons for undertaking the study

As I write this introduction, contemplating on the culmination of the past three years spent co-creating this research on caring for our natural water bodies, I find myself simultaneously crafting the conclusion, meticulously stitching the Mother Hydro-rug (a key process, making and method of enquiry for this research will be explained more fully later), and incorporating feedback from reviewers into my chapters. This crafting encapsulates the embodied and integrated approach that guides my research journey, consistently demystifying and disentangling the fallacy of binaries, whilst swimming and *strandlooping* through the dynamism of the inbetween. It all began with the inception of this research, when I penned my proposal and embarked on walks and swims from a small town in Camissa[1] with honking penguins for neighbours. It was during these embodied activities that I realised part of the journey should involve *strandlooping* along the False Bay Coastline, engaging in deep thought with every step and with every stitch. All of these concepts, theoretical frameworks and research enquiries - much like the headwaters of a river - will be unravelled and explored in the coming paragraphs and through the pedagogical experiments that each chapter brings. Come along and let us *strandloop* together, bring some walking shoes, a mask and snorkel. I have packed a flask of ginger tea, some thread, needles, off-cut material, and we'll find some beach plastic along the way, but more about this later. Don't stress, if you don't have any of these items, we can share or we'll make a plan as we go.

Deborah Bird Rose (2022) illuminates the essence of care through the concept of 'world,' emphasising our interconnectedness and the inherent responsibility it entails. Much like I have shared in the opening paragraph of this thesis, you will be entering into the world of questions I am asking alongside being called to question, together with others - both human and more-than-human. Trust the process and feel free to ask questions as we go. Guided by this ethos of

[1] Camissa, meaning 'place of sweet waters', was the KhoiKhoi people's name for Cape Town (Camissa museum, 2022). The city once had four rivers, including the Camissa River, and 36 springs, all of which were channeled underground and drained out to the sea as the city expanded.

relationality and care, I embark on this study, introducing myself and my background, as well as the environmental justice context for this thesis, before unpacking its aims, objectives, and theoretical frameworks. Can you feel the cool, northwesterly wind on your skin? This offshore breeze clears out False Bay waters so that the visibility is good for snorkelling in the kelp forest. I can't wait for us to dive in together.

As Aaniyah Martin, born in Camissa, South Africa—known as the 'place of sweet waters' by the KhoiKhoi people—I am deeply rooted in the rich aquatic heritage of Cape Town. Despite its once-abundant rivers and springs, the city's expansion led to their subterranean burial, symbolising the erasure of Indigenous names and histories. Through intentional acknowledgment of pre-colonial nomenclature, I aim to honour and reclaim these ancestral connections. Central to my connection are blue and green spaces, which relate to marine and terrestrial environments, respectively. These spaces hold significance beyond their ecological value, serving as sites of racialised exclusion and reclamation. By foregrounding the experiences of Black and Brown[2] bodies in accessing and asserting customary rights to care for these spaces amidst apartheid's legacies, I confront the complex intersections of race, identity or race, class and environmental justice.

My journey, from studying Environmental Science to founding The Beach Co-op, underscores a commitment to bridging the divide between humanity and nature. Through The Beach Co-op's beach cleanup initiatives, I highlight the interdependence of humans and marine ecosystems, challenging assumptions of shared responsibility embedded within the narrative of 'we.' And yet, 'we' need to hold that not all humans share the same lived experience in this world. Here I am specifically pointing to the 'we' narrative and the assumptions that the word 'we' brings. For example, Liboiron (2021, 23) uses the phrase - "We are trashing the planet" - in this context 'we' erases the differences and power relations, that refutes specific responsibility and obligation. To use another example, I have different obligations to plastic pollution than someone who lives in

[2] I have used the words Brown and Black bodies to distinguish them from Black Indigenous People of Colour because of the North American framing and how it has been imposed in a South African context. The South African Black consciousness writer and anti-apartheid activist Stephen Bantu Biko's ideas of Black consciousness are more suitable and fitting for this work (Biko, 2017).

an informal settlement[3] that has no services to collect their refuse on a weekly basis. Neimanis (2024) refers to queer feminist Sara Ahmed's struggle with feminist histories and the difficulty of 'we' with that history and the violences that are hidden by the many of 'our' calls to justice. Instead, I advocate for nuanced understandings that recognise differential impacts and obligations, particularly concerning environmental stewardship and care. In this context, environmental stewardship refers to an inclusive approach to caring for and preserving the environment that acknowledges the differential impacts and obligations of individuals and communities. It involves recognising the interconnectedness between humans and marine ecosystems while also challenging assumptions of collective responsibility that may overlook power dynamics and disparities in lived experiences.

Drawing on insights from scholars such as Liboiron (2021) and Barad (in Juelskjær et al., 2020), I grapple with questions of responsibility and solidarity amidst ongoing legacies of apartheid. As South Africa further consolidates its democratic transition, the hauntological spectres (Derrida, 1994) of exclusion and racialised laws persist even 30 years later, echoing through the embodies and lived experiences of Black and Brown bodies. By acknowledging the multiplicity of 'we's' and embracing diverse perspectives, I seek to foster solidarity against colonial injustices while honouring the incommensurabilities of varied worlds and values. This approach recognises that there is not a singular 'we' but rather multiple communities with unique experiences and perspectives. By embracing this diversity, we can build solidarity among marginalised groups and allies to challenge colonial injustices. Additionally, honouring the incommensurabilities of different worlds and values, is a way of acknowledging that not all perspectives can be easily reconciled or compared. Instead, it encourages us to respond by learning and rendering to the differences, allowing for a more nuanced understanding of complex issues.

These nuances sit within a South African environmental justice context which this research attempts to respond to. Significant environmental challenges and crises, with the focus of this research being on water and our hydrocommons, intersect with issues of social and environmental justice. Here, the key aspect is the interplay of how colonisation, followed by industrialisation and then apartheid all play a role on how humans (bearing in mind that not all

[3] South Africa's informal settlements, remnants of apartheid, symbolise historical racial segregation, perpetuating poverty and inequality due to limited infrastructure and services.

humans are equal as explained earlier) engage with the more-than-human entities in South Africa. The historical context of environmental inequity is critical to understanding these challenges. The impact of colonisation and subsequent industrialisation has profoundly shaped the relationship between marginalised communities and our natural resources. Indigenous groups, such as the KhoiKhoi, faced dispossession of land and resources, which led to the erosion of their traditional ecological knowledge and practices (Bam, 2021). The industrialisation that followed intensified environmental degradation, prioritising economic gain over ecological sustainability and further alienating local communities from their environments. Apartheid laws and policies like the Group Areas Act enforced racial segregation, restricting access to various spaces, such as coastal environments, for Black and Brown communities and perpetuating social and economic inequalities (Green, 2020). Although post-apartheid efforts have aimed to democratise access to these spaces, the legacy of exclusion remains, with many marginalised groups still facing barriers to enjoying and benefiting from natural resources.

From an ecological perspective, research indicates that plastic pollution is expected to escalate dramatically, impacting our environment and coastal habitats in particular (Jambeck et al., 2015). Additionally, nutrient loading from runoff exacerbates algal blooms, further harming marine life (Harrison et al., 2021). Tidal pool ecosystems, which support diverse species such as anemones and crabs, are particularly vulnerable to climate change, increased temperatures, and ocean acidification, leading to significant disruptions in species balance and health (Morris et al., 2020). It follows that marine ecosystems, tidal pools included, face threats from pollution, climate change, and tourism. While tourism can provide economic benefits, it often prioritises profit over sustainability, contributing to further degradation of natural habitats (López-Morales et al., 2021). Climate change presents an additional threat to South Africa's coastal ecosystems, with rising sea levels and increased storm intensity impacting habitats directly and leading to habitat loss (Schneider et al., 2019). Furthermore, the extraction of marine resources, such as fishing and mining, disproportionately affects coastal communities, often resulting in conflicts over resource use (Bennett et al., 2016). Similar threats are faced by terrestrial environments alike.

In a developing country like South Africa, the intersection of environmental degradation and social justice is particularly exacerbated, as the marginalised communities - often Black and

Brown bodies - are the human entities most vulnerable to the environmental threats which have often been led and enforced by capitalists. In summary, framing this study within the historical and contemporary contexts of environmental justice enriches the understanding of the stakes involved. Furthermore, Green (2020) emphasises the importance of reconsidering the assumption that environmentalism must remain politically neutral. She highlights that while there are numerous Black environmental movements in South Africa, many are overlooked by predominantly white South African environmentalists—both academic and otherwise—because these movements focus on struggles for land, water and sanitation, health, and access to affordable, nutritious food (Green, 2020). Highlighting the inequitable distribution of environmental burdens and their impact on marginalised communities is crucial for advocating for more equitable policies. Addressing these elements in the introduction will provide a solid foundation for the subsequent practices of enquiry such as *strandlooping* and hydro-rugging, and discussions in the thesis.Oh wait, did you smell that *buchu*[4]? Here, let me show you what it looks like. Brush your hand against it and the aroma will arouse your senses - this one is my favourite, smelling of citrus. I wonder if the KhoiKhoi used it as a perfume?

In essence, this research serves as a testament to the power of relationality, responsibility, and care in confronting historical traumas and envisioning pathways towards environmental justice-to-come (Barad, 2017). Barad's (2017) concept of "justice-to-come," as explained through the lens of environmental justice-to-come, emphasises the entanglements of violent colonial histories and their ongoing impact on environmental injustices. This notion acknowledges that environmental injustices are not isolated incidents but are deeply rooted in historical legacies of colonialism, which often involved practices of erasure, exploitation, and displacement of Indigenous peoples and ecosystems. Moreover, the most vulnerable to the impacts of climate change are Black and Brown bodies, a consequence of the capitalist agenda driven by the relentless expansion of the Global North, prioritising growth at the expense of both human and more-than-human entities (Tsing, 2015; Haraway, 2016; Rose, 2022; Milstein et al., 2023). These marginalised communities also face barriers to accessing pristine natural landscapes and are unfairly stigmatised as environmental offenders, perpetuating what McGarry (2013, p 6)

[4] "Buchu" refers to a group of aromatic plants from the genus Agathosma, endemic to South Africa.The leaves are known for their distinct scent and have been traditionally used for their medicinal properties, including anti-inflammatory and diuretic effects.

terms ‘ecological apartheid’. This phenomenon not only signifies a disconnect between people and their environment but also highlights a form of environmental racism, particularly targeting certain racial groups (Lazarus, 2000), which is why I have chosen to focus on Black and Brown bodies for this research enquiry.

Environmental justice-to-come involves the act of re-membering that goes beyond mere acknowledgment of past wrongs. It recognises the need for a material reconfiguring of spatiotemporal realities, where the past, present, and future are intra-twined[5], in order to address the devastation caused by colonialism and environmental exploitation. As Barad (2017) argues, hauntings possess a materiality that transcends mere memories or echoes of the past; they are integral to our current material conditions. Essentially, hauntings function as both material entities and significant forces that exert influence on the present and future.This reconfiguring aims to do justice by accounting for the historical injustices and their ongoing effects on marginalised communities and ecosystems and is a central concept explored in relation to Black and Brown bodies and their watery stories. Additionally, an environmental justice-to-come produces openings for new possible histories and futures that contest the traditional ways of practising conservation and sustainability. Sustainability and conservation have been troubled from a posthuman perspective, which asks "What is it that sustainability seeks to sustain" and "For whom?" Alaimo (2016, p. 175). Most sustainability discourses involve distancing epistemologies and ontologies which render the world as a resource for human use. Contesting such discourses calls for transformative actions that not only address current environmental injustices but also open up pathways for enduring change, where time-beings (both human and more-than-human) can find ways to thrive and coexist harmoniously within entangled ecosystems. An environmental justice-to-come embodies a commitment to confronting the legacies of colonialism and environmental exploitation, while simultaneously striving to imagine and create more just, caring and sustainable futures for all beings. It takes into account the entanglement of social, environmental, and historical justice, and the need for collective efforts to address systemic inequalities and injustices. Through a critical engagement with the past and present where the past is not left behind, and the implications this has for the future, I endeavour

[5] Interaction is the coming together of two or more pre-existing entities, whereas intra-action is the relationship which is pre-existing, and entities or subjects and objects only come into being through relationships (Barad, 2007).

to weave a narrative that amplifies marginalised voices and contributes towards transformative change within South Africa's socio-environmental landscape.

This beach, where we are currently *strandlooping*, was designated for white bodies only. My Papa brought us here and secretly taught us how to swim—right in the kelp forest. Can you imagine? He must have felt both terrified and incredibly brave at the same time. I often wonder what would have happened if we had encountered a disgruntled policeman who decided to arrest us.

As we continue to *strandloop* we move with understanding the context for this research to the theoretical frameworks and methodologies guiding the research, which seeks to elevate the voices of Black and Brown communities and cultivate transformative shifts within South Africa's socio-environmental terrain and the importance of developing Southern pedagogies, ways of enquiry, knowledges and ways of being/becoming.

Theoretical frameworks and approaches to the enquiry

As we stroll along the shoreline together, I'm deeply moved by how engaging in *strandlooping*, both independently and with companions, endeavours to challenge boundaries and foster avenues within higher education for embracing diverse approaches to knowledge creation. *Strandlooping* is more than a research enquiry, it is a reclaiming of my identity as a Brown Creole woman and widening the pathway for others like me to embark on similar journeys.

Colonialism systematically marginalised Indigenous scientific traditions, relegating them to the realm of folklore and superstition, while elevating Northern science as the epitome of knowledge. This process of classification and categorisation, driven by colonial interests, established dualisms and binaries such as modern/traditional, progressive/backward, and nature/culture (Bam and Muthien, 2021; Escobar, 2011; Juelskjær et al., 2020; Lugones, 2007; McKittrick, 2021; Oyewumi, 1997). The perception of science as divorced from social and cultural contexts perpetuates hegemonic narratives, entwining scientific practices with masculinist, racist, and colonial ideologies (McKittrick, 2021; Schneider, 2005; Simpson, 2017; Tuck, 2012). Haraway, Harding, and Barad, among others, have challenged this separation, advocating for a more inclusive and engaged approach to knowledge production (Barad, 2007;

Schneider, 2005). African feminists and Indigenous knowledge holders echo the call for a holistic approach to knowledge creation, emphasising compassion and wisdom over intellectualism (Muthien, 2021; Okech, 2020). Wisdom, as echoed by African feminists and Indigenous knowledge holders, emphasises a politico-ethico-onto-epistemology also important in its inexticrability since it goes beyond knowledge to ontology, ethics, and politics which are all imbricated in each other.

Representational theory views knowledge as static representations of reality, whereas non-representational theory, which includes African feminists and Indigenous knowledge, foregrounds the dynamic practice through which relations unfold (Vannini, 2015). Rejecting the notion of a fixed empirical reality, non-representational approaches prioritise performative enactments and practices (Akaomolafe & Ladha, 2017; Barad, 2007; Bozalek, 2021; Vannini, 2015). Research-creation, born out of transdisciplinary enquiry, offers a transversal engagement with different disciplines, enriching understandings of complex research questions (Manning, 2016). Erin Manning proposes the hyphen in research-creation as the bridge between research and creation, defining it as the "differential between making and thinking across art and philosophy" (Truman et al., 2020, p. 228). This perspective positions research-creation as the transformative force driving the emergence of new knowledge (Truman et al., 2020, p. 228). In addition to its function in generating knowledge, research-creation transforms the terrain of academic investigation and distribution through several mechanisms. Firstly, it encourages collaborations that span disciplinary boundaries, promoting a holistic approach to understanding complex issues. Secondly, it incorporates artistic and creative methodologies, enriching scholarly pursuits with innovative perspectives and expressions. Finally, it actively involves diverse communities, ensuring that the research practice is relevant, accessible, and inclusive.

Manning suggests that by embracing diverse modes of enquiry, research-creation not only illuminates the mechanics of thought but also encompasses "that which doesn't register directly as thought [that is] the difference that makes a difference" (2020, p. 228). It emphasises process or making over outcomes, inviting a re-accounting of the role of writing in the thinking-doing (Manning, 2016). I used research-creation as a means to explore the connections between diverse communities and watery ecosystems, while nurturing a pedagogy of care. This approach aligns with Kulundu et al.'s (2020) concept of 'call and response' learning, inspired by the African

tradition of collective improvisation and meaning-making. Through research-creation, this research fosters an iterative practice of co-creation, to elaborate on how this approach is "the difference that makes a difference" (Manning, 2020) by fostering dialogue and mutual understanding amongst participants. This has been central to how I approach my enquiries and it features in all the chapters of this thesis.

In addition to research-creation, I have meandered with feminism, specifically African feminism and Indigenous knowledge, and posthumanism as the core theoretical frames that help me understand my research enquiries and findings. All of these philosophical orientations are linked to a relational ontology and care, which posits that entities and phenomena do not exist in isolation but rather come into existence and meaning through their relations with other entities. Central to relational ontology are the concepts of entanglement, dynamism and indeterminacy. Indeterminacy is thus an un/doing of identity that unsettles the very foundations of being and non-being (Bozalek, 2022). There is no static givenness; the world is constantly being reconfigured. Relational ontology, as articulated by thinkers such as Alfred North Whitehead, Karen Barad, and Donna Haraway, provides a philosophical framework that resonates with Indigenous philosophies and care ethics. Relational ontology emphasises the entanglement of entities, challenging notions of separate and independent existence. This perspective aligns with Indigenous understandings of the entanglements of all life and resonates with the care ethicist's emphasis on relationality and responsibility towards others. Indigenous philosophies and care ethicists contribute to a broader understanding of relational ontology by highlighting alternative ways of conceptualising relationships, ethics, and entanglements in the world. Their contributions enrich and deepen our understanding of relationality and offer important insights for ethical and ontological enquiry.

I have noticed that you are becoming more comfortable with the water temperature; you can stay in for much longer than when we first started swimming and snorkelling. I love how the cool temperatures of around 12 degrees Celsius make my skin feel as though it's on fire. It reminds me that I, too, am a watery body.

Contextuality or situatedness of knowledge is another key aspect of relational ontology. Moreover, the meaning and significance of entities and phenomena are material-discursive, not

fixed but rather contingent upon their specific relationships and intra-actions[6] within particular contexts or environments, which is connected to positionality too. Thus, understanding the context and positionality in which these relationships occur is crucial for understanding the 'thick now' and how the present is threaded through with the ghosts of the past and what might yet be of the future (Barad, 2017). I am very clear about my positionality as a Brown Creole woman born and raised in South Africa with ancestry from Malaysia and Indonesia from the 1600s throughout this research practice. This lived experience in my Brown skin influences the research enquiry and my role as the primary researcher.

Drawing from relational ontology, posthumanism disrupts traditional demarcations between humans and more-than-human entities, emphasising the entanglement of all beings (Barad, 200; Braidotti, 2013; Harraway, 2016). However, it prompts a critical reevaluation of our conception of humanity. It is evident that not all groups of humans (and more-than-humans) enjoy equitable privileges or opportunities that confer advantage upon some while marginalising others. Furthermore, by critiquing anthropocentrism and hierarchical dualisms, posthumanism highlights the flawed discourses that have perpetuated the domination of humans over nature and technology. Instead, it advocates for a paradigm shift, recognising humans as enmeshed within intricate networks alongside animals, ecosystems, and technological artefacts. As Barad (2007) notes, agential cuts like human/non-human always need to be questioned, as the world cannot be assumed to be an already given. This acknowledgment confirms that ethical, ontological, political, and epistemological frameworks are always already entangled, much like African feminism and Indigenous philosophies. In this context, the responsibility of humans cannot be uniform or homogeneous. Those who have historically benefitted from societal privileges bear a different level of responsibility to those who have been marginalised or oppressed. Posthumanism thus challenges us to consider not only the entanglements but also the ethical implications of power differentials within these relationships. It prompts us to question whose voices are heard, whose histories have been erased, whose needs are prioritised, and how we can strive for a more equitable and just coexistence within our worlds.

[6] Interaction assumes that there are separate individual agencies that precede their interaction and are then intertwined; whereas intra-action assumes the mutual constitution of already entangled agencies.

Thinking-with posthumanism, particularly Braidotti's (2022) work, I have used figurations to help with understanding and interpreting certain historical and material conditions (Bozalek & Hölscher, 2023). Figurations are not neutral descriptors or mere metaphors but embody situated positions and aspirational statements. Braidotti (2022 p. 212) explains that figurations are "thinking aids", which can "help us work through complex issues". Referring to them as "theoretical fictions", Braidotti (2022 p. 212) contends that figurations "work to dismantle the posture of scientific objectivity, academic hierarchies and lethal binary oppositions". Neimanis's body of water serves as a figuration for understanding human bodies as fluid, permeable, and entangled with the environment (Neimanis, 2009). The notion of bodies of water emphasises the entanglement of bodies with water systems and challenges dualistic notions of self and nature. In the Chapters that follow, there are many figurations that I use such as the meandering river in Chapter Five to think with learning and teaching with fourth year students. In Chapter three the *watermeisie* is a figuration to think with the hydrological cycle and offers us various tributaries to *strandloop* along the concept of water from cultural, physiological, and geographical perspectives. Black and Brown skins become a figuration in Chapter Four for the Mother Hydro-rug as their watery stories are shared through the making of their hydro-rugs. As you continue to *strandloop* with this work, be attentive to other figurations you may come across, not just the shells and plastic litter along the shoreline.

Diffraction, as opposed to reflection, was another form of understanding and interpreting research practises and outcomes. Unlike reflection, diffraction, as discussed by Barad and Haraway, involves paying close attention to the ways differences come about and the impacts these differences create, thus paving the way for innovative ways of thinking (Bozalek & Zembyls, 2017; Barad & Gandorfer, 2021). Put differently, Barad and Haraway view diffraction as a practice of carefully observing the creation of differences and considering their consequences, thereby aerating them to new ways of thinking (Bozalek & Zembylas, 2017; Barad & Gandorfer, 2021). This is revealed in Chapter Five where students shared their relationship to water after our water colour painting enquiry. These differing responses to how they experience the ocean is neither right nor wrong, instead when combined, they weave a narrative of intricate entanglements. A diffractive approach intra-twines insights rather than pitting them against each other, promoting a multitude of perspectives rather than establishing binaries or prioritising one concept over another (Haraway, 1988, 1992, 1997). Haraway paved

the way for diffraction and its capacity to critically and constructively grasp diversity and explore various configurations of difference (Haraway, 1988, 1992, 1997; Barad, 2014). By presenting diffraction as a framework based on multiplicity rather than comparison, she offered an alternative optical metaphor to 'reflection' (Juelskjær et al., 2020: 11). This conceptual evolution of diffraction underscores feminist research and the activist/political drive to enact social change. The pursuit of social transformation diverges from research that merely reflects existing inequalities, thereby largely perpetuating those very disparities.

Feminism, especially in the contexts of African feminism and Indigenous knowledge, emphasises the importance of acknowledging diverse experiences and voices within the struggle for gender equality. It rejects a universalised understanding of women's experiences and instead recognises the intersectionality of race, culture, class, and other factors in shaping gender dynamics (Bam, 2021; Ogunyemi, 1996; Oyěwùmí, 1997). African feminism, for instance, underscores communal values and the interconnectedness of individuals within their social and cultural environments (Muthien, 2021). Indigenous knowledge similarly highlights the relationality between humans and the natural world, challenging dominant Western paradigms that prioritise individualism and exploitation of resources (Simpson, 2017).

Care and relationality serve as foundational principles that underpin both feminism and posthumanism. Care ethics, rooted in the work of feminist scholars like Joan Tronto, emphasises the importance of empathy, compassion, and attentiveness to the needs of others. It challenges traditional ethical theories that prioritise abstract principles or individual rights and instead focuses on the particularities of human relationships and contexts (Tronto, 1993). Relationality, as a broader concept, recognises that all beings are interconnected and mutually dependent. It emphasises the ethical implications of these relationships, calling for an ethic of care that extends beyond human-centric concerns to include the well-being of more-than-human entities and ecosystems (Haraway, 2016; Tsing 2015; Tronto 1993, Ogunyemi, 1996; Oyěwùmí, 1997; Simpson, 2017).

African feminism, Indigenous knowledge and posthumanism, intersect on the shared ground of care and relational ontology, acknowledging the intrinsic entanglements of all entities. These frameworks advocate for inclusive and compassionate approaches to engaging with the world.

Through mutual acknowledgment of entanglements, they provide nuanced perspectives on contemporary social, ontological, political, and ecological issues (Braidotti, 2013; Puig de la Bellacas, 2017; Ahmed, 2010). Simpson (2017) and Kimmerer (2003) reiterate that the knowledge our bodies and our practices generate has never been considered valid knowledge within the academy and therefore often exists on the margins. As we *strandloop* in between the high and low tide water marks along the shore of False Bay in Camissa we are re-membering our past and reimagining our future, weaving together threads of resilience, resistance, and reciprocity, embracing the multiplicity of voices and perspectives that enrich our collective journey toward justice and harmony.

Central to this research is the exploration of alternative methodologies for understanding and reshaping care practices for our water bodies. Concepts such as *strandlooping* (beach walking), a method of enquiry rooted in embodied experiences and reimagining higher education research, serve as key pillars in redefining the narrative around environmental care and gender studies is explored in Chapter three. Additionally, participants collectively embraced a reparative methodology, which I term hydro-rugging. This practice involves gathering discarded materials - such as plastic litter, cloth scraps I've collected, and individuals from Black and Brown communities - to converge with hands, hearts, ears, thread, needles, and scissors. These components are utilised to construct individual hydro-rugs. Whenever feasible, we assemble near a body of water, be it a tidal pool or the ocean, as discussed in Chapter two. I would designate a space for our gathering by arranging a cloth with all necessary materials, along with some refreshments if needed, to facilitate the creation of individual hydro-rugs. Participants select their scrap materials, plastic litter, and thread, engaging in conversations about their relationship with water throughout the crafting, hydro-rugging, and repairing practice. Each participant creates their own hydro-rug, with each rug intertwined with a narrative reflecting the individual's connection to water. These individual hydro-rugs are then stitched together to form the Mother Hydro-rug, serving as a social sculpture embodying the obscured histories and relationships that South Africans hold with water and the ocean. The primary focus was to centre on Black and Brown individuals and uncover their water and ocean care practices. As previously mentioned, The Beach Co-op plays a crucial role in nurturing caring communities by organising cleanups along beaches and rivers and sharing knowledge and information about South Africa's distinctive biodiversity. The debris collected during these cleanups are repurposed and used for the hydro-

rugging practice. This convivial activity facilitates the mending and healing of the trauma experienced by Black and Brown bodies in the post-apartheid era. By engaging with African feminism, Indigenous knowledge, and research-creation frameworks, the research endeavours to bridge theory with practice, and practise with theory, in innovative and relational ways through making the Mother Hydro-rug and *strandlooping* with participants. It follows that the embodied performative enactments of hydro-rugging and *strandlooping* from the Global South informs theory and continues to broaden and deepen theory in an ongoing interactive practice in research-creation.

Now that we've *strandlooped* with the research frameworks and collected bits of plastic litter from the beach, I extend an invitation for you to join me for ginger tea on my picnic blanket by the seaside. Let's incorporate some of the collected plastic into our hydro-rugs as we reflect on various research questions and enquiries.

Aims and objectives of the study and research questions

In the intricate scars that map post-Apartheid South Africa, the legacy of coloniality and apartheid continue to cast long shadows, particularly in the realm of environmental care and access to shared resources. There are many examples of this through the enquiries with Black and Brown bodies and their relationship with our water bodies or hydrocommons (Martin, 2023; Martin et al., 2024). The health of our oceans, referred to as the hydrocommons, holds pivotal importance not only for the sustenance of the planet but also for the well-being of all beings, human and more-than-human, who call this blue planet home. However, the burden of responsibility for safeguarding/extraction of these vital marine ecosystems is not equally shared among all members of society. Given this context, with a specific focus on the hurdles encountered in marine conservation as a Brown body, the concepts of sustainability and conservation may seem devoid of political engagement (Bozalek and Zembylas, 2023), and often strive to uphold existing norms, disregarding the complex link between economic expansion and environmental harm. I am in agreement with Bozalek and Zembylas (2023) who convey that it is

essential to question what is deemed worth conserving and for whose advantage. In light of these considerations, my research seeks to explore a fundamental question:

How can reparative care pedagogies reshape the hydrocommons for Black and Brown communities in post-apartheid South Africa?

The hydrocommons, encompassing natural water bodies such as oceans, rivers, and wetlands, constitute integral components of the hydrological cycle, and more than this the hydrocommons not only includes hydrogeophysical bodies of water, but also animal, plant, hybrid, and most importantly human bodies of water too. Neimanis (2009) writes that we are all bodies of water – we are the hydrocommons. This notion of commons extends beyond mere resource utilisation to encompass collective responsibility (Neimanis, 2009). However, as mentioned earlier in the introduction, Black and Brown bodies within a South African context, have had a particular relationship with watery bodies one that was severed with colonisation, industrialisation and apartheid laws that forcibly removed Black and Brown bodies from hydrogeophysical bodies of water and in turn stripped them from their sense of identity and belonging. In many ways, the work of this research is to repair the relationship of Black and Brown bodies with themselves as watery bodies as well as with the hydrogeophysical bodies of water. Initially conceived to focus on ocean and beach environments, my research scope has expanded through collaborative engagement to include all forms of water bodies. However, it must be noted that the beach and ocean tidal pools represent vital points of access and connection to the sea, especially for Black and Brown communities in Camissa, South Africa. Serving as the interface between land and ocean, these spaces offer opportunities for exploration and engagement, irrespective of swimming abilities. By probing into these spaces, we aim to foster inclusive practices that cater to diverse needs and experiences, transcending historical barriers imposed by social, economic, and political marginalisation (Carolissen et al., 2010). Drawing inspiration from Mohulatsi (2023) and Amin and Howell's (2016) reconceptualisation of the commons as a dynamic, contested space, I perceive the hydrocommons as a nexus of histories, knowledges, ontologies and practices—a living repository of stories. The Mother Hydro-rug, elucidated in the preceding section of the Introduction, embodies this by co-creating a counter hegemonic map of False Bay and Black and brown bodies relationships with water.

In this study, the concept of community extends beyond human entities to encompass all beings benefiting from healthy hydrocommons—citizens, fish, corporations, marine turtles, government bodies, whales and industries. My research seeks to cultivate collaborative efforts towards nurturing and safeguarding the hydrocommons. This notion of community engagement is further explained by Lotz-Sisitka, Wals, Kronlid & McGarry (2015) who convey that in defining environmental concerns in terms of coupled socio-ecological systems there is a growing body within the scientific community suggesting that issues need to be understood and engaged through transdisciplinary perspectives across multiple institutions and involving multiple actors (Kimmerer, 2003; McGarry, 2013; Liboiron, 2021; McKittrick, 2021). The practice of Slow science as an approach that encourages scientists to resist the urge to constantly churn out new discoveries and instead concentrate on producing knowledge that is rigorous, dependable, and enduring (Stengers, 2021; McGarry, Bozalek & Martin; forthcoming a & b). The Slow movement was initiated by Carlo Petrini (2013), the originator of the Slow Food Movement, as a protest against McDonalds opening a restaurant in Rome (Bozalek, 2021). It is very important to realise that Slow does not only refer to slowness/speed or duration, as Petrini (2013) made explicit. Instead, the Slow Food movement extends into Slow scholarship shifting to a focus on the quality rather than quantity of living, depth of engagement and a willingness to engage across differences of discipline and ideas (Leibowitz & Bozalek, 2018; Bozalek, 2021). Slow scholarship is therefore a proposal for alternative modes of doing academia and pedagogy in response to the current and mainstream modus operandi of outcomes, managerialism and corporatisation of these spheres of life (Stengers, 2011; Bozalek, 2021). Furthermore, Slow scholarship is described by Leibowitz and Bozalek as being about ‘attentiveness, deliberation, thoughtfulness, open-ended enquiry, a receptive attitude, care-fullness, creativity, intensity, discernment, cultivating pleasure, and creating dialogues between the natural and social sciences’ (2018, p. 983). Slow science also stresses the significance of transdisciplinary collaboration and open communication within the scientific community; by fostering an environment where researchers from diverse backgrounds can exchange ideas, share resources, and collaborate on long-term projects. Slow science aims to stimulate innovation and tackle complex scientific challenges more effectively. Moreover, Ulmer's (2020, p. 238) assertion that "rusty weatherings" embody hope for future transdisciplinary feminisms underscores the

transformative potential of embracing fluid, boundary-crossing approaches to knowledge production.

Therefore, the sub-questions guiding my research are as follows:

a) *Are there indirect experiences and associated practical wisdoms (praxis), that can be useful pedagogies of care in the hydrocommons?*

In order to challenge the dominant scientific and racialised white traditions, as well as the legacy of apartheid in marine conservation, this study investigates how indirect experiences through research-creation, Indigenous knowledge, feminism, and posthumanism, might yield reparative pedagogies of care for the hydrocommons. Given the historical influence of colonialism and apartheid on conservation efforts in South Africa, which have led to issues such as land ownership disparities, unequal distribution of benefits, and conflicts between wildlife and local communities (Martin, 2021), there are numerous concerns surrounding the concept of conservation. Moreover, the widespread problems of poaching and illegal wildlife trade, entwined with capitalism, injustice, and racism, pose additional threats to biodiversity (Holmes & Hattingh, 2018). The persistent influence of historical factors on conservation practices, even three decades after the advent of democracy, underscores the urgency and relevance of this research to understand how marginalised communities have historically cared for and continue to care for our environment.

b) *How do we support and understand reparative care practices for our hydrocommons?*

Our South African history and the enduring legacy of apartheid have marginalised and severed Black and Brown communities from environmental participation. This aspect requires careful consideration and has been prioritised in the research, recognising that a significant portion of the population has experienced various forms of trauma, such as forced relocation under the Group Areas Act (1950). To address this question, I have worked to co-create safe spaces for gatherings, whether in a gallery setting - predominantly exclusive to the wealthy and elite, thus unwelcoming to Black or Brown bodies - or at tidal pools. Drawing on my twenty years of experience and engagement in the environmental field in Camissa, I have cultivated enduring

relationships with various organisations, fostering trust that has facilitated partnerships and collaboration for these research enquiries.

c) *How might research-creation events help us initiate care for our hydrocommons?*

As previously noted, research-creation prioritises the process over outcomes, encouraging a different approach to the role of writing in the process of thinking and doing (Manning, 2016). Research-creation has given me the opportunity to explore the creation of learning spaces for regenerative storytelling and embodied practices that encourage collective response-ability (accountability and responsiveness) and care for our hydrocommons. It has shown me that even when you are uncertain of what the outcomes may be, you should trust the practice. This will be revealed in the chapters that follow this introduction.

Having delved into the research questions over ginger tea and hydro-rugging, we're prepared to wrap up and resume *strandlooping*. While this marks the final leg of this section along False Bay, we may opt to return, as there's always fresh knowledge to uncover upon revisitation. In fact, you may find when reading the chapters, which have been published in various journals, that there is in fact some repetition, what may look like repetition is rather iteration, in the same way we comb the same stretch of coastline *strandlooping*, it is never quiet the same, changed by tide, weather, politics and memory . I invite you to stay with this and to embrace the slow pace and time that *strandlooping* offers for processing concepts and revisiting them to gain deeper insights and understandings of how the past continues to influence the present and the future. While we *strandloop*, I'll provide an overview of the main points each chapter has covered before you continue reading each chapter.

Chapter outlines

This dissertation consists of five blind peer-reviewed publications, three have been published and two are under review or in the process of being published. Each chapter is introduced with a circular image that was stitched onto the Mother Hydro-rug. This doctoral research delves deep into the complexities of care, privilege, and environmental justice in the context of South Africa's post-Apartheid society. Drawing inspiration from diverse frameworks, the study aims to unravel the intricacies of reparative care practices that are culturally sensitive and transformative.

The focus is on co-creating care for the hydrocommons while addressing the injustices perpetrated by colonial legacies and apartheid structures. Responding to feedback regarding the utilisation of multiple frameworks by a reviewer for Chapter Three, which focuses on *strandlooping*, this thesis acknowledges the complexity inherent in the subject matter, necessitating a multifaceted approach. Accordingly, it presents a collection of research-creation explorations, or pedagogical experiments and the communal digestion, or collaborative analysis of these various theories through convivial practice. Throughout these explorations, the thesis consistently returns to the foundational practice of *strandlooping* or hydro-rugging, centering its investigations around engagements with water.

To begin with, Chapter One, entitled *Collaborative innovations into pedagogies of care for South African hydrocommons,* explores the interconnectedness of land and sea, encompassing relationships with both human and more-than-human entities. Figure 1.1 is the circular image of a hand stitched image of my hands, holding them in a prayer position and the Arabic word *adiyah*[7] has been embroidered in red underneath the hands. This chapter serves as a foundational piece for the dissertation, addressing the overarching research question while setting the stage for subsequent enquiries. It focuses on the indirect experiences and praxis that are useful pedagogies of care within the hydrocommons. For instance, I discuss how my routine mountain walks and the act of sketching a relative from an old photograph provided embodied pathways to understanding my lineage, tracing it back eight generations to the first emancipated slave. Here, the conventional concept of linear time is challenged, as Barad's notion of "space-time-mattering" highlights the inseparable entanglement of space, time, and matter (2007). This understanding emphasises that space and time are not distinct entities but are co-constituted within phenomena. Consequently, phenomena transcend conventional notions of past and future, existing as material entanglements that extend across various temporal and spatial dimensions (Barad, 2007). The insights of Vollenhoven (2021) resonate with my personal journey, particularly her exploration of healing as intertwined with caring practices and the presence of surrounding plant life. This chapter illuminates my evolving understanding of self and heritage through the practice of *strandlooping*, which not only connects me to ancestors who traversed the coastline but also to my mother, who identifies as a *strandloper*. This theme is

[7] This is the plural of *duah* which means prayer in Arabic.

explored further in Chapter Three, where I recount experiences of *strandlooping* with my mother along the Strand coastline of False Bay, a place where she harvested periwinkles for sustenance in her youth.

Chapter Two's hydro-rug entitled *Tidal Pools as Containers of Care*, was featured in the fourth issue of the *Ellipses Journal of Creative Research*, entitled "Architectures of the South: Bruising, wounding, healing, remembering, returning, and repairing." Although it is included in this dissertation in print form, it is recommended to be read online due to its multimodal and visual nature, which the journal actively encouraged and supported. The circular image from the Mother Hydro-rug is of a shy shark sometimes spotted in the tidal pools (Figure 2.1). The arabic word is *ri'yah* which means care. This chapter introduces a novel perspective on containers, and creates the figuration of tidal pools as containers of care through listening to stories and hydro-rugging at four tidal pools along the False Bay coastline. By engaging in place-based dialogues with individuals at these sites, the research sought to uncover hidden care practices overshadowed by the enduring legacies of apartheid and colonialism. Through the collaborative act of stitching hydro-rugs, this chapter underscores the importance of amplifying voices historically silenced, offering a reimagination of environmental care as an inclusive and just collective experience. Intra-twined with the hydro-rugging practice is memory and temporality, drawing from Barad's (2007) conceptualisation of memory as an intrinsic aspect of the world's fabric. Time, akin to space, is portrayed as part of diffraction, dispersion, and entanglement. Temporal diffraction emphasises the multiplicity inherent within each moment, where the past, present and future are mutually imbricated (Barad, 2007). This perspective on memory invites a deeper consideration of how past experiences permeate the present, shaping perceptions and care practices within coastal communities. Through the practice of hydro-rugging, communities are brought together to re-member shared narratives and cultivate reparative care practices within vulnerable populations, particularly Black and Brown individuals historically marginalised from coastal spaces.

The third chapter focuses on *strandlooping* as a method of enquiry is titled "Strandlooping as a relational enquiry to reimagine Higher Education and Gender Studies along the Camissa coastline" and has been submitted to the journal *Gender and Educatio*n's special issue 'Gender,

Feminisms and the 'Posts': Contemporary Contestations, New Educational Imaginaries & Hope-full Renewals'. The circular image introducing this chapter is of my feet with the Arabic word *haj al-ma'* which means water pilgrim (Figure 3.1). At the time of writing this introduction, it is in the final process of being submitted to the journal, after responses to the reviewers. This chapter utilises watermarks as a figuration for propositions to unpack how *strandlooping* is used as a method of enquiry. The 'walking-feeling-thinking' watermark is a thread I tug on in this chapter because the *strandlooping* takes place alongside water and this thinking with water allows for generative, playful and intuitive pedagogical approaches. Notably, the concept of Afro-water feminism was co-created with the force of waves and being tumbled around whilst trying to surf big waves at my local surf break. The very act of placing one foot in front of another, or paddling and stroking with one arm followed by the other, mimics the movement and creates the gentle rhythm of stitching/looping from *strand-looping*. Here the hyphen is used to emphasise the looping and the rhythmical motion. My strides become the invisible stitches along the coastline of False Bay as I gather stories through meeting humans and more-than-humans by re-connecting with coastline and re-membering our ancestry.

Chapter Four, entitled "Hydro-rugging as Reparative Caring Encounter: Re-membering Southern Oceanic Hauntologies," has been resubmitted to the *Environmental Communication journal of nature and culture* pending approval after revisions based on reviewer feedback. The circular image for this chapter is of a river and the Arabic word is *tadafuq* which means flow (Figure 4.1). The third and fourth chapters respectively focus on the primary methods of enquiry namely *strandlooping* and hydro-rugging Chapter Four elucidates the hydro-rugging practice as convivial, recounting watery narratives from Black and Brown individuals gathered during workshops hosted in collaboration with surf coaches from Waves for Change. This collaborative practice of making and theorising, as advocated by scholars such as Haraway (2016) and Manning (2016), involves re-membering erased narratives that intertwine people with the ocean. Hydro-rugging embodies the significance of active listening and emotional acknowledgment (Ahmed 2024), engaging in a reciprocal dialogue with the diverse elements of the beach environment, including plastic and other more-than-human entities. This paper examines how hydro-rugging has cultivated affective relationships with Black, Brown, and more-than-human entities within Southern oceanic landscapes.

Chapter Five entitled “Meandering as learning: Co-creating care with Camissa Oceans in higher education”, has been published in the journal *Critical Studies in Teaching and Learning (CRiSTaL)*. The circular hand stitched image is of a snail with the red letter being a music note (Figure 5.1). The article unlocks the concept of meandering as a form of learning, emphasising matterphorical exploration, particularly regarding the symbolic significance of water and its dynamic flow. This matterphorical journey parallels the exploration process of the thesis, specifically focusing on how researchers meander alongside students from the Centre for Creative Education to deepen their understanding of care and their relationship with Camissa. The chapter draws on Slow scholarship and research-creation frameworks, which challenge entrenched practices rooted in colonial, anthropocentric, and patriarchal systems. Through these frameworks, the chapter explores how inquiries and innovations create opportunities to reclaim lost care practices.

Overall, this thesis contributes to an ongoing discourse on environmental justice, decolonisation, and care ethics by offering a nuanced exploration of the interplay between privilege, colonial legacies, and environmental responsibility in the South African context. By centering the voices of the marginalised and the more-than-human, and advocating for transformative care practices, the thesis aims to contribute towards a more equitable and sustainable relationship with our hydrocommons, one that honours the entanglement of all beings and fosters a sense of shared stewardship for the hydrocommons and an environmental-justice-to come. The following five chapters will meander with the research questions outlined in this section. References pertinent to each chapter have been consolidated and appended after the conclusion. Appendix B encompasses all reviewers feedback along with my corresponding responses. I've found this undertaking to be both demanding and gratifying. The inclusion of reviewer comments aims to foster transparency and enhance the credibility of this work. I recommend reading each chapter alongside its corresponding reviewer feedback and my responses for a comprehensive understanding.

As our current *strandloop* concludes, I trust you'll find the upcoming chapters engaging. We'll reconvene to complete your individual hydro-rug and contribute to the Mother Hydro-rug as we discuss the findings from the following chapters and my plans for advancing this work. Thank

you for accompanying me thus far, and I eagerly anticipate our next rendezvous during the next new or full moon to continue our collaborative efforts. I hope the swell remains moderate and that the Black Southeasterly[8] wind stays away, ensuring we have pleasant conditions for *strandlooping* and hydro-rugging.

[8] The Black Southeasterly wind, often simply referred to as the "Cape Doctor," is a strong, dry wind that blows from the southeast in Cape Town, South Africa. This wind is notorious for its ability to clear away clouds and pollution, leading to clear skies and beautiful weather. However, it can also bring rough sea conditions and significant swells, making it a double-edged sword for outdoor activities. The wind typically picks up in the summer months, and while it can be invigorating, it can also be quite powerful, affecting both marine and coastal activities.

1. Chapter One: Collaborative innovations into pedagogies of care for South African hydrocommons

Figure 1.1. A hand stitched image of my hands, holding them in a prayer position and the Arabic word *adiyah* has been embroidered in red underneath the hand

1.1. Abstract

Caring for our hydrocommons and our marine environment is critical for the health of the ocean, the planet and the humans and more-than-humans that reside here. We live on a blue planet and healthy oceans provide oxygen for us to breathe and survive. Yet we do not all share in our responsibility equally to care for this common resource. Muddling through how we overcome this is important for understanding care and privileged irresponsibility in a South African post-Apartheid context. My scholarship is specifically working towards addressing the injustices of coloniality and our South African Apartheid legacy; and co-creating care for our hydrocommons. It is now 30 years after democracy in South Africa, yet the history and legacy of Apartheid continues and has an effect on Black and Brown bodies by excluding them from the ocean and other spaces. My contribution considers reparative care practices which are culturally sensitive and emergent. The study is informed by the complementary frameworks of research-creation, transgressive learning, agential realism and decoloniality. These frameworks inspire the inquiry of the research to provide a critical thinking space for exploring how we support and understand repararitive care practices for our marine environment. The inquiries discussed in this chapter include practices of '*strandlooping*', swimming and collectively constructing and mending a hydro-rug made from waste materials.

"For those of us who live at the shoreline
standing upon the constant edges of decision
crucial and alone."

(Lorde, 1978 https://www.poetryfoundation.org/poems/147275/a-litany-for-survival /Accessed 12 October 2022)

Figure 1.2. Aaniyah at Waenhuiskraans/Arniston cave October 2022 spotting whales

1.2. Diving in

This chapter explores ways in which humans understand caring for the marine environment and work towards co-developing a pedagogy of care for our hydrocommons in South Africa. Although this research is being explored 30 years after democracy in South Africa, the history and legacy of Apartheid continues to live on and to have an effect on Brown and Black[9] bodies by excluding them from the ocean and other spaces. The usefulness of the work is that it provides a critical thinking space to explore how we support and understand reparative care practices through research-creation and transgressive learning for our marine environment.

[9] I use the words Brown and Black bodies to distinguish them from Black Indigenous People of Colour because of the American framing and how it has been imposed in a South African context. Biko's ideas of Black consciousness are more suitable and fitting for this work.

Research-creation as a method emerged as a result of the inquiry related to inter - and transdisciplinarity (Manning, 2016). Research-creation, also referred to as "arts-based," was adopted into academic language through the questioning of methodology and started out as a funding category that would enable artists teaching in universities who didn't have PhDs to apply for large academic grants (Manning, 2016). The nature of research-creation is such that it involves transversal engagement with different disciplines and this in turn stimulates the rethinking of how artistic practice reopens the question of what these disciplines can do, and how research-creation can enrich the understanding of the research question at hand. Manning further explains how research-creation is process- rather than outcomes-driven and how it begins outside disciplinary and institutional constrictions (Manning, 2016).
I am excited to use research-creation as a means to understand and unlock how we engage with a diverse group of people to understand their connection to the marine environment and how we develop a pedagogy of care as a practice of enacting this. As reiterated by Manning (2016) research-creation does not need new methods, what it needs is a re-accounting of what writing can do in the process of thinking-doing. Furthermore, a research-creation approach relates strongly to Kulundu, McGarry and Lotz-Sisitka's (2020, p.113) approach of 'call and response' learning/research which is inspired by:

> the call and response tradition of singing in Africa, where one person sings a phrase, and inspired by their contribution, the crowd sings back; this becomes an intuitive ongoing iterative process of improvisation and meaning making together.

This chapter explores how to configure reparative care practices and healing given that a large portion of the South African population experienced some form of trauma; for example, being forcibly relocated through the Group Areas Act and being denied access to beaches and sea where they might have lived or earned their livelihoods. The proposed contribution of this study

lies in the exploration of a Slow scholarship and generative methodology, that includes practices of *strandlooping*[10], swimming and collectively mending a hydro-rug[11].

The hydrocommons are our natural water bodies – ocean, rivers and wetlands – which form part of the hydrological cycle. However, the concept of the commons refers to any creations of nature or culture that we inherit jointly or freely; and furthermore, a commons implies not only common use of a resource, but also common responsibility (Neimanis, 2009). My research context will focus on the ocean and beach component of the hydrocommons; and yet the ocean and beach environment cannot exist without the continuous circulation of water in the Earth-Atmosphere system of which human and more-than-human entities are included. In particular, I am interested in the engagement of Black and Brown bodies and our engagement as watery bodies with the hydrocommons.

The beach and ocean tidal pools are possibly the most likely point of entry and connection to the ocean for humans, especially in South Africa, where the coastline is rough and wild. The geographical place, known as the beach, is the interface between land and ocean. A place accessible to those that enjoy venturing into the ocean and those that may not, those who can swim and those who don't know how to. This opens up the opportunity to explore how we encourage communities of people who may not have access to the wonder of swimming in the ocean, as well as with those that do and those who don't have fears of dwelling in the open water. The term 'community' holds historical connotations of political, economic, and social disadvantage in South Africa (Carolissen, Rohleder, Bozalek, Swartz & Leibowitz, 2010). For me, 'community' encompasses a sense of kinship or family among a group of living things (human and more-than-human) that care for the wellbeing of people and the planet. In this

[10] Rather than using the word walking, I have contextualised it to the Afrikaans word strandloop meaning *to beach walk* and added the 'ing' to make it a verb. My mother has always referred to herself as a strandloper having grown up along the False Bay coastline in the Western Cape, South Africa, in a suburb called the Strand. Bam (2021) refers to the word strandloper as a derogatory colonial term for the Goringghaicona who were seasoned, multilingual traders who traveled in passer-by ships way before the Dutch or Portuguese arrived at the Cape. I do not associate the word strandloper as derogatory and have named myself @contemporary_strandloper on Instagram.

[11] The mending technique is experienced through the hydro-rug featuring collaborative stitching's of Brown and Black histories into a rug made from ocean waste material.

research, a community will be defined as all humans that benefit (tangibly and intangibly) from a healthy ocean; it includes citizens, corporations, government, business and industry.

In order to consider how to configure reparative care practices which are culturally sensitive and emergent I have found agential realism (Barad, 2007; Juelskjær, Plauborg & Adrian, 2020), transgressive learning (Lotz-Sisitka, Wals, Kronlid & McGarry, 2015; Bengstsson, 2019; Kulundu et al. 2020) and decolonial theoretical frameworks (Akomolafe & Ladha, 2017; Connell, 2007; Escobar, 2011; Oyewumi, 1997; Lugones, 2007; Juelskjær et al.,2020) the most aligned with answering the questions of how we understand and make meaning, care for, respond to and take responsibility for our hydrocommons. The framework for care is linked to being response-able (Haraway, 2016; Barad, 2007) and I will explore how response-ability and responsibility sit at the foundation of transgressive learning praxis that expand ethical sensibilities in care and posthuman/new materialism ethics within the hydrocommons context in South Africa. Bozalek (2021) elaborates on these concepts and explains that as researchers, we need to be responsible (accountable) and response-able (responsive) towards the issues and the phenomena we are doing inquiries into.

Colonialism erased many local scientific traditions by declassifying them as primitive and as part of folklore and by substituting what was perceived as Southern superstition with Northern science. To some authors, the very power of colonialism rested on its ability to name and categorize the world according to its own interest, thus inventing and enforcing such binaries as modern/traditional, progressive/backward, nature/culture, structure/agency, world/representation and civilized/primitive (Escobar, 2011; Oyewumi, 1997; Lugones, 2007; Juelskjær et al., 2020). Furthermore, Schneider (2005) explains that the notion that science is somehow separate from the social and cultural is one of the hegemonies that block a vision of the multiple ways that science and its practices are entwined with masculinist, racist, and colonial histories and worlds among various others that are more desirable - such as feminist, just, anti-racist, democratic worlds. If it were not for Haraway and other feminist science scholars such as Sandra Harding, Karen Barad and others, the porosity of this boundary between science and society, as well as a clearer view of the ideological work it does, would not be core tenets of science studies today (Schneider, 2005).

The major emphasis that is foregrounded by non-representational and critical posthumanist/new materialist/agential realist researchers is that study does not occur in units or controlled isolation but rather the vital practises through which relations take place. In much the same way that the hydrological cycle, as described earlier, is not bounded by each phase but rather in relationship with each phase and each phase contributes to the whole. These researchers are much less interested in representing an empirical reality that has taken place before the act of representation than they are in enacting multiple and diverse potentials of what knowledge can become afterwards (Vannini, 2015). Instead, performative approaches – practices, enactments and doings – are proposed by feminist new materialism, critical posthumanism and agential realism thereby rejecting representationalism (Akaomolafe & Ladha, 2017; Barad, 2007; Bozalek, 2021; Vanini, 2015). Barad (2007) calls on Niels Bohr, who, they say, rejects representationalism, where words and things are separated, and who includes the discursive and material together, as material-discursive. Critical posthumanism transcends the either/or in materialist and discursive and joins them together (Bozalek, Zembylas & Tronto, 2021).

Situating this work in agential realism offers a relational and performative understanding of the world which is characteristic of non-representational theory. It seeks to understand how the world has come to be by not only reflecting or representing reality. A performative understanding assumes that we are part of the world's becoming rather than at a distance from it, and that we have a direct material engagement with the world – practices are seen as material enactments. Furthermore, Barad (2007) importantly notes that it is humans and more-than-humans who engage in performative acts. Furthermore phenomena are the primary ontological units which are entangled material agencies; rather than the separation of a pre-existing subject and object as in representational theories (Barad, 2007). This thinking lends itself to research-creation and the concept of dissolving boundaries is followed up by the notion of intra-action.

In an interview with Adam Kleinman for Mousse Magazine (2021), Barad explains intra-action by introducing the concept that "individuals do not pre-exist as such but rather materialise in intra-action", in other words, through relationships. This sentiment aligns strongly with my pedagogical intent for this research, which aims to facilitate an intra-active reconfiguring between and with people in multiple ways of becoming-with the hydrocommons/more-than-

human world, to facilitate meaning making and learning that is 'intersectionality resonate' (Kulundu, 2018). The entanglement of environmental, social and justice issues are brought to the surface and by so doing we are able to address the colonial thinking that marks the environmental science practices of the past (Neimanis et al., 2015). Placing my research at the intersection between marine conservation and social justice issues in a South African context, and within agential realism is useful for me because it re-thinks the demarcations between natural sciences, social sciences and the humanities, as well as creating new entrances and exists between plural epistemologies and ecologies of knowledges located within these knowledge silos (De Sousa Santos, 2009).

1.3. Floating, surfacing and reclaiming

I owe my being to the Khoi and San whose desolate souls haunt the
great expanses of the beautiful Cape
- they who fell victim to the
most merciless genocide our native land has ever seen, they who were
the first to lose their lives in the struggle to defend our freedom...
(Mbeki 1996)

(cited in Bam and Muthien, 2021, p. 4)

My research and interest in agential realism and care for our hydrocommons, with a particular interest in the beach and ocean, stems from the ocean being in my blood from a long lineage of ancestors brought to the Cape from Malaysia/Indonesia as slaves in the late 1600s. I was fortunate enough to have parents who taught me to swim, to harvest periwinkles along the rocky shore, to make delicious meals from the bounty of the sea and to share my appreciation for these life-giving bodies of water with others. My parents encouraged my sisters and I to enjoy green and blue spaces despite the Apartheid restrictions and exclusions that limit the spaces which Brown and Black bodies could access and enjoy. Unbeknown to us, my parents challenged these rules and would take us to whites-only spaces without explaining to us that they were in fact breaking the law. It was only recently (May 2021) that I asked my mom how we got away with going to Dalebrook tidal pool, for example, which was designated for white people only. She explained that they simply took us and made sure that they went either early in the morning or at

sunset when other users would simply turn a blind eye. I have come to realise that these experiences have made me feel that blue and green spaces are as much mine as they are and should be everyone's. I have come to realise that not all Brown and Black bodies feel this way because of their experience of adhering to the demarcated areas as set out under the Apartheid regime or because of having experienced punitive responses when attempting to disregard the law. My understanding of blue and green spaces can be described as naturally wild spaces in the marine and freshwater (blue) and terrestrial (green) environments. My parents' silent and strategic resistance helped me experience a sense of belonging with blue realms, and with that a need to care for and be responsible for ensuring that I protect the marine environment that we loved from a young age, and continue to love; and this has anchored and shaped my Scholarship.

I have always struggled to call myself a scientist and I finally understand why, because through reading the work of Sylvia Vollenhoven, Keeper of the Kumm (2016), she foregrounds the understanding that science is diffused with spirit, and that landscapes speaks of stories denied (Bam and Muthien, 2021). In Vollenhoven's chapter – Writing ourselves back into history – from the book Rethinking Africa (Muthien and Bam 2021) she explains how it becomes imbedded in her mind that healing involves caring, personal rituals as well as the plants that grow all around us. This way of being completely resonates with me as I move through the world and I begin understanding and reclaiming who I am. The *strandlooping* not only connects me to my ancestors who roamed the coastline, it also connects me to my mother who calls herself a *strandloper* having been born along the Strand coastline of False Bay and harvesting periwinkles along the rocky shore for food and sustenance. Today, as a contemporary *strandloper,* I need to be more cautious of *strandlooping* on my own as a woman because of my safety especially in a South African context. The risk of being assaulted as a woman *strandlooping* alone is high, as a result of our Apartheid legacy and how it has manifested in the segregation of class, race, wealth and poverty that we still live with today. My work in conservation has led me to building relationships with various individuals and organisations and I have been able to lean into these relationships to support me on this journey. Gregg Oelofse from the City of Cape Town has been instrumental in supporting my research

through facilitating that the Shark Spotters[12] of Cape Town join me on some of my *strandlooping* journey particularly along stretches of coastline that are considered dangerous and unsafe.

The figure of Krotoa-Eva or !Goa/goas (her name among the Goringghaicona tribe that lived by the shore) has played a significant role for me in working with the 'ancestral presence of the past'(Vollenhoven, 2021, p.29). The practice of reclaiming myself as well as the conservation work that I have been involved with and have led; has been an emergence and nurturing experience of arriving home (Omardien, 2021). The reclaiming practice lives in relationship with my assimilation practice. I live in spaces where on the one hand, I feel like I belong because I am with my people and my community that look like me, and on the other hand, I live in spaces where I feel I am in the minority because I am the token Brown person. I am only now beginning to feel comfortable enough to be my true, authentic self rather than assimilating so that I fit in, belong, and avoid conflict. Krotoa was first brought to my attention at a ceremony I was invited to on our west coast to pray for the protection of our coastline which is being mined for tourmaline and other resources; and with not much regard for the local and indigenous groups that reside there (Little & Domingues, 2021). Krotoa was called upon whilst in ceremony by the traditional healer for guidance and direction in this matter.

I have a deep connection and empathy for Krotoa through understanding and making sense of my journey as a Brown woman in the world right now, and yet I sense that she had similar feelings then (Omardien, 2021; Bloem, 1999). She was a KhoiKhoi woman who worked as a domestic servant in the Van Riebeeck house and as translator for the Dutch authorities. Her marriage was the first recorded union between a 'native' and a 'settler'. In the 1650s Krotoa was the only figure possessing an intimate knowledge of both KhoiKhoi and Dutch culture; as she passed back and forth between one society and the other, she exchanged her Dutch clothing for KhoiKhoi skins, and vice versa. I hold feelings of both despair and comfort for her life and what she must have experienced and what we as Brown people continue to experience today (Omardien, 2021).

[12] https://sharkspotters.org.za/

Toni Giselle Stuart focused her Masters research on re-imagining Krotoa's life through Krotoa's voice, by creating, Krotoa-Eva's Suite —a cape jazz poem in three movements. I have chosen to include an excerpt of the work with her consent.

the woman speaks

my tears spill down the flank
of Devil's Peak
my breath is the cloth
that sets Hoerikwaggo's table
I am the one
who invites you to eat
I am the one
who invites you to eat

I am the child of two Gods
my heart is a Hollander
but my soul prays to Heitsi-Eb!

I am the one
whose bones are strong enough
to carry the weight of two skins
I am the one
whose mouth is supple enough
to hold the secrets of two tongues

if you meet me in the veld,
know my feet have already returned to the fort
if you meet me inside the castle,
know my heart has already returned to the dunes

no matter who I tell you I am
do not believe me

no matter who I tell you I am
I am always
only
half
of myself

(Stuart, 2015)

1.4. *Strandlooping*/swimming with the tides and weaving stories through hydro-rugging

My intention with this research is to use Slow scholarship and inquiries such as *strandlooping/*swimming, and mending[13] to bring the entanglement of environmental and social justice issues to the surface through revealing stories from the past that have been erased and forgotten. The uncovering of stories is a slow process that involves the unpacking of oral history, and this in itself takes time to find the bearers of this information and to build trust for this information to be shared. This motion of uncovering and recovering reminds me of the motion of the ocean washing up onto the shore. High tide pushes onto the shore sometimes bringing with it things that have been buried deep in the ocean and leaving them along the high tide mark to be found or not; and then as the tide recedes and becomes low exposing parts of the land that is usually covered by water. This covering and uncovering motion of the ocean is governed by the cycle of the moon. The cycles of the moon have become significant to how I move along the shore – *strandlooping*/swimming along the coastline of False Bay[14].

Strandlooping/swimming close to the sea arguably open up ghostly knowledges about the multiple histories that shape our presents and futures through our immersion and relationship with water (Shefer & Bozalek, 2021). Encounters in and along the sea, in *strandlooping*/swimming, thus allow for alternative knowledge-making practises, deploying rather a 'hydro-logics' (Neimanis, 2013, 2017b). Shefer and Bozalek (2021) convey that in postcolonial spaces like South Africa, wild swimming may offer a particularly fruitful space to

[13] This will be unpacked later in the chapter but it refers to the literal and figurative mending process. Literally we will be creating a hydro-rug from beach plastic and waste materials and figuratively my footsteps become the invisible thread stitching the past and present together from Cape Point to Hanglip (Hangklip) along the False Bay coastline discovering stories that have been erased.

[14] In addition to finding stories that have been erased I am also trying to find the names of places before colonisation. As I continue with my re-search these names will reveal themselves to me or not, in the same way that the tide covers and uncovers parts of our shoreline. I will use the names of places I find, and the current name will be placed in brackets thereafter. When the name appears in the text for the first time I will use the indigenous name followed by the current name in brackets. This in itself is an act of re-membering and reclaiming these places, and honouring our ancestors who have come before us.

engage with troubled waters related to colonial pasts and its continuities and mutations in current capitalocene and anthropocene times. 'Staying with the trouble' (Haraway, 2016) by swimming and *strandlooping* alongside troubled waters and troubling our waters as we swim and *strandloop* then holds many possibilities for alternative scholarships for justice-to-come and new knowledge-making (Shefer & Bozalek, 2021).

I have chosen to *strandloop*/swim along the coastline of False Bay in Camissa (Cape Town) around new or full moon depending on the weather and swell conditions over those time periods. The focus on either new and full moon facilitates and opens up my time and the need to fulfil my role as re-searcher[15] and student as well as being present as a mother, wife, daughter and daughter-in-law. This slow journey allows me to process my findings and experiences in between the *strandlooping* and swimming; as opposed to completing it in one mission as these explorations and expeditions are usually practised. Jolly (2022) from the Daily Maverick describes the *strandlooping* act as "Aaniyah's rewalk as an antihero's journey or rather a heroine's journey which is not so much getting from A to B but rather the journey itself." My "artwalk" echoes author Ursula Le Guin's The Carrier Bag Theory of Fiction (1978) which posits that even before the masculine spears appeared in our evolution there was the feminine carrier bag, which some considered our ancestors' greatest invention (Jolly, 2022).

[15] Re-search goes beyond the process of systematic inquiry that entails collection of data; documentation of critical information analysis and interpretation of that data/information, in accordance with suitable methodologies set by specific professional fields and academic disciplines. Re-search is a reciprocal, intuitive and improvised approach to inquiry with no predetermined outcomes.

Figure 1.3. Madyo (age 11) and Haroun (age 5), two of Aaniyah's children who *strandloop* with her, pictured here along the False Bay coastline close to Hanglip (Hangklip).

The mending technique is experienced through the hydro-rug featuring collaborative stitching's of Brown and Black histories into a rug. The Beach Co-op[16] focuses on building communities that care through hosting beach cleanups and sharing knowledge of the unique marine biodiversity of South Africa. The debris collected at cleanups are reworked into collaborative artworks and whilst we stitch and sew we share stories of our connection to the ocean and this practice facilitates the mending and healing of the trauma Brown and Black bodies have experienced and continue to experience post-Apartheid.

[16] A voluntary organisation established in 2015 that hosts beach cleanups along. The Beach Co-op became formalised as a non-profit company in 2017, and Aaniyah is the Founder and director. For more information see www.thebeachcoop.org

The co-creation of the hydro-rug plays a crucial role in unlocking and revealing stories of our relationship with the ocean. Whilst in conversation we are stitching, mending and sewing our individual hydro-rug pieces which are made from plastic litter that we collect from our beaches, thule and off-cut/waste material and thread. As we mend and share our stories they are woven into the hydro-rug which becomes the physical object of our stories. The individual hydro-rug pieces are then stitched and Sachiko-ed[17] together to form the collective hydro-rug. The hydro-rug becomes the embodied, material aesthetic of the stories that are shared and that formulate our understanding of caring for our marine environment. These techniques of *strandlooping*, listening, sharing stories, stitching and mending foregrounds the need to know and do differently and otherwise (Tachine & Nicolazzo 2022) when we produce and understand relevant knowledge about the colonial past and its ongoing presence (Bam and Muthien 2021).

The process of sharing stories about the ocean and feelings of belonging to places that were previously demarcated for White people only, and mending the hydro-rug are intra-twined and participants experience a sense of healing. When possible, we are positioned next to a tidal pool or the ocean. I lay out a cloth demarcating a space for us to meet, with a flask of tea and all the materials we need to create the hydro-rug - the sewing box, waste material and litter. Participants choose their waste material, litter and the thread they want to use; and we would be in conversation throughout the making practice. I (Martin, forthcoming b) have intra-viewed[18] many individuals and the hydro-rug continues to grow and was exhibited at the Zero Eitz gallery in Camissa as part of the *Our ocean is scared, you can't mine heaven* exhibition curated by Dr Dylan McGarry from August to November 2022.

My personal healing and mending are entangled with the hydro-rug, not only because my grandmother was a dress-maker by profession and therefore sewing and mending was part of our family practice; but because it has opened up the possibility for me to reclaim who I am through unlocking my ancestry with the help of Daiyaan Petersen. I met Daiyaan through Instagram because of a drawing I posted to my stories of an unknown family relation. I received the

[17] A Japanese running stitch technique that I have used to stitch the individual hydro-rug pieces into one.
[18] The term intra-view as opposed to interview encompasses a generative exchange rather than extraction of information through an open-ended conversation and is linked to Karen Barad's intra-action.

photograph from my mom and she had no idea who the woman was. I became intrigued by her, and began a pencil drawing of her in July 2022. Daiyaan offered to help me track her name because of his interest in assisting creole people with tracking their ancestry. His ability to read Dutch, Javanese and Arabic-Afrikaans has helped us track our ancestry from reading *mesangs* (head stones) at *maqbara's* (graveyards) to visiting the archives and reading permits and wills. This has uncovered our maternal lineage eight generations back to an emancipated slave whose name was Katryn van de Kaap. We have also discovered that my mom's family owned a horse and carriage business called 'Soeker Bro's (this was the oldest Malay/Muslim owned family run company in the Cape which existed till the mid 20th century) on Plein Street in Camissa. They were a prominent creole family and hence they were photographed, which was not common amongst creole families of the time.

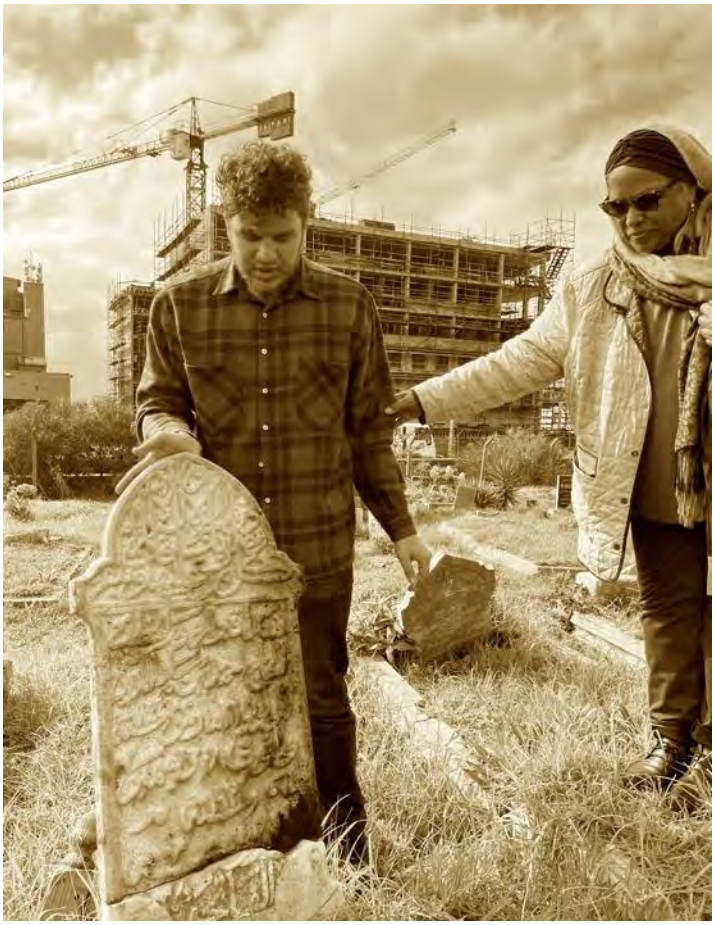


Figure 1.4. Sisi Sarah Martin (Aaniyah's mother) and Daiyaan Petersen finding the Soeker ancestors graves in Mowbray *maqbara*, Camissa.

As part of my personal weekly practice/ritual I try to go walking at least twice a week by myself up our local mountain in Lakeside. At the time of discovering my ancestry I was particularly drawn to the Protea Nitida which was in bloom. When I read more about them and their uses I discovered that they were used for firewood and to make ox wagon wheels because they are so hardy. In addition, their leaves – dead or alive – were used as a plant dye by boiling them with sugar and a rusty nail. The connection of this plant with my ancestors and the horse and carriage business led me to experimenting with the plant dye and incorporating it into the hydro-rug process. I have dyed sheets of muslin or cotton, depending on what kind of waste material I find, and this has formed the base layer on which the individual hydro-rugs will be Sachiko-ed.

Figure 1.5a. The Protea Nitida pictured on Lakeside Pinnacle close to Aaniyah's home

Figure 1.5b. Preparing the plant dye with sugar, a rusty nail and plant leaves in my mother's first cooking pot

1.5. Drifting thoughts

Alexis Pauline Gumb asks “What are the scales of intimacy and the actual practices that would teach us how to care for each other beyond obligation or imaginary duties?” (2020, p.56). Similarly, I am asking what other care practices exist that have been overlooked because of our South African Apartheid and slavery legacy which continues to live on today; both through raced and classed injustices and violence’s but also through continued human violence’s to the oceans and other species. Patricia Hills Collins argues that ‘seeing from below’ can generate a post-colonial understanding of ‘being human’ (1990). In this way, seeing from below, allows Brown and Black bodies to offer understanding and insight that speak not only about and to – but beyond – their locations (Lewis and Baderoon 2021). These editors of a recent volume on Black feminism argue that despite the assumption that essays and writing from socially marginalised standpoints can generate only knowledge that speaks to the experiences of these groups, on the contrary those positioned at the margins often see the world from a different perspective. Lewis and Baderoon (2021) go on to say that this knowledge not only counters racist and patriarchal world views, it envisions new ways of being human and is therefore relevant to all.

The approach and techniques for this research includes *strandlooping*, stitching, mending, creating, re-imagining and storytelling. These inquiries enable us to comprehend entangled relationships between bodies and the marine environment. These ‘otherwise’ ways of knowing and being in the world facilitates the co-creation and building of community especially amongst Brown and Black people who have been segregated through Apartheid’s compartmentalisation of ethnic, religious and mixed-race groups that has had a powerful impact on how groups continue to identify themselves. “We are now busy journeying from the woundedness of recent centuries to wholeness” (Vollenhoven 2021, p.29).

“The fact that we are here and that I speak these words is an attempt to break that silence and bridge some of these differences between us, for it is not difference which immobilises us, but silence. And there are so many silences to be broken.”

(Lorde, 2019, p. 33)

2. Chapter Two: Tidal Pools as Containers of Care, False Bay South Africa

Figure 2.1. The circular image from the Mother Hydro-rug is of a shy shark and the arabic word is *ri'yah* which means care

This paper should be viewed online to listen and watch the video content. Please click here: https://www.ellipses.org.za/article/tidal-pools-as-containers-of-care

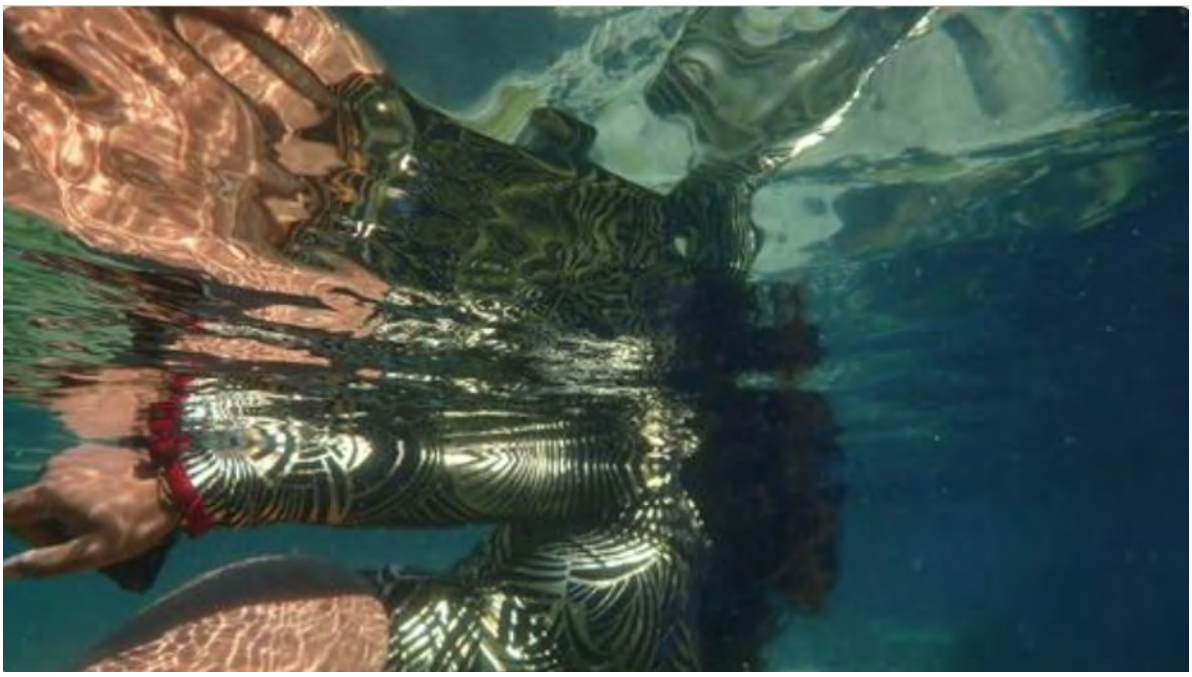


Figure 2.2. Aaniyah swimming in Dalebrook tidal pool (credit: Leonie Joubert 2022)

2.1. Abstract

This article explores tidal pools as safe spaces for humans, and it specifically focuses on the experiences of brown and black humans who were excluded from certain areas due to the South African Apartheid legacy and the Group Areas Act (GAA) of 1962. Most Black and Brown people have an unusual relationship with water and the ocean because of our South African history and the Group Areas Act that prevented access to certain places. This unusual relationship continues to filter into our lives today, despite democracy and the new South Africa. For humans that feel insecure about their swimming ability, tidal pools are a safe haven, additionally, they act as a nurturing ground for juvenile plants and animals. Tidal pools are therefore safe spaces for humans and more-than-humans.

In South Africa, privilege and structural economic benefit were determined largely by pigmentation (Bam and Muthien 2021). In other words, privilege was the ability of white people to have the capital and access to experience places and spaces in ways that brown and black people could not. They have had access to the most pristine and safest beaches and the capital to purchase coastal property and equipment to enjoy the ocean in different ways. There is a lag

effect and a sense of entitlement that comes with privilege, even though Apartheid laws no longer exist. This privilege is what makes caring political.

I enquire through place-based conversations with four individuals at four tidal pools - what other care practices exist that have been overlooked because of our South African Apartheid legacy which continues to live on today? Duncan Johnson is intra-viewed at Dalebrook pool, Joanne Peers at St James and Traci Kwaai at Kalk bay pool. Sarah Martin was intra-viewed in relation to her experience with Harmony Park tidal pool (due to heavy rain this was the only intra-view that didn't take place at the tidal pool). The term intra-view as opposed to interview encompasses a generative exchange rather than extraction of information through an open-ended conversation and is linked to Karen Barad's intra-action. Furthermore, facilitating the intra-view at the tidal pools or close to the ocean affects the way in which the conversation unfolds, and that certain kinds of materiality do not merely refer to passive entities but must be understood as matter that matters (Petersen 2014).

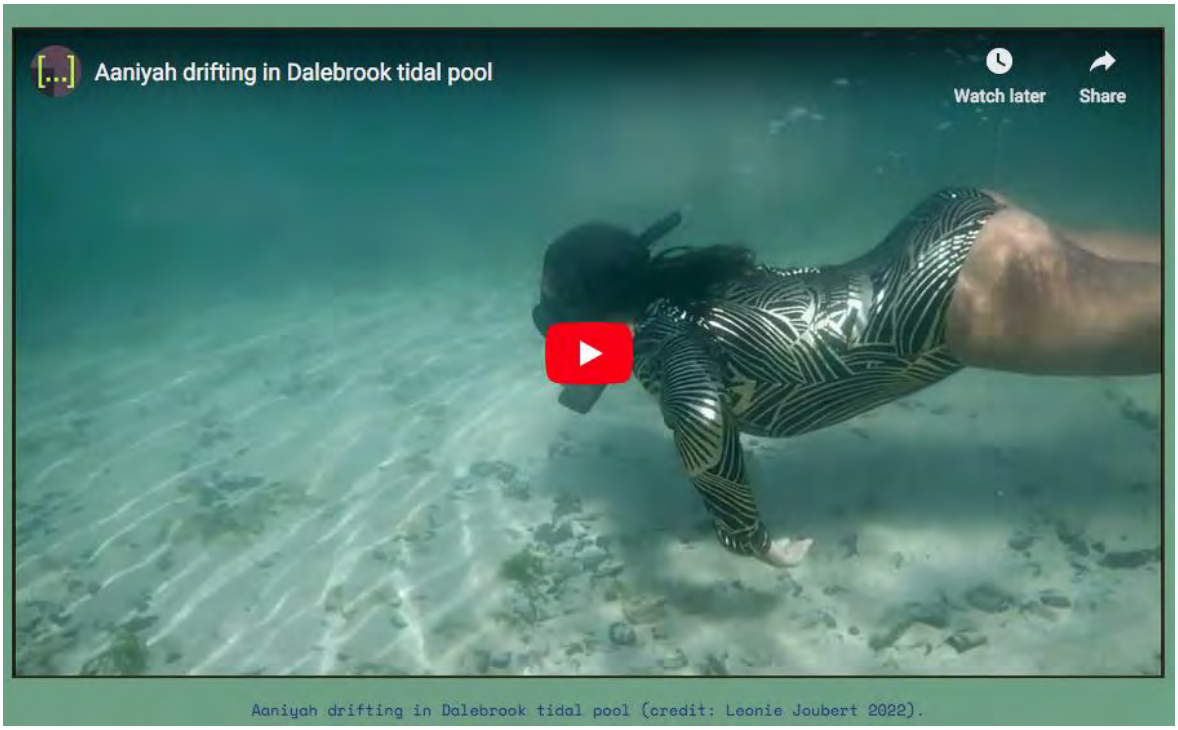


Figure 2.3. Aaniyah drifting in Dalebrook tidal pool (credit Leonie Joubert 2022).

2.2. Introduction

This research forms part of a broader project to understand and co-create a pedagogy of care for our hydrocommons through sharing stories about Black and Brown experiences of the ocean and forms of care. These four pools are amongst nine that have been built along the False Bay coastline, and I will be walking and swimming along the coastline and passing all of them as part of my research journey.

The co-creation of the hydro-rug plays a crucial role in unlocking and revealing stories about our relationship with the ocean. As we mend and share our stories they are woven into the hydro-rug, which becomes the physical object of our stories. Whilst in conversation we were stitching, mending and sewing a hydro-rug which is made from plastic litter that we collected from our South African beaches, thule and off-cut/waste material and thread. The hydro-rug becomes the embodied, material aesthetic of the stories that are shared and that formulate our understanding of caring for our marine environment. These methods of listening, sharing stories, stitching and mending foreground the need to know and do differently and otherwise (Tachine & Nicolazzo 2022), when we produce and understand relevant knowledge about the colonial past and its ongoing presence (Bam and Muthien 2021).

The practice of mending the hydro rug whilst sharing stories about the oceans and about feelings of belonging to places that were previously demarcated for white people only provides a sense of healing. We were positioned next to the pool or with a view of the ocean. I would lay out a cloth demarcating a space for us to meet, with a flask of tea and all the materials we needed to create the hydro-rug: the sewing box, waste material and litter. They would choose which waste material, litter, and thread they wanted to use and we would be in conversation throughout the making practice.

Sarah explained how the practice was like going down memory lane. The tulle material colours she had chosen reminded her of the ocean and the stitching had a balming effect on her, much like the waves do. It reminded her of walking along the ocean and singing her hymns and prayers. Traci, Joanne and Duncan expressed how creating something of beauty from castaway bits felt like a healing practice for themselves as well as the ocean.

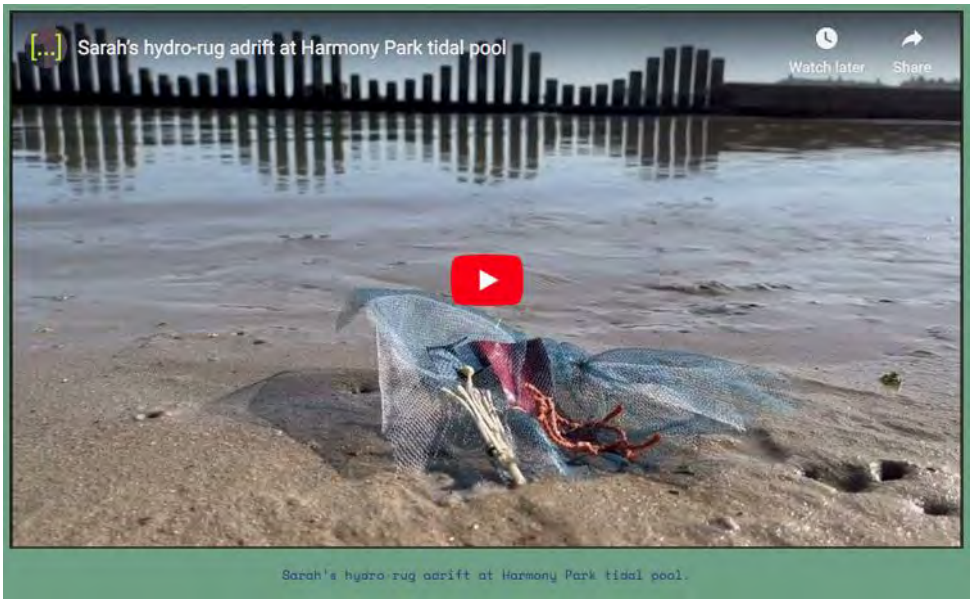
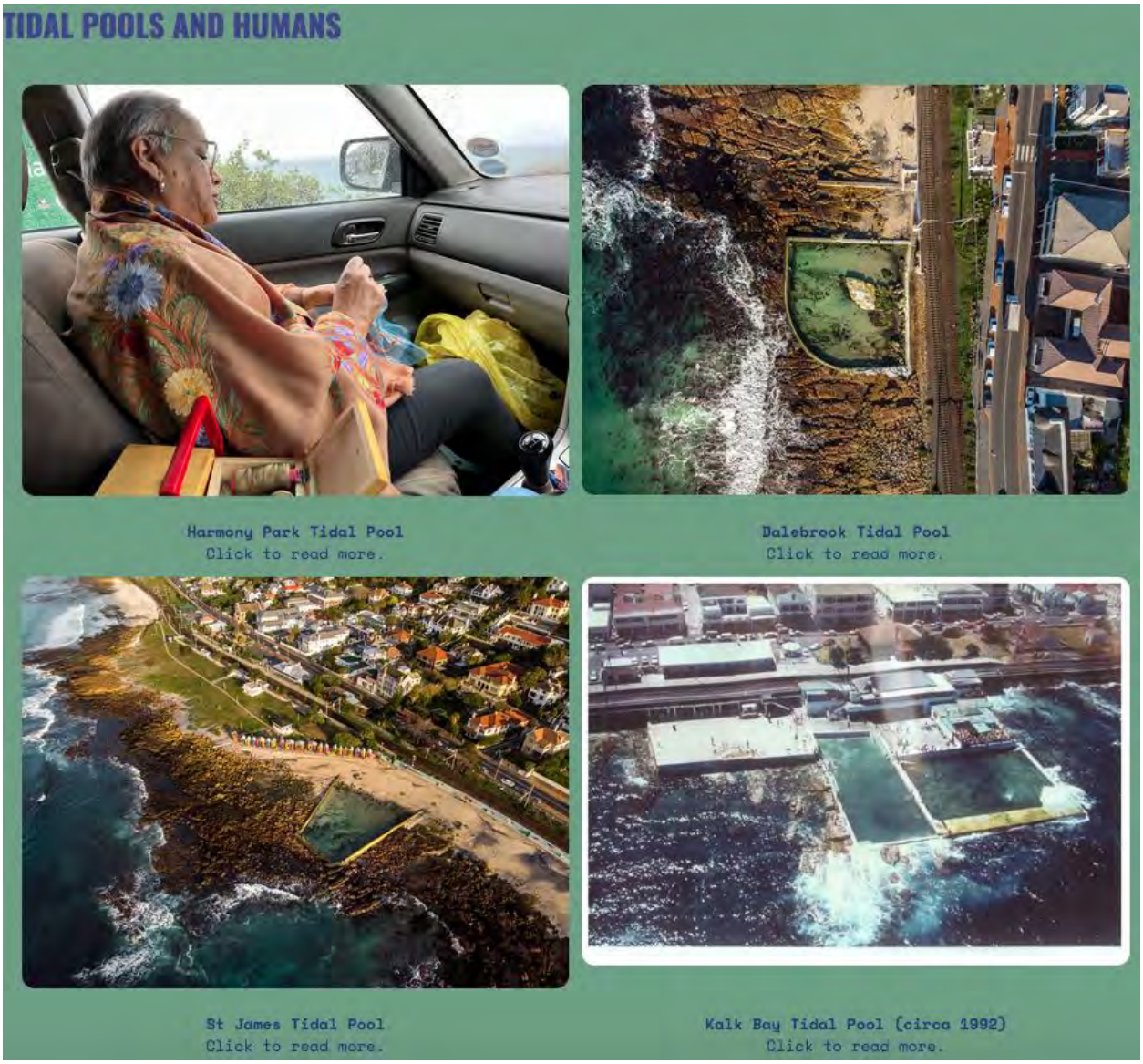


Figure 2.4. Sarah's hydro-rug adrift at Harmony Park tidal pool



2.3. Harmony Park Tidal Pool

Sarah's relationship to Harmony Park tidal pool was troubled because of not having access to all beaches along the Strand peninsula prior to the Group Areas Act, and then subsequently only being allowed at Harmony park before the tidal pool was built. This stretch of Strand coastline is rocky and swimming there before the pool was built was dangerous. For this reason, Sarah's older brothers discouraged and prevented her from going to Harmony Park. She first visited it 58 years later at the age of 69 with her daughter Aaniyah (author of this article) in September 2019 for a beach cleanup hosted by The Beach Co-op, a non-profit organisation. This experience was traumatic for her because she had not realised how much pain she had buried until arriving at

Harmony Park, being physically unable to move her legs to climb out the car and walk onto the beach.

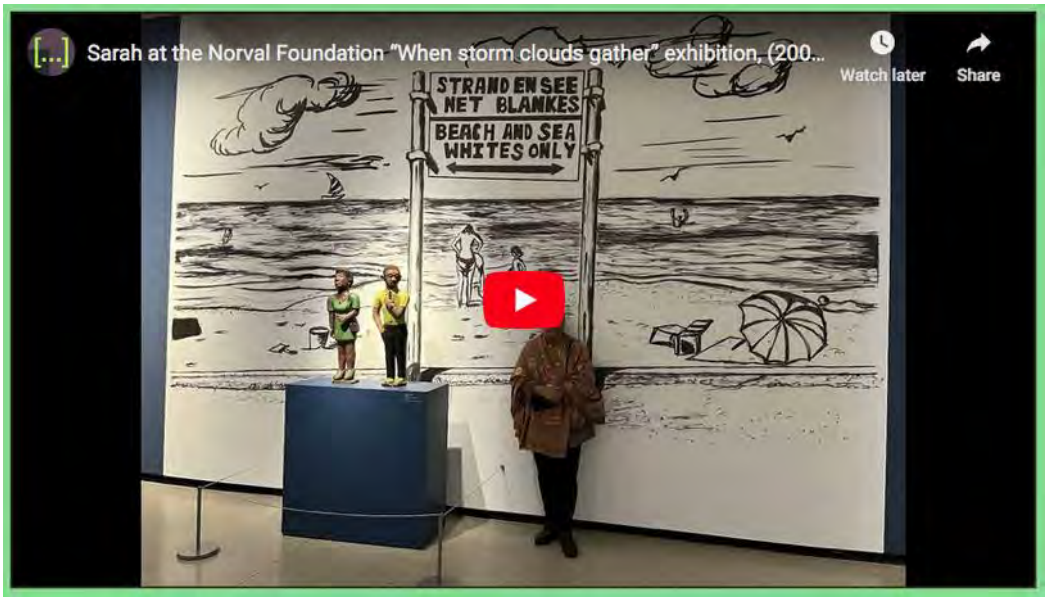


Figure 2.5. Sarah at the Norval Foundation "When storm clouds gather" exhibition (2022)

Sarah shared her anger and bitterness for being forcibly removed from her home, which was replaced by a taxi rank. She mourned the loss of the place and all the memories that she has of her childhood with her mother - which have been physically erased. Similarly, Joanne explains her swimming experience at Infanta – a place that only white people could enjoy and how the feelings of not belonging to that community still exist today, even though brown people are allowed there now. She refers to these feelings as the 'backwash' of what still remains from a time long ago, a time we need to remember to help us heal.

Despite the trauma experienced, Sarah continues to act responsibly by cleaning up the beach while she walks along the coastline out of reciprocity, and the strong need to give back to our mother ocean for what she provides to us.

2.4. Dalebrook Tidal Pool

Duncan uses his music as a language and wants to make it accessible to everyone, not only those who can afford to listen to him perform. His scenery sessions are performances in public spaces for citizens to enjoy and engage in the role that music plays in making us feel good and that we belong.

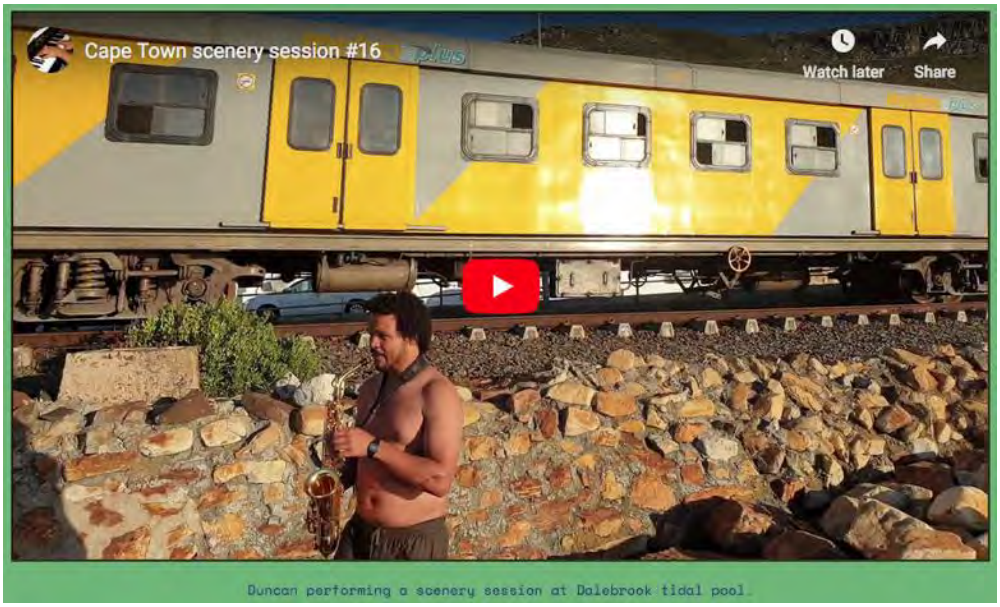


Figure 2.6. Duncan performing a scenery session at Dalebrook tidal pool

All intra-viewees bar Sarah had a positive relationship with the tidal pool as a container of care. Joanne, Traci and Duncan felt safer in the pool not only from a physical perspective but also from an emotional and spiritual perspective. They expressed similar feelings about being held by the walls of the pool from the wilder ocean and simultaneously being held by the sense of community that they have created by visiting their respective pools regularly. Duncan developed this sense of familiarity through his 'scenery session' performances by playing his saxophone at the pool. He was initially afraid that people would find his performance loud and obstructive but was surprised and heartened to receive praise and thanks for playing with affirmations of wanting him to play there again. This sense of community is what brings him back to the pool.

2.5. St James Tidal Pool

Joanne's relationship to water is linked to the colour of her skin. Her skin colour determined where she was allowed to swim and she would play in the shallow water, and not necessarily swim because of her exposure and access to water and swimming. The pool walls became a body of care for her, creating a safer space within which she could swim. More than the physical container of a pool, the sense of belonging is also felt through seeing other people that remind her that she belongs because of the colour of their skin and the language that is spoken, which she identifies with and understands.

She mentioned the safe space that was created for us to share stories by laying down a cloth and displaying the hydro-rug materials that we used whilst in conversation. Joanne explains: "Going in and out, tying together knots, threading through a needle eye – feels like it allows the freedom to tell stories. And to know that what I am doing here will become part of or become something different." (June 2022).

Figure 2.7. St James tidal pool image taken by Joanne at the intra-view

Joanne uses an example of her relationship to water and initial fear of it, and how remembering this fear is important when she engages and encourages other users to join her in the water. She

asks, “What are the instruments that we need to be part of a care practice?”(June 2022). Some of these instruments are linked to privilege, which is always political. Acknowledging the politics ensures that we do not create a recipe for care, and this in turn helps us realise that it is never a simple task. Privilege enables care through having access and capital to be able to enjoy and become familiar with experiences, for example swimming and snorkelling in cold water with wetsuits, masks, snorkels, weight belts, fins and underwater cameras. In the same way these instruments can constrain care because we forget that not everyone has the means or capital to purchase instruments, which translates into care because of the experiences that obtaining the instruments brings.

2.6. Kalk Bay Tidal Pool

Traci lived in Kalk Bay as a child, it is home to her and her ancestors for 200 years. Although she feels at home at the tidal pool, there are also moments of anxiety and feeling unwelcome because of the memories that linger from the Group Areas Act and places being demarcated for white people only. More recently, Traci has been involved with protests against the owner of the Brass Bell restaurant. He has encroached and developed his restaurant business into the public space of the tidal pool, and this has substantially diminished the public space accessible to pool users.

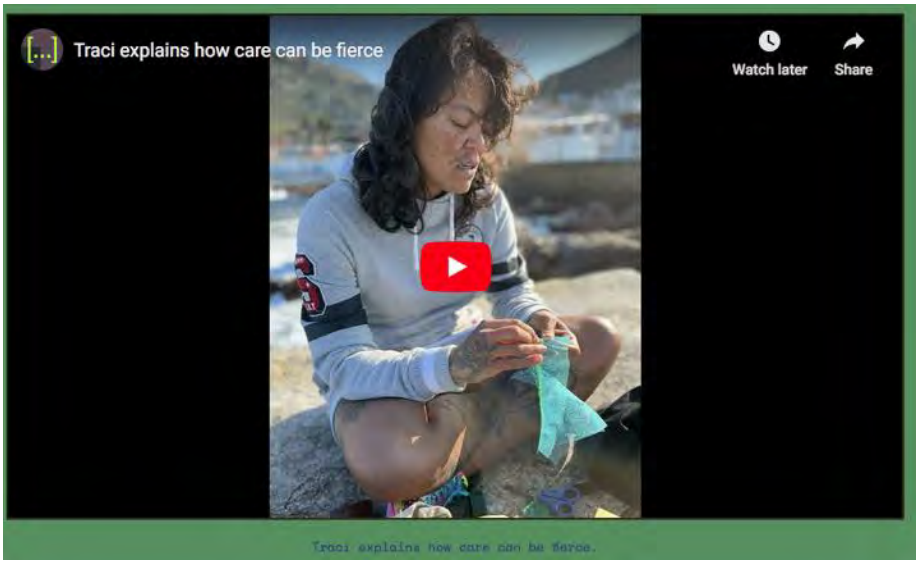


Figure 2.8. Traci explains how care can be fierce

Traci explains that community and care work together, and caring is not something you can do alone, it is a collective effort - one that requires community. We need the ocean to survive and therefore it makes sense for us to build and create communities that care. However, Duncan explains that the ocean does not necessarily need us. As humans, we emphasise our needs and place ourselves above everything else. He feels that the ocean has no regard for us and will continue to survive without us.

Both Joanne and Traci identified remembering as an act of care. Joanne reiterates that this is not simply remembering an event or occasion, rather it is an ongoing concept. Traci explains remembering goes against the notion of erasure, it is in fact the opposite of erasure. "We remember because they want us to forget" Traci Kwaai (June 2022).

2.7. Drifting Thoughts

I chose to use the word 'containers' for the tidal pools to disrupt the traditional view of a container as confined, restricted and controlled. The tidal pools are structures that allow water to flow over, into and through them. They are continuously changing and adapting to their surrounding conditions – the swell size, direction and period, the phases of the moon and tides, the surrounding geography and sedimentation, and the shape of the pool in relation to the surroundings – these are some of the factors that influence the pools as containers of unboundedness and abundance.

The intra-views with four individuals affirm that the bruising and wounding of bodies (whether human or more-than-human) and land are the visual and physical surfacing of violence and trauma, or manifestations of inflicted harm. While the immediate impact might be highly visible, the longer term effect of trauma is no less significant, even if at times less visible. Vollenhoven (2021) reiterates this through acknowledging the countless South Africans who have taken on the responsibility to re-member; and by so doing addressing the damage done by centuries of colonialism and apartheid.

Figure 2.9. Ralf collecting litter whilst doing laps for Traci's hydro-rug

Alexis Pauline Gumb asks "What are the scales of intimacy and the actual practices that would teach us how to care for each other beyond obligation or imaginary duties?" (2020:56). Similarly I am asking what other care practices exist that have been overlooked because of our South African Apartheid legacy which continues to live on today. Patricia Hills Collins argues that 'seeing from below' can generate a post-colonial understanding of 'being human' (1990). In this way, seeing from below, allows brown and black bodies to offer understanding and insight that speak not only about and to – but beyond – their locations (Lewis and Badroon 2021). They argue that despite the assumption that essays and writing from socially marginalised standpoints can generate only knowledge that speaks to the experiences of these groups, on the contrary those positioned at the margins often see the world from a different perspective. Lewis and Baderoon (2021) go on to say that this knowledge not only counters racist and patriarchal world views, it envisions new ways of being human and is therefore relevant to all.

Despite being marginalised and restricted from accessing the ocean, these four brown bodies are healing their wounds and scars by choosing to remember by singing, swimming, performing live music, picking up litter, protesting for access to spaces that were previously demarcated for white people only and building communities. These are some of the acts of care that they are practising and that was shared as we co-created the hydro-rug and shared stories of our

connection to the ocean despite the trauma experienced. Each interviewee has a deep connection to the ocean and both Traci and Duncan liken the ocean to a mother figure.

Figure 2.10. Tidal pools as containers of care (Image by Traci Viljoen 2022)

The approach and methods for this research includes stitching, mending, creating, imagining and storytelling. These methods enable us to comprehend entangled relationships between bodies and the built marine environment of tidal pools. These 'otherwise' ways of knowing and being in the world facilitates the co-creation and building of community especially amongst brown and black people who have been segregated through Apartheid's compartmentalisation of ethnic, religious and mixed-race groups that has had a powerful impact on how groups continue to identify themselves. "We are now busy journeying from the woundedness of recent centuries to wholeness" (Vollenhoven 2021: 29).

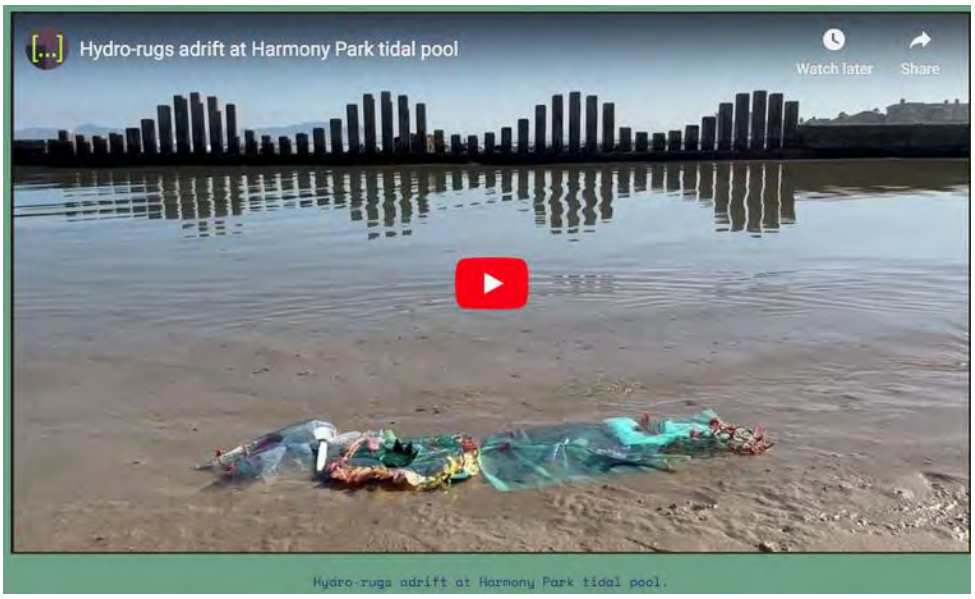


Figure 2.11. Hydro-rugs adrift at Harmony Park tidal pool

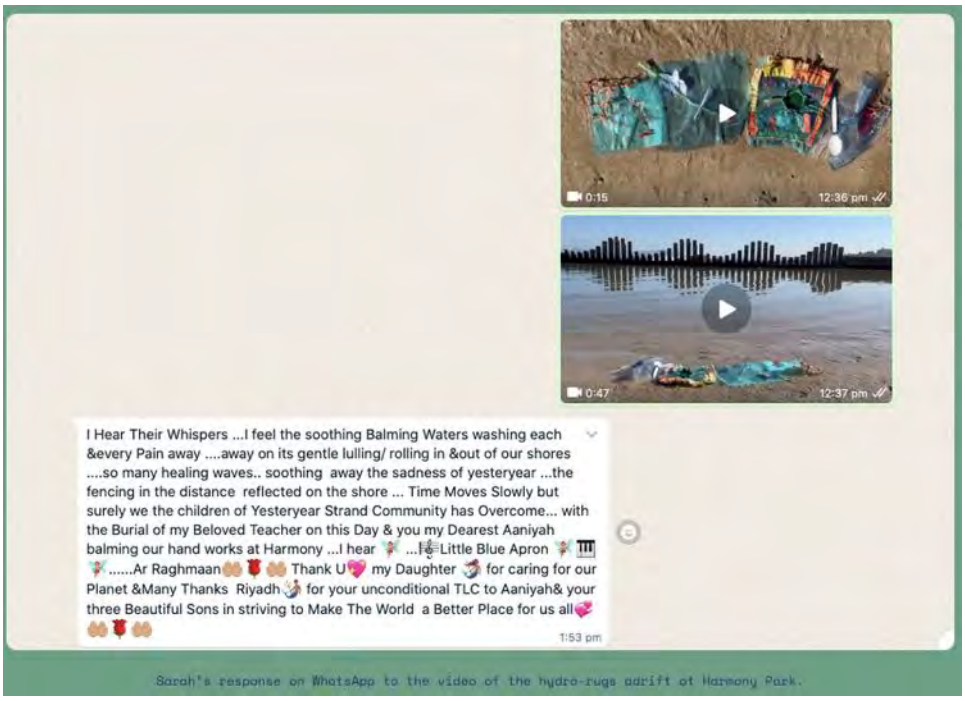


Figure 2.12. Sarah's response on WhatsApp to the video of the hydro-rugs adrift at Harmony Park

3. Chapter Three: Strandlooping as a relational enquiry to reimagine Higher Education and Gender Studies along the Camissa[19] coastline

Figure 3.1. The circular image introducing this chapter is of my feet with the Arabic word *haj al-ma'* which means water pilgrim

[19] Camissa, meaning 'place of sweet waters', was the KhoiKhoi people's name for Cape Town (Camissa museum, 2022). The city once had four rivers, including the Camissa River, and 36 springs, all of which were channeled underground and drained out to the sea as the city expanded.

3.1. Abstract

Thirty years after democracy in South Africa, the legacy of apartheid continues to affect Black and Brown[20] bodies by excluding them from the ocean and other spaces through the legacies of racist laws which continue to bleed into the present. In this paper, I argue that s*trandlooping*[21] as a method of enquiry is key to understanding care for our hydrocommons. This methodology can also be considered to be a reparative and generative way of re-imagining and practising higher education research and gender studies differently. *Strandlooping* as a lone, Brown woman along certain stretches of the coastline is unsafe, and this influences the way I work and whom I choose to walk with. I make use of African feminism, Indigenous knowledge and research-creation frameworks in the paper to enact theory-practice-praxis in creative and relational ways. The paper concludes with three suggested watermarks or propositions for *strandlooping* to encourage knowledge-making with humans and more-than-human entities.

Key words: walking; strandlooping; care; feminist; research-creation

3.2. Introduction

My research focuses on watery relations. We live on a blue planet and healthy oceans provide oxygen for us to breathe and survive. Oceans, rivers and wetlands are our natural water bodies which form part of the hydrological cycle and are our hydrocommons (Neimanis 2009). Hydrocommons refers to the water bodies and resources that we all use, our very own human bodies included, and for which we are responsible. Caring for our hydrocommons is critical for the health of the ocean, the planet and the humans and more-than-humans that reside here. However, there is tension with the concept of responsibility and who is responsible for caring for our common resources such as our water bodies. This tension arises because responsibility and care are linked to matters of justice, for which there are endless debates, theories and writings (Bozalek and Zembylas 2023). In South Africa, privilege and structural economic benefit was

[20] We use the words Brown and Black bodies to distinguish them from Black Indigenous People of Colour because of the North American framing and how it has been imposed in a South African context. The South African Black consciousness writer and anti-apartheid activist Stephen Bantu Biko's ideas of Black consciousness are more suitable and fitting for this work (Biko, 2017).

[21] Rather than using the word walking, I have contextualised it to the creole Afrikaans word *strandloop* meaning *to beach walk* and added the 'ing' to make it a verb.

determined largely by skin pigmentation and this interplays with responsibility and care too. It follows that privileged irresponsibility, also referred to as 'ignorant ignorance' (Muthien and Bam 2021) is intertwined with power, and this power influences your ability to respond or what Bozalek and Zembylas (2023) refer to as response-ability, which will be unpacked later in this paper.

One of the practises and enquiries I am using to understand responsibility and care is *strandlooping* along the False Bay coastline of Camissa. Instead of employing the term "walking," I've contextualised it by incorporating the creole Afrikaans word "strandloop," which means to beach walk, and appended the suffix '-ing' to form a verb. Bam (2021) refers to the word *strandloper* as a derogatory colonial term for the Goringghaicona who were seasoned, multilingual traders who traveled in passer-by ships way before the Dutch or Portuguese arrived at the Cape. As a Brown mixed-ancestry woman, I do not consider the word strandloper to be derogatory, and have in fact reappropriated and metabolised it; and have named myself '@contemporary_strandloper' on Instagram. My mother has always proudly referred to herself as a strandloper having grown up along the False Bay coastline in a suburb called the Strand[22] in the Western Cape, South Africa.

Strandlooping, a walking/swimming/kayaking/foraging methodology and form of enquiry, is a direct response and enactment that challenges the existing Western-based colonial research methods which have erased multigenerational knowledge of Indigenous women of the Cape (Muthien and Bam 2021). These Western disciplines seek 'scientific objectivity' through fixed terminologies and classifications leaving little room for fluidity and marginalised Indigenous women's voices. I see *strandlooping* as an act to foreground 'knowing differently' and 'doing differently' in how we produce and understand relevant knowledge to arrive at an understanding that science is diffused with spirit, and that landscape speaks of stories denied (Bam and Muthien 2021, Vollenhoven 2016). *Strandlooping* as a mode of enquiry offers direct insights into ways in which I am able to respond to the call to re-imagine and enact theory-practice-praxis in care-full, creative, and relational ways. *Strandlooping* for me happens alongside water in the liminal and littoral zones - the shoreline and along the river beds - in South Africa but also along other

[22] *Strand* is translated as 'beach' from Afrikaans.

countries' coastlines and riverbeds. I include the practice of riverlooping which means walking along a freshwater river, another water body which ultimately meanders towards the salty ocean.This paper focuses particularly on the Camissa peninsula of False Bay, the Makhutsi river in the Limpopo province, and the Kawe (Cahuita) peninsula of Costa Rica. Tracking wild animals along the Makhutsi river opens up an understanding of how we share this planet with more-than-human species too.

The *strandlooping* takes place at either new or full moon and for the duration of this paper when I use the term *strandlooping* it also refers to *riverlooping*/swimming/kayaking/foraging. These lunar cycles give me the space to be a mother to my children and perform all the other roles I play in addition to thinking-feeling-doing-reading-writing for a doctoral degree based on publications such as this one. Many other long-distance walks (usually dominated by men) set out to achieve certain ambitions or targets in a linear, structured and time-limited way. Unlike this, *strandlooping* is done iteratively, in attunement and with consideration for the cycles of the moon, cycles of my body, the weather and swell predictions and the needs of my family.

This paper considers how we not only heal from our traumatic past through strandlooping as a contribution to social and educational change for plural ways of knowing, being and doing; it also challenges the traditional ways of learning and teaching in education. It does this by demonstrating how it might be done differently through innovative praxis and practical enquiries that I implement to co-develop a pedagogy of care for our hydrocommons in South Africa. In doing so, I am engaging in and being formed by feminist and collaborative knowledge-making practices, processes of becoming that stem from a relational perspective. Although I use the word *'I'* in this paper, I am never alone. There are always the human and more-than-human entities that have contributed to my thinking and being in this world and other worlds. This is the relational way I am trying to understand the world as I continue to break down the binary disciplined way I was trained to be in the world; and move to embrace a transdisciplinary way[23].

[23] I thank my colleague, doctoral fellow, friend, snorkeler, hydropoetic researcher Joanne Peers for always reminding me of this

McKittrick (2021, 4) argues that Black (and Brown)[24] people:

> have always used interdisciplinary methodologies to explain, explore, and story the world, because thinking and writing and imagining across a range of texts, disciplines, histories and genres unsettles suffocating and dismal and insular racial logics.

Black and Brown people bring together various sources and texts and narratives not to capture something or someone – to enslave them and universalise them - but to question the analytical work of capturing, and the desire to capture something or someone (McKittrick 2021). Whilst McKittrick uses the term interdisciplinary I prefer the use of transdisciplinary as described by Taylor, Hughes and Ulmer (2020). Raghavan (2020) in particular likens transdisciplinary feminism as seeking to disrupt the fortress-model of disciplinarity, and advocates for a transient disciplinarity, resisting entrenched disciplinary boundaries in favour of an expansive yet specifically situated approach. Furthermore, Ulmer (2020) uses rust as a metaphor for transdisciplinary feminism as a means of describing the need to decay, corrupt and decompose disciplinary boundaries that seek to constrain our thinking. She asks "How might rust 'work' as a story - one in which it is possible to see ourselves in?" (Ulmer, 2020, 244). Given that I am strandlooping alongside the ocean and water bodies, the ocean in particular, has the ability to corrode and create rusty weatherings, this figuration[25] resonates with me. This way helps me understand the commons to be a site of convening histories, knowledges, worldviews practices and wisdoms, that exist in stories. As Ulmer (2020, 238) reiterates, "rusty weatherings are not only figurative and literal in scope—they are also everyday expressions of hope for transdisciplinary feminisms yet to come." The paper published by Mohulatsi (2023) expresses this understanding of the commons through her figuration of the *watermeisie*[26]. Mohulatsi (2023) argues that the *watermeisie* is a nomadic figure through whom we can attempt a speculative re-

[24] I use the words Brown and Black bodies to distinguish them from Black Indigenous People of Colour because of the North American framing and how it has been imposed in a South African context. Biko's ideas of Black consciousness are more suitable and fitting for this work because we are situated in an African context. However, in the South African context specifically, we want to specify and name both Black and Brown bodies because apartheid laws separated them purposefully and there are racial divides that exist amongst these groups today.
[25] Haraway (1988) describes figurations as tricksters in that they blur the lines and boundaries of definitive ways of knowing and thinking-with concepts, they are aspirational responses to particular historical and material conditions. Rosi Braidotti (2019) explains figurations as conceptual beings which do not define the human condition, instead they offer an indeterminate, complex and ongoing process of subject formation.
[26] The word *watermeisie* is Afrikaans referring to a kind of mermaid, a creature half-human and half-fish.

mapping of slave memory in Southern Africa, especially in the Cape region where slave-holding and trade was centered. The figuration of *watermeisie* invites us to think, notice and witness different ways of thinking-with and through the world, and in this particular body of work to think-with the oceans and rivers in an embodied way.

This embodied technique of *strandlooping*-with the ocean/river as water bodies and all the human and more-than-human entities is captured in this figure of *watermeisie,* and as I think with oceanic scholarly enquiries in relation to higher education pedagogies and gender. This way of viewing the commons lends itself to a relational ontology, which sees the world as inextricably entangled and holds that relations pre-exist entities, subjects and objects, which only come into being through relationships (Bozalek and Zembylas 2023). The idea of an independent, discrete, intentional and propertied individual human subject is troubled in a relational ontology. African feminism, Indigenous knowledges and research-creation, are seeking to find new possibilities to flourish and open-up opportunities for those who are marginalised in the current system by the intersectional and mutually constitutive oppressions of patriarchy, colonialism, and capitalism through artistic expression (Bam 2021, Knowles 2021). These three theoretical frameworks are relevant to relational ontology and this paper suggests that through the practice of strandlooping and recognising the world as relational, rather than static and binary, influences higher education and in turn this would re-form our intelligences to meet the world in a more caring, peaceful and less exploitative way (Tronto 2023).
The next stride of this paper will unpack the theoretical frameworks I have used to arrive at Afro-*water*[27] feminism.

3.3. Zig-zagging with African feminism, Indigenous knowledges and research-creation as theoretical frames to arrive at Afro-*water* feminism

My research enquiries are based on research-creation, and the nature of research-creation is that it emerged as a result of the enquiry related to inter - and transdisciplinarity through process philosophy (Manning 2016a, Truman 2022). Truman (2022) elucidates the origins of research-

[27] Water pronounced as 'vaa-ter', as one would say it in Afrikaans.

creation in Canada, noting its adoption by artists and designers who blend artistic practice with elements of science or social science research. Additionally, scholars in various fields recognise the significance of arts and creativity, while educators seek to integrate cultural productions and arts-based pedagogy into curriculum development. Central to research-creation is the integration of artistic expression with academic enquiry, facilitating the generation of knowledge and fostering innovation through the convergence of creative and scholarly research methodologies. I am particularly drawn to rethinking how the artistic practice, of strandlooping in my case, reopens the question of what these disciplines can do, and how research-creation can enrich the understanding of the research question at hand (Manning 2016b). The *strandlooping* enquiry is outside of the disciplinary and institutional constrictions of co-creating a pedagogy of care for the hydrocommons and yet I argue that this makes *strandlooping* ideal for the research enquiry related to care, belonging, place-based concepts and healing. *Strandlooping* is a Slow process, and this means that the pace of my research enquiry is slower because of how walking informs thinking and writing and vice versa. Slow processes focus more on quality, on process rather than product, on curiosity and experimentation (Bozalek 2021b), and the Slow process of strandlooping is key to addressing the research-creation of care for our environment through healing from our traumatic past; and building relationships with humans and more-than-human entities along the journey from Cape Point to Hanglip[28] (Hangklip).

The aim of this work is to reveal adapted and expanded ways of knowing that restore connectedness and relationality that culminates in contributing to finding other pathways for learning and teaching in higher education. My intention is to think through the principles of knowledge-making from a perspective that imagines a future that is unravelled from a patriarchal and colonial past; and to bring the entanglement of environmental and social justice issues to the surface. Tamale (2020, 30) explains that this "is a multifaceted, holistic and integral process" made more complex because of the redlined[29] colonialism's legacy, resulting in a situation where

[28] I am also trying to find the names of places before colonisation. I will use the names of places I find, and the current name will be placed in brackets thereafter. When the name appears in the text for the first time I will use the indigenous name or the earliest name I can find (which may come from early colonisers) followed by the current name in brackets. This in itself is an act of remembering and reclaiming these places, and honouring our ancestors.

[29] A hiking/walking term that means you've hiked every single inch of trail in it, including all of the major trails as well as all of the smaller connector sections. Here it refers to the way in which colonialism is entrenched and found everywhere.

"many in mainstream academia, even today, are yet to be convinced that feminist methodologies, approaches and analyses in research are part of legitimate scientific (or not) enquiry" (2020, 47). She continues, "we must adopt ethical non-positivist intellectual paradigms that acknowledge subjective interpretation of reality and are commensurate with Indigenous (and feminist) knowledge systems that are non-linear, non-rational and value-laden" (Tamale 2020, 279). The techniques of *strandlooping*, is used to engage in the enquiry by *strandlooping-with* as a movement of thought not only with others, but a process of engaging with obscured or marginalised histories, as described by Springgay and Truman (2018).

Strandlooping is an active practice, characterised by dynamic participation rather than passive observation. This active engagement, whether with oneself or in interaction with others, fosters dialogue and exploration without the constraints of predetermined hypotheses. By employing movement to stimulate thought, strandlooping allows ideas to unfold organically, without a predetermined endpoint. This practice is inherently fluid and unpredictable, with outcomes subject to change over time. Drawing on Taylor's (2020) conception of walking as a wavering line, strandlooping embodies a similar ethos. It is a meandering path that twists, turns, and intertwines with other narratives, eschewing the rigidity of linear thinking. This form of walking represents a departure from conventional discipline, embracing a feminist ethos of indiscipline. It is characterised by a refusal to adhere to norms or regulations, embodying a spirit of rebellion and autonomy. This non-linear approach is confirmed by Simpson (2017) who writes about how Western education teaches us to type, write, and think within the confines of Western thought, as well as to pass tests and get jobs within the city of capitalism.

Leanne Simpson elaborates on how she learnt from a circle of Elders to proceed slowly and carefully - all of which are liabilities in a neoliberal university (Simpson 2017). Similarly, on a recent trip to Costa Rica I visited Dr. Maria Suarez[30] and was invited into a group of Elders called the Maternal Gift economy, they meet once a week to discuss various projects or any

[30] She is founder and director of ESCRIBANA, a feminist digital media venue since 2011. She was a co-director of the Feminist International Radio Endeavor (FIRE) from 1991 to 2011, of which she is a co-founder. She worked as an educator in literacy in many countries in Central America during the 1970s and 1980s. More recently, and what brought me to visit her, is that she is the coordinator of the Community Center Diving Ambassadors of the South Caribbean Sea, which is dedicated to archeological diving and recovery of the history of the afro-descendant population on the coast of Costa Rica.

issues or concerns people may have and or want to share with the group to gain insights. Simpson (2017) and Kimmerer (2003) reiterate that the knowledge our bodies and our practices generate has never been considered valid knowledge within the academy and therefore often exists on the margins. The research enquiries I embody, such as strandlooping, attempts to push against these margins and create opportunities in higher education for embracing other ways of knowledge-making and reclaiming who I am as a Brown Creole woman, and opening up the space for others like me to also embark on this journey.

The *strandlooping* takes place along the seashore, within the liminal and littoral space and where tides wash between high and low. The environment is constantly changing and being churned, aerated if you will, and the plant and animal species that live in this shore zone need a special kind of resilience to withstand the wave action and exposure to the sun (Branch et al. 2022). Similarly, the *riverlooping* changes where I am able to walk depending on which section of the river I am walking. Tides will influence the water level of the river especially if I walk close to the river mouth. The middle and upper reaches of a river's water flow is often driven by seasons and the amount of rainfall. Our changing climate influences this too as is evident with the higher frequency of droughts and flash floods we have been experiencing across the globe (Zhou et al. 2023). I understand this resilience and it resonates with me and my positionality as a Brown Creole woman living through the latter years of our apartheid legacy, and then being the first of five Brown bodies in 1990 accepted into a school that was previously designated as Whites-only. Joining an integrated school was the beginning of my assimilation process and the need to belong. I have only broken this resilience to belong in my early 40s and in alignment with my decision to pursue my doctorate which has taken me on a journey of reclaiming who I am. The reason I use resilience and not enculturation, is because I have assimilated for so many years that it has almost transformed into a resilience of protection that ambiguously has not allowed me to feel into the realities of social ecological justice along my own coastline. The resilience sits inside of the assimilation.

Learning and reading about relational ontology has been a balm for my soul, having come from studying a science degree and struggling particularly with the subject and object binary that requires you as the researcher to divorce yourself from what is deemed as the experiment that

you are observing. I have found home in *strandlooping* from a relational approach rather than a scientific positivist approach and enculturation which I learned, and am now unlearning, through categories and silos for my undergraduate and Masters studies degrees. Parallels can be drawn between my years of assimilating to feel that I belong and feeling compelled to use the positivist and scientific approach, and my more recent years of reclaiming who I am with ethical non-positivist paradigms that acknowledge subjective interpretations of reality and are aligned with Indigenous and feminist knowledge systems that are nonlinear, non-rational and value-laden (Tamale 2020).

I am drawn to African feminist theories which maintain that our relationships and connections are inherently intellectual, spiritual and emotional. Ntseane (2011) argues that the four interconnected ideas that guide a diverse African feminist approach to research are a collective worldview, spirituality, a shared orientation towards knowledge, and the role of gender in how knowledge is processed (Knowles 2021). I have chosen to focus on the collective worldview and how this pertains to re-imagine and enact theory-practice-praxis in creative and relational ways – ways which are deeply political and which promise to be potentially transformative for gender and education.

A collective worldview is a reciprocal balancing between individual and community needs. As Ntseane (2011) argues, a sense of the collective shapes people's recognition of what constitutes a problem as well as who is responsible. The sense of responsibility intrigues me and entices me to understand how we arrive at feeling responsible and acting on this particularly for our hydrocommons. Care ethicists describe responsibility as being about acting on the need for care once it has been identified (Bozalek and Zembylas 2023). They explain that there are generally two different modes of responsibility—one grounded in the individual rational and moral agent, the other in collective or relational responsibility (Bozalek and Zembylas 2023, p. 8). Privileged irresponsibility or 'ignorant ignorance' (Muthien and Bam 2021) is about a refusal to acknowledge complicity and implicatedness in inequalities and unjust conditions. This 'blind' refusal allows certain groups/geopolitical areas, species and to flourish at the expense of others. Bozalek and Zembylas (2023) define the notion of response-ability, which involves responsiveness or the ability to respond. Response-ability involves paying close attention to the tracing of entangled relationships which are co-constituted with human and more-than-human

others in multiple temporalities and spaces. We inherit various ghostly and material presences which continue to play out in the present and the future, such as the apartheid legacy of South Africa and more recently in Gaza. On the 17th of October 2023, the eleventh consecutive day of its bombardment, Israel stunned the world by bombing the al-Ahli Arab hospital in Gaza City, where thousands of civilians were receiving medical treatment and seeking shelter from the attacks (Prashad 2023). How will we live with the ghosts that come to haunt us from the past and the future? Barad (2017) writes that the indeterminacy of time and space is important when considering responsibility, privileged irresponsibility and response-ability, because the past and future are always already implicated in the thick-now of the present. As I strandloop along the False Bay coastline I carry an immense response-ability to hold the stories shared with me by the human and more-than human entities that I encounter along the way. I acknowledge that I may have more privileges than my Brown counterparts, and this enhances the weight of my response-ability on behalf of Brown and Black communities even more so. How do I ensure that the voices and stories of Black and Brown bodies are justly heard and shared despite my privilege?

The process of bringing together thinking with the hydrological cycle as *watermeisie* and hydrofeminism, with African feminism and Indigenous knowledge congeals into what I call Afro-*water* feminism. I found the term Afro-*water* feminism whilst drifting out at sea. The tide was extremely low with the swell entering the bay from a south-east direction. I got in apprehensively because I knew that I would need to paddle hard to get to the back line[31]. I didn't make it to the back; but it was this defeat and my salty, wet skin that opened up my thoughts to become entangled with all I had been reading, thinking, surfing and writing about African feminism and hydrofeminism. Afro also refers to a hairstyle originating with Black people, in which naturally curly or frizzy hair is cut into a full, round shape all over the head. There has been much written with regards to Black Afro hair and how swimming and being in water with hair that is curly becomes unmanageable which often leads to Black people not swimming or immersing themselves in water, in addition to all the other political entanglements that come with water and Black and Brown bodies (Erasmus 2000, Gumbs 2020). 'Oe! My hare gaan huistoe[32]': hair-styling as black cultural practice written by Erasmus (1997) explains how

[31] A term used by surfers to denote the place beyond the breaking waves.
[32] Afrikaans for 'Oh! My hair is going home'. A phrase used by Black and Brown people who have curly, frizzy hair that is uncontrollable especially when exposed to water.

scientific racism of the late nineteenth century made the body the sign of race. The naming of biological markers which came to validate White superiority and Black inferiority was central to this science. Next to skin colour, hair texture was regarded as one of the most reliable markers of racial heritage.

Erasmus (1997) concludes that race is always present, it is always there because whether we like it or not, we are still living in the shadow of the history of colonialism, slavery and genocide, and their cultural and political aftermath. The building swell of Indigenous knowledge, Afro-*water* feminism and research-creation allows us to work through and with the present deep wounds of injustice and environmental degradation with the possibility of healing with ancient salty water remedies. These frameworks advocate for learning that occurs relationally and in assemblages, rather than residing within individuals or entities. Learning is rather concerned with experimentation and the creation of concepts (a pedagogy of the concept) and the purpose of learning is not to transmit or acquire fixed objects or bodies of knowledge, instead learning in this way proposes that we muddle through concepts with human and more-than-human entities (Bozalek 2019; Martin, Peers and Giorza 2023b). The performative act of *strandlooping* along the coastline/river means that I cannot predict what I meet or what arises along the path. As such, I am *strandlooping* a concept (Springgay and Truman 2018) and I intend taking this further through suggesting *strandlooping* propositions or watermarks[33] in this paper that will open up new processual ways of doing pedagogy which includes epistemology (knowing), being/becoming (ontology) and ethics (what matters) in relation to the ocean (Barad 2017).

In the next section of the paper, I bring you as the reader along on a few of my s*trandloops* and in so doing I propose propositions/watermarksfor *strandlooping* that will provide insights into practising higher education that embraces Black/Indigenous and feminist scholarship.

[33] I have created the word watermarks from seamarks. Also known as a beacon, seamarks are the large and often colourful objects you see floating out in the middle of sea. They're designed to help boaters navigate the sea better by avoiding things like dangerous currents and low water levels. Similarly you would find these seamarks at the estuary of a river. Painting with watercolours and leaving watermarks of colour of more-than-human entities that strandlooping brings me into contact with, is also a method I use to process my thinking.

3.4. Watermarks for *strandlooping*

Propositions or watermarks do not give information as to how they function in concrete instances, instead they gesture to how they could potentialise (Springgay and Truman 2018). Using watermarks as a figuration for propositions is relevant because they are literally out at sea and unstable in their nature, yet creating an awareness of shallower water or currents that sea users should avoid. Watermarks, as they drift in the waterways, can also be seen as springboards from which thought is composed to make space for the action to emerge. Given that this research is connected to the hydrocommons the use of the term watermarks as a figuration for propositions became relevant and poignant for conveying the prompts for strandlooping as a method of enquiry. Erin Manning and Brian Massumi (2014), following Alfred North Whitehead (1978) refer to propositions as inflections or forces that influence what may come to be expressed in the process and how an incipient situation becomes open to be changed, intensifying or inhibiting it. In some ways, these watermarks are the springboards from which the s*trandlooping* practice has evolved. These watermarks may not necessarily be useful to other scholars who chose to use a walking methodology because they are specific to my context, however they may be useful to create and spark other watermarks applicable to scholars in their context. Below I unpack watermarks or propositions for *strandlooping* to encourage knowledge-making with humans and more-than-human entities.

3.4.1. The periwinkle harvest bag as container

I understand containers to be porous and have in fact described tidal pools as containers of care because of their porosity - water being able to flow through gaps in the walls and or over the top of the walls (Martin, 2023a). Traditionally, the harvest bags for periwinkles were old onion bags because it was made from mesh netting that allows water to pass through, whilst acting as a container for the periwinkles without becoming too heavy with water whilst harvesting. Creating a container for myself to feel safe and connected has been important for allowing the enquiries to flow.

This notion of the carrier bag is echoed in author Ursula Le Guin's The Carrier Bag Theory of Fiction (Le Guin and Haraway 2019) which posits that even before the masculine spears and the hero/warrior archetype appeared in our cultural evolution there was the feminine carrier bag, which some considered our ancestors' greatest invention. Le Guin's Carrier Bag Theory suggests that all heroes, long before they can attempt their call to adventure, and express their agency were at one point contained in carrier bags whether in their mother's womb, carried by the feminine, and had to experience care.

I had planned to *strandloop* at either new or full moon, so those dates were the actual event dates but it was important to walk in between and to give myself the space and time to process in preparation for the events. The regular practice of walking up our local mountain in Lakeside is the result of this. I have become acquainted with certain rocks and plants and one particular plant, the Protea Nitida, led me to my ancestors. I re-discovered how this plant played a role in a family run business on Plein Street in Cape Town called Soeker and Soeker Bro's for renting horse and carriages (Martin, 2024). Ox wagon wheels were made from the Protea Nitida and the leaves were used to make plant dye. I have incorporated using the plant dye into the hydro-rugging[34] enquiry by dyeing the cloth that I use as a base onto which I am stitching and joining all the individual hydro-rugs and ocean memories shared (Martin, 2024).

This watermark expresses the need to create a container, not in the conventional sense that is bounded and inflexible, but rather a container that allows for continuity and flow. This is akin to a feminist, relational ontology which allows for other ways of knowledge-making.

3.4.2. Feet as foundation for walking-feeling-thinking

"*Sometimes when you love the coast enough you become shoreline."* (Gumbs 2020, 145)

[34] Hydro-rugging is another technique of enquiry I am using for my research. Storytelling and sharing is central to this technique through an enquiry related to Black and Brown people and their relationship with water. Whilst stories are shared each individual is stitching their hydro-rug made from beach litter and other waste materials. Each hydro-rug will be stitched onto the Protea Nitida plant dyed cloth to create the Mother Hydro-rug with all the water stories.

Although the feet are at the bottom of the body they hold us and carry our weight as we move through the world. The *strandlooping* enquiry would not be possible without my feet, it is with my feet that I am able to think, see, feel, taste and touch the False Bay coastline. Whilst writing my PhD proposal I would go for morning walks or swims and it was at that time that *strandlooping* led me to manifesting that I would walk the False Bay coastline as part of my research enquiry to co-create a pedagogy of care with human and more-than-human entities. Springgay and Truman (2018, xiii) capture this by saying, "Walking activates the creation of concepts. To walk is to move-with thought. We write as we walk." Writing as we walk resonates with me and the regular ritual of walking as a container/periwinkle harvest bag which is porous expresses the nature of how walking becomes feeling, thinking and writing with my feet.

The very act of placing one foot in front of another mimics the movement, and creates the gentle rhythm of stitching/looping from *strand-looping*. Here the hyphen is used to emphasise the looping and the rhythmical motion. My strides become the invisible stitches along the coastline of False Bay as I gather stories[35] through meeting humans and more-than-humans by re-connecting with coastline and re-membering our ancestry – in particular the bodies affected by settler colonial histories and apartheid in South Africa. In Figure 1a I came across a field of Sea Roses whilst walking along the rocky coastline at Pringle Bay looking for *Drosters Gat*[36]. In addition to strandlooping, I have also been practising drawing, painting, knitting socks and stitching to help me process my thoughts. The watercolour painting in Figure 1a. is an expression of how overwhelmed I felt by their beauty of these flowers and yet when I found the cave, and sat there to breathe and listen; I was deeply affected by the fear and pain that these forgotten souls endured as I listened to the waves rushing into and out of the cave below me. Like *strandlooping*, the watermarks I have made through painting, helps me process my thoughts by using more than my brain. This practice of looping, painting and stitching are all springboards for opening up space to allow for more thoughts to flow in flexible, creative and innovative ways that are contrary to traditional knowledge practices. Figure 1b. is a photograph of my feet that I hand stitched onto Protea Nitida dyed cloth as a piece that will be added to the Mother Hydro-

[35]Martin et al. (2023b) paper describes various embodied techniques practised with 11 students that evoked sensibilities and memories and a re-connection with water and care.
[36] *Droster* refers to a runaway slave and *gat* is a cave.

rug (Martin, forthcoming b). Next to the wooden hoop you may notice the footprints of a bushbuck that walked along the sand dune before I came along. This reiterates the relations with human and more-than-human entities as I s*trandloop*. The stitched image of my feet is from a photograph that was taken whilst *strandlooping* along the Kawe and the realisation that this watermark, feet as foundation for walking-feeling-thinking, is applicable wherever I *strandloop* as colonisation has occurred globally and the segregation and separation of Black and Brown bodies is experienced globally. This will be unpacked further in the description of the last watermark.

Figure 3.2a. Sea Roses at *Droster's Gat* by Aaniyah Martin

Figure 3.2b. *Strand-looping* with my feet and more-than-human feet (later stitched into the Mother Hydro-rug)

3.4.3. Looping *with intuition, attunement, curiosity and my Mommy*[37]

[37] The use of the word Mommy here instead of Mother or Mom is significant because despite the formal text of the journal I have chosen to maintain the sense of intimacy and warmth, to evoke a sense of

The places where *strandlooping* is practised is where the learning takes place too. The importance of the material world, and in this case the ocean and beach, plays a significant role in how we learn - the material is as important as the discursive, and cannot be separated from it (Bozalek 2019). Sometimes this is set intentionally as a specific event and other times in the practice of *looping* the learning arises spontaneously.

Mohulatsi (2023) explains how Camissa holds memories that carry the history of colonisation and apartheid, underscored by segregation and exclusions. These exclusions are felt and experienced elsewhere in the world too; as I experienced in Costa Rica on the Kawe coastline and in Portland, Oregon along the *Nchi wana* (Columbia) river. The divinities that occupy water also became modified, due to the histories of forced or semi-forced removal to which many people in South Africa, and the world, were subjected during colonisation and more recently apartheid in South Africa and Gaza as depicted in a painting by my Mommy in Figure 2 (Mohulatsi 2023, Biko 2017). My Mommy and I spent a weekend together and I worked on writing this paper. In fact, there was a stage in my life that I called her Mom and have returned to Mommy with the reclamation of my Brown creole re-awakening. When I had breaks from writing we would paint and draw together overlooking False Bay and chatting about my research and sharing stories. Figure 2 was painted by my Mommy as we sat together thinking and feeling with water. *Strandlooping* with the land and water bodies over new and full moons has been a practice of re-attuning with water and the celestial powers (Mohulatsi 2023). Painting and drawing have become an extension of the strandlooping and therefore a continuation of the practice of attunement and a creative expression of knowledge-making that is often overlooked in traditional higher education systems.

childhood affection and the close bond we share. Our bond as eldest daughter and Mother has deepened through this research and the ability for me to ask her questions that I would not have asked her during my phase of assimilating.

Figure 3.3. From the river to the sea by Sarah Martin

Around the time of the new moon in February 2023, I walked the stretch of coastline from Strand to Bikini beach. Walking this stretch of coastline with my Mommy feels significant for me because she was born and grew up along this coastline. At the age of 11 her family was forcibly removed from their home living two blocks from the ocean, and only allowed access to certain stretches of the coastline that were often unsafe with sharp, jagged rocks and rip currents. My mom and I *strandlooped* together and came across the tidal pool she learnt to swim in as a child. The low tide had trapped at least 20 rays in the pool and we were able to watch them gliding and swim with them in the pool.

This encounter with the rays led me to read Barad (2011) and they point out that the neuronal receptor cells in stingrays make it possible for these creatures to anticipate a message which has

not yet arrived – a kind of clairvoyance - much like the intuition I need to listen to when planning the *strandlooping* enquiries. This practice disrupts linear time: past, present and future are threaded through one another. The act of strandlooping with my Mommy led us to meeting the rays and thinking with them has opened up how we learn from the more-than-human, disrupting the binaries of human/animal and listening with an open fleshiness towards the human and the more-than-human in order to anticipate the not-yet-thought or thought-in-the-act (Manning 2020). In the practice of becoming with others or in relation to others, and staying with others for extended periods of time, we create trust, learning to hold possibilities open and discovering what we might become capable of together (Despret and Meuret 2016, Tronto 2015). According to Joan Tronto (2015), trust refers to the duration of care and this resonates with the concerns that this paper is addressing regarding finding care-full ways of knowledge-making.

3.5. Congealings

In this paper, which surfaces processual knowledge, and *strandlooping* a conclusion is difficult, as the work is iterative ongoing. As such, I offer congealings as opposed to a conclusion. A thickening of insights and learnings. I have articulated the importance of different practices or enactments that are embodied, experimental, affirmative and inclusive, thus contributing to alternative knowledge-making in higher education. Through these embodied practices I am able to locate what I have termed Afro-*water* feminism - a practice that is similar to generative, playful, intuitive and inventive aesthetic practices of knowledge-creation and public pedagogies (Rotas 2016). This way of engaging with academic research undoes many of the assumptions implicit in higher education that focus on learning to teach in a categorised and segregated manner and which replicate systems of colonialism and apartheid. By emphasising embodied, experimental, and inclusive practices, the paper advocates for a pedagogical shift towards relationality and processual learning. I have found processual knowledge-making with supervisors that extend beyond my academic supervisors to include my parents, immediate family members, citizens and more-than-human entities. This collaborative way of learning from both human and more-than-human entities is grounded in feminism and African/Indigenous frameworks.

In particular, this paper discusses the significance of *strandlooping* as a processual knowledge-making practice. It underscores how this approach expands ways of knowing, restoring connectedness between humans and more-than-human entities. By foregrounding the process over outcomes, rather than focusing on the outputs and measures of success and failure alone, strandlooping contributes to alternative pathways for learning and teaching in higher education . Furthermore, the *strandlooping* watermarks call for building flexible containers, containers of care (Martin, 2023a) - thinking and feeling with your feet, listening deeply and re-mapping with your body. All of these watermarks are embodied enquiries that include epistemology (knowing), being/becoming (ontology) and ethics (what matters) - an ethico-onto-epistemological entanglement which encourages researchers to focus on becoming and what matters to them as opposed to focusing on epistemology alone. Whilst these watermarks are specific to my context, watermarks that pertain to other scholars can be devised by them and their context and needs.

Embracing *strandlooping* as processual knowledge-making allows us to work with a sensibility that does justice to dispossessed people's stories, that respects their knowledge, and de-centers colonial and apartheid knowledge agendas. As I strandloop with the ocean and the salty ancient water washes our wounds as it ebbs and flows between high and low tide watermarks; healing and slowly congealing wounds from the Black and Brown bodies of Camissa.

There are three watermarks that have been congealed here to to assist researchers in crafting their own methodologies tailored to their specific contexts. The periwinkle harvest bag as a watermark captures the creation of a container that isn't rigid or restrictive but instead promotes continuity and fluidity. It aligns with a feminist, relational approach to understanding, which embraces diverse methods of knowledge creation. Feet as foundational for walking-thinking-feeling is a watermark that reiterates the looping and continuous movement that stimulates thought and emotion, ultimately enriching the writing practice. Finally, incorporating intuition, attunement, curiosity, and personal connections, particularly with my Mommy, serves as a vital watermark in unlocking intuitive insights necessary for planning *strandlooping* enquiries.

Overall, the paper highlights the transformative potential of *strandlooping* as a feminist pedagogical and knowledge-making practice, surfacing its role in challenging dominant educational paradigms and centering marginalised voices and experiences.

4. Chapter Four: Hydro-rugging as reparative caring encounter: Re-membering Southern oceanic hauntologies

Figure 4.1 The circular image for this chapter is of a river and the Arabic word is *tadafuq* which means flow

4.1. Abstract

Expanding beach clean-ups to more than just removing plastic from the shoreline, citizens are invited to dwell with the ecological crisis and its intersectional entanglements of historical injustices related to the ocean, through a tactile mending practice using collected rubbish. Public story-doing (Rodricks, 2024) is initiated by generative dialogue enabled through the material call of the plastic collected, which is re-membered and mended into the Mother Hydro-rug. This making-with thinking/theorising (Haraway, 2016; Manning, 2016) involves re-membering erased narratives that entangle people with the ocean. Hydro-rugging fosters reparative care practices within vulnerable communities through convivial organised events that bring people, particularly Black and Brown bodies, together to share their memories of and with the ocean. Hydro-rugging embodies the importance of active listening and acknowledging emotions (Ahmed, 2004), engaging in a call and response with the very fabric of beach surroundings, be it the plastic or other more-than-human elements.

Key words: care, hearth labour, knowledge-making, oceanic hauntologies

4.2. Introduction

Deborah Bird-Rose (2022) explains that in the context of care she uses the term ‘world’ and the idea that “Nothing comes without its world” (Haraway, 1997). This is to say that to be alive means that we are enmeshed in the lives of others, and that to be enmeshed is to bear responsibility (Rose, 2022). It is with this ethos of relationality, responsibility and care that I introduce myself and the world that I come from, before diving into what the Mother Hydro-rug is and what she calls and responds too. My name is Aaniyah Martin and I was born in Camissa[38], South Africa. ‘The sea is in my blood’ from a long lineage of ancestors brought to the Cape from Malaysia/Indonesia as slaves in the late 1600s. In her book Dockside, Hofmeyr (2022, 22) introduces the term "creolised waters," highlighting port cities, like Camissa, as vibrant hubs of cosmopolitan exchange that encompass not only land-based historiographies but also maritime narratives. Southern African waters epitomise this creolisation, embodying a rich tapestry of cultural influences. Here, according to Hofmeyr (2022) the sea holds significance as the realm of

[38] Camissa, meaning 'place of sweet waters', was the KhoiKhoi people's name for Cape Town. The city once had seven rivers, including the Camissa River, and 36 springs, all of which were channelled underground and drained out to the sea as the city expanded.

African ancestors, Khoisan ("first nation") water spirits and deities, Muslim water *jinn* associated with enslaved communities brought to the Cape during the Dutch colonial era, and imperial notions of maritime masculinity.

In the chapter I have written for the *Hydrofeminist Thinking with Oceans: Political and Pedagogical Possibilities* book edited by Shefer, Bozalek & Romano (2024) I describe my connection to blue and green spaces[39] despite the apartheid restrictions and exclusions that limited the spaces which Black and Brown bodies could access and enjoy. I use the words Brown and Black bodies to distinguish them from Black Indigenous People of Colour because of the North American framing and how it has been imposed in a South African context. Biko's (2017) ideas of Black consciousness, that rejected the apartheid-era divisions and classifications based on race, and instead advocated for a broader understanding of Blackness that transcended racial boundaries and embraced the collective identity and experiences of all those marginalised by the apartheid system, are more suitable and fitting for this work because we are situated in an African context. However, in the South African context, and for the purposes of this research specifically, I want to specify and name both Black and Brown bodies because apartheid laws separated them purposefully and there are racial divides that exist amongst these groups today despite Biko's Black consciousness philosophy. Even though my skin is Brown and I have experienced the effects of apartheid, my parents provided opportunities for me that some of my Brown-skinned kin have not experienced. Recently I approached my mom to enquire how we managed to visit Dalebrook tidal pool during the years of the apartheid regime, a blue space, which was designated for White bodies only. Recalling these memories, where my parents boldly defied discriminatory laws to enjoy beaches restricted to Whites, all without ever mentioning their acts of rebellion to us, has made me realise that both blue and green spaces are meant for everyone, including myself. However, not every Black and Brown individual shares my experiences, as their parents opted to abide by the laws due to severe repercussions such as imprisonment. Consequently, their connection to blue and green spaces differs from mine. This context is significant for my research as the majority of the Waves for Change coaches are Black and Brown and I am in dialogue with them in this paper. Waves for Change is a non-profit

[39] My understanding of blue and green spaces can be described as naturally wild spaces in the marine and freshwater (blue) and terrestrial (green) environments.

organisation focused on providing child-friendly mental health services through teaching young children water safety and surfing skills.

Three decades have passed since South Africa became a democracy, yet the history and legacy of apartheid continues to pulse through Black and Brown bodies. Exclusions are still ubiquitous from multiple spaces, although this research focuses more specifically on exclusion from ocean spaces and education. Such exclusions have been legislated, through various racist laws such as the Group Areas Act (GAA) 1950 and the Bantu Education Act (1953), and still have a hauntological impact on all who inhabit the country. Many Black and Brown bodies continue to feel that they do not belong on certain beaches to this day (Martin, 2023a). Consequently, hauntology transcends traditional ontological categories, disrupting fixed distinctions such as those between life and death, presence and absence, and past and present (Barad, 2017). The concept of hauntology, coined by Jacques Derrida, draws a parallel with French ontology through its homophonic resemblance. It aims to articulate the elusive ontology of ghostly figures, characterised by their ambiguous nature as "neither living nor dead, present or absent" (1994b, 63). As Barad (2017) points out, hauntings possess a materiality that extends beyond mere memories or echoes of the past; they are integral components of current material conditions. In essence, hauntings are both material entities and significant forces that exert influence and impact on the present. This is linked to how I have used the word re-member in title of this paper to denote the practice of reconnecting with one's past, integrating fragmented aspects of identity, or restoring a sense of wholeness through memory recall. Barad's understanding of hauntology aligns closely with my research approach, which engages with concepts such as Hofmeyr's (2022) notion of "creolised waters" and Christina Sharpe's (2016) concept of "wake work." Sharpe's (2016) evocative portrayal of the molecular remnants of enslaved bodies and the depths of the undersea as repositories of ancestral memory and imagination resonates deeply with my exploration of how hydro-rugging as an enquiry and method may shape affective relations with Black and Brown bodies within blue spaces.

My history and context with ecosystems culminated in my choice to study environmental and geographic science, to work at the Worldwide Fund for Nature and to establish The Beach Co-op, an NGO that aims to build caring communities through hosting beach cleanups and creating access to beaches that were previously demarcated for White bodies only. At the heart of my

ethos, and that of The Beach Co-op, lies a commitment to overcoming the artificial divide between humans and the environment. As McGarry (2013, 6) aptly describes, this separation is akin to an 'ecological apartheid', a concept resonant with the historical and ongoing injustices in South Africa, and calls for empathetic creative public pedagogical practice in the time of such separation. Within the context of apartheid and its aftermath, the term carries particular weight, highlighting the systemic exclusion of certain communities from accessing land and sea based on racial discrimination. This enforced segregation has inflicted deep wounds, resulting in trauma and a pervasive sense of disconnection and alienation as will be conveyed in some of the stories shared later in this paper. Expanding upon the insights of Gumbs (2020) in her illuminating work "Undrowned: Black Feminist Lessons from Marine Mammals," the term "undrowned" serves as a powerful reframe, shifting the narrative from one of mere survival to that of resistance, resilience, and flourishing. Despite systemic efforts to suppress Black voices and experiences, Gumbs celebrates the enduring agency and vitality of Black communities. Furthermore, Gumbs employs the concept of "undrowned" to highlight the interconnectedness between Black liberation struggles and ecological justice. By drawing inspiration from marine mammals and their adaptability to aquatic environments, she encourages readers to reimagine strategies for collective liberation that prioritise interconnectedness, cooperation, and sustainability.

Drawing from hooks' exploration of belonging (2009), the initiatives spearheaded by The Beach Co-op, exemplified by the collaborative creation of the Mother Hydro-rug[40], are deeply rooted in confronting the notion of unbelonging. This concept underscores the urgent need to counter feelings of disconnection and alienation, asserting the transformative process of reclaiming a sense of belonging and interconnectedness. Rodricks (2024) conceptualises unbelonging as a liminal space between belonging and exclusion, enriching our practical comprehension of advancing inclusive participation in both formal and informal educational arenas, particularly for individuals navigating the intersecting margins of marginalised identities. The relationship between belonging and unbelonging is also connected in a reciprocal loop. My unbelonging and dissimilation from White systems of supremacy, capitalism and colonialism, and finding new

[40] The title as Mother Hydro-rug has emerged with time and the capitalisation denotes the primary relationship to the ocean as Mother which resonates with many of the participants that share their memories and stories as they are hydro-rugging. See The Beach Co-op website for more.

belonging to my Brown ancestry and heritage, works in parallel with the unbelonging of plastic flotsam and its belonging in our making of tangible stories in a relational tapestry.

To grasp the notion of unbelonging, my research methodology integrates immersive practices such as strandlooping (beach walking) whilst moving through areas that were restricted for Black and Brown bodies to move through during apartheid (Martin, forthcoming a). Moreover, I[41] am actively involved in the collective creation of a social sculpture titled the Mother Hydro-rug, alongside citizen-led public storytelling initiatives aimed at uncovering invisible and erased histories and fostering new care practices towards water bodies among local South Africans. Joseph Beuys (2007) coined the term "social sculpture" to describe art's potential to shape society. He believed everyone could participate in this creative process, sculpting the 'invisible materials' that exist between people and the more-than-human world, through generative artworks. For Beuys, social interactions and human creativity were the raw materials for sculpting a more inclusive and democratic world. Through The Beach Co-op's cleanup efforts, collected debris are transformed into collaborative artworks, where shared narratives of oceanic connection facilitate healing from the enduring traumas experienced by Black and Brown bodies in the post-apartheid era. Encouraging active participation, particularly from individuals of Black and Brown communities, I extend an invitation for them to share stories of their relationships with water, while crafting their own hydro-rugs. This act of storytelling, as explored by Tsing (2015), or rather story-doing (Rodricks, 2024), serves as a profound introduction to fostering new, locally rooted, and politically charged ecological and communicative frameworks. Furthermore, story-doing is not only relational, but also action-oriented because it invites co-construction between the researcher and participants through the creation of individual hydro-rugs (Rodricks, 2024). Concurrently, I facilitate the collaborative creation of the Mother Hydro-rug, a synthesis of these individual hydro-rug narratives intricately woven into a communal rug, illustrating the interconnectedness of people, land, and sea. In contrast to reflection, diffraction, as elaborated upon by Barad and Haraway, entails attentiveness to the processes through which differences emerge and the effects these differences engender, thereby opening pathways to

[41] Although I am using the word I here, I am never alone. Although I may lead the hydro-rugging process, or the articulation of this paper and my research, I am also being led by the stories of Black and Brown bodies, by the waste materials, the needles and threads and all the relationships with the human and more-than-human entities. Liboiron (2021) writes that they see the footnotes of their book as an ethic of gratitude to those whose shoulders they stand on.

novel modes of thought (Bozalek & Zembyls, 2017; Barad & Gandorfer, 2021). Subsequently, this paper will engage with how hydro-rugging as practice and enquiry has shaped affective relations with Black, Brown and more-than-human entities within Southern oceanic places.

4.3. Creating the Mother Hydro-rug as an epidermis[42]

Hydro-rugging is a response to 'ecological apartheid'(McGarry, 2013) and a means to contribute towards healing not only from the apartheid from the natural environment but also the racialised apartheid by Black and Brown bodies to certain roles, places and spaces; for example my family was asked to leave a beach we visited along the False Bay coastline because it was designated for White bodies only. Throughout apartheid Black and Brown bodies provided the labour in the mining and agricultural industries, as well as domestic labour, and this narrative continues today (Kamies, 2019).

The practice of hydro-rugging entails gathering discarded materials - plastic litter, scraps of cloth I've gathered, and Black and Brown bodies - to come together with hands, hearts, ears, thread, needles, and pairs of scissors. These elements are used to craft individual hydro-rugs. When possible, we are positioned next to a body of water - such as a tidal pool or the ocean. I lay out a cloth demarcating a space for us to meet, with some snacks if people need to eat, and all the materials we need to create the individual hydro-rugs – the sewing box, scrap material and beach plastic litter. Participants choose their scrap material, plastic litter and thread; and we would be in conversation sharing our relationship with water throughout the making and mending practice. At this stage each person is making their own individual hydro-rug as depicted in Figure 1.

[42] The epidermis is the top layer of an organism's skin, and it is made up of three layers. The dermis is the skin layer that lies beneath the epidermis. The epidermis is devoid of blood vessels, prevents water loss, is a barrier against toxic substances, withstands mechanical stress and is involved in immune responses.. The dermis contains blood vessels, which are a small network of blood capillaries.

Figure 4.2. Waves for Change coaches creating their personal hydro-rugs

Each of these personal hydro-rugs and the stories they convey of relationships with the ocean are stitched alongside each other and joined to the Mother Hydro-rug. The Mother Hydro-rug becomes the embodied, material aesthetic of the stories that are shared and that formulate our understanding of caring for our coastal environment. These methods of listening, sharing stories, stitching and mending foregrounds the need to know and do differently and otherwise (Tachine & Nicolazzo, 2022) when we produce and understand through calling and responding with knowledge about the colonial past and its ongoing presence (Bam & Muthien, 2021).The Mother Hydro-rug provides a sensitive space for discussing environmental issues intra-twined[43] with racial discrimination. Pezzullo (2017) contends that environmental communication bears the responsibility not only to mitigate harm but also to respect the individuals, locales, and

[43] Interaction is the coming together of two or more pre-existing entities, whereas intra-action is the relationship which is pre-existing, and entities or subjects and objects only come into being through relationships (Barad, 2007).

nonhuman entities that coexist within our environment. She argues for the necessity of transcending individualism and fostering solidarity and collective care. It is through this ethos and determination that we can confront the destructive forces that perpetuate cynicism and despair, urging us to take action as our world faces unprecedented challenges (Pezzullo, 2024). This ethos of environmental communication resonates and permeates with the practice of hydro-rugging conviviality, from taking discarded materials and through sharing stories we are able to overcome some of the trauma experienced from unbelonging.

Muthien (2021, 55) refers to the 'Archeologies of the Heart', an Indigenous feminist collection that calls for knowledge production to be more heart-centred. This approach seeks to transcend the traditional academic focus on the intellect, and to speak with more compassion, from the heart, drawing on ancient wisdom. The performative enactment of sharing stories about the ocean and feelings of belonging to places that were previously demarcated for White people only, and mending hydro-rugs are intra-twined and through this, participants experience a sense of healing. The dermis onto which the individual hydro-rugs are stitched and brought together has been dyed with Protea Nitida plant dye that I created myself. The significance of using the Protea Nitida dye comes from discovering that my ancestors owned a horse and carriage business in Camissa, and that wagon wheels for the carriages were made from the Protea Nitida stems (Martin, 2024). Bringing the wisdom from my ancestors into the Mother Hydro-rug resonates strongly with me and is confirmed by African Indigenous feminists Magoqwana (2021) and Muthien (2021) who speak of bones and the endless stream of knowledge that passes on to and through us through eons. This knowledge comes from our ancestors and many Indigenous scholars and feminists do not claim to have invented anything, they convey that they are merely transmitting ancient knowledge (Muthien, 2021, p. 83). Mending as an intricate, delicate and slow motion, is a reconfiguring and an act of 'bringing together.' The Mother Hydro-rug becomes a visual figuration[44] for the epidermis of the Earth that has suffered extraction and piercing for resources driven by the acquisitive greed of colonialism and now capitalism for the demands and needs of the Global North. Moreover, the Mother Hydro-rug is also the re-pairing of Black and Brown bodies and our skins that have been forced to do the extracting and piercing

[44] Figurations are imaginative responses to historical and material conditions, interpreting ethical and political implications (Bozalek & Hölscher, 2023). They are not neutral descriptors or mere metaphors but embody situated positions and aspirational statements.

of Mother Earth and at the same time we[45] have also been mutilated and continue to suffer (Yusoff, 2018). We come together, and the convivial nature of sharing stories as we create hydro-rugs is the practice of mending wounds with salty ocean remedies.

The next section of the paper will further unpack how hydro-rugging may serve as a 'matterphor' (Barad & Gandorfer, 2021) for healing and threading together more just and caring ways of being in the wake of racialised violence and 'ecological apartheid'. Gandorfer and Ayub (2021, 2) explain matterphorics as an "ethics of thought, or, more precisely, it is an aesth-ethics of thought" that calls for an ethics of both sense-making and sensing in the making. It follows that the "matterphor[46]" (Barad & Gandorfer, 2021) of mending allows me to blend personal history, familial dynamics, and ancestral roles into a cohesive narrative that reflects the journey of healing. The mending, as sense-making, enriches my theory of knowledge-making and learning through keeping the mind and hands busy with choosing plastic litter items, scrap material, creating the design for the hydro-rug and stitching. Alongside keeping the mind and hands busy the heart is also at play through sharing stories and giving voice to forgotten narratives and silenced experiences. Just as my *strandlooping* steps become the thread that stitches together past and present, the Mother Hydro-rug emerges as a tangible rendition of co-created knowledge (Martin, forthcoming b). The Mother Hydro-rug practically documents and embodies the unity of stories shared during beach cleanups, woven into the fabric of the coastline's history. The needle is not just a tool; it embodies my presence and movement, bridging the gap between individuals, communities, and the environment and ultimately social and environmental injustices.

Creating the space for the Mother Hydro-rug to be a means of communicating environmental concerns in this nuanced way of hydro-rugging and public story-doing (Rodricks, 2024) not only as a discipline of crisis, but also of care, is an important contribution to the growing interventionist approach to environmental communication (Puzello 2022, Ettinger et al. 2023; Okoliko, 2024; Puzello, 2024). It teaches me that knowledge-making isn't solely about uncovering new information and formulating theories that can be applied broadly, but also about

[45] My skin is Brown and I include myself in 'we' when I refer to Black and Brown bodies.

[46] "Matterphor" is used by Barad and Ayub (2021, p.14) by explaining that "the concept 'metaphor' is the trope of meaning transfer and substitution by means of analogy, *matter- phor* denotes the articulation of meaning in relation to matter, understood not as fixed entity, but as constantly shifting (*-phoric*) and thereby establishing entanglements and relationalities."

restoring and revitalising what's been overlooked and silenced. Nnaemeka (2005) back-stitches[47] this point by reiterating that in feminist scholarship as we charge ourselves to listen to silences, to the silences imposed by theory we must interrogate the history/histories of theory/theoretical frameworks, and in so doing bring to the fore the performance of the doing as implicated in their formulation. The Mother Hydro-rug extends and expands our capacities for communication, to not only be held in language, the rug offers tactile communication, which allows stories to be held indirectly, and carefully. The rug is a fusion of heart and matter, where consciousness and substance converge.

4.4. Hydro-rugging as heart(h) labour

The hydro-rugging practice allows us "to get under our skin" and invites us to be emotional. Sara Ahmed explains that emotions reveal so much to us about time; "emotions are the very 'flesh' of time" (Ahmed, 2004, 202). She conveys how emotions show us how histories stay alive, even when they are not consciously remembered; how histories of colonialism, slavery, and violence shape lives and worlds in the present. The hydro-rugging facilitates the opening up of these emotions and provides the opportunity for emotions to expose not only the past but also to drip into the futures, in the ways they involve different orientations to others (Ahmed, 2004). Understanding this emotional labour is what I build on to create what I have named hearth labour. I recently visited Klasies cave, where I uncovered a 100,000-year-old hearth from the Middle Stone Ages. It revealed shells, bones, and lithics in the Salty Black Soil layer, representing moments when early humans gathered to cook, connect, and share stories (Van Wijk et al., 2019). I am attempting to reenact the conviviality of that time as we gather to hydro-rug as hearth labour. Archeologists can only refer to a hearth as a 'combustion feature' when they write about it because of the emotional and anthropomorphic associations with the word hearth. I do not wish to romanticise hearth labour though, it can be exhausting to care because as Pezullo (2023) explains care works lands on us differently due to age, citizenship, race, class, gender, health and more. This will be further revealed by the stories that I share below, with ethical clearance and consent from all the participants.

[47] A stitch sewn one stitch length backward on the front side and two stitch lengths forward on the reverse side to form a solid line of stitching on both sides.

We conducted the hydro-rugging work discussed in this paper at Elephant in the Zoom (EITZ) and ZERO gallery on Burg street, in the heart of Camissa. The gallery is located just two blocks away from parliament and Greenmarket Square, formerly a site of political protests during apartheid. Originally a hub for slave trade and water collection, the square now serves as a trading market (Worden et al., 1998). Positioned amidst this rich history, the gallery boasts ground floor property with expansive glass windows, allowing the city's vibrant past and present to merge with the gallery space. This prime location hosted the exhibition 'Our Ocean is Sacred, you can't mine heaven[48],' inviting Waves for Change coaches to engage in our hydro-rugging inquiry.

One of the primary objectives was to transform the gallery space from a static exhibition venue into a dynamic and interactive learning environment, fostering transgressive learning experiences (Lotz-Sisitka et al., 2015). Embracing this ethos, I utilised the gallery as a vibrant convivial classroom setting to deepen engagement with the Mother Hydro-rug as seen in Figure 2.

[48] The Exhibition can be seen here: https://my.matterport.com/show/?m=oSfnkYPp6as

Figure 4.3. Aaniyah and the Waves for Change coaches at the EITZ ZERO gallery

Ettinger et al. (2023) introduce climate dialogues using the Teachable Moments Communication Process for climate change events. They propose a framework to foster knowledge-sharing and trust among communities affected by extreme weather, moving beyond traditional scientific explanations. Similarly, inspired by James and McGarry's concept of "ocean fluencies" (forthcoming), my aim was to expand ocean literacy into socio-cultural realms. Dialogue-based strategies for public engagement, though less explored, align with a pluriversal approach, promoting inclusive and diverse perspectives. Creating an inclusive gallery space is crucial for justice and equality, challenging apartheid's legacy. This legacy restricted access and educational opportunities for Black and Brown individuals, hindering their socio-economic progress. Using the gallery as a platform, I collaborated with learners and community members to develop educational methodologies (Martin et al., 2023b).

I invited three Waves for Change coach groups, each comprising roughly eight to 15 coaches, to join the gallery for hydro-rugging events. The event, as explained by Massumi (2015) and Bozalek & Taylor (2022), creates an emergent ecology, transcending human activity alone. It embodies a relational ontology where entities come into being through relationships (Barad, 2007), fostering potential openings and creativity. This means that we cannot know in advance what an event can do, because we cannot predict how the bodies within the event will respond.These coaches, trained in surf therapy, merge surfing's health benefits with relationship-building and emotional awareness activities. They speak local languages like English, Afrikaaps[49], and Xhosa, facilitating sharing during hydro-rugging. I prompted them to share their first ocean memory or imagine what the ocean might say to them.

Engaging in dialogue and responding to these prompts, the subsequent section of the paper will delve deeper into how hydro-rugging facilitates healing and weaving together more equitable and compassionate ways of existence following racialised violence and 'ecological apartheid' (McGarry, 2013). Establishing the framework for the Mother Hydro-rug to act as a conduit for expressing environmental and social justice concerns, through the intricate practice of hydro-rugging and public story-doing (Rodricks, 2024) serves not only as a response to crisis but also as an act of care.

4.5. Hydro-rugging with matters of the heart(h)

The Mother Hydro-rug does not only point to colonialism, slavery and violence, it offers a waterway that glides within a body politic, opposing the mind/body, nature/culture and natural/unnatural binaries as a way to refuse the bodies' separation (and the hauntings entrained therein) from the ecological world. Wide-ranging, non-binary, open and inclusive modes of research cultivate arts of attentiveness - breaking free from 'ecological apartheid' (McGarry, 2013; Rose, 2022). Even though the hearth is dry, as opposed to the teary, watery and wet stories

[49] Kaaps or Afrikaaps is a language created in settler colonial South Africa, during the 1500s. It took shape as a language during encounters between indigenous African (Khoi and San), South-East Asian, Dutch, Portuguese and English people.

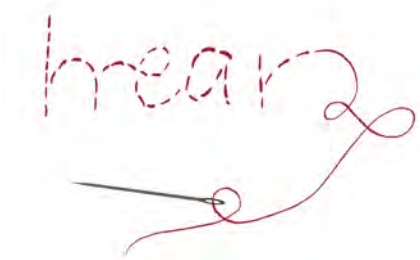
that the hydro-rugging practice reveals, it is this very dry/wet binary that brings the hearth and the Mother Hydro-rug into conversation by creating space for story-doing (Rodricks, 2024).

Ahmed (2004) explains that it takes time to know what we can do with emotions and the hydro-rugging practice is a means of trying to address this.

> The objects of emotions slide and stick and they join the intimate histories of bodies, with the public domain of justice and injustice. Justice is not simply a feeling. And feelings are not always just. But justice involves feelings, which move us across the surfaces of the world, creating ripples in the intimate contours of our lives. Where we go, with these feelings, remains an open question (Ahmed, 2004, 202).

This section shares stories from Waves for Change coaches and their connection to the marine environment. I cluster these stories into three components: 'hear', 'heart', and 'hearth', depicted by needle and thread drawings by Dylan McGarry. Imagine these components as hydro-rugs, merging into the Mother Hydro-rug along with other collected stories. Nnaemeka (2005, 53) likens silence to a quilt, where separate patches reveal interconnected geographies and histories, suggesting the potential for harmony amid contradictions. Drawing on this quilt figuration, the hydro-rugging themes may stand alone yet weave together, resonating and influencing each other.

I begin with the stories shared and then diffract this through theory. Writing in this order is done intentionally so as to surface the mutual imbrication of practice and theory. Although I lead the events and processes, I am learning as much from the coaches as the coaches are learning from me. This is supported by Lenz-Taguchi (2010, 6) who explains that seeking to go "beyond the theory/practice divide will offer multiple possibilities of understanding and knowing".



"For me there's a lot of memories but there is one good memory that I want to share. It was a Sunday after filling my belly with lunch, we went for dessert, for some ice cream. There was a nice vibe on the beach[50], people were playing soccer, some guys were even working out. But as I was licking my ice cream on the sand the ocean looked beautiful, it was clear, definitely not blue, but it had a bit of clearness in it and I was with my dad. I think that was maybe the first and last, if I'm not mistaken, time that I spent a day with him at the beach… but he asked me if I wanted to feel the water. But I shared with him that I was scared and he said he was a lifeguard and that I shouldn't be scared; You know I am a lifeguard, he said – like dads are they put a bit of pressure on you but I went - I could swim but the movement of ocean is a bit different to what you feel in a swimming pool. I thought my first experience was going to be drowning, but when I made my feet wet and walked in slowly with him, I experienced something that I long for now. The first time I actually felt safe with my dad. And some of the guys here know - I don't have that relationship with my dad anymore. So that memory is one of my best memories because it is one of the few times I got to spend it with him. It is how I got into water, into being an athlete, because of that day, knowing and feeling safe with him and that he would protect me. It's one of the main reasons why I work where I work today and try and not work in the office."

Hearth labour is experienced when one of the coaches shares the memory above with us that describes how he will never forget or be able to experience this again because he is estranged from his father now[51]. Muthien (2021) explains that the idea of the cells outside of the brain storing memories and energies is not new to Indigenous peoples. The ocean and the beach, as a

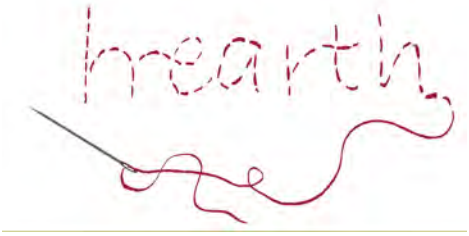
[50] Eastern beach in the Eastern Cape - his favourite beach.
[51] If you would like to listen to this story shared by the coach, you can find it by clicking this link https://soundcloud.com/info-the-beach-co-op/african

place where this memory was made, becomes significant for the coach. The dialogical elements of the hydro-rug are significant, as they provide an embodied, convivial social space for story-doing (Rodricks, 2024), that is warm, inviting and not laden with pretense, or moral imperatives. Rather, it is an open-ended, playful and discerning space of making, mending, stitching, long periods of silence and contemplation, and then spurts of stories and conversations - much like ocean swells. This is significant as it allows for several iterative and continuous approaches to coping with and responding to the very overwhelming aspects of ecological degradation and social justice; which is so often responded to with positivist solution-oriented frameworks and narratives that have clearly failed effective climate change responses in so many ways (Tsing, 2015; Tsing et al., 2017; Akomolafe & Ladha 2017).

Joseph Beuys (Beuys, 2007), the renowned German artist, introduced social sculpture, transcending traditional materials to engage with the 'invisible materials' between humans and more-than-human entanglements. Social sculpture treats society as a malleable artwork, inviting active participation in shaping the environment and collective identity. Beuys envisioned social phenomena warmed up from a cold, static state into a dynamic, pliable form. However, he also acknowledged ashfall or fallout, such as nuclear waste and plastic litter, as artefacts of colonialism, capitalism, and the industrial revolution, unable to easily decompose or integrate into ecosystems. Pollution, notably plastic pollution, embodies colonial fallout (Liboiron, 2021), manifesting as cold, grotesque objects along coastlines. These objects become the focus of communion during hydro-rugging, as efforts are made to 'warm them up'. Re-threading Beuys' story, the plastic the coach stitches, though a colonial artefact, evoked memories of his father. The hydro-rug he crafts resurfaces epidermal layers, rekindling his bond with his father, despite their estrangement.

" *If the ocean could speak - whenever I go to the beach I go and meditate. It says listen to your intuition and believe in yourself more. Because that's where it begins - it begins with you - if you believe in yourself then you can conquer anything, every contortion can help. I have learnt to hang onto this - to grip onto this. I was saying to Jamie - whenever I feel like this shoe - unwanted - I go to the ocean and think about things on a deeper level. Whenever I think I'm this shoe - I go to the ocean and regulate myself - to build my confidence, self-esteem and to believe in myself. No one can be there for yourself but you - be kind to yourself and believe in yourself."*

This coach related how she resonated with a washed-up shoe sole, illustrating the significance of materiality. The hydro-rug fosters dialogue across relational ontology, African feminism, critical pedagogy, and ecological ethics. The connective aesthetics of hydro-rugging, drawing from Gablik (1992), embody Karen Barad's relational ontology, emphasising matter's emergence through relationships (Barad & Gandorfer, 2021). Each stitch and act of engagement with plastic fallout carries nuanced narratives, intertwining personal, emotional, political, and cultural elements. Barad's concept challenges traditional observer-observed divisions, recognising matter's agency and participation in meaning-making and communication. This aligns with African concepts like *ubuntu* and *ulwandle*. *Ubuntu* "I am because you are" falls within the same noun class as words for the Ocean, *ulwandle* "we are because the ocean is". Karen Barad's (Barad & Gandorfer, 2021) concept of "spacetimematterings" and relational ontology, underscores the idea that matter is not static but emerges through entangled relationships. As such, this invites us to move beyond the notion of creating something entirely new and instead to engage in the creative practice of reconfiguring matter together to make it matter. This is the intention of the hydro-rugging practice, and was experienced by this coach, and myself as researcher, sharing how the sole of a shoe she chose to stitch with reminded her of her self worth. This story reshaped my perception of plastic, revealing its profound role in our material relations. It dismantles the natural/unnatural binary and challenges assumptions about plastic pollution. In South Africa, historical injustices and limited access to coastal areas shape attitudes towards water, highlighting systemic inequalities and the need for inclusive environmental stewardship.



"I was very little - six or seven years old and my grandfather was a fisherman who worked in Kalk Bay and then we went out fishing and waited for him to come back. I was afraid and scared and he offered for me to come onto the boat. I looked down and I felt so afraid. He distracted me with the fish on the boat. He then asked me to go out fishing with him and then I fell in love with the ocean. I want to be in and on the ocean - I actually wish I can travel the world one day on the ocean with no boundaries. My parents also spent time there (Kalk bay) when they were younger - for New Year - it has a history for people like us."

During apartheid, Kalk Bay beach and tidal pool served as one of the few accessible spots for Black and Brown people due to its proximity to the train line (Martin, 2023a). The delicate twisting of threads between ecological systems and social justice issues was experienced whilst we were drifting with memories and hydro-rugging. Indigenous peoples of the old colonial Cape colony faced brutal colonial encounters (Bam & Muthien, 2021, p. 4), shaping our haunted ontologies, as Derrida's concept of hauntology illuminates. Creative reshaping of matter emerges as a powerful tool for healing and transformation, particularly when confronting past pain and trauma tied to place and identity. The coach's story of fear overcome by fishing with his grandfather speaks to the "creolised waters" of Camissa (Hofmeyr, 2022), highlighting the significance of social sculpture in addressing our haunted selves and connection to place (Derrida, 1994a&b). Hydro-rugging carves out a hearth space, fostering connections like the coach's bond with Kalk Bay beach. This relationship with the ocean and family was reserved for the festive season only, Christmas and New Year, when most working class people have the time to enjoy the beaches that were designated for them. Drawing from Nnaemeka (2005) and Beuys (2007), art-making becomes a means of touching invisible materials, echoing Barad's notion of reality shaped by entangled relationships between ecological systems and social justice.

I have recounted three hydro-rugging narratives from Waves for Change coaches to illustrate how hydro-rugging conviviality nurtures and influences emotional connections among individuals and with oceanic environments. Across the paper, hydro-rugging is depicted as a series of "matterphors," encompassing various dimensions of restorative connections through hearth labour, enacting ocean fluencies, as a mending practice that creates epidermal layers and threads together quilts of care. These "matterphors" illustrate how hydro-rugging transcends its materiality to become a transformative practice and is summarised in the following paragraphs.

The stories shared whilst hydro-rugging creates a heart(h) space for participants to engage deeply, and meaningfully with the ocean's invisible histories and relationships along the False Bay coastline. The Mother Hydro-rug emerges as a tangible artifact of congealing agency, weaving together diverse narratives and histories of the ocean, past, present, and future (Gell, 1998; Newfield and Bozalek, 2018; Shefer, 2021; Martin, 2023b). Through hydro-rugging, participants broaden their understanding of citations within a (post)colonial context, where knowledge exists within oral traditions or fractured into obscured clues through story-doing (Rodricks, 2024) that threads together quilts of care. This radical opening of the heart(h)fosters inclusivity, particularly amplifying and consolidating Black and Brown voices marginalised by colonisation and apartheid laws.

From an environmental communication perspective, hydro-rugging re-presents facts through the aliveness of shared stories, transcending traditional modes of communication. In Pezzullo's (2024) opening letter for the special issue on Environmental Communication as a Care Discipline she embraces the notion of "pluriversal politics" advocated by Arturo Escobar (2020) and states that environmental communication underscores the importance of resisting monocultural narratives. While grounded in empirical reality, Pezzullo (2024) reiterates that we cannot allow past and present instances of environmental degradation and social injustice to constrain our ability to craft narratives that envision a more viable future. The Mother Hydro-rug allows for memories shared alongside tactile activities to become a form of communication that simultaneously opens perceptions and fosters attunement (Ahmed, 2004). As a mending practice, hydro-rugging engages with justice by addressing temporal convergences, confronting the past and how it is pinned in the present, and how this matters in the future. By refusing binary distinctions and embracing non-binary modes of research, hydro-rugging challenges

(post)colonial mapping erasures and creates space for new understandings of connectivity (Rose, 2022; Milstein et al., 2023).

The hydro-rugging practice challenges the reified two dimensional mapping practice, allowing for hauntings to live in the rug through the epidermal layerings of individual hydro-rugs that counter colonial mapping erasures (Na'puti, 2019). The act of reconfiguring matter through the social sculpture process of hydro-rugging allows the practice to be a verb and a noun. Hydro-rugging has provided me with the means to reshape relationships, infuse meaning into materials, and find a common language that transcends the boundaries of time and space, that gets to the heart(h) of what matters. Black and Brown situated bodies matter and their relationship, albeit fractured, damaged and erased from the ocean and environment, can be acknowledged through the hydro-rugging practice which additionally offers a place for healing and restoration. As we stitch, mend and sculpt matter, visible and otherwise into matterings, we discover that the practice of making matter is an act of making it matter that becomes not only a re-configuring of our hauntologies, but perhaps a transfiguration, i.e. allowing the soul to show up, as Injairu Kulundu (2020) explains. It becomes a matter of the heart(h).

The Mother Hydro-rug serves as a conduit for multi-species research and oceanic fluencies, facilitating encounters and conversations with the world in continuously becoming, and becoming is always becoming-with (Haraway, 2016; van Dooren et al., 2016; Bird-Rose, 2002). Rather than merely an art object, the Mother Hydro-rug embodies a creative practice for meaning-making and theorising relationality. The practice of hydro-rugging and the conversations and stories it conjures questions whether the Mother Hydro-rug as an object and practice can be separated. From my experience with leading this practice as a responsible participant, I believe that the Mother Hydro-rug as object/practice is entangled as opposed to the western narrative that creates the subject/object divide so present in scientific epistemes. Rather the hydro-rugging practice goes beyond this binary and hyper-separation – that which is one side of the binary can have nothing in common with the other side (Milstein et al., 2023; Rose, 2022) – and in so doing it creates space at the heart(h) for new understandings of connectivity and what Anna Tsing refers to as a new science with its key characteristic being multispecies love (Tsing, 2010).

In summary, hydro-rugging transcends its material form to become a transformative practice that reconfigures hauntologies and opens space for new understandings of connectivity and relationality, ultimately fostering healing and restoration in the wake of racialised violence and ecological apartheid.

4.6. Weaving and re-membering as an iterative practice

The paper explores hydro-rugging as a transformative practice that goes beyond its materiality, depicted through "matterphors" that illustrate its restorative connections. Hydro-rugging with humans, specifically Black and Brown bodies, and the sense-make with (Barad & Gandorfer, 2021) more-than-human entities produces storying that wrestles with inequality and decenters the human narrative to include marginalised voices of the human and more-than-human kind.

Hydro-rugging serves as a care cartography[52], a form of mapping the coastline with bodies and skins, with the materials washed ashore, and with the invisible materials of memories, affects and traumas that beach themselves, and permeate the rug. This paper reveals how issues of social and ecological justice in South Africa are entwined, through the hydro-rugging practice, as a mending practice threading together quilts or individual hydro-rugs of care. Mending becomes a powerful transformation, turning unbelonging into strength, discord into harmony, and fragmentation into unity. It underlines the value of acknowledging, preserving, and mending the stories that contribute to a richer, interconnected tapestry of understanding. From an environmental communication perspective, hydro-rugging breathes life into the liveliness of shared stories and dialogue, transcending conventional modes of communication.

The Mother Hydro-rug serves as a conduit for multi-species research, embodying a creative practice for meaning-making and theorising relationality. Ultimately, hydro-rugging fosters

[52] In this context, cartography—traditionally understood as the art and science of map-making—can be reinterpreted as a means of representing and understanding the intricate relationships within this network. Rather than simply depicting geographical features from a human perspective, cartography in critical posthumanism can highlight the interconnectedness of various actors, both human and non-human, and how they influence each other (Haraway, 2016)

healing and restoration in the aftermath of racialised violence and ecological apartheid, transcending its material form to create new understandings of connectivity and relationality.

5. Chapter Five: Meandering as learning: Co-creating care with Camissa Oceans in higher education

Figure 5.1. The circular hand stitched image is of a snail with the red letter being a music note

5.1. Headwater[53]/Abstract

This paper meanders with students from the Centre for Creative Education to understand care and our relationship with Camissa[54]. The authors explore Slow scholarship and research-creation frameworks that disrupt practices which remain entrenched in colonial, anthropocentric and patriarchal systems. Apartheid is felt by Black and Brown[55] bodies through exclusions from the ocean and other spaces. This paper explores how enquiries and innovations open spaces for lost care practices to be re-membered.

5.2. Tributary[56]/Introduction

[53] The headwaters form the source of a river. Throughout this paper we reference the hydrological cycle and a river more specifically as a figure for learning and teaching in Higher Education. That is to say that the river flows from the headwaters to the ocean but the course may be disrupted along the way by human and more-than-human factors and the end destination is not necessarily the ocean. The hydrocommons are our natural water bodies – ocean, rivers and wetlands – which form part of the hydrological cycle and are in a continuous relationship with the atmosphere. Broadly speaking, the concept of the commons refers to any creations of nature or culture that we inherit jointly or freely; and furthermore, a common implies not only common use of a resource, but also common responsibility (Neimanis, 2009).

[54] Camissa, meaning 'place of sweet waters', was the KhoiKhoi people's name for Cape Town. The city once had seven rivers, including the Camissa River, and 36 springs, all of which were channelled underground and drained out to the sea as the city expanded.

[55] We use the words Brown and Black bodies to distinguish them from Black Indigenous People of Colour because of the North American framing and how it has been imposed in a South African context. Biko's ideas of Black consciousness are more suitable and fitting for this work because we are situated in an African context. However, in the South African context specifically, we want to specify and name both Black and Brown bodies because Apartheid laws separated them purposefully and there are racial divides that exist amongst these groups today. This is significant as the majority of the students and authors are Brown.

[56] Throughout this paper the headings refer to phases of the hydrological cycle replacing traditional headings such as Abstract (Headwaters), Introduction (Tributary), Enquiries (Confluence), Discussion (Delta), and Conclusion (Ebb and Flow). The end goal is not necessarily the ocean for this river, because the river is part of the bigger hydrological cycle which is continuously in motion and this is a figure for the continuous learning with the authors as 'teachers' and the students as 'learners' and how they always learn with each other.

Fourth year Bachelor of Education Foundation Phase students from the Centre for Creative Education (CCE), meander alongside the authors[57] as we learn from each other and co-become with the process of this watery body of work that refreshingly re-connects to the ocean and re-membering our ancestry. Before we, the authors, begin at the tributary of this meandering river of collaborative meaning-making, we need to explain how and why we have written the paper the way we have. This will allow you, as the reader, to meander with us as we find our way with the students and the more-than-human entities we are entangled with, and as we reconfigure conventional scholarly practices in learning and teaching in Higher Education (HE). We use the figuration of a river and the hydrological cycle to describe how we work with the students and are led by what emerges from the events we as authors co-create with them.

The authors draw upon the concepts of Slow[58] scholarship and embodied/convivial/generative research enquiries, such as painting, foraging, cooking, singing, and mending, as an entanglement of environmental and social justice. These embodied enquiries open space through which stories and experiences from the past that have been erased and forgotten can be revealed and brought to the surface. The binary of theory and practice is challenged and the paper intentionally begins with the practice and theory follows after to make the point that 'practice is in fact continuously and already doing and enacting educational theories.' (Lenz Taguchi, 2010: x). Additionally, footnotes are deliberately used as an act to draw the reader into the bottom of the river, the forgotten or erased space, by explaining more of the theory in the footnotes rather than in the main body of the paper where the focus is on the practice. The reader should also note how the authors use footnotes for Figures 1 and 2 to describe what the reader may not be seeing in the Figure. The footnote for each figure is a deliberate act because there are so many more stories or explanations for this figure than what is revealed here; the figure becomes an act of non-representation (Vannini, 2015). The paper is written in the present tense as a staying with

[57] We deliberately introduce the authors later in this paper because we are disrupting the teacher/learner binary that exists in traditional learning and teaching environments. The authors (as teachers) and learners are learning from each other.

[58] Slow scholarship sits within feminist new materialism and posthumanism and is based on ideas of process philosophers such Whitehead (1947). It is a proposal for alternative modes of doing academia and pedagogy in response to the current modus operandi of outcomes, managerialism and corporatisation of these spheres of life (Bozalek, 2021).

present time and a re-minding that the past is present in 'now' time, especially given our post-apartheid context, as well as the ghosts of the Bantu Education[59] Act 1953 that haunts us today (Motala & Bozalek, 2022).

There were many motivations that informed the development of this module in a way that undo assumptions employed in HE that focus on learning to teach. In South Africa, many young education graduates are confronted with diverse socio-economic realities in schools. This means that education students should be supported and equipped with understanding their own journeys within the South African schooling system to become more attuned to the children in the classrooms. As authors we work to trouble the positioning of social and natural science, art, and literacy as separate, foregrounding relational[60] approaches to understanding water and how we care for our environment.

[59] The education was aimed at training Black and Brown children for manual labour and menial jobs that the government deemed suitable for those of their race. It was explicitly intended to inculcate the idea that Black and Brown people were to accept being subservient to white South Africans (Bauer, 2018).

[60] Relational approaches acknowledge posthumanist ontologies of already being connected, implicated and response-able. The role that materials and place plays is significant to how we relate to each other and our understanding of each other. These become clear in the events described later in the paper.

Figure 5.2. A drawing of an *Alikreukel*[61] mollusc or snail found on our False Bay coastline as a figuration for the Slow scholarship enquiry

The snail shell shape in Figure 1 drawn by Dr Dylan McGarry[62] denotes the non-linear way in which the enquiries continue to engage (in spiralling circles of iteration) with the students and the authors beyond the chronological Higher Education timetable. Furthermore, it is a reference to slowness and Slow scholarship explained later in this paper. The blue treble clef music note is reminiscent of a meandering river and the importance of singing which emerges in the paper. These framings of care, response-ability (McGarry, 2013; Bozalek & Zembylas, 2017) and Slow pedagogies are woven into our accounts of practice, in the same way that the water flows in the river and finds its way to the ocean (which is not the end of the hydrological cycle), and is constantly changing shape and being affected by human and more-than-human entities.
There were three intra-active[63] events, namely painting, foraging and hydro-rugging, hosted by the authors as *response-able* participants with the students. The event in this case, is based on a relational ontology that holds that entities and individuals or their attributes do not pre-exist or are not prior to relationships but come into being through relationships (Manning, 2016). The event is seen as the primary unit of the real, making itself felt somehow in the immediacy of the moment and that creates an emergent ecology, 'a something doing' (Massumi, 2015: 152), which is not limited to human doing (Bozalek & Taylor, 2022: 66). This means that we cannot know in advance what an event can do, because we cannot predict how the bodies within the event will respond. The event is a worlding of which we (the authors and students) are part, and that takes us along with it and co-composes and creates conditions for potential openings and creativity (Bozalek & Taylor, 2022; Manning 2016). *Response-ability* refers to the ability or capacity to

[61] Aaniyah has since learnt from her friend Traci Kwaai who is engaged with the Kalk Bay fishing community (where the latter grew up) that it is also called a "gup". Reminder: The footnote for each figure in this paper is a deliberate act because there are so many more stories or explanations for this figure than what it reveals here.

[62] Dr Dylan McGarry is Aaniyah's co-supervisor (doula) for her doctoral research who describes himself as a scholar activist-pracademic multimedia artist.

[63] Barad (2007) constructed the neologism intra-action to indicate its difference from interaction. Interaction assumes the prior existence of determinately bounded and propertied entities, which come into contact with each other. Intra-action indicates ontological inseparability of phenomena where relata exist as a result of relations—'relata-within-phenomena emerge through specific intra-actions' (Barad, 2007: 140).

respond and listen (Barad, 2007; McGarry, 2013; Bozalek & Zembylas, 2017). Response-ability is elaborated upon later in the paper and put to work in the events with the students.

The painting event introduced the students to how our human earthly survival is dependent on the health of our oceans and other species – every second breath we take comes from healthy oceans (Tsing, 2015; Terranova, 2016; World Economic Forum, 2019). The event takes us through a deep dive using breath to reiterate how healthy oceans ensure that we are able to survive. Together with our breath we inhale and exhale with painting rhythmic strokes of blue to penetrate our subconscious and think with water. We beckon images and figures that evoke feelings of the ocean for us and our connection with it. Breathing is one of the organic processes that we can control or moderate through slowing down the breath. It is an involuntary process; however, breathing is connected to the force of life within each of us. Related to ideas of drowning and survival, the breathing exercise is a meditative staying with the breath and its meaning for human survival. The awareness that healthy oceans enable our ongoing survival is the focus of the practice and is an embodied experiential pedagogy. These 'Watery letters to our subconscious' are the artefacts of this event and were exhibited at the Elephant in the Zoom (EITZ) Zero gallery, in Camissa, as part of a wider exhibition and radical anarchiving[64] project entitled: "Our Ocean is Sacred, you Can't Mine Heaven".

Meandering as tributaries do, we continue the watery journey immersing ourselves in the ocean and harvesting kelp at Cape Point Nature Reserve[65]. Our bodies move with whales cruising

[64] An anarchive's supplemental, excessive nature means that it is never contained in any particular archive or documentation element contained in an archive. It is never contained in an object. The anarchive is made of the formative movements going into and coming out of the archive, for which the objects contained in the archive serve as springboards (*The 3ecologies Project,* no date).

[65] The first written records or knowledge of Cape Point can be traced to the European search for a sea route to the East, instigated by Prince Henry the Navigator. Portuguese explorer Bartolomeu Dias was the first to round the Cape Peninsula in 1488. A decade later, Vasco da Gama navigated the same route and sailed down the coast of Africa, successfully opening a new trading route for Europe with India and the Far East. None of these accounts consider the Indigenous people and their presence before colonisation. Nor do these accounts acknowledge how the Point was demarcated and only certain areas were accessible for Brown and Black bodies during Apartheid law. Prior to 1994, most of the students' forebears would not have been able to access this particular beach where we sang, cleaned and immersed ourselves in the sea (Cape Point, no date).

nearby, gulley sharks darting along the shoreline catching unbroken waves, baboons foraging on the beach with ostriches roaming alongside them, and eland and bontebok grazing on the dunes above us. We meander along the beach with the species of the reserve and collect discarded human materials. The materials we gather are for a collaborative social process and a tactile map: entitled the "hydro-rug" mending event. The question – *If the ocean could say something to you, what would it say?* – loops[66] thoughts through listening, stitching, mending, and responding. The hydro-rug absorbs the relations with the ocean, ways of knowing and memories and is a collaborative art-making and research-creation event that becomes a connective aesthetic map. Red thread joins the pieces as a figurative[67] gesture that tells the story that the "sea is in our blood[68]" and it serves to re-member and mend fragmented and violent dismembered histories. Convivial practices such as singing, dancing, and making kelp lasagne with Roushanna Gray at the Veld & Sea[69] glasshouse was a luxurious treat infused with the flavours of a ceremonial ritual. We share stories of conservation and reciprocity[70] and in which ways that relates to care.

[66] Martin (forthcoming a) refers to strand-looping. "I have hyphenated the word here specifically to emphasise the looping component of the word, which means walking in Afrikaans but here I also want to lean into the English word looping which for me links to re-mapping, re-turning and re-membering the hydrological cycle."

[67] For Rosi Braidotti, figurations are conceptual beings which do not define the human condition, instead they offer an indeterminate, complex, and ongoing process of subject formation (2019: 36).

[68] A phrase echoed by fishers brought to the Cape as slaves from the East in the 1600s which restorative storyteller Traci Kwaai has amplified through her work with the Fisherchild Projekt.

[69] Roushanna Gray is a wild food innovator and avid forager who teaches adults and children alike about indigenous edible food. Roushanna is the Founder of Veld and Sea.

[70] Simpson (2017) states that our nationhood is based on the idea that the earth gives and sustains life, that 'natural resources' are not natural resources at all, but gifts from Aki, the land. 'Our nationhood is based on the foundational concept that we should give up what we can to support the integrity of our homelands for the coming generations. We should give more than we take' (Simpson, 2017:8).

5.3. Confluence[71]/Enquiries

The Tributary/Introduction above briefly introduces the events with the students and this section of the paper will focus on the painting and hydro-rugging events only as a means to re-conceptualise scholarship in HE in South Africa and particularly in a post-apartheid context. The design of the students' course, context, research enquiries, techniques, students, and authors converge in this section of the paper as tributaries confluence into a wider stream. We follow on by explaining how Slow scholarship, research-creation and response-able pedagogies, the theoretical influences of our enquiries, located more broadly in feminist new materialism, inform the process and understandings of learning collaboratively in HE in South Africa. Finally, we discuss how co-learning allows and opens opportunities for learning and teaching that is more inclusive in HE. Worth noting is the fluid way in which developing and creating the points of enquiry were devised - in much the same way as this paper has been presented. This research was led by the authors' embodied experiences rather than by discursive theory alone. Although the authors led the events and processes, they were learning as much from the learners as the learners were learning from the authors. This is supported by Lenz-Taguchi who attests to learning being understood in terms of different matter, both the human and more-than-human making themselves intelligible to each other and seeking to go 'beyond the theory/practice divide will offer multiple possibilities of understanding and knowing' (2010: 6).

As authors of this paper, we come to this research from different tributaries of life experiences and it is this confluence of knowing, being and creative pedagogies that meander through enquiries with the students. Joanne is the Head of Academics at CCE, PhD researcher and has been working in HE and public-school spaces in South Africa. Theresa is a postqualitative researcher of settler origin whose Slow art practice and experience in art education merges with her commitment to 'communities of enquiry' as response-able (posthuman) pedagogical practices. Aaniyah is an intersectional environmentalist who has worked in marine conservation for 19 years and is currently a doctoral student in Education at Rhodes University. These

[71] The point where two or more rivers converge, forming another water-course or river. This section unpacks the methods of enquiry as Peers contests in her chapter 'Re-searching research' and how students are instructed 'theory first, methods after, analysis later' (2023: 94). In this paper we describe the methods first and then the theory to make the point that 'practice is in fact continuous and already doing and enacting educational theories.' (Lenz-Taguchi, 2010, x).

research interests drew Aaniyah into the CCE because of her relationship with Joanne as fellow doctoral student and the opportunity to work with students.

Figure 5.3. The fourth year students with Joanne, fellow lecturer Carole Scott and Aaniyah at the EITZ Zero Gallery[72]

[72] Not captured in the picture but what stands out for the authors is the conversation and re-membering of slave history and ancestry that was revealed through engaging with the Life Jackets soft sculpture exhibit by Cleo Droomer with one of the students. “It still lives within me, my great, great, great Grandparents arrived in Durban on a ship from India and were part of the first slaves working on the sugar cane farms in Durban. Today my granny has to carry water to her home because of the water shortages they are experiencing in Durban.” She expresses how the water theme, being transported as slaves and now carrying water, are all entangled within her being; she feels hot and emotional as she shares this with us.

The hydro-rug, which the students flow into and create with waste materials, forms part of Aaniyah's doctoral project and was part of the exhibit at the EITZ Zero gallery (Figure 2)[73]. Another part of Aaniyah's doctoral project is *strandlooping*[74] along the False Bay coastline from Cape Point Nature Reserve to Hangklip and engaging in citizen-led public storytelling around invisible histories and relationships local South Africans have with the ocean. Inviting the students to the gallery space was yet another means for them to feel that their stories matter and that they belong. We wanted to disrupt the notion of exclusivity and privatisation[75], and both Joanne and Aaniyah use the gallery space as a place to affirm, build and co-create education pedagogies with learners and citizens. This sense of belonging is fostered by bell hooks (2009) in her book entitled *belonging: a culture of place*; the gallery becomes the place for the students to experience a sense of belonging and community and to build onto the work we would do together which focuses on re-connection and care for and with the ocean, and re-membering[76] their ancestry.

The students feel deeply connected to Cleo Droomer's art piece entitled *(Life) Jacket*s (Droomer & Beaton, 2023). These soft sculptures were created to honour his ancestors who were brought to the Cape as slaves in the 1600s. The cloth used in the life jackets are originally from his grandparents' clothing. This sculpture resonated with the students, as they identified powerfully

[73] This Public Storytelling Project and radical an-archive, led by Dr. Dylan McGarry and Dr. Boudina McConnachie, collaboratively uncovers sacred ocean cultures through art, some of which was used as evidence in court interdicts in 2022 alongside fishers' testimonies. This exhibition expands ocean literacies beyond science into socio-cultural discourse and emphasises the transformative potential of tangible artworks in reshaping evidence hierarchies within judicial processes, thus constituting a living library of meaningful evidence for ocean decision making.

[74] Translated from Afrikaans as beach walking.

[75] Certain spaces and places in South Africa still carry the stigma of the Group Areas Act of 1950 which legally forbid Brown and Black people from being in certain places because of their colour. Gallery spaces were and continue to carry this stigma in our post-apartheid era.

[76] This follows the thread that comes from Karen Barad's explanation of the difference between returning and re-turning through the metaphors of reflection and diffraction. Returning is associated with reflection and re-turning is about diffracting (Barad, 2014: 184-185). The latter involves always already being entangled with/in a world that is not at a distance. Re-membering is therefore an extension of this re-turning to self in much the same way as the hydrological cycle is the continuous re-turning/re-cycling of water in various forms.

with ancestral family lineages being brought to South Africa as slaves from Asia and Indonesia via treacherous trans-oceanic voyages.

Aaniyah facilitates a painting process entitled 'Watery letters to our subconscious'. The students cancel their choir lesson to create more time for our event, however collectively we decide that singing would be a beautiful way to begin the lesson whilst we prepare the painting stations. This was unplanned and as we meander along our learning journey, we all agree that singing becomes a key tributary to our learning process, which explains the treble note in Figure 1. Aaniyah guides the enquiry by prompting the students to use the paint and their breath as they make lines on the page, going from dark blue at the bottom to lighter blue at the top. Aaniyah asks the students to take note of what is emerging for them and to note if there are any stories, concerns, questions, or symbols that have arisen during the process.

We are called together through songs around the hydro-rug as we converge with ocean stories and weave them into the hydro-rug. Singing warms up the day with hands and voices enquiring together. All the materials are spread out on a table in a classroom at the CCE - beach litter, waste material, needles, thread, pairs of scissors, and an iron. During the practice of creating the hydro-rug, the enquiry draws to a close through the writing of a poem. Each student writes a line in response to the question we put forward - *If the ocean could say something what would it say?* The sheet of paper meanders from one student to the next, contributions written and folding it over for the next student to add their piece. The poem[77] is produced through the movement of hands, stories, sharing, threading, folding and poetic voice.

As we flow into the next section of the paper, we diffract the embodied practice with post-human theories, much like fresh/sweet water mixes with salty water at the delta of a river. The slash (for example, in fresh/sweet) is a deliberate move as explained by Barad (in Barad & Gandorfer, 2021: 42) to indicate a cutting-together-apart, rather than a sign of absolute separation. We are specifically interested in the theory/practice binary for learning and teaching in Higher Education for alternative scholarships.

[77] Aaniyah is the Founder and director for The Beach Co-op and the work with the CCE students was included in the The Beach Co-op Annual Report (2023, 15).

5.4. Delta[78]/Discussion

Ingold uses the river as a figuration to understand concepts of transitive and intransitive senses of production, by drawing from Deleuze and Guattari's (2004) 'lines of flight' and 'lines of becoming' (2011: 14). Ingold (2011) asks us to imagine a river flowing to explain the concept of 'lines of flight' along river banks on either side where the banks are connected by a bridge which allows us to cross from one location to another. The bridge establishes a transitive connection between the two locations, but the river running underneath the bridge does not connect anything to anything else in a material sense. Rather it flows without beginning or end; in a continuous cycle and in relationship with the banks on either side of it and the surrounding environment and atmosphere. This line of flight that runs along pulling away at points on either side of the river banks as it sweeps by exists in contrast to the bridge and its linear connector that goes across from point to point (Ingold, 2011). The bridge or point-to-point connector is transitive, taking us from an outline of an event plan to the completed results and outcomes of that event plan. The line of flight, in contrast, is intransitive - it continues and is iterative in much the same way as our learning and teaching practices, techniques, and enquiries with the students as described in this paper.

The painting lines of blue was an event and engagement with the students, and we use materials such as water colour paint, brushes, and paint to mark lines on a page with the movement of breath and brush stroke. However, the prompts throughout the process evoke more than the paintings. Many of the students disclose that they initially focus on the lines being straight and perfect before relaxing into it. One student specifies that after the first six strokes and being prompted by Aaniyah to slow down, only then does she relax into it and focuses less on the output but rather the process. She went on to share that she made a vision board and envisions purchasing a violin. As she ascends through the painting and hues of blue, she could hear the

[78] Where the mouth of a river splits into many channels, causing triangular shaped, muddy land forms. This is where we get messy in and with the mud, diffracting the enquiry with theory and proposing and analysing how meandering as learning creates an inclusive approach to learning and teaching in Higher Education. In retrospect, and whilst writing this paper and in the process of diffracting the enquiries with theory the authors have used the river as a figure for the practise of learning through enquiry. Aaniyah recalls that we encountered a river of freshwater on our beach stroll and litter collection at Buffels Bay, Cape Point Nature Reserve. The river was running across the dune into the ocean mixing fresh and salty water.

violin and cello and the feeling of the strings being pulled through the motion of painting with the lines[79]. For her, the image of sound waves and music emerged from doing this exercise. Another student described how the movement of the painting exercise reminded her of how she trained for swimming competitions and how she practised timing her breath with her strokes as she swam. During the painting exercise she tried to compete with her breath, but she realised that it wasn't necessary. Overwhelming feelings of drowning and yet being able to survive were evoked through the movement of placing the brush strokes on the page.

The concepts of reflection and diffraction were also discussed in relation to the painting enquiry and thinking with water, through diffractive journaling enquiry that Joanne led. One student shared the awe of water being clear and still and its ability to reflect at you, however Joanne felt more connected to how water is able to move in currents, interrupting each other which brings development and growth by keeping things alive and turbulent. These aspects of water are both true, they both describe different ways of being with water as opposed to comparing them or only focusing on the differences and similarities. Instead, they are moving through each other, and this opens-up the differences. From both Haraway's and Barad's perspectives, reflexivity appears to be caught up in sameness because of its mirroring of fixed positions, whereas diffraction is seen as more attuned to patterning of difference which make a difference and their effects in knowledge-making practices (Bozalek & Zembylas, 2017; Barad & Gandorfer, 2021). For example, one of the students expressed that she experiences the ocean and water as calming and whenever she feels angry or upset the water can calm and restore her. This is true for her; however, this may not be true for someone else. Joanne uses this example that was shared to express that diffraction for her is 'a political act' in response to the comfort that the student feels when immersing herself in water, Joanne has another response or vibration that is not the same. In other words, diffraction is understood by both Barad and Haraway as a process of being

[79] This experience is beautifully reiterated by Ingold:

> Thus in life as in music or painting, the movement of becoming – the growth of the plant from its seed, the issuing of the melody from the meeting of violin and bow, the motion of the brush and its trace – points are not joined so much as swept aside and rendered indiscernible by the current as it sweeps through. Life is open-ended: its impulse is not to reach a terminus but to keep on going. The plant, the musician or the painter, in keeping going, 'hazards an improvisation'. (Ingold, 2010: 343).

attentive to how differences get made and what the effects of these differences are by opening them up and aerating it to new ways of thinking (Bozalek & Zembylas, 2017; Barad & Gandorfer, 2021). Both Joanne and the student have different responses to how they experience the ocean, and neither is right nor wrong, but together they produce a story of relational complexity. A diffractive practice reads insights through one another instead of against one another, emphasising many truths as opposed to creating binaries or placing one concept or idea above the other (Haraway, 1988, 1992, 1997). Haraway carved the way for diffraction and its critical and productive potential for conceptualising difference and for studying different configurations of difference (Haraway, 1988, 1992, 1997; Barad, 2014). By introducing diffraction in this way through multiplicity rather than comparison, she introduced diffraction as an alternative optical metaphor to 'reflection' (Juelskjær, et al., 2020: 11). This conceptual development of diffraction highlights feminist research, and activist/political ambition of enacting social change. The desire for social change opposes research that mainly reflects/mirrors existing inequalities, thus by and large contributing to the reproduction of those very same inequalities.

The hydro-rugging[80] event contributes to a politics of care through mending techniques that not only remove litter from the ocean as a rubbish dump in the material sense, but it also requires participants, in this case the students, to create hydro-rugs from waste factory material, thread, and beach plastic. Hydro-rugging re-creates a new material, by re-using waste material and transforming it into a new form, and embedded within this is the sharing of ocean stories and the healing from our past colonial and more recent South African Apartheid legacy through social justice pedagogy and thinking with the oceans as re-storying colonised places (Appleby & Pennycook, 2017; Shefer, 2021).

We encourage the students to answer the question - *if the ocean could say something what would it say?* One student explains that the ocean would say 'I am God'. Another diffracts this thinking through her idea that the ocean for her is female, as opposed to God which is associated with the

[80] As mentioned earlier, the hydro-rug is an embodied technique that becomes the material object for public storytelling and sharing around invisible histories and relationships local South Africans have with the ocean. See Figure 2 - the hydro-rug is on the coffee table in the foreground.

masculine figure. She goes on to say that because it's August and its women's month she feels we should honour women. She sees the ocean as a woman figure, constantly navigating our relationship between power and abuse by pretending that everything is okay, in much the same way as the litter we collect when we clean up only reveals a fraction of what lies much deeper in the ocean. The ocean, like the female figure, also covers up and removes the litter by transporting it back into the ocean and pretending that it is clean and healthy when in fact it is not. The ocean's voice and its resilience to continuously cover up is reaching its climax[81] as we face new levels of global anthropocentric capitalism which has adverse effects on humans and more-than-humans. She continues to say that the water is blue, and it looks clean, and we take this for granted and assume that it is clean. As we write this paper, citizens of Camissa have experienced beach closures because of the effluent that pours into our oceans because of load-shedding which affects our electricity; and hence the power stations that pump our sewage become blocked and overflow into the ocean[82]. The sewage has no boundaries and leaks into the bay and affects beaches and tidal pools that are now open to everyone[83].

The narrative of the ocean being smooth, reflective, blue, clear and a vast boundless void is awash as we dive deeper and notice the different hues of blue into the darkest recesses of the sea where there is a lack of light and blackness prevails. As we descend there are many life forms roaming the ocean, some of them known to us and others yet to be discovered, and it is no surprise that human waste has found its way to the deepest chasms and trenches too. Bennett (2018: 103) suggests that this blackness found at the bottom of the ocean serves as an occasion for thinking about blackness as a means of organising both human and more-than-human life within the oceanic realm. For in this void of darkness there is life - of the human and the more-than-human kind - and the colour line opens a way of thinking of how they are related rather than divided. Bennett (2018) notes the history of violent proximity between the people who are black and the more-than-human entities that roam the waves. He specifically hones in on sharks and

[81] Tenors are usually the highest male human voices found in the world, and from a more-than-human sound pitch bats are unparalleled among mammals in the range of sound frequencies they can produce.
[82] Kretzmann published this article on the 13th January 2023, however Capetonians have continued to see beach closures as recently as March 2023.
[83] The Group Areas Act (1950) restricted Brown and Black people from using certain stretches of coastline and accessing amenities such as certain tidal pools.

their role and influence on slaves aboard a slave ship. Sharks become the figure for anti-blackness as well as the ongoing presence of black persistence and black fugitive possibility. Whilst the sharks are a threat of imminent death for the slaves at sea, they are also a figure of black resistance and survival on the open sea. The shiver of sharks and their ability to work collectively is diffracted with the slave community in the hold of the ship and how they as humans emulate the behaviour of the more-than-human sharks by becoming multiple too.

The students observed gulley sharks darting in the waves when we visited Cape Point Nature Reserve to harvest kelp and clean the beach for the hydro-rugging event. Thinking with the sea, and with sharks and its relationship with slave history, affords us the opportunity to think with the more-than-human. The fear of the sea by Black and Brown people today is deeply rooted in the hold of a slave ship and the fear of being eaten by sharks as they journeyed across oceans from their homelands to places unknown to them[84].

The motion[85] of a river flowing as described by Ingold above, and the students' memories resonate with theoretical frameworks that we draw on for this research. The frameworks include Slow scholarship, research-creation and response-able pedagogies which are located more broadly in feminist new materialism and posthumanism. Feminist new materialism and posthumanism are predicated on a relational ontology, which holds that people and entities come into being through relationships (much like the relationship the river has with the banks and its surrounding environment), rather than entities pre-existing relationships or having individually identified characteristics. Diffraction, as mentioned earlier in relation to thinking with water and the painting enquiry with the students, is also predicated on a relational ontology, an ongoing process in which matter and meaning are co-constituted.

[84] In this situated context we refer to Black and Brown bodies of this generation who are finally able to vocalise the oppression that apartheid has imposed upon us and our parents and their parents. This is what two of the three authors embody. We acknowledge the deep African ontologies linked to the ocean but for the purposes of this paper the more recent trauma of slavery is pertinent.

[85] Here we use motion instead of notion to emphasise the importance of constantly moving like a river and not remaining stagnant, even if the movement slows down, it is still moving or in motion.

The Slow movement was initiated by Carlo Petrini (2013), the originator of the Slow Food Movement, as a protest against McDonalds opening a restaurant in Rome (Bozalek, 2021b). It is very important to realise that Slow does not only refer to slowness/speed or duration, as Petrini (2013) made explicit. Instead, the Slow Food movement extends into Slow scholarship shifting to a focus on the quality rather than quantity of living, depth of engagement and a willingness to engage across differences of discipline and ideas (Leibowitz & Bozalek, 2018; Bozalek, 2021a). Slow scholarship is therefore a proposal for alternative modes of doing academia and pedagogy in response to the current and mainstream[86] modus operandi of outcomes, managerialism and corporatisation of these spheres of life (Stengers, 2011; Bozalek, 2021b). Furthermore, Slow scholarship is described by Leibowitz and Bozalek as being about 'attentiveness, deliberation, thoughtfulness, open-ended enquiry, a receptive attitude, care-fullness, creativity, intensity, discernment, cultivating pleasure, and creating dialogues between the natural and social sciences' (2018: 983).

Bozalek (2021b) argues that there are several academic practices and disciplines that have implemented and benefited from Slow scholarship. Manning and Massumi (2014) express this through research-creation and its emergence through transdisciplinarity. They refer to research-creation as being troubled from its birth which they took as their starting point. They ask "What if we started over? What if we took the hyphenation seriously, seeing it as an internal connection—a mutual interpenetration of processes rather than a communication of products?" (Manning & Massumi, 2014: 88-89). This is the approach we have taken with all our enquiries through the process of learning and teaching with the students.

The authors propose singing as Slow scholarship - Slow singing. Slow singing has been integral to the entire convivial enquiry with the students and was unplanned. The emergence of singing through the practice and introduction of techniques to prompt discussion around water and care reminds the authors of the concept of co-creation as the singing was led by the students themselves. Singing is a slowing down in that it demands controlling the breath in much the same way as the painting event slows down our breath. Measured breath and conscious breathing

[86] Here again the figuration of the river and exploring and meandering along other tributaries to reveal and understand the process rather than the outcomes of learning and teaching.

has the effect of slowing the heartbeat. The repetitions of the verses and refrains and the call and response patterns in some of the songs hold us in the present together (Kulundu, et al., 2020). Time moves in cycles and refrains from repeating and returning differently each time. These sung patterns are folded into the movement of the bodies in a line around the room, reaching the pot on the stove and dipping the kelp into the water[87]. Bodies moving in rhythm, arms lifting and lowering, as we paint and as we place the kelp into the pot. This is the pattern of so many re-membered work songs. Arms and hands are dipping kelp and painting blue strokes but are haunted by so many other arms lifting and lowering oars into water or picks into the earth, as songs lead the pace and the rhythm of the joyless labour of enslaved bodies. A re-imagining of the miners as the song echoes through time.

Practice and enquiry are not separated or made possible through theory, instead theories and enquiry are in conversation with each other through diffraction. In this way, making is already "thinking-in-action", and conceptualisation is a practice in its own right (Manning & Massumi, 2014: 89). This is keenly experienced and felt in the hydro-rugging and Watery letters. Like the hydrological cycle, which is open ended and in constant motion, research-creation also calls for this fluid way of being. The authors propose Slow singing, convivial story-telling and re-membering from the co-created events as innovative genealogies and techniques directed towards more precise engagements with transformation toward accessible, Africanised and decolonised curricula, and research agendas and practices. However, it must be noted that these techniques are specific to this context[88] and may not necessarily be applied elsewhere.

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[87] Making the kelp lasagne with the students combined Slow Food with Slow scholarship in the convergence of cooking and singing together as part of our convivial learning process at Veld & Sea. As the kelp floats in the boiling pot on the stove it keeps softening as the kitchen is filled with the sound of song.
Hoya hoya hoya
Hoya ho
Vukani madoda ningangcangcazeli
Siye khona emgodeni
Translated from Zulu to English: Wake up men and do not shake [worry]; let us go to the mine. Also see Veld and Sea Instagram (IG) account shared with Aaniyah's IG account @contemporary_strandloper: https://www.instagram.com/p/ChePgh_KSe8/

[88] Two of the three authors are from Camissa and are Brown. The majority of the students are Brown and from Camissa too. There is a shared understanding and history with these Brown bodies and the post-apartheid legacy which we all carry with us and our ancestors.

Furthermore, the techniques challenge the dominant colonial, patriarchal, euro western logics which post-academic, neoliberal, corporatized academia has intensified.

The creative practices and techniques we used in relation to the theory do not end with this paper, rather they continue to cycle through into our work as authors and for the students and the more-than-human engagements involved in our work. Similarly, you as the reader of this paper may also diffract with your experience and what is expressed here. In other words, it invites you as the reader to float or evaporate with us in the continuous hydrologic cycle. As Massumi and Manning (2014) reiterate the kind of results aimed at would not be preprogrammed, they would be experimental, emergent effects of an ongoing process. Furthermore, Barad (in Barad & Gandorfer, 2021: 42) explains that They are trying to be in touch with the theory in the way it inhabits Them and that They are inhabiting it—"the way in which we inhabit each other in this strange topology, this material, embodied sense of sense-making".

In addition to the processual motion of Slow scholarship through research-creation, we also draw on response-able pedagogy. Response-ability refers to the ability or capacity to respond. In a South African context, the ability to respond as a Brown or Black person is contentious given the post-apartheid context and how Brown and Black bodies were and continue to be silenced and erased. In other words, legally not being allowed to respond or have the ability and or privilege to respond. Most of the students we worked with are Brown and are descendants of humans that experienced Apartheid and still experience prejudices. Despite new laws and legislation, we need to re-member the Apartheid context and understand the vulnerability of finding the courage to respond, especially for those humans that were denied this right. It follows that response-able pedagogies are not simply examples of the type of learning that can take place when power relations, materiality and entanglement are acknowledged; they also constitute ethico-political practices that incorporate a relational ontology into learning and teaching activities (Bozalek & Zembylas, 2017). Choosing to work with water and our relationship with it and each other was done with sensitivity; and the knowledge that many Brown and Black bodies in a South African context have and continue to have less access to certain water bodies and are therefore not as familiar with water and swimming.

5.5. Ebb and Flow/Conclusion

Thinking with the water allows us to meander and opens up boundless experiences and stories that have been 'dammed'[89] by South Africa's recent post-apartheid narrative, glossing over continued trauma in our 'rainbow nation' and colonial history. Embodied, convivial, sensory and affective encounters with water, through painting, immersion, walking, hearing, seeing, smelling, tasting, singing or through forms of story-telling or imagery that transport us there, holds multiple ox-bow[90] lakes for rethinking the extractive and exploitative nature of our current pedagogy. As we flow, and in between and embedded within the various events, conviviality acts as a suspension in which the learning happens; as water is the suspension where life grows, regenerates, and flourishes. The enquiries meandered with in this paper do not only suggest alternative ways of making meaning and imparting it, but they also contribute to a politics of care, re-pairing[91], restorying, and restoring. Lenz-Taguchi explains that everything around us affects everything else, which makes 'everything change and be in a continuous process of becoming – becoming different in itself – rather than being different in relation to another' (2010: 15).

As we float and drown with the continuous process of becoming, there are key aspects of the enquiries with the students that hang in the mist – Slow scholarship, research-creation and events – and how working with these aspects and thinking with water surfaces new understandings of care for our hydrocommons. Each event emerged with sense-making related to care for water and the environment through 'thinking-in-action' (Manning & Massumi, 2014: 89) both personally and collectively. The collective and convivial nature of the enquiry has an important pedagogical influence in the practices of meandering as learning, and Slow Scholarship. The sharing surfaces deep wounds and the possibility of healing with ancient salty water remedies

[89] This is a play on the word dam and water being physically dammed.

[90] Oxbow lakes are the remains of the river water from the bend in the river that becomes cut-off to form stillwater lakes. This means that water does not flow into or out of them. There is no stream or spring feeding the lake, and it doesn't have a natural outlet. Oxbow lakes often become swamps or bogs, and they often dry up as their water evaporates.

[91] The word repair is derived from the Latin word *reparare* which means to restore. We have hyphenated the word here to emphasise the move away from the binary of a pair, even whilst learning and teaching in this way opens up care we acknowledge the past and the lack of care for certain humans that caused trauma and an inability to care.

through listening and responding with each other, through Slow singing and dancing as we ebb and flow with our Apartheid legacy in Higher Education.

Watershed[92]/Conclusion

Thank you for meeting up with me again in the thick present, this time not in Camissa but in the former Ciskei territories. I find you here, at the watershed, at the Kleinemonde estuary, as it meets the ocean. It is here, from the vistas of the Ciskei in the Eastern Cape, that I write this concluding passage, where the culmination of years of collaborative research and enquiry unfolds amidst the undulating hills and shimmering seas of this region. It seems both fitting and poignant that my thesis finds its closure in this land and seascape. The Ciskei, once a symbol of apartheid's segregationist policies, serves as a powerful backdrop to write into the complexities of South Africa's history.

Established in 1961 as one of the apartheid regime's "Bantustans," the Ciskei purported to be an independent state for Black South Africans, yet remained firmly under the control of the oppressive apartheid government. This region, like many others designated as Bantustans, became a tool of racial segregation and the systematic disenfranchisement of its inhabitants.

The dissolution of apartheid in the 1990s marked the end of the Ciskei's existence as a separate entity, as it was reintegrated into South Africa in 1994. However, its legacy persists, serving as a reminder of the injustices endured by Black South Africans under apartheid rule.

As I consider my research journey amidst the land and seascapes of the former Ciskei, I am reminded of the resilience and strength of those who have navigated its tumultuous history. It is in this context that my thesis finds its significance – a testament to the enduring spirit of enquiry, resistance, and hope that continues to shape the narrative of South Africa's past, present, and future.

In collaboration with five women from the Keiskamma Project, Dyl (one of my supervisors) and I undertake the initial phase of assembling the Mother Hydro-rug (akin to the cyclical rhythm of lunar cycles), meticulously stitching and melding individual hydro-rugs into a cohesive whole. The women are from this region and as we stitch and sew together we share and exchange stories

[92] In various contexts, "watershed" denotes a critical turning point or boundary, often metaphorically representing pivotal moments in history, policy, or social movements. This term originates from hydrology, describing a geographical divide where water flows in different directions.

of our relationship to water with all the stories we are enmeshed with from previous hydro-rugging practices. This mirrors the conglomeration of my five research papers, revealing not only the overarching findings but also illuminating pathways to new enquiries and practices for knowledge-making in higher education.

Through weaving the papers and their findings together, I am also embarking on a journey to unravel the intricacies of care, reparation, justice, and belonging within the context of South Africa's complex historical legacy. Grounded in the insightful enquiries of scholars like Alexis Pauline Gumb, Patricia Hills Collins and June Bam, I delve deep into the realms of intimacy, post-colonial understanding, and the transformative power of marginalised perspectives.

Each chapter offers unique threads through which to view our interconnectedness with each other and the natural world, from the overlooked care practices stemming from apartheid's enduring impact to the generative possibilities of Afro-water feminism as described in Chapter Three, and the profound significance of hydro-rugging as a mending practice in Chapters One, Two, Four and Five. Through innovative methodologies and practices such as *strandlooping*/swimming, introduced in Chapter One and explained further in Chapter Three, story-doing and mending unpacked in Chapters Two, Four and Five, I navigate the fluid boundaries between academic enquiry and lived experience, weaving together narratives that challenge traditional paradigms and offer glimpses into alternative ways of knowing and being. The significant threads from each paper are tugged on and woven into the paragraphs below, while also raising additional enquiries and avenues that I suggest for further collaborations and crafting a pedagogy centred on care.

Chapter One entitled “Collaborative innovations into pedagogies of care for South African hydrocommons” creates the foundation for the exploration of care practices. By employing techniques such as *strandlooping*, stitching, and storytelling, the paper seeks to comprehend the entangled relationships between bodies and the hydrocommons. It highlights the importance of recognising alternative ways of knowing and being in the world, particularly among Black and Brown communities segregated by apartheid's ethnic and racial divisions. It quotes Audre Lorde's assertion that it is silence, rather than difference, that immobilises us, emphasising the need to confront and bridge the gaps between diverse experiences. This journey from

woundedness to wholeness is depicted as essential for fostering dialogue, understanding, and ultimately, healing in society.

Collaborating with co-researchers and participants, we have unearthed certain practices that facilitate the breaking of silence. Yet, my interest lies in persisting on this journey of collectively crafting pedagogies of care to address the lingering traumas of the past that hinder our progress in the present and future. What other methods and practices exist that allow for the silence to be broken in a gentle, caring and nurturing ways? This research marks merely the inception of our venture toward acts of care, healing and wholeness.

Chapter Two's "Tidal Pools as Containers of Care" attempts to offer a fresh perspective on traditional notions of containers by portraying tidal pools as vibrant and intra-active dynamic spaces. In contrast to the static and binary perception of conventional containers, tidal pools are portrayed as dynamic spaces, influenced by elements like water movement, lunar cycles, and surrounding geography. This reframing underscores the intricate relationship between tidal pools and their environment, highlighting their continual adaptation and impact on the ecosystem. Furthermore, the paper emphasises the significance of marginalised viewpoints. By drawing on the concept of 'seeing from below' (Collins, 1990), it challenges prevailing assumptions about knowledge derived from socially marginalised perspectives. It contends that these perspectives not only challenge discriminatory worldviews but also provide valuable insights into broader human experiences, ultimately promoting more inclusive and compassionate approaches to existence.

The focal point of prioritising marginalised voices, particularly those of Black and Brown bodies, which have historically endured suppression, neglect, and erasure, has been paramount in this research. I wish to further these concerns by continuing to explore the concept of cultivating containers of care that are capable of accommodating not only Black and Brown communities but also a diverse range of voices and experiences.

In Chapter Three, "*Strandlooping* as a relational enquiry to reimagine higher education and gender studies along the Camissa coastline", the thread we tug on is the co-creation of the concept Afro-water feminism and thinking with water that allows for generative, playful, and intuitive pedagogical approaches. It highlights how such methodologies challenge traditional

educational assumptions rooted in colonialism and apartheid structures. By emphasising embodied, experimental, and inclusive practices, the paper advocates for a pedagogical shift towards relationality and processual learning. *Strandlooping* embodies a pursuit of a justice-to-come within knowledge creation, offering a framework that honours the narratives of marginalised communities while challenging colonial and apartheid narratives. This practice allows for a nuanced understanding that respects the wisdom of dispossessed communities. Through engaging with water bodies via *strandlooping*, a transformative healing process unfolds, acknowledging and addressing the historical wounds inflicted upon Black and Brown individuals.

Engaging with water bodies through *strandlooping* has become a healing practice for me as I gather and process the stories of Black and Brown bodies and their relationship with the hydrocommons. While much of my *strandlooping* has been solitary, I have walked with friends and family. Moving forward, I am eager to expand this practice by involving diverse groups, akin to our collective experience in hydro-rugging, fostering spaces for sharing and listening to stories. Exploring the possibility of co-creating events that integrate *strandlooping* and hydro-rugging with a broader spectrum of participants, beyond the Back and Brown communities I have previously engaged with, is an aspect that I would like to explore further.

Following on from *strandlooping* as a practice, Chapter Four unpacks the hydro-rugging practice, in "Hydro-rugging as reparative caring encounter: Re-membering Southern oceanic hauntologies", as another key thread that weaves care cartographies and mending. Mending emerges as a powerful transformation, turning 'un-belonging' into strength, discord into harmony, and fragmentation into unity. It underlines the value of acknowledging, preserving, and mending the stories that contribute to a richer, interconnected tapestry of understanding. From the standpoint of environmental communication, hydro-rugging injects vitality into the richness of shared narratives and discourse, transcending conventional channels of interaction. Ultimately, hydro-rugging nurtures healing and rejuvenation in the wake of racialised violence and ecological segregation, transcending its physical manifestation to forge novel understandings of interconnection and relationality.

Whilst I have taken the hydro-rugging practice further than South African watery bodies to other parts of the world, there is a yearning to continue co-creating and growing the Mother Hydro-rug. This would entail hydro-rugging with more communities across the world that have suffered the injustices of coloniality, apartheid and displacement. As I pen these words, I'm actively broadening the scope of the Mother Hydro-rug by collaborating with women from the Keiskamma project, enriching the tapestry of stories we've amassed thus far. This undertaking represents not merely an expansion, but a deepening and layering of our existing framework, as we incorporate and embellish key elements—such as Krotoa, kelp, eagle rays, crabs, the moon, and feet—thus contributing to the ever-evolving narrative of the Mother Hydro-rug.

The final chapter entitled *Meandering as Learning: Co-creating Care with Camissa Oceans in Higher Education* intertwines the threads of *strandlooping* and hydro-rugging to advance a politics of care, underscored by the principles of re-pairing, restorying, and restoring our relationships with water and the environment. This collaborative practice involves fourth-year students from the Centre of Creative Education and acknowledges the entanglements of all facets of existence, challenging fixed notions of identity and knowledge. Through sensory engagements like painting, cooking kelp lasagne, and storytelling, we use transformative pedagogical tools to immerse ourselves in water's essence. These encounters prompt us to reconsider extractive and exploitative educational approaches, fostering conviviality and enabling the exploration of alternative meanings and practices. The collective and convivial nature of these enquiries carries significant pedagogical implications, promoting a Slow scholarship and research-creation for including other ways of knowledge-making.

Looking ahead, I aim to explore how the next phase of The Beach Co-op can deepen its impact on fostering communities dedicated to caring for our hydrocommons. As my thesis nears completion and The Beach Co-op’s annual report is released, we have announced a pause for the remainder of the year to reimagine our approach to achieving this goal. I'm eager to engage with citizens and partners to harness water as a medium for accessing boundless experiences and stories, providing a critical lens to reevaluate post-apartheid and societal narratives. Through this exploration, The Beach Co-op will seek to catalyse meaningful change and foster a deeper sense of interconnectedness and stewardship towards our shared environment.

Central to the exploration of these five papers is the concept of 'seeing from below' (Collins, 1990), which not only amplifies marginalised voices, but also invites us to reimagine our collective humanity beyond the constraints of race, class, and colonial constructs; as well as including the more-than-human entities that reside below or alongside these watery bodies. As I think back on the collaborative practice of co-creating the Mother Hydro-rug and sharing stories of resilience and connection to the water, it becomes evident that healing and transformation emerge not through silence, but through embodied practices and this creates dialogue, action, and community-building.

In embracing the fluidity of water as both a matterphorical and literal medium for understanding, I advocate for a pedagogy of care that honours the complexity of our shared histories and fosters a sense of belonging rooted in reciprocity and respect. Through acts of *strandlooping*, mending, and re-imagining, we move closer to realising a future where wounds are transformed into a source of strength, and where water bodies, with their timeless rhythms, become a figuration of healing and collective liberation.

As we wind our way back to Camissa and I wrap up this thesis, coinciding with the debut of the initial phase of the Mother Hydro-rug at the 'Nothing comes without its world' exhibition curated by Dylan McGarry, aimed at raising funds for the marine turtle hospital, the Beach Co-op, and other organisations. I invite you to join me at the gallery. Initially conceived as a means of exploration, public storytelling and meaning-making, I had little foresight into what and how the Mother Hydro-rug would evolve. Looking at it, and its growth, I realise that this Mother Hydro-rug, will continue to grow, well beyond this doctorate, that a conclusion is thus inappropriate, thus this is the moment of watershed, of the Mother Hyrdo-rug meeting a new threshold. Standing here with you in the gallery, in front of this piece (see Figure 6) co-created with profound care and attentive story-listening and doing, is truly remarkable.

Figure 6. The Mother Hydro-Rug co-created with Aaniyah and participants engaged in sharing and understanding our relationship with water

May our collective journey from adversity to healing be guided by a dedication to breaking the silences that sustain injustice and division. Let us engage in acts of repair and continue navigating the seas of knowledge with curiosity, empathy, and profound respect for the entanglements of all life forms. This invitation extends beyond the conclusion of this doctoral phase, urging us to persist in the work of dismantling silence. I have outlined some avenues through which I intend to continue probing, striving towards an environmental-justice-to-come (Haraway, 2017). Moreover, the journey of the Mother Hydro-rug will persist, gathering more tales and enhancing the shimmer of our resilience.

The intricate layers of intra-twining beach plastic with discarded materials, glistening under the gallery lights, echo the narratives shared about our relationships with water. Much like the dancing diffraction and reflections on the surfaces of water, the piece emits stories, shimmering with entanglements. In moments like these, I recall the words of my dear friend and artist Thania Petersen, who often exclaims upon reaching the shore, "Look at us! Look at us! We are survivors!"

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Appendix A - Ethical Clearance

RHODES UNIVERSITY
Where leaders learn

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7 February 2024

Dr Dylan McGarry

D.McGarry@ru.ac.za

Dear Dr Dylan McGarry and Ms Aaniyah Martin (Previously Ormadien)

Re: Transgressive learning and research-creation: Collaborative innovations into pedagogies of care for South African hydrocommons

APPLICATION NUMBER: 2024-5165-8329

This letter confirms that your research ethics renewal application has been reviewed and **APPROVED** by the Education Faculty Research Ethics Committee (EF-REC).

Approval is granted for 1 year. An annual progress report is required in order to renew approval for an additional period. You will receive an email notifying you when the progress report is due.

Should any substantive change(s) be made during the research process, that may have ethical implications, you should notify the Education Faculty REC Chair via email. This includes changes in investigators. The REC Chair will advise as to whether a new application is necessary.

Do keep this clearance letter secure and accessible throughout your study and after its completion. It will be needed when a thesis is examined and when publications are submitted to journals.

Please also submit a brief report to the REC Chair on the completion of the research. This can be done via email. The purpose of this report is to indicate whether the research was conducted successfully and whether any ethics-related matters arose that the committee should be aware of, in order to guide future studies.

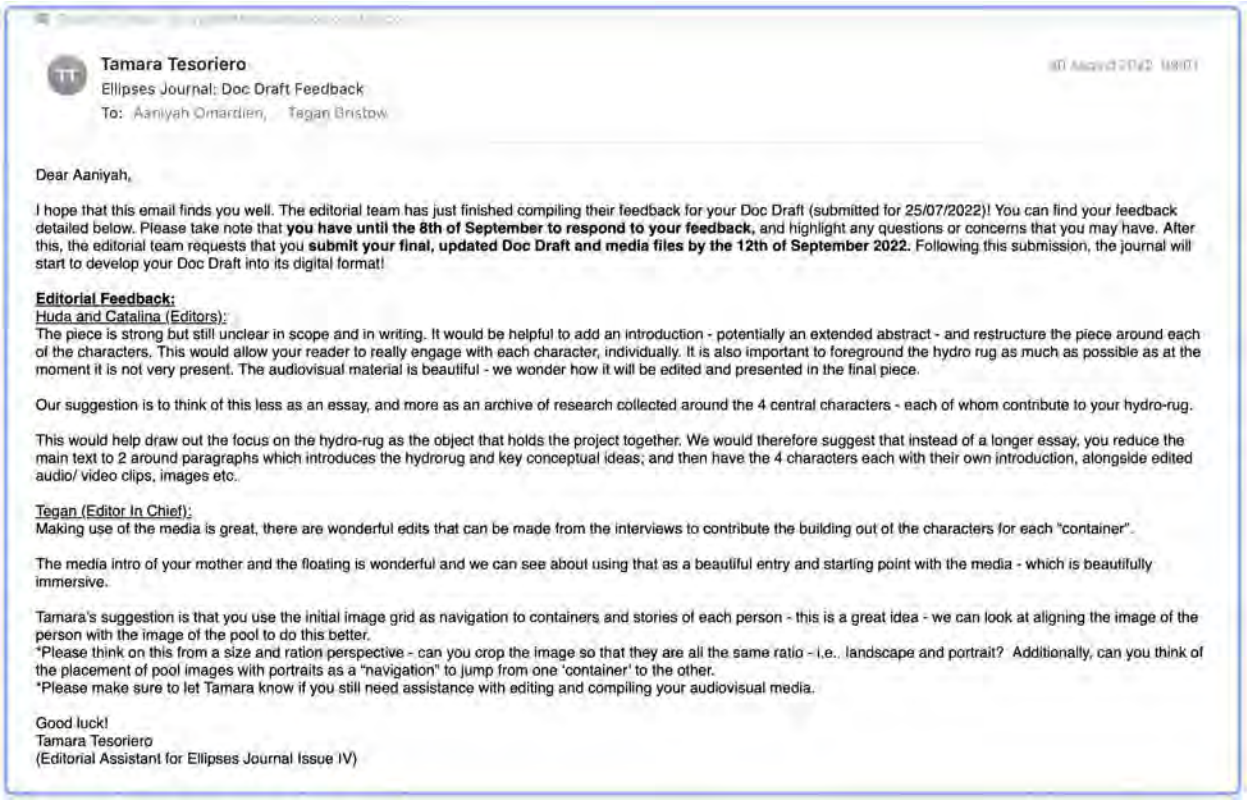
Sincerely,

Prof Mags Blackie

Chair: Education Faculty Research Ethics Committee

Appendix B - Reviewers comments

Chapter two



Tamara Tesoriero
Ellipses Journal: Doc Draft Feedback
To: Aaniyah Omardien, Tegan Bristow

Dear Aaniyah,

I hope that this email finds you well. The editorial team has just finished compiling their feedback for your Doc Draft (submitted for 25/07/2022)! You can find your feedback detailed below. Please take note that **you have until the 8th of September to respond to your feedback,** and highlight any questions or concerns that you may have. After this, the editorial team requests that you **submit your final, updated Doc Draft and media files by the 12th of September 2022.** Following this submission, the journal will start to develop your Doc Draft into its digital format!

Editorial Feedback:
Huda and Catalina (Editors):
The piece is strong but still unclear in scope and in writing. It would be helpful to add an introduction - potentially an extended abstract - and restructure the piece around each of the characters. This would allow your reader to really engage with each character, individually. It is also important to foreground the hydro rug as much as possible as at the moment it is not very present. The audiovisual material is beautiful - we wonder how it will be edited and presented in the final piece.

Our suggestion is to think of this less as an essay, and more as an archive of research collected around the 4 central characters - each of whom contribute to your hydro-rug.

This would help draw out the focus on the hydro-rug as the object that holds the project together. We would therefore suggest that instead of a longer essay, you reduce the main text to 2 around paragraphs which introduces the hydrorug and key conceptual ideas; and then have the 4 characters each with their own introduction, alongside edited audio/ video clips, images etc.

Tegan (Editor In Chief):
Making use of the media is great, there are wonderful edits that can be made from the interviews to contribute the building out of the characters for each "container".

The media intro of your mother and the floating is wonderful and we can see about using that as a beautiful entry and starting point with the media - which is beautifully immersive.

Tamara's suggestion is that you use the initial image grid as navigation to containers and stories of each person - this is a great idea - we can look at aligning the image of the person with the image of the pool to do this better.
*Please think on this from a size and ration perspective - can you crop the image so that they are all the same ratio - i.e.. landscape and portrait? Additionally, can you think of the placement of pool images with portraits as a "navigation" to jump from one 'container' to the other.
*Please make sure to let Tamara know if you still need assistance with editing and compiling your audiovisual media.

Good luck!
Tamara Tesoriero
(Editorial Assistant for Ellipses Journal Issue IV)

Aaniyah Omardien
Re: Ellipses Journal: Doc Draft Feedback
To: Tamara Tesoriero, Cc: Tegan Bristow

Details

Hi both

I've had a chance to look over the text now in relation to comments below.

I agree that the hydro-rug should be foregrounded and the characters per pool be made more prominent per pool. I've tried to edit the text this way. I agree that this makes it more clear.

What I am struggling with is splitting the rest of the text by each individual per pool. I prefer the themes that have emerged across pools. I'm hoping that changing the intro focusing on introducing the characters per pool and the hydro rug makes things clearer and allows for themes to follow.

If Huda/Catalina have time to chat this through we could try do that? I could meet on Fri afternoon or Monday afternoon.

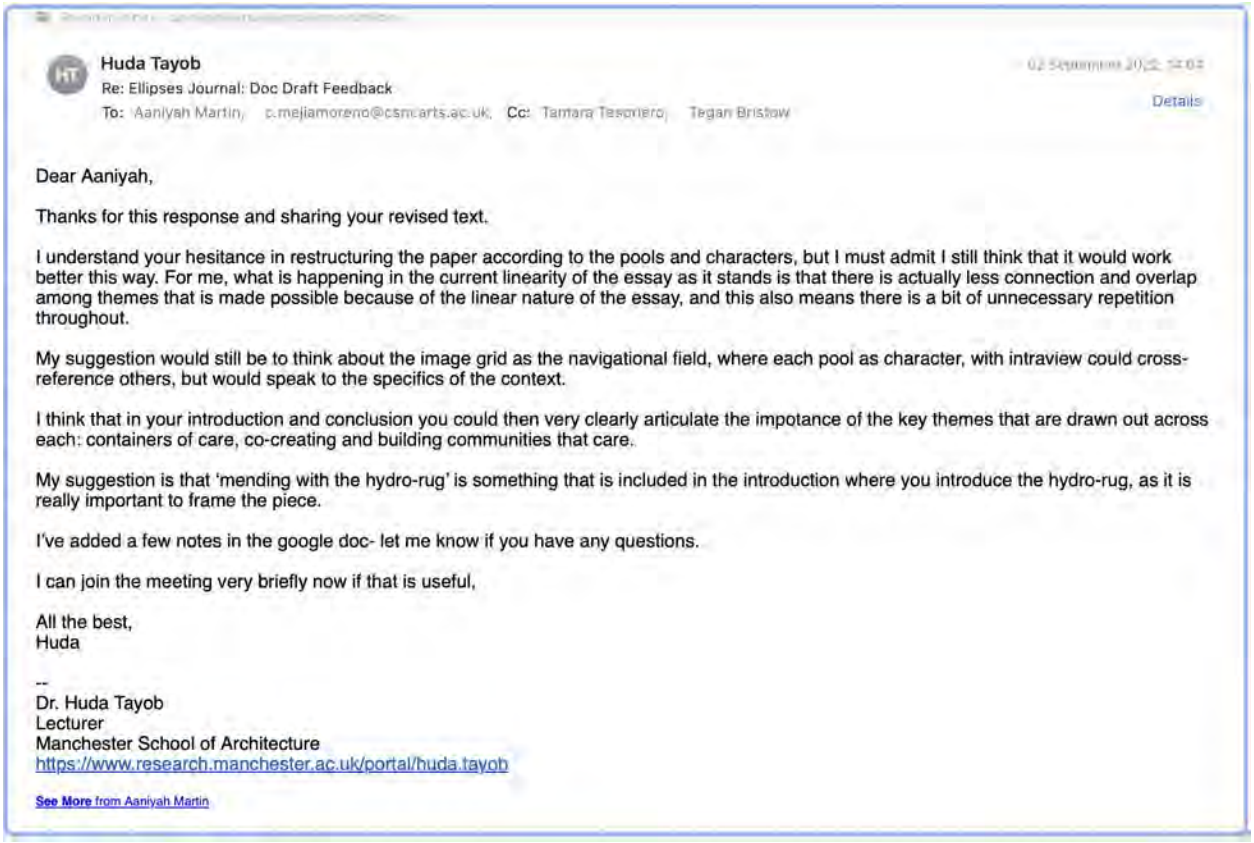
Another question re references - do I add the intra-views with each character to the reference list?

I'll chat to Tamara more on Friday about these ideas too.

Thanks Aaniyah

Sent from my iPhone

See More from Tamara Tesoriero



Huda Tayob
Re: Ellipses Journal: Doc Draft Feedback
To: Aaniyah Martin, c.mejiamoreno@csm.arts.ac.uk; Cc: Tamara Tesoriero; Tegan Bristow

02 September 2021, 12:03
Details

Dear Aaniyah,

Thanks for this response and sharing your revised text.

I understand your hesitance in restructuring the paper according to the pools and characters, but I must admit I still think that it would work better this way. For me, what is happening in the current linearity of the essay as it stands is that there is actually less connection and overlap among themes that is made possible because of the linear nature of the essay, and this also means there is a bit of unnecessary repetition throughout.

My suggestion would still be to think about the image grid as the navigational field, where each pool as character, with intraview could cross-reference others, but would speak to the specifics of the context.

I think that in your introduction and conclusion you could then very clearly articulate the impotance of the key themes that are drawn out across each: containers of care, co-creating and building communities that care.

My suggestion is that 'mending with the hydro-rug' is something that is included in the introduction where you introduce the hydro-rug, as it is really important to frame the piece.

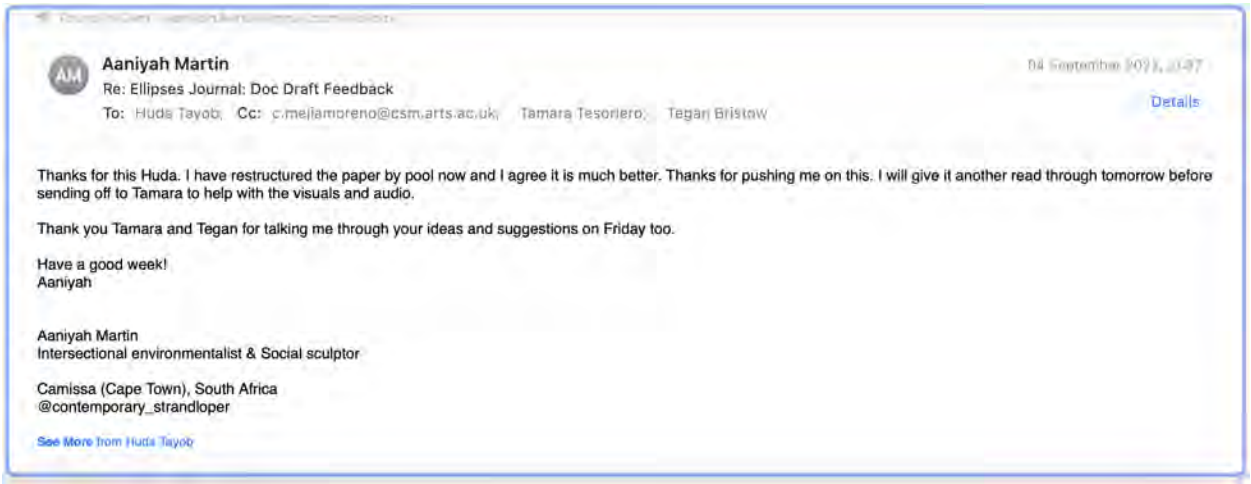
I've added a few notes in the google doc- let me know if you have any questions.

I can join the meeting very briefly now if that is useful,

All the best,
Huda

--
Dr. Huda Tayob
Lecturer
Manchester School of Architecture
https://www.research.manchester.ac.uk/portal/huda.tayob

See More from Aaniyah Martin



Aaniyah Martin
Re: Ellipses Journal: Doc Draft Feedback
To: Huda Tayob; Cc: c.mejiamoreno@csm.arts.ac.uk; Tamara Tesoriero; Tegan Bristow

04 September 2021, 21:37
Details

Thanks for this Huda. I have restructured the paper by pool now and I agree it is much better. Thanks for pushing me on this. I will give it another read through tomorrow before sending off to Tamara to help with the visuals and audio.

Thank you Tamara and Tegan for talking me through your ideas and suggestions on Friday too.

Have a good week!
Aaniyah

Aaniyah Martin
Intersectional environmentalist & Social sculptor

Camissa (Cape Town), South Africa
@contemporary_strandloper

See More from Huda Tayob

Appendix B - Reviewers comments

Chapter three

Strandlpooping as a relational enquiry to reimagine higher education and gender studies along the Camissa coastline

Gender and Education: Gender, Feminisms and the 'Posts': Contemporary Contestations, New Educational Imaginaries & Hope-full Renewals'

Responses to and implementation of reviewer's comments	
Notes from Editors	
Your manuscript entitled "Strandlooping with the lunar cycle and diffracting through care along the Camissa coastline", which you submitted to Gender and Education, has been reviewed. The reviewer comments are included at the bottom of this letter. The Editors invite you to submit major revisions.	
Concerns Raised	**Response to Editors**
Notes from Reviewers	
Concerns raised by Reviewer #1	**Response and amendments to revision draft**
I think this is an important piece of scholarship and a contribution to the field of qualitative research through research-creation drawing on Black feminism and Indigenous thought in a South African context.	Thank you

I understand from reading that you (the author) are a PhD student and is clearly well read across these fields. My main comment on the paper is that there is too much in it. This may be a result of you currently writing a thesis and framing up the article based on a larger piece of writing and all your thinking etc. To help revising this paper. I think it could use a bit more structure, and some streamlining. I suggest cutting out references to activities that you are doing outside of the scope of the paper (i.e. your larger PhD) and only refer to what's happening (what you're arguing for) within the paper as a way of keeping it a bit more contained. I suggest cutting out some of the concepts that are stated but then not engaged with. For example: "Strandlooping as an enquiry offers direct insights into ways in which I am able to respond to the call to re-imagine and enact theory-practice-praxis in nomadic, rhizomatic, care-full, creative, affirmative and relational ways." - This sentence has a lot of concepts in it. Many of which are overdetermined euro-western ones, or vague. Given the thoughtfulness and anti-coloniality in much of the paper, I would suggest reconsidering this list and perhaps making a statement of what strandlooping is that's a bit more specific. Similarly, the title of the piece has 'diffractive' in it as well. Which is another huge concept that's not entirely engaged with, as well as 'care.' Choose a couple of concepts and engage with them specifically in this paper. This will give you an opportunity to write other papers thinking with other concepts later if you choose rather than having everything in here.	Thank you. I have decided to focus on African feminism, Indigenous knowledge and research-creation only and mention this in the abstract. I have chosen to focus on the creativity and relational ways that strandlooping can contribute to higher education and gender studies. I have tightened up the abstract to reflect this. I have also altered the title of the paper.

In some ways I see this as a methodology paper. See below what you write on page 8 (after a lot of other concepts are introduced): Page 8 “African feminism, Indigenous knowledges and research-creation, are seeking to find new possibilities to flourish and open-up opportunities for those who are marginalised in the current system by the intersectional and mutually constitutive oppressions of patriarchy, colonialism, and capitalism through artistic expression” (Bam 2021, Knowles 2021) This section brings together African feminism, Indigenous knowledges, and research-creation. I believe that this *is* your contribution to knowledge in this paper. If possible, I would get to this earlier in the paper, perhaps after an introduction to yourself/strandlooping. And then explain these approaches to your approach to strandlooping *in the paper* rather than your whole PhD’s concepts. And explain how these are being used in what you do *in* the paper.	Thank you for this insight in streamlining the paper. I agree and have reworked the Intro to reflect this.
What you do is then take the reader on some strandloops. And discuss what emerges in them read through Black/Indigenous and feminist scholarship. Watermarks for strand looping section: Propositions or watermarks do not give information as to how they function in concrete instances, instead they gesture to how they could potentialise (Springgay and Truman 2018).	I have explained further why I have used the term watermark as opposed to proposition as well as why they are being used here. I have also corrected the paraphrasing and referenced where necessary.

Watch paraphrasing in document. Some instances seem like direct quotations but are not referenced as such. Why are propositions being used here? Also, explain *what* a watermark is.	
Re: images. Why are there images? Are they part of the strandlooping practice? Do they help you think with place/practice? Or are they representations?	I have explained this too.
I think this is important scholarship. But within the purview of an academic journal article, the work would be better served by sticking to a few key concepts and putting them to work in the writing. Suggested streamlining. From your abstract: "This paper explores why and how strandlooping has become a generative and [affective] way of doing research differently, specifically in a South African context." I'd bracket out affective unless *that* concept is engaged with. Then the paper could run: 1. Context 2. What is strandlooping 3. What concepts are you drawing on *in this paper* to explicate it (research-creation, Black feminism, Indigenous knowledges 4. What exemplifications are you giving to do this (a couple of strandloops examples) 5. What we are learning from that/what this means/contributes.	Thank you for these guidelines. I have addressed them and restructured the paper to align with this suggested outline.

Concerns raised by Reviewer #2	Response and amendments to revision draft
This is a fascinating and important paper which deals with the racist spatial and bodily politics of the apartheid regime in South Africa, and which continue to affects spaces, places, bodies and movement in contemporary South Africa, with respect to practices of care and the hydrocommons. It develops an original methodological approach and is very well grounded in relevant theory. I've put some comments below to suggest ways in which the author can strengthen the paper, particularly to make it more apparent how it speaks into the concerns of the special issue, and the journal more generally. I thought the revisions where somewhere between minor and major so I am suggesting 'substantial' category to give you adequate time to do the work required.	Thank you, I appreciate your guidance with this.
Abstract The abstract makes no explicit mention of gender, feminisms and the posts, or education. What 'post' analytical or philosophical framework is this paper situated within? What does it have to do with education (bear in mind the journal is gender and education)? What are the feminist issues or concerns being dealt with? Addressing these questions would help situate the paper more clearly in relation to the special issue and the journal more generally.	Thank you – I have rewritten the abstract to include the relevance of this paper to the special issue.

Introduction The comments I have made about the abstract apply here also. The author needs to frame the paper in relation to the concerns of the special issue, and the journal more generally. The reclaiming of the term strandloping is well-made and persuasive as a way to speak back to racist legacies, and I liked the way the author interested their own positionality into the debates with such clarity. Is it strandloping or strandlooping? Does this need explaining to the reader? The paragraph that begins with McKittrick's quote contains a lot of different theorists. While all of them add something important to the debate, the author has not yet stated what their central argument is (again with reference to gender, feminisms, education and the posts). If this argument is stated at the top of the paragraph, the author can then do some work to explain to the reader how each of the authors referred to (McKittrick, Braidotti, Haraway etc) helps them to think the problem and to engage in methodological and analytical practices to 'work' the problem. As it currently reads, there are a lot of fascinating references and some insights but they don't yet adequately cohere around an argument. With that in mind, the paragraph which begins 'This paper considers …' could be placed at the top of this section and then used as a touchstone/reference point for what follows.	Strandlooping comes from strandloop or strandloper – I have made it a verb and I am not sure that it has ever been used this way. In addition to the footnote for the abstract I have included in the body when I unpack what a strandloper is. I have tried to address this by being more explicit about what strandlooping is in the Intro and how it relates to education and gender. I have placed the intention of the paper earlier and followed on by quoting McKittrick and not too many others to confirm my motivation for this work. I then move into the theories that helps support this.

By the time I got to footnote 7, I was completely captivated by the methodological approach. Seems to me there are important things in the footnotes that really ought to be in the paper. I'd say eliminate footnotes altogether by doing some work to integrate them. I'm aware of McKittrick's arguments and practices about footnoting but I don't see them as being relevant to what is going on in this paper. For example, the footnote 8 phrase 'The resilience sits inside of the assimilation' really, in my view, should be in the paragraph and be made more of to trouble practices and legacies and theories of assimilation. These are political points that shape what argument can be made.	I have reworked some of the footnotes to integrate them into the body of the paper.
Zig-zagging This section makes the theoretical location in posthumanism clear – need to make this apparent in the Abstract and Introduction, as I say above.	Thank you. Yes, I have done this.
The paragraph beginning 'My research enquiries are based on research-creation ...' could perhaps be edited and cut a little, as some of the points have already been made, particularly on Slow and research-creation. The thing that was niggling at me, and hasn't yet been fully explained, is the 'transdisciplinary' (or is it post-disciplinary?) nature of this work. The reference to McKittirck early on makes the point that Black and Brown people have long done this, but it would help me (and the journal's readers) for you to make an explicit comment on how you are doing it in this paper – bring to the fore what is implicit. Taylor, Hughes and Ulmer's book on Transdisciplinary Feminist Research (2021) might be helpful for this.	I have reworked this section substantially and I hope the argument and flow reads better now.
The paragraph beginning 'A collective worldview …' makes a passionate and just case for the entanglements of history, coloniality, response-ability, and care. Can you bring this back to your immediate concerns in this article? You do that in the next paragraph, but this current paragraph sort of 'sits alone' as exposition and it would be nice for it to be integrated into the flow and argument. Again, this for me is about the coherence of the paper.	I have addressed this paragraph by bringing it back to the argument and as stated above this entire section has been reworked to have a better flow.

Watermarks for strandlooping Please add a little explanation as to what is meant by 'potentialise' as theory, method, praxis and how this relates to the central concerns of the paper. It might just be that you need to reorder the sentences in this introduction to this section, especially bring more to the fore your 'springboards for composing thought' point.	I have reworked these and have conveyed how each watermark plays a role in addressing the central concerns of the paper.
1. The periwinkle harvest bag. Would you be able to include an image of one or two of the hydro-rugs you are crafting? It would be great if you could.	Due to the word count I was unable to do this but have included a link to images on The Beach Co-op website.
2. Feet as foundation. I actually thought a photo of your feet would be great to include, to demonstrate the entangled assemblage your feet are amongst as you walk.	I have included an image of my feet.
Each of the three watermark sections could do a little more to track their insights back into the central argument of the paper.	I have tried to track them back to the central argument and in the conclusion.
Conclusion Pull out the key insights for gender, education, feminisms and the posts more directly. Good luck with the revisions and I look forward to reading your paper again.	I have done this and hope it meets with your approval.

Appendix B - Reviewers comments

Chapter four

Hydro-rugging as reparative caring encounter: Re-membering Southern oceanic hauntologies

<<Environmental Education: Affective Encounters in Environmental Communication>>

Responses to and implementation of reviewer's comments

Notes from Editors

<<General feedback from editors>>

Your manuscript entitled "Hydro-rugging as reparative caring encounter: Re-membering Southern oceanic hauntologies" which you submitted to Environmental Communication, has been reviewed. The reviewer comments are included at the bottom of this letter.

The reviewer(s) would like to see some revisions made to your manuscript before publication. I think their assessment is thorough, fair and constructive and invite you to respond to the reviewers' comments and revise your manuscript. Please could you also locate your arguments within the field of Environmental Communication, arguments of which can be found throughout the journal. Congratulations on entering the next phase of manuscript revision and we wish you all the best with the revisions.

In accordance with our format-free submission policy, an editable version of the article must be supplied at the revision stage. Please submit your revised manuscript files in an editable file format.

To submit a revision, go to https://rp.tandfonline.com/submission/flow?submissionId=236877269&step=1. If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript.

If you have any questions or technical issues, please contact the journal's editorial office at RENC-peerreview@journals.tandf.co.uk.

This journal is now using a set of keywords to reflect the UN Sustainable Development Goals (SDGs). For manuscripts that are accepted for publication, use of these keywords will better highlight SDG-relevant works to readers. If your manuscript is relevant to one or more of the SDGs, please ensure you have selected the appropriate keyword(s) for your submission record and added them to your manuscript.

Because we are trying to facilitate timely publication of manuscripts submitted to Environmental Communication, your revised manuscript should be uploaded as soon as possible. If it is not possible for you to submit your revision in a reasonable amount of time, we may have to consider your paper as a new submission.

Once again, thank you for submitting your manuscript to Environmental Communication and I look forward to receiving your revision.

Sincerely,

Meghan Judge

Concerns Raised	Response to Editors
Notes from Reviewers	
Concerns raised by Reviewer #1	**Response and amendments to revision draft**
<<concerns raised>>	<<responses and changes implemented>>
I enjoyed reading your article entitled "Hydro-rugging as reparative caring encounter: Re-membering Southern oceanic hauntologies," and learning more about this fascinating practice of oceanic restorative justice. I also appreciate your commitment to writing in a poetic and diffractive style, one that tries to ground your theorizing in this place and to disrupt western conventions and expectations for academic writing. This work is meaningful and promises to make an important contribution to Environmental Communication (EC) as a field.	Thank you. I found your review particularly useful and I hope that the reworked paper reads with more intention and understanding now that I have incorporated your suggestions.
However, this paper needs to be strengthened in several ways so the insights you share are refined as a whole and made accessible to diverse audiences. In the following comments, I recommend three overarching changes, including (1) a substantive reorganization and rewriting of the introduction, theory/method, and analysis sections; (2) a clearer identification of this context, hydro-rugging as a practice, and the questions that guide this work; (3) and a refined analysis that identifies the primary themes, patterns, or changes that hydro-rugging creates. This work also needs to connect more with existing EC scholarship, and I conclude with a suggestion for how to start making those connections.	I have reworked the sections to flow in the way that you have suggested. Instead of having the theory added at the end of the paper before the conclusion I have integrated and woven it into the analysis more directly. I have reworked the context and hydro-rugging as a practice and introduced the questions. I have summarised the findings in a section after the analysis and before the conclusion.
The poetic and non-linear writing style has promise but, as written, this style in underdeveloped and because of this the writing and analysis feel disjointed. Consequently, the rich detail and affective sense of hydro-rugging as a practice never full materializes. Starting in the introduction, I recommend refining how you situate yourself, the histories to which hydro-rugging responds, and the key concepts from the literature that guide your analysis. To this end, please consider reorganizing along the following lines: begin as you currently do with a story in which you situate yourself. Then continue this story-work to also introduce the context and the practice of hydro-rugging. If you are looking for a model for how to do this situating story-work well, I recommend reading Tiara Na'puti's (2019) "Archipelagic rhetoric." In addition to situating herself and introducing how her work challenges histories of racialized and militarized violence in Guåhan, Na'puti also creates a visual sense of countermapping. Following her approach would likely create a better feel for hydro-rugging as a practice in the introduction and analysis.	I found Tiara's paper most useful and fascinating - thank you for sharing it. I have reworked the introduction and the analysis sections of the paper.

Further, in the introduction you use the powerful term "ecological apartheid," and I wanted you to say more about this history here. In this section, you briefly introduce Jacques Derrida's concept of hauntology and return to this later in the paper. I recommend introducing this more fully here to describe how histories of enslavement and apartheid haunt this place. However, I would also suggest that you consider dropping the connection to Derrida to instead center a concept like Christina Sharpe's (2016) "wake work" as articulated in her book, In the Wake: On Blackness and Being. You might also appreciate her approach to how "Beauty is a Method" in an essay bearing this title and her most recent book Ordinary Notes (which would also serve as a model for the kind of poetic writing you are doing here).	I have extended my understanding and use of the term ecological apartheid and included both Derrida and Sharpe's work here alongside Hofmeyr (recommended by the 2nd reviewer) and creolised waters. I loved 'Beauty as Method' paper but decided to not include this in this paper as it would add another concept to the work which is already quite full.
After situating yourself and more fully introducing the potential for hydro-rugging to thread together healing in the wake of "ecological apartheid," I suggest refining your focus in a theory/method section that currently has two main influences: Sara Ahmed's affect theory and Karen Barad's aesthetic philosophy, and especially Barad's notion of "matterphor." These first two sections (i.e. the introduction and theory/method) should guide you toward the identification of a central question or focus for your enquiry. The question that I hear you asking in this paper is something along the lines of: in what way does hydro-rugging shape affective relations with each other and within oceanic places? How does hydro-rugging serve as a "matterphor" for healing and for threading together more just and caring ways of being in the wakes of racialized violence and ecological apartheid? More clearly identifying a guiding question or objective will help focus the analysis. There is some wonderful richness and detail in this analysis and a lot more material to work with there, especially for elaborating the main patterns as they relate to your guiding question. For example, across the paper I hear you describe hydro-rugging through a series of "matterphors" including how hydro-rugging is hearth labor, enacts oceanic fluencies, is a practice of mending, creates epidermal layers, and threads together quilts of care. I wanted to hear much more about how hydro-rugging becomes a matterphor for these restorative connections. As written, the analysis shifts back-and-forth between introducing extended quotes and then going back to theory and these need to be knitted together more effectively.	Thank you for this, I have taken your suggestions and have asked the question more clearly so as to help with the analysis. I have combined the participants' responses and followed with the theory and my understanding of how the practice and theory meets and addresses the question. I have therefore merged the two sections into one and have tried to knit them together more effectively.
Finally, this work also needs to connect with and contribute to existing scholarship in environmental communication as a field. Addressing nature/culture binaries and supporting more caring relations with oceanic places are two longstanding commitments in EC and connecting with this literature would strengthen this paper. As a starting point, I recommend reviewing some of the more recent articles in the journal, and especially the special issue on Care that was just published online, and work backwards from there to deepen the connection with related scholarship.	I have extended the work of Ettinger (as the second reviewer asked for) and included papers and reading from the latest Care issue which I found very interesting and pertains beautifully to the hydro-rugging as a care cartography.

In sum, there is much to be learned from hydro-rugging as restorative justice. A substantial reorganization and clarification of the theory, guiding question, and analysis will help this learning and contribution become more fully realized.	
Concerns raised by Reviewer #2	**Response and amendments to revision draft**
This article looks to the coast and to plastic waste to attend to the long history of Black and Brown people's relationship with the ocean in South Africa and how the isolationist nature of the colonial and apartheid governments led to the distinct separation of these communities from natural resources. Through "hydro-rugging", a practical and theoretical practice of artmaking through ocean waste, the article also attends to the reparative art practices of Black and Brown people in attempts to mend the relations they have with water spaces and the marine environment generally. In this practice, memory is central as it facilitates the storytelling of the close-knit relationships Black and Brown people have with the sea and the coast. Indigenous, slave, colonial and apartheid histories are sewn together to reveal the intersectional and entangled nature of epistemic and structural injustice in South Africa and Cape Town more specifically. The article has an original approach to hydrocolonialism (Hofmeyr 2021) and its theoretical contribution to Oceanic Humanities is undoubtedly necessary, however, the article is loosely referenced, has a meandering prose, as well as a serpentine line of argument. Major revisions are required to render the article publishable. The author should definitely resubmit the article to this journal.	Thank you for your review. I have addressed the referencing issues you highlight as well as signposting and being more direct with my argument through setting questions as suggested by reviewer 1.
One major problem is that the article does not have a clear set of aims and the lack of signposting throughout signals this. The introduction, for example, does not clearly set out the article's provocations and at the moment the reader is introduced solely to the authors positionality and research.	I have addressed this by introducing myself and the concept of hydro-rugging more clearly and then motivating why we need hydro-rugging to address the questions we have related to environmental and social justice.

There is also the problem of definitions from the onset. The hydro-rug is not clearly defined and its meaning across the article is not always clear. I was unsure, at times, whether the hydro-rug and the Mother hydro-rug are material or theoretical and this stems from the articles telling rather than showing. On page 2, the author footnotes the phrase "the sea is in our blood" and connects it to Cape slave and fishermen communities; this is an extensive history that should be expanded upon in the main text because it initiates discussion on the blue histories of previously enslaved people in Cape Town. The introduction and the main body of the article also need thorough citation, for example, on pg. 3 the author cites McGarry but does not provide a page number. There is also very little in the introduction that clearly defines or situates the discourse on Blackness and Brownness (does the author need the latter term? If so, why?) in the South African context — footnote 4, like many of the footnotes in the article some of which should be included in the body of the text or removed, does not provide any useful information to the reader on the South African context and its various colour lines. The dilemma of definitions emerging late or not at all is one that makes the reading experience confusing, for instance, the term "hauntology" is used carelessly and there is never an instance where it is clearly defined or located within already existing scholarship on hauntology. The nod to Derrida comes too late and is not adequately cited or expanded (pg. 16). I recommend Nick Sherpherd's chapter in Reclaiming Archaeology (2013) titled "Ruin memory: a hauntology of Cape Town" as a starting point. I would also recommend that the author look at Fabrice Monteiro's art collection titled "God of Garbage" to connect the hydro-rug to continental efforts at redressing ocean waste, plastic particularly.	I have addressed this by bringing some of the footnotes into the text. I have rewritten and tried to be more explicit about what the hydro-rug and Mother Hydro-rug is, and included two figures to help with this too. I have referenced the sections you encouraged me to reference. I have extended the definition of hauntology earlier on in the paper. I enjoyed reading Shepherd's paper and Fabrice's work - thank you for sharing these.
The section "Creating the Mother Hydro-rug" starts abruptly, there is no signposting. The author should at least mention some of the "new methods and theories" they are referring to on page 5. The section and the article make big claims that are not substantiated, see for example pg. 6 from "these very bodies have been battered and bruised…" to the end of the paragraph. Throughout the article there is a lack of references, e.g., when the author writes on the Greensquare Market (pg. 9).	I have improved the signposting so as not to start without context or leading the reader. I have referenced the sections that make big claims without reference - although it must be said that I am also speaking from direct experience as a Brown body that has generationally experienced the battering and bruising of Black and Brown bodies.
The writing on mending and the stitching of memory tends to be repetitive. Stitching as a curatorial methodology is an interesting approach; one that can be connected to other projects in Cape Town such as the ones Amie Soudien writes about in "Memory, Multiplicity, and Participatory Curation at the District Six Museum, Cape Town (2019). It would also be interesting to see writing on the implications of using ocean waste to repair and mend the histories of people who have	Thank you for this - I elected to use Nadia Kamies's work instead. She is from Cape Town and her research resonates with mine.

been treated as waste material in slave, colonial and apartheid South Africa.	
The writing on Hydro-rugging as hearth-labour is quite fascinating. However, terms like hearth-labour are not clearly defined or located within already existing scholarship. On pg. 10 the author mentions engagements and dialogues on climate change without citing any of these. The author cites Ettinger (2023) and yet does not clarify or expand on the scholar's contributions and their usefulness to their own paper.	I have not located it in any other scholarship other than in the warmth work by Beuys. I have extended how Ettinger et al. paper has contributed to dialogue and conversation in environmental communication and how this speaks to hydro-rugging.
In the paragraph that follows, there is mention of apartheid laws and their restrictions on Black and Brown bodies in public spaces. The apartheid government had a myriad of restrictive laws some of them relegated to land and others to the use of public spaces. Specificity would be welcome here and throughout.	I have been more explicit about the apartheid laws and the ones that pertain to this hydro-rugging paper specifically.
The paper lacks temporal specificity as well, for example, on pg. 11 the author writes that "the hearth takes us back to a time where we would make time to sit together, cook, commune and share our stories." Which time exactly? And who does the "We" refer to? This leads me to the other problem of the contradictory use of the "I" and the "We" throughout the paper. It is not always clear who the "We" is despite the caveat provided in the introduction. Another term that is not fully developed and appears quite late in the paper is "relational ontology" (pg. 10).	I have also referenced the time more clearly. I have cleared the contradictory I and We in the paper. I have explained relational ontology on pg 14 and again on pag 18 in more detail.
With regards to the memories shared by participants, does this research have the ethical clearance to publish this material?	Yes it does and I have included it in the paper to make it more explicit - see pg 11 - and also attached the ethical clearance certificate from the University. Even though I have clearance I never disclose the participants names.
To sum it up, this article has great potential but its meandering prose, lack of citations and a clear line of argument makes the reading experience difficult. I would also recommend that the author look at past and emerging work in Oceanic Humanities (e.g. Isabel Hofmeyr, Charne Lavery, Meg Samuelson, Elizabeth DeLoughrey, Confidence Joseph, Phindi Mnyaka, Rose Boswell etc.) The paper needs a complete rewrite and a much clearer focus. It does offer valuable insights on race, the ocean and other public spaces in South Africa	I have kept the meandering prose but with more direction and sign posts along the way to direct the reader with the flow. Thank you for the references, I have included some of these in the revised paper.

Appendix B - Reviewers comments

Chapter five

Dear Editors

Thank you for your comments and queries, it has helped us as authors to understand how we can improve the paper for readers to follow what we are wanting to convey through writing the paper in this particular way.

Please see below for our comments in response to your advise:

1. Many thanks for your contribution to the special edition and for responding to your reviewers. We have been through your revised article and have identified a number of issues that need to be addressed in order for your article to have a better flow. Part of the problem is one of structure … if you are following the logic of the head water leading to tributaries that then flow down to the ocean, It needs to be clear what the source is, what the different tributaries are and why they are important, and what they do... how they affect and impact on ... the bigger pool of the ocean.

   Thank you for this observation. We have tried to tidy up the structure in a way that works with what we are trying to convey in the introduction of the paper. We are more explicit about our intentions, but as we have taken a non-material/representational approach and rather work within a New Materialist or Posthuman re-configuring, this comment requires some further unpacking. We argue that the comment related to the linear flow of the river from headwater to the ocean as being clear and with intention is contrary to the thinking of research-creation which calls for an unpredictable and emergence of outcomes from the process with no set 'course' and deliberate intention. Yes, the river may get to the sea but there are many options and choices as we flow with the river and this is our point, we are staying with the process with the river and participating and learning together with the students.
   Reading Neimanis again – she writes about water being what we make of it. We can explain how this work affects the bigger pool of the paper but following the river in a sequential process is not what we want to emphasise. In fact, the hydrological cycle is constantly changing and being affected by human and more-than-human factors and perhaps this is what needs to be stated upfront – we have done this.

   We have therefore included some of the suggestions for restructuring but not all.

   1. Introducing ourselves as authors: We have kept it where it originally was because we want to be clear that we as authors are not leading the process, this is a shared learning experience with the students as much as the teachers. We have made this explicit in the introduction too.
   2. Figure 1: Slow scholarship drawing and some of the theory has been moved up into an earlier section of the paper. However, most of the Slow scholarship theory related to the experience with the students emerges in the discussion and is unpacked in relation to the experiences that unfolded with the events (Page 12 and 13 on original editors comments).

3. Pg 10, 11 - the editor calls for us to move the description of the events to earlier in the paper. We have chosen to keep them where they are because we are diffracting the practice with the theory in the discussion of the paper and conveying how interlinked they are. We have however chosen to focus on the painting and hydro-rugging events in relation to theory and have tried to create better structure and flow by doing so.
4. Cleo's jackets: We have described the context a bit more.

Joanne: Aaniyah, I support your views and would like to add that working within a hydrologics is not the intention of this paper at all. We playfully and explicitly work with the affordances of watery methods in order to resist the linear, taken for granted ideas "sources". Another way of putting it is drawing on rhizomatic readings and writings within scholarship.

2. In order to do this, you need to clarify the main question of the article (and how it relates to the special issue) and trace the threads of the major argument and its tributaries in order to show how your three pedagogical interventions are in fact transgressive (what is the status quo, why is it problematic and how does this shift power, relationships, histories etc.).

We have clarified this in the Intro.
Theresa: The flow is intended to be followed -without sight of the destination or what is coming around the corner… we are 'meandering'! Meander with us. I think you have responded very well to the editor, Aaniyah.

3. At the moment the paper is too descriptive, it will be much more powerful if you could help the reader understand how care, response-able and slow pedagogies are central to social and environmental justices.

Again we have tried to address this by being more explicit. However, the descriptive nature of this paper is intentional - we are also not sure what you mean by descriptive, is it that we are describing the events in too much detail? Because sometimes we are asked to be more detailed i.e. Life Jackets. We are challenging the theory/practice binary and in fact foregrounding the practice to show that practice is as important as theory and that practice can inform theory as much as theory informs practice.

Joanne: Thanks Aaniyah, and to pick up on the concept of descriptive mentioned in this review comment, I don't believe that we are working with descriptions.

4. The flow will also be greatly enhanced by introducing yourselves and the participants up front and explaining how the paper will unfold. This will require a brief description and contextualisation of the three pedagogical interventions before you discuss each one in detail.

We have chosen to explain the intention of the paper upfront but have kept the introduction of who we are for later in the paper because we are challenging the teacher/learner binary too; and explain that the one is as important to learning as the other.
Theresa: This would be a very rational and sequential move. We would rather write poetically and less logically. We are present in the writing, initially as a small swarm. Our individual stories are not immediately relevant but are offered later in the text as a situating and response-able accounting.

5. Then, as you dive deeper into each event, you can explain how and why they were curated as they were, what the set out to achieve and why they matter. At the moment there is a division between the descriptive narrative and the theoretical frameworks that inform your thinking. The latter are reading as add-ons in the form of footnotes, rather than critical engagements with pedagogical practice. Similarly, the references to care, response-able and slow pedagogies are somewhat diluted because you do not give them their due. We suggest that you focus on each one through a specific event rather than mention them throughout the text.

   We are happy to explain this upfront and the reasoning for doing this but changing this will go against the reason for doing it this way – disrupting how research is practised in that theory always comes first. In this paper we make the point that practise informs theory and that they are in fact interchangeable.

   Joanne: I agree with Aaniyah, the emphasis on deepening the writing of the concepts mentioned in your review is something to take up, however, not in a bounded section allocated way.
   Theresa: There are multiple events that relate to each of these concepts which are related and not mutually exclusive.

6. The paper will also require a rigorous copy and language edit - you may want to enlist the services of Karen Graaff who is also a feminist scholar working in this area?

   Apologies for this. I think in the back and forth of reviews and moving between Word and Google docs this has been poor. There are some specific ways that we are purposefully writing and I have highlighted those.

   We would really like us to enlist people of colour to help with this in the future. Given the time constraints I am happy to go with her. Roshan Kader is a good contact that Aaniyah has worked with previously.
   Theresa: We are happy for Karen to do an edit as long as we get to see it again before it is published. I have had bad experiences with 'language' edits….