

A new 'dance of agency': An embodied engagement with material agency in artistic practice.

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Supervised by

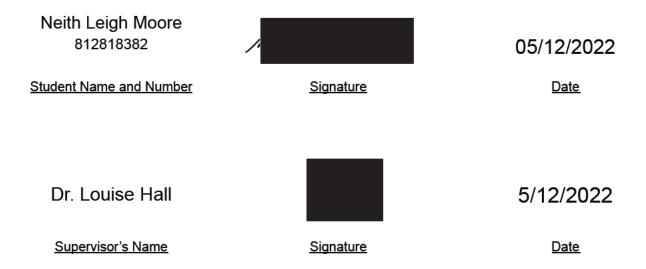
Dr. Louise Hall (Supervisor)

DECLARATION

Submitted in partial fulfilment of the requirements for the degree of Master of Arts, in the Graduate Programme in Visual Arts
University of KwaZulu-Natal, Pietermaritzburg, South Africa.

I, Neith Leigh Moore, declare that

- 1. The research reported in this thesis, except where otherwise indicated, is my original research.
- 2. This thesis has not been submitted for any degree or examination at any other university.
- 3. This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
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- 5. This thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the References sections.



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My thanks go to my supervisor, Dr Louise Hall, who showed me how PLR could work to liberate and change my practice.

I could never have done this without the support of my husband, Trevor, who did not live to see me finish this project. He is, however, still included in my work as part of the unity of making/thinking/being.

The financial assistance of the Centre for Visual Arts at the University of KwaZulu-Natal, through the support of the Rita Strong Scholarship towards this Master's degree and associated research, is hereby acknowledged and I confirm that the opinions expressed, content and conclusions determined are my personal submissions as those of the artist/author and are not necessarily to be attributed to the Centre for Visual Arts and/or the University of KwaZulu-Natal.

ABSTRACT

My current body of work explores, and is rooted in, the issues and challenges surrounding posthuman performativity as part of the New Materialisms.

These theories claim to offer a new way of making/knowing/being that is not anthropocentric. From this framework, I approach understandings of material agency that seek to go beyond human agency and "chasten my fantasies of human mastery"¹.

My objective is to investigate my 'dance of agency'² through a posthumanist lens, as I engage in an inter-epistemic dialogue, which seeks to undermine the traditional boundaries between the human, the animal, and the inanimate. This dialogue positions itself on the boundaries of many disciplines, namely physics, biological systems theory, psychology and chemistry, in an attempt to apply a posthumanist theory to the Visual Arts.

Using my art practice and the exhibition, 'Material Agency in the Anthropocene', from my practice-led research, I explore my own, and society's vulnerability in a manner that pays attention to the powerful 'being' of nonhuman forces and materials and their inherent entropic 'messiness'.

Given the scope and scale of current non-human agencies, such as viral, biological and climate change factors, I suggest that this area of research into a new 'dance of agency' between the human and the non-human could be of contemporary value.

Keywords: Visual Art; Posthumanist performativity & theory; New Materialisms; material agency; human agency; Anthropocene; Practice-led Research;

¹ Bennett 2010:122

² Pickering 2012:1

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Chapter 1:

1.1 Introduction

A background to my exploration will be presented in this chapter. Also discussed in this chapter, in the literature review, will be the authors and sources which were vital to my research. The theoretical framework is then explained together with a discussion of the methodologies used to explore the research questions. The chapter concludes with the structure of this dissertation.

My use of the term 'thinking-making-being' situated this study in an ongoing investigation of my art-making during the time of COVID-19. The interrogation of some of my emotional and embodied concerns about the ramifications of the Anthropocene in this pandemic assisted me in considering the possibilities inherent in celebrating material agency in my evolving practice, as a 'dance of agency'. Lessening the impact of the human (myself as the artist) provided an allegory for the reduction of human impact in this time/space. A focus on embodiment consisted of the careful monitoring, documentation and reflection (both visual and verbal) of the human's (my) artistic and physical input in the artwork as the intent is to 'lessen' this. This resulted in a new awareness for me and hopefully others, of the importance of material (non-human) agency in keeping with the misalignment that humanity has created "within the gap that modernity has created between nature and culture, human and nonhuman" due to the "biopolitical wars of the historical colonial expansion" (Ghosh, 2021:165,167).

1.2 Background / motivation

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My retirement, which started in 2020, offered me the opportunity to resurrect and revitalize my artistic practice, as the last 35 years of my life have been engaged in teaching Art, Design and Science (Physics and Chemistry) to high school learners as well as developing websites.

However, the advent of COVID-19 in 2020 radically and unpredictably changed my initial intentions and could be considered as a major constraint or obstacle in this resurrective journey. With galleries, retail outlets and UKZN closed for the lockdown, I was literally confined and dependent on myself, my body, my past experiences, my closely restricted environment, and the materials around me. I had to examine my isolated environment closely to establish what was available to me; what was commonly available in supermarkets/hardware stores and online; what was used for other purposes and what I already had, as these became the only

These ubiquitous construction materials presented themselves to me at various times. Initially, my involvement was with water as I worked with boreholes, plumbing, and mud. The copper of the plumbing became especially intriguing and gave rise to a host of new possibilities - new 'accommodations' as the dance progressed. Over time, the development of rust came to my attention as heat and human neglect allowed colours and textures to emerge. Sunlight (both the infrared and ultraviolet parts of the spectrum) also suggested possibilities of altering chemicals and materials. These 'emergent properties' of water, copper, rust and sunlight, suggested a way of considering and organizing the choreography of my new dance and underpinning the structure of both the practice and the co-emergent research (see title on cover page).

In addition to the lockdown associated with the pandemic and my age as a risk factor, arthritis and degenerative disc disease had posed questions for me concerning the somatic involvement of my body in art-making as an 'embodied engagement'. This constituted another constraint or obstacle in the journey towards this goal - a 'resistance'. This concept will be explored in the research.

My past experience as a Science and Biology teacher; as an Art and Design teacher; and as a web designer provided the life context which drew on past experiences. In addition, my experience as a Wellness Counselor emphasized the important role that art-making has to play in human wellbeing, particularly during times of stress and anxiety such as this global pandemic (Berry, 2011: Ch.1)(de Botton & Armstrong, 2016: Ch1). Journaling kept a record of my bodily/somatic engagement and the reflections that arose before/during/after the creations of the artworks, which evidenced these engagements.

As the lockdown restrictions eased in 2021, more materials became available, especially online, but the intrigue of engaging with the basic vital raw materials had at that stage become intriguing and necessary for me in my practice.

1.3 Research objectives

A core consideration of this new 'dance of agency', was the interrogation of my embodied (human) entanglement with material agency in my artistic practice. This research argues that experimental processes in working with materials in an 'alchemical' and reverent manner are instrumental in articulating the research questions. The research objectives were to examine and interrogate the new 'choreography' in the dance between my human agency and material

agencies in order to develop a new mode of thinking/awareness and artistic practice with regards to notions of aesthetics and process. In order to achieve this, it was necessary to identify and expand on the parameters involving chosen 'resistances' and 'accommodations' in my evolving artistic practice during the time of COVID-19. For example, one of these resistance/accommodation parameters was the curatorial decisions regarding a dynamically interactive virtual exhibition as a response to COVID-19.

In summary, the objectives were:

- 1. To examine and interrogate the new 'choreography' in the dance between my human agency and material agencies in order to develop a new mode of thinking and artistic practice with regards to notions of aesthetics and process.
- 2. To identify and expand on the parameters involving chosen 'resistances' and 'accommodations' in an evolving artistic practice during the time of COVID-19.
 - 2.1. One of these resistance/accommodation parameters was the curatorial decisions regarding a dynamically interactive virtual exhibition as a response to COVID-19.
 - 2.2. Another of the resistance/constraint parameters was the somatic involvement of my body in art-making as an 'embodied engagement'.

1.4 Research questions

- 1. How will new modes of thinking and artistic practice regarding aesthetics and process, result from an altered relationship between my human agency (as artistic self) and the variety of material agencies used?
 - 1.1. How will the chosen parameters in my artistic practice process expand this 'dance'?
 - 1.2. What curatorial decisions regarding a dynamically interactive physical and virtual exhibition will co-emerge as a response to COVID-19?

1.5 Review of Literature

A review of the relevant literature situated the research project in the Anthropocene³ and helped construct a theoretical framework which I later applied in the section on Research Methodology (pg. 9). This review was considered in sections that related strongly to my exploration of the concepts that underpin my research. Artists that were strong influences on my work were briefly mentioned, but in-depths discussions on them were found later in the study where their approaches and concepts relate to my praxis.

I used a mixed methodology where Practice-Led Research (PLR) was the fundamental methodology. Other elements of this 'mix' were discussed in their sections and their methods outlined.

1.5.1 Practice-Led Research (PLR) literature

My readings around PLR suggested the most useful framework and methodology. In Bolt and Barrett's (2007) *Practice as Research: Approaches to Creative Arts Enquiry,* Bolt emphasizes "the double articulation between theory and practice, whereby theory emerges from a reflexive practice at the same time that practice is informed by theory. This double articulation is central to practice-led research" (Bolt & Barrett, 2007: 738/4512).

Cahnmann-Taylor's *Arts-Based Research in Education: Foundations for Practice* (2018) suggested that the purpose of PLR is to become "more reflective on the magnitude of entanglement in which we (as artists) operate" (Cahnmann-Taylor, 2018 :4-5). This further suggested the importance of a reflective/reflexive practice.

PLR also suits the artist/researcher when material agency exists in the physical, practical world and the 'making-thinking-being' of the artist constitutes the partial human agency.

"... previously, scholars who were artists felt the need to separate these two worlds, (distinguishing) scholarly practice from artistic engagement. The last ten years have seen

³ This Anthropocene Era can be considered as an unofficial unit of geologic time that describes 1950 to 2021 when human activity started to have a significant impact on the planet's climate and ecosystems (National Geographic 2019).

this artificial wall collapse as young and veteran scholars fearlessly explore academic and artistic border crossing. Today, young scholars entering the field may not even be aware that such a wall once existed" (Cahnmann-Taylor, 2018: 2).

Bolton & Delderfield's (2018) Reflective Practice: Writing & Professional Development re-asserted the value of this inclusion of reflective practice in all aspects of the PLR as it included an embodied experience that had as many viewpoints and contexts as possible. They differentiated between reflection and reflexivity in that reflexivity finds strategies to question our reflective assumptions and viewpoints.

1.5.2 Decentering the human subject

The dialectic and dialogue between non-human and human agents in my art correlated with Pickering's position regarding the decentring of the human subject and the emergent more equal 'play' between human and non-human (or material) agency. He applied this to his field of science studies, but my contention here was that this provided a useful way of re-considering my personal art practice (Pickering, 1995: 559). Pickering's (1995:562) own use of the original term 'mangle of practice' to describe this 'play' seemed painfully disconcerting for me, but his later use of the idea of a 'dance of agency' seemed more positive and useful to my investigation (Pickering, 2012:1).

The ubiquity of what was available to me in isolation due to the COVID-19 lockdown became one of the 'partners' in this dance (Pickering, 2011:3). Both Pickering and Barad postulated a performative onto-epistemology where the impact of our Anthropocene Era is mediated by this relational dance of agency (Pickering, 2011:3, 2013:77, 2017:talk 2; Barad, 2003: 808). This Anthropocene Era could be considered as an unofficial unit of geologic time that describes 1950 to 2021 when human activity started to have a significant impact on the planet's climate and ecosystems (National Geographic, 2019)(Smithsonian, n.d).

In Pickering's view (Pickering, 1995:585), any analysis of science⁴ (and now, in my view, of artistic practice) called for a decentring of the human subject (here - artist) and a move towards an equal interaction (or in Barad's neologisms, an intra-action) of the human and nonhuman. Barad asserted that an analysis of any practice - be it scientific or artistic - required an acknowledgement (and an investigation) of the roles of the nonhuman (or material) agency and

⁴ "Science is the pursuit and application of knowledge and understanding of the natural and social world following a systematic methodology based on evidence" (ScienceCouncil.org).

a study of 'knowing is being' in the practice. She called this an 'onto-epistemological' approach - another neologism. Barad stated that:

"We do not obtain knowledge by standing outside of the world; we know because "we" are of the world. We are part of the world in its differential becoming. The separation of epistemology from ontology is a reverberation of a metaphysics that assumes an inherent difference between human and nonhuman, subject and object, mind and body, matter and discourse. Onto-epistemology—the study of practices of knowing in being—is probably a better way to think about the kind of understandings that are needed to come to terms with how specific intra-actions matter" (Barad, 2003:30).

The investigation of Human/Object Agency and Poiesis ('bringing into being') developed in importance during my reading and seminal works were found that expanded on this area of practice. Pickering's (1995) *The Mangle of Practice - Time, Agency, and Science;* (2011) *Ontological Politics: Realism and Agency in Science, Technology and Art*; (2013) *Being in an environment: a performative perspective:* (2017) *Poiesis in Action: doing without knowing* provided an insight into areas that could be developed further in their applications to artistic practice. As previously mentioned in the motivation, this 'dance' of agency developed as work occured with the resistances offered by non-human materials/objects, such as found in art, and possible somatic accommodations reached by a human agent, such as myself. As such, the key ideas of 'embodiment' and 'materiality' were implied in the 'dance of agency' as the human (artist) body intra-acted and was entangled with the autonomous materials (Pickering, 2012:1).

Henrickson's (2014) Do objects have agency? and (2014) The dance of agency: the interaction between human/object agency and passivity, provided an insightful commentary on Pickering's work. These ideas of agency and non-human (posthuman) performativity were further developed in the work of Barad's (2003) Posthumanist Performativity: Toward an Understanding of how Matter comes to matter and (2007) Meeting the Universe Halfway: Quantum Physics and the Entanglement of matter and meaning.

Some artists that have been important conceptually to date have been:

Nathi Khanyile's (2019) installation *Wathint' abafazi Wathint' imbokodo* (Figure 1) consisted of pillars of woven grass that were imposingly physically present in the Durban Art Gallery space but also seemed to be suffused by a life force and take on the role of spiritual guardians. This shamanistic transcendence occured despite attempted objectivity as the materials had their own 'lives', and there was a subjective essence that subtly affected their emergence and intra-action. The materials Khanyile used here were ubiquitous in rural culture and also had cultural and transcendent significance. e.g. the white ochre represented the person called to 'ukuthwasa'

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which happens when someone in the ancestral Sangoma/Inyanga lineage calls (Mkhize, 2011)(Khanyile, 2019 interview).

Sun documented finding this spiritual 'essence' in architectural materials as well and refered to Jane Bennett's writing in this regard.

"According to (Bennett), substances aren't simply alive in a mechanistic way or infused with a transcendent spirit. They are alive in their complex interrelationships, trajectories, and propensities. Bennett shares Bruno Latour's term 'actant', which is a source of action that can be either human or nonhuman" (Sun, 2015: para 2).

This intra-action between the human and the non-human, the animate and the inanimate, was relatively new to Western thought but was evident in the attitude of many other indigenous peoples to matter and nature, and also in the attitude between humans and their artefacts. This was acknowledged in the study. Ghimpu, for example, showed this connection in her study of an Andean culture where she found that "the material universe possesses sentience; ergo, a degree of intentionality is assigned to it as well" (Ghimpu, 2016:1). Anzaldua, too, drew on the connections between the imagination's knowing, being and making functions, (epistemological, ontological and creative functions) when she borrowed from transpersonal psychology, indigenous and esoteric philosophies, and shamanism to bridge body/nature and spirit/mind as she created in the liminal spaces between cultures and between this physical world and the world of spirit (Anzaldua, 2015: location 613). This would be important in an African context when Khanyile's work is considered.



Figure 1: Nathi Khanyile *Wathint' abafazi Wathint' imbokodo* (2019) Installation variable and on various dates. Plaited/woven grass, red & white ochre, cow dung.

Another artist who allowed her materials (ink and glue) more agency was Penny Siopis (Figure 2), who also achieved an 'imminent transcendence' in her work (Siopis, Website). Again, a close study of her work provided insights into personal practice with regards to new 'dances of agency' (Pickering 2011:3). Siopis worked with glue, inks and gravity. She allowed the materials to develop in their own unique manner but often re-involved her artistic agency at the end to emphasize images suggested by the materials.

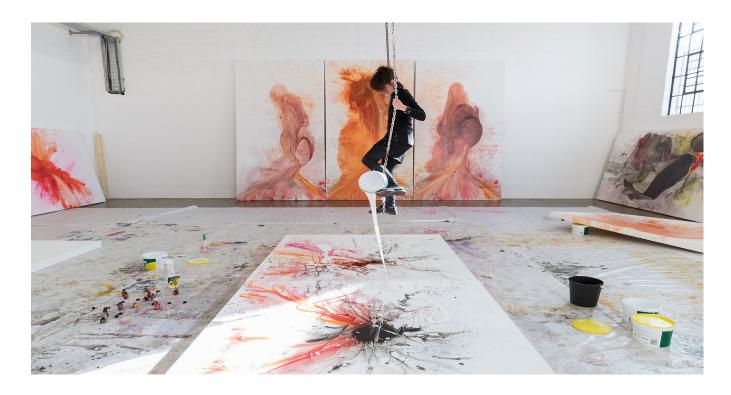


Figure 2: Penny Siopis at work.

1.5.3 Science and Art (Transdisciplinarity)

Many artists work on the boundary of science and art, and so Bronwyn Lace's (2017) *Feast or Famine* (Figure 3); Fritha Langerman's (2010) *Subtle Thresholds*; Pippa Skotnes' and Jeanette Unite's websites provided inspiration and a sense of context for my work. Dana Walrath's website worked with medicine and memory, while Marian Hester's website was also useful as she worked in developing a fuller material agency in her prints and installations. Studying their modes of thinking/being and how this affects their artistic practice (making), was of use in any new 'dance of agency' (Pickering, 2011:3). Lace's work referenced a forensic method of cleaning bones for examination and preservation. In this video, carrion beetles eating an owl were seen. The artistic possibilities of this type of 'scientific' videography further revealed natural agencies.



Figure 3: Bronwyn Lace's (2017) Feast or Famine. Video Collection: Durban Art Gallery

The experiments I conducted in my evolving artistic practice produced a range of 'alchemical' results that promised a new direction situated in the interdisciplinary space between art and science, using non-traditional materials and allowed them the latitude to be autonomous agents. This 'new direction' had a personal, healing value for me but also had pedagogic implications in terms of a 'generative but disruptive' potential for art-making. This pedagogic direction was one that was common to a number of contemporary authors such as Hickey-Moody and Mcphie (Hickey-Moody, 2016: abstract)(Mcphie, 2018:11).

"Performative (inorganic) posthuman pedagogies can lead to rewarding consequences when applied to higher education and co-create the potential to support a flatter ethico-onto-epistemological awareness." (Mcphie, 2018:11).

These concepts about material and matter did not exist in a vacuum and other articles applied these concepts to disciplines such as psychology - Bastalich's (2020) *Interpretivism, social constructionism and phenomenology;* art - Lange-Berndt (2015) *Materiality* and ecocriticism - Morton's (2011) *The Mesh.* These additional readings provided insights as to new 'response-abilities' (Barad, 2007) that emerged in their applications to my art-based practice. Feminist Studies also provided insights into new areas of relationships between the hu/man and

wo/man, between humans and nature and between all of these and the actual physical materials of the earth. Alaimo's (2010) *Bodily Natures: Science, Environment and the Material Self* and Anzaldua's (2015) *Light in the Dark/Luz en lo Oscuro: Rewriting Identity, Spirituality, Reality* was of use in firmly positioning the study.

Mcphie's (2018) I knock at the stone's front door: Performative pedagogies beyond the human story and Morton's (2011) The Mesh, examined the excessive human focus in the Anthropocene Era and its consequences to ecology and the Earth. Although these works were a call to action on the ecocriticism front, many of the lessons and response-abilities that were exposed had already made a difference in my personal thinking and writing. Many words that are currently used are deconstructed in these texts and re-used in a more reflective manner such as 'responsibility and response-ability' - 'the ability to respond in a meaningful manner' (Barad, 2003).

Psychological areas of concern in this project existed in the areas of wellness, pain-relief and mindfulness, and useful readings around this were Varela, Thompson & Rosch's (1991) *The embodied mind: cognitive science and human experience;* Berry's *Personal Geographies* (2011); de Botton & Armstrong's *Art as Therapy* (2016). This research would, however, not aim to investigate these areas as a primary concern, and they would remain part of the dialogue between resistances and accommodations and have an embodied importance in my work which will be discussed further in the dissertation. It became evident that my new practice positioned itself on the boundaries of many disciplines and so the investigation of this transdisciplinary possibility became necessary. Some of these disciplines were theoretical physics, biological systems theory, psychology and chemistry.

1.6 Research Methodology

Mnguni considered that "a theoretical framework was a lens through which the entire study was viewed". He argued that it should be part of the Research Methodology section in order that "researchers can demonstrate coherently how the theoretical framework informs their methods and approaches." I concurred with Mnguni's position and used this rationale for discussing the Theoretical Framework of this study before I discussed the Research methodology. (Mnguni, 2020: 1).

1.6.1 Embodiment

My use of the term 'thinking-making-being' situated this study in an ongoing investigation of my art-making during the time of COVID-19. The interrogation of some of my emotional and

embodied concerns about the ramifications of the Anthropocene in this pandemic assisted me in considering the possibilities inherent in celebrating material agency in my evolving practice. Lessening the impact of the human (myself as the artist) provided an allegory for the reduction of human impact in this time/space. A focus on embodiment consisted of the careful monitoring, documentation and reflection (both visual and verbal) of the human's (my) artistic and physical input in the artwork as the intent is to 'lessen' this. My age as a risk factor, arthritis and degenerative disc disease had posed questions for me concerning the somatic involvement of my body in art-making as an 'embodied engagement'. This constituted another constraint or obstacle in the journey towards this goal - a 'resistance'. This concept was explored in the research.

This resulted in a new awareness for me and hopefully others, of the importance of material (non-human) agency in keeping with the misalignment that humanity has created "within the gap that modernity has created between nature and culture, human and nonhuman" due to the "biopolitical wars of the historical colonial expansion" (Ghosh, 2021:165,167).

1.6.2 Posthuman Performativity

Both Pickering and Barad postulated a Posthuman Performativity onto-epistemology where the impact of our Anthropocene Era was mediated by this relational dance of agency (Pickering, 1995, 2011, 2013 & 2017; Barad, 2003 & 2007). Barad - an important New Materialist thinker - also wrote of this performative intra-action between the human and the non-human when she used quantum physics to explain that all matter (animate-human and animate/inanimate-matter) is a performative involvement in the common 'spacetimemattering' of the world (Barad, 2012: 45). Bolt even argued for a performative view of painting when she questioned the transcendence of the image from the representational to the performative, which was discussed later (Bolt, 2010: 4).

The 'vital force in materials' (Runge in Lange-Berndt, 2012: 96) already became more apparent to me, as was Bennett's concept of 'vital matter' (Bennett, 2010: 62) when I am worked with materials and their performativity, and this was something new that emerged, after my habitual desire for extreme human control of matter. The challenge then was to choreograph the dance of agency so that my artist's involvement did not disappear altogether but that materials had as much autonomous agency as was possible (Pickering, 2012:1).

This research project had the potential to incorporate a more integrated and holistic approach whereby the project progressed in a rhizomatic web-like manner instead of a hierarchical arboreal linear fashion (Cahnmann-Taylor, 2018; Deleuze & Guattari, 1980). This was also in

keeping with the postmodern avoidance of Cartesian 'either/or' dualisms and the understanding that, like photons in physics which have quantum properties of both particles and electromagnetic waves, the conceptual underpinning was now that of rhizomatic 'both/and' thinking (Barad 2007:85).

Bruno Latour, in his 1999 *Pandora's Hope* considers that "...unlike society, which is an artifact imposed by the modernist settlement, [the concept of collectives] refers to associations of humans and nonhumans. While a division between nature and society renders invisible the political process by which the cosmos is collected in one liveable whole, the word 'collective' makes this process central" (Latour, 1999: 286).

Lange-Berndt, in *Materiality* (2015) also focused on this concept of collectives but pointed out that "materials are always in a state of becoming, entangled in vibrant webs of relations, with their own ecologies and politics" (Lange-Berndt, 2015:31). This awareness became central in my consideration of the dialect and dialogue between non-human and human agents in this livable world which Latour referred to as 'Gaia' (Latour, 2019 *Gaia 2.0/Down to Earth 0.38/20.11*).

1.6.3 Reflection

I documented and recorded my process of co-creation as part of the reflective process. An emphasis on a reflective (online journaling) practice complemented this PLR in terms of documenting and reflecting on the process underpinning the co-creation of the emergent works. To this end, I established an online reflective website called 'Making-thinking-being ... a reflective journey' (neithmoore.com), where Bolton's ideas on reflection were incorporated into my artistic practice (Bolton & Delderfield 2018: 9). This website became a vital part of my practice (neithmoore.com - 'making-thinking-being').

This reflective recording was further enhanced by the meta-cognitive aspects of reflexivity. Using a reflexive approach, I attempted to find strategies to question my old attitudes, values and habitual actions, such as that of extreme technical control (Bolton & Delderfield 2018: 10).

1.6.4 Material Facilitation

In terms of my actual practice, this involved the facilitation, instead of the control, of materials as the emergent 'artworks' were co-created by the materials and myself. These artworks were then considered to be the 'emergent properties' of the materials themselves. I used the 'dance of agency' (Pickering 2012:2) as a metaphor for an investigation into this interplay - or rather 'intra-play'/'intra-activity' as Barad contends (Barad 2003:18) - between material and my human agency; between materiality and embodiment. I anticipated that this intra-play could be conflictual at times but also liberating and healing. It also created a new way of thinking about

art for me where existing habits of control were altered. As is typical with PLR, this 'intra-play' co-created the questions which underpinned the research.

Barad's intra-play was also argued to be 'in conversation' with Deleuze and Guattari's rhizomatous thinking (Murris & Bozalek 2019), which was of importance to any approach that presupposed an agential relationship - be it dialectical or not. Barad's advocacy of a 'diffractive' methodology when investigating two or more disparate entities also resulted in some surprising and illuminating results (Koole 2015; Geerts & van der Tuin 2016). This intra-play was recorded on the website. This digital involvement also aided in the diffractive reading of these works (Bozalek & Zembylas 2016).

1.6.5 Virtual space

Another area investigated was that of the interactive virtual exhibition (Virtual Reality)(VR) as an end objective of this project. I used a Ricoh-theta 360 camera and Theasys was used to host the exhibition (Moore 2021: *Interactive virtual exhibition example*). This strategy proved of enduring interest during the extended Covid-19 pandemic and subsequent partial return to 'normal'. Many institutions have long seen the potential in this, and they provided useful examples, such as the Parasch Heijnen Museum (Parasch Heijnen Museum, n/d). The artists' websites previously mentioned on page 7 also showed this potential. To this end, experimentation with a personal website was investigated with a view to being able to exhibit some of the chemical 'behaviours' experienced and documented videographically (neithmoore.com). In addition, the virtual exhibition was an accommodation to some of the current resistances inherent in the Covid pandemic (Pickering 1995:559). These 'virtual' curatorial decisions co-emerged as the pandemic and the work evolved in this process exhibition.

1.6.6 Practice-led research (PLR)

In this research project, my practical artworks and experimental processes (praxis) were started in 2021 and these experimental artworks then suggested and informed relevant theoretical research writing (exegesis), as is typical of PLR. As I researched and reviewed the relevant literature, missing areas emerged and suggested further practical work for me. This was a feedback loop typical of PLR that resulted in my investigation of a new 'dance of agency' that generated a third creative space for me (Pickering 2012:1)(Goddard in Barrett & Bolt 2007: 2610/4512). As has been mentioned on page 11, this 'intra-play' between agencies co-created the questions which underpinned the research which was a feature of PLR.

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In conclusion, the methodology which best combined the elements of making-thinking-being in this dance of agency seemed to be situated somewhere in the New Materialist (Posthuman) paradigm, with its many-faceted components. I contended that this mixed methodology would assist me during this practice-led research project and would lead to more specific insights and further questions about art practice as the 'dance' progressed.

As Practice-led Research was concerned with the nature of practice and led to new knowledge that had operational significance for that practice (Candy 2006:1), the practical 'posthuman' work that occured during this project led to research in the New Materialisms that created new understandings about practice, with all its processes and aesthetics. This then provided a feedback loop where the research itself suggested further practical work and so a cycle was established. It was important in this process to document/reflect during and after each session of practice. This was recorded in order to trace the evolution of the work.

1.7 Structure of dissertation

Process underpinned the structure of this dissertation.

Ch.1: Introduction, Review of Literature, Methodology & framework

Ch.2: An examination of my practice: with reference to a few select artists

- Working on a construction site
- Working with alchemy
- Working with rust
- > Working with natural UV light
- Working with Lithic Fragments

Ch. 3: Conclusions

Chapter 2:

2.1 Introduction

In this chapter, I considered the various types of knowledge and thinking processes that had emerged in the initial stages of my PLR, while I engaged with the potential of material agency. A consideration for me, in the discussion of my work, was a decision to emphasise material agency and decenter human agency by moving between writing in the 1st person (as human agent) and then moving into the 3rd person as the materials themselves 'acted' or 'waited' in a vital manner (Bennett 2010: 122).

2.2 Working on a construction site

I started work on the construction site of our retirement cottage and studio at the end of 2019 and I planned to temporarily continue my art practice from the main house in existing stables and on the veranda. Construction materials arrived on site and the buildings took shape. A borehole was dug and mud covered much of the site as the summer rains arrived at the same time as the news about an emerging global pandemic. My art materials were unfortunately in storage waiting for the studio to be completed but, as this was now on hold, I was in a state of limbo and mental depression.

"The images of the dried mud are texturally fascinating and I now want to work with mud as a medium. This seems crazy but possible and I think it could make me feel less depressed!" (Moore, journal entry).

The abundance of water, mud and abandoned cement around me invited an engagement with them in lieu of using conventional and inaccessible art materials. I questioned whether this way of working could result in a new mode of thinking and artistic practice, regarding aesthetics and process. The raw materials and forces seemed out of my control and seemed to have a life of their own that did not rely on my existing technical acumen. Researching the concept of an independent life of materials led me to Jane Bennett's writings on *Vital Matter* (Bennett 2010: 122).

In keeping with PLR, this experimental work with mud initiated research around the use of elemental and ubiquitous 'non-art' materials. Pickering (2012:2) says that "If there is a certain nonhuman toughness about scientific knowledge, it is grounded in performative (not cognitive) relations with the material world." With my science background, this idea of science being grounded in a performative relationship with water and mud, proved enticing and I was left to wonder if this might not be true of art-making as well, as is reflected in my research question, where I consider new modes of thinking and practice (pg.3).



Figure 4: Moore 2020. Photograph of dried mud April 2020 during lockdown.



Fig. 5 Water video link

I found the performative nature of water to be a feature of the water itself and largely independent of human agents. It obeys gravity and has its own unique life (Bennett 2010: 122). Pickering notes this too when he shows how macro water-management is not only about hydrological knowledge, "but another iterative and performative dance of agency, orchestrated

now between the dam operators and the downstream ecosystem" (Pickering 2017: 3). This idea that materials and forces have their own performative potential led me to investigate the agency of water, gravity, flow, copper, pool acid and mud.

The stimulus for an initial artwork with these construction materials (Figure 6), was the advent of 'bizarre lockdown clothing rules' in South Africa where the sale of open-toed sandals was forbidden (BusinessTech 2020). I articulated what I considered to be a pointless and confused rule by making concrete 'slops' with copper pipes to carry water, that went nowhere and were useless. A 12V current from an old battery caused the copper to oxidize and added danger and human irritation. As an extra incentive for my future engagement, I then saw these sandals as a metaphor for the beginning steps of my journey to investigate my new 'dance of agency' (see pg. 3 for research questions)(Pickering 2012:1).



Figure 6: Moore 2020. Concrete Sandals. Life size. Concrete, copper pipes, acid

The work of Jan Hogan

Further reading around mud and the forces that act upon it as potential new parameters to investigate in my practice, highlighted the work of Jan Hogan, where her work with mud recorded the history of a past people (Hogan 2015: n.p.). Hogan worked with a roll of heavy paper which she unrolled in the landscape. She noticed that the "paper retains the traces of the elementary forces forces that impinge on us as living beings, forces like "pressure, inertia, weight, attraction, gravitation, germination" (Deleuze 2003:48 in Hogan 2015). She allowed the ochres and the soils of the Australian ground to stain and soak into her paper which she then folded as an acknowledgement of her intervention as a human agent. This play between the agency of the ground and of inanimate forces resonated with the manner in which I was working with mud. Hogan's interest, however, lies in the relationship between the land and its original inhabitants, as it is mediated by her art process in a meditative manner that contains a shamanic element when she acknowledges and celebrates the ancient people of her land.



Figure 7: Jan Hogan, 2015. Ochres on the Line.

Relationship with my work

As I noted in my journal about my process of working with mud:

"The weather is freezing and I try to keep my hands dry. Once the paper is dry I move inside and hang the paper up. I want to use water itself to move the mud around and I want to add water-soluble graphite and copper chloride crystals formed when I acid-washed/oxidized my copper water pipes. A geological layering appears - even though I am working sideways so that gravity can move the mud, graphite and calcium chloride around. The greeny-turquoise of the calcium chloride salt seems to mark where the water is caught between the strata of red shale and sandstone. Here my mud and paper record my involvement with the finding of water. As I am freezing, I come inside and work digitally in front of the fire. Using Photoshop, I layer digitally and adjust the opacity of the flaked mud photo to integrate it with my mud drawing." (Moore, journal entry).

This rather traditional engagement with Photoshop resulted in an involvement of my graphic design experience which highlighted my human agency and reduced the immediate agency of the raw materials. However, it did result in a more 'attractive' artwork which I thought tapped into my Modernist aesthetic norms and formal considerations of colour, line, texture and shape. Van der Watt considers that this is problematic in the sense that it is a "modernist legacy of a consideration for the aesthetic quality of form" (Van der Watt - no date: 3). This question of critique using Modernist aesthetics versus a different type of New Materialist critique was an important part of my research, as was considered in research question 1 (MacLure 2015: 19).

In my research questions, outlined on page 3, I asked "How will new modes of thinking and artistic practice regarding aesthetics and process, result from an altered relationship between my human agency (as artistic self) and the variety of material agencies used?" Of primary concern here was my thinking about and reflecting on, the types of knowledge that I had gained from facilitating and documenting the material agency of making art as well as the types of knowledge that assisted in informing the critique of ongoing processes and aesthetics (see also pg. 3).

This material agency, as Pickering, who is a science sociologist, philosopher and historian, speculates, is situated in another kind of knowledge, another way of knowing the world, which can be distinguished from 'strong' scientific knowledge. He called this 'poiesis' and suggested that it is a performative staging of his dances of agency (Pickering 1995:2) and so is related to the ancient Greek concept of 'mētis' (Pickering 2017:1). Broadly speaking, mētis represents a range of acquired knowledge and practical skills that responds to a constantly changing natural

and human environment (Scott 1999: 327). In this sense, Pickering considered that metis and *poiesis* were "... not, in fact, any kind of knowledge. Western thought is focussed on knowledge and epistemology, and that is the root of our problem" (Pickering 2017:1). In this active performative sense, poiesis was similar to a thinking process, that may or may not construct knowledge. It related in many ways to the meditative thinking process of Heidegger, where he stated that meditative thinking allowed the human to be open to the 'mystery' or unknowing of being, and to be willing to stay with this lack of surety, or, as Haraway put it, "to stay with the trouble" (Heidegger in Wenlund et al. 2019: Ch12, 20/27)(Haraway 2016:1). An interrogation of these types of process-knowledges, resulted in a different approach to my artistic practice regarding aesthetics and process (see research question pg.3).

Haraway also situated an agential complexity, similar to Pickering's, in her concept of sympoiesis. It was only in retrospect that I realized that my current dance of agency had its first seeds in a similar sympoietic stance (see hyperbolic jewellery from 2010 in figure 9, worn as part of an enmeshment). This jewellery, though, was not part of my current research. Haraway said:

"Sympoiesis is a simple word; it means "making-with." Nothing makes itself; nothing is really autopoietic or self-organizing. ... Sympoiesis is a word proper to complex, dynamic, responsive, situated, historical systems. It is a word for worlding-with, in company." (Haraway 2016:58).



Figure 8: Neith Moore 2010
Hyperbolic coral jewellery.

Scrap wool, cotton & fabric, hyperbolic crochet.
Each 10cm x 10cm. Artist's possession.

Like badges worn by activists, these pieces raised awareness about ecological consciousness but were not part of this research.

Haraway saw 'worldings' as a notion that described a human-non-human enmeshment and from her perspective as a biologist, found art-science worldings of particular relevance (Haraway 2016: 67). One such worlding she mentioned is the *Crochet Coral Reef Project* (see figure 11) which was based on a sympoietic knotting of "mathematics, marine biology, environmental

activism, ecological consciousness raising, women's handicrafts, fibre arts, museum display, and community art practices" (Haraway 2016: 78)(Smithsonian n/d: website article).

This worlding spread across the globe as an effective environmental gesture of activism and also involved South African artists in community workshops such as the jewellery workshop in 2010 (see figure 10, worn as part of this workshop enmeshment). This concept of 'worlding', I found further expanded my investigation around new modes of thinking as outlined on page 3.

As I moved between my own ubiquitous construction materials such as mud (Fig.7) and concrete (Fig. 5) in my dance of agency, I journalled that I found the experience of drawing on/in/with concrete to be a surprisingly "...pleasant one (Pickering 2012:1). The physicality and the mess is considerable but I want to go big. I've worked with small pieces before and the recent act of drawing on my concrete slops reminds me of this" (Moore, journal entry)(see Figure 6: pg.17).

The pattern/texture of the reinforcing mesh from the flooring slab of the construction site inspired its addition to my artwork as I 're-allocated' much of that material once the builders had left the site for lockdown. In my journal I recorded that:

"The coarse drag of the pencils/graphite blocks on the surface of the concrete; the unevenness; the not-knowing what will happen and the sense that my body/experience is working with the materials. Nothing is in charge - all aspects are working together. One is not more important than another" (Moore, journal entry).

This reflection on process was important to subsequent changes in my consideration of art process and aesthetics (see research question pg.3). I continued using the building site for more materials as the borehole drilling had brought up some mud slurry containing some beautiful rusted and yellow ochres. For toughness I used calcrete (coarse calcium carbonate) as the grit/stone in the cement. The application of the cement slurry used gravity to move it around and as I lifted and tilted, I moved my body to work with gravity. This was exceptionally painful and made me realize that the 'embodied nature' of this type of material engagement had to be considered in future work. Documentation of and reflection on the physical nature of this engagement became part of the process and further enmeshed me in new types of thinking around *mētis* and *poiesis*.

The work of Christine Hansen

Similar to the movement of this *mētis* and *poiesis*, is Christine Hansen's (2019) 'fluctuating thinking', which allowed her a depth of not-knowing that developed a sense of trust in process for her.



Figure 9: Christine Hansen, 2015.

50 Billion Micrograms: In Search of the Aftermath of an Event
Photography, Water and Fluctuating Thinking.

Although, at that time in 2020, I was more attracted to her way of 'fluctuating thinking', I later turned to the immediacy of her ideas of cyanotypography as a response to the death of my husband (see pg.65 of this dissertation).

Some of her work (see figure 13) was informed by the double role of photography in its formative years during the 19th Century. In that era, photography in general and cyanotypography in particular, was both a scientific tool using chemical processes, but also a mystical 'spiritual' medium that used alchemy to connect to the natural world. This process also connected "to water, to time, to history and to the natural world and chemistry" (Hansen 2019: screen 5). She felt that cyanotypography provided an immediate response to a situation and place which fitted in with her emphasis on fluctuating thinking. I concurred with her in that I found the process to be spiritually connecting.

The relationship with my work

To quote from my online journal:

"I'm certainly feeling uncomfortable about incorporating my image and I think some of that discomfort comes from Trevor's death, because what has happened is I have become separated from him. If I think of how we believed in the middle path (Buddhist Middle Way⁵) - he is now one with energy - he is now one with material - but I am left behind. I want to bring myself physically into this more closely so I decided to have a look at photographic means to do this." (Moore, journal entry).

Another thinker who influenced and changed my mode of thinking about process, aesthetics and product, was Tonkinwise who wrote about the notion of 'affordance.' An affordance is an 'actual possibility', a 'promised action opportunity.' This implied that these affordances are always occurring as properties of materials and of process and all I needed to do was to recognize these affordances and be open-minded about them. This situated this type of knowledge in an embodied manner. The philosophical underpinning of this embodied recognition and the awareness of the affordances offered by material agency has changed my modes of thinking and their performative relationship with me.

Tonkinwise clarified this embedded 'body-knowledge' by mentioning that we don't know we know until our body starts its making and then the déjà vu moment occurs. I felt déjà vu moments when working with these construction materials, as if my previous experiences in sculpture, building, maintenance and chemistry had coalesced. I documented this body-knowledge as I was working by using both videos and in my online journal. (Moore, journal entry).

I recorded in my journal that:

"The experience of exposing the surface is intriguing and feels like an archaeological dig. Cracks, crannies, altered colours of aggregates surface and suggest textural responses. I simply don't know where the slab is headed but the chemistry seems to be leading the way.

Embodied experience makes the process satisfying instead of terrifying. My body 'knows' what is going on and only requires my mind to kick in for times of pre-planning. E.g. what might I need tomorrow? Do I have it?

The next step is to integrate the concrete with the images I have collected about WATER. I will use big blocks of graphite as a start (because I like the scratchy sound) and then allow my 'fluctuating thinking' to flow in and around the slab. The materials will set up opportunities that my experience and my body will recognize" (Moore, journal entry).

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⁵ The Buddhist Middle Way is explained by Varela, Thompson & Rosch as a form of groundlessness that emphasises the enfolding of the organism and environment into each other and the unfolding from one another in the fundamental circularity that is life itself. The writings of the Indian philosopher Nāgārjuna founded the Middle Way or Madhyamaka. It avoids the extreme of either objectivism or subjectivism, of absolutism or nihilism(Varela, 1991: location 5484 Kindle Edition)

The work of Jeanette Unite

As opposed to Tonkinwise, the artist Jeanette Unite focused on the materials themselves rather than the body/material assemblage. She worked with materials from the mining industry and managed to balance the materiality of the geological samples with mining imagery in a way that enhanced meaning.

" ... artist Jeannette Unite has been developing a highly personalised subject matter out of the public face of mining operations, recycling detritus leftover from industrial sites as pigments ground into her drawings and paintings." (Unite n/d: website).

Her method of continuously collecting minerals and soils and using them so that the focus is on their natural attributes or agency, resonated strongly with my praxis as this collecting of earth materials has been a lifelong habit of mine. However, what changed in my thinking was the philosophical underpinning of this habitual activity and the awareness of the agency and vitality of the materials and their performative relationship with me.



Figure 10: Unite, J. 2008. *Geo-logic IV*Triptych with mineral sands in acrylic medium. 100cm x 180cm

The relationship with my work

Barad sums up this new relationship between the human and material agencies when she lists possible aspects of this agential relationship:

"On an agential realist account,

Agency is cut loose from its traditional humanist orbit.

Agency is not aligned with human intentionality or subjectivity.

Agency is a matter of intra-acting; it is an enactment, not something that someone or something has.

Agency is not an attribute whatsoever—it is "doing"/"being" in its intra-activity.

Agency is the enactment of iterative changes to particular practices through the dynamics of intra-activity" (Barad 2003: 826-7).

Considerations of this 'intra-activity', led me to use abstract imagery 'constructed' with the materials themselves. I assembled materials so that they suggest a 'building' in the process of rising on the horizon in an imaginary geologic landscape (see figure 14). Although this piece was first assembled in 2020, chemical changes are still occurring in 2022, which suggested further directions for me. This meant some compromises with scale and gravity in line with my embodied engagement. Certain gravity-dependant activities such as lifting and tilting heavy shutterboard proved impossible for me, physically, to carry out.

2.2.1 Insights

An awareness of the ubiquity of construction materials became apparent during this phase of my PLR. I had previously bought 'art materials' at great cost and had developed a value system that seemed dependent on having unusual imported papers, equipment and materials. To be suddenly deprived of these was a liberating revelation for me.

However, I conversely found that the attempted relinquishment of my human agency to be extremely threatening in its apparent lack of control in my artistic practice. I felt I wanted to demonstrate my previous expertise in, for example, mould-making, Photoshop, print-making and other technical disciplines, but had to partially refrain. I did realize though, that videography and photography skills would still be needed as a method of documenting material agency.

Another threatening area was my letting go of Modernist and Postmodernist aesthetic criteria. I found this difficult after a life-time of teaching these to others. This exercise had already posed a question regarding the possibility of other types of aesthetics and critique. What will a New Materialist aesthetic and critique be?

I have now established a foundation for new modes of thinking for me which I will call 'making-thinking-being' for the moment. 'Facio et cogito, ergo sum' (I make and think, therefore I am) - to paraphrase Descartes⁶. I realized, however, that my 'being' was largely dependent on my physical state and strength... an embodied engagement in this dance of agency.

The potential of the virtual component of the exhibition was established as the website now hosts the videos, photos, journal entries and virtual 'tours' that I produced to showcase the material agencies and my new dance of agency (see Question 1.2)(Pickering 2012:1).

2.3 Working with Alchemy

The alchemical nature of raw materials and the entangled nature of their resistances and my accommodations came to the foreground as I worked with the raw construction materials in the initial steps of a dance of agency (Pickering 1993:569). Alchemical resistances that particularly came to my attention and that I have identified for discussion are:

Time as a resistance, form as a resistance, and scale as a resistance.

I investigated Siopis and Oldenburg with reference to these issues.

2.3.1 Resistances in my art

Pickering established a particular position for the human agent as just one of the 'actants' in an intricate 'dance of agency' that was performed with other agents - both human and nonhuman. In his book 'The Mangle of Practice' he posited that materials, machines, facts, theories, conceptual structures, disciplined practices and humans are in a constantly shifting relationship with each other. He called this becoming 'mangled' together in ways that are not immediately knowable or controllable, as the 'mangling' is dynamically influenced by the contextual elements of culture, time and place (the environment). This dynamic 'mangling' became an interaction between what Pickering calls "resistances and accommodations", where he saw resistances as obstacles in this dance of agency. His accommodations can be considered as ways in which the human agent adapts to the obstacles posited by the material agencies (Pickering1993:569). Although he wrote as a scientist, I found this point of view applicable to my 'alchemical' practice, as my research had demonstrated that the chemical materials I worked with had their own agency and my attempts at control were often unsuccessful. These parameters have become a factor in the expansion of my new 'dance of agency' (see 1.1 in the research questions).

⁶ Descartes "Cogito ergo sum" - 'I think therefore I am' (SciHi 2018: para 7)

Prior to this research, this lack of control would have been anathema in my artistic practice, as my previous definition of being an artist had been based on the idea of mastery and control - both acquiring it and teaching it (Moore, journal entry). It would have been an insurmountable resistance for me. Pickering imagined that humanity "lives on these little islands of stability and technoscientific mastery where we have succeeded in making the world dual ..., and also that these islands are more or less perilous – sometimes we fall off them and lose control, with potentially disastrous results" (Pickering 2011: 5). This feeling of a perilous lack of control and disorientation was very close to me during my alchemical practice and underpinned the resistances which I have identified thus far.

'Five Experiments' 2020 (Figures 16 to 20) is an early work which is situated in the transdisciplinary space of Chemistry and Art. I created an initial visual dance between the agency of the chemicals and that of my body as an introduction to the instability of the interactions. The temporal aspect that these end-experiments didn't show, was the dynamic, performative nature of the 'dance' process and this was best demonstrated in videos. I then hypothesized that my role in a dance like this was to 'amplify' and record certain chemical emergences as they occurred and not to control their process of emergence. Underlying these five alchemical experiments were pages from an old paper textbook on fluid dynamics, which referenced chemical theory and practice. I chose to use and to include words from the text as images using chemical material/matter. These word-images would link the scientific nature of the experiments to the objective scientific terminology which designated the experimental processes. This reminded the viewer of the scientific context of the work and positioned the work in the interdisciplinary space between science and art. Kentridge, too, maintained that the written word in a work of visual art acts in an informative manner. He also argued that the tension between context and form 'nudges' the viewer in their interpretation of the work and reminds them of the physical reality underpinning the work (Mashabela 2018: para 2).



Figure 11: Moore 2019. *Copper Experiment*.

Copper, acid, rust, graphite, on textbook page.

20 x 20cm

The words act as prompts which direct the viewer towards fluid processes in chemistry such as 'flow', 'water', and $2gL/C_D$ (Kentridge in Mashabela 2018: para 2). The act of working with materials and chemicals on top of the text created a certain tension as I let the chemical-laden polymer flow, both in a physical and metaphorical sense (Moore, journal entry). Pickering acknowledged this human flow when he stated:

"Successful human action depends on latching onto the shi⁷ of whatever situation one finds oneself in, going with the flow, in the Taoist sense of the term" (Pickering 2013: 22).

I found that elements of opacity and transparency established themselves without my input they were the properties of chemical agents acting according to their own physical and chemical 'rules'. The textbook pages became obscured but certain words emerged again as drying took place. I investigated cues from these emergences that prompted me to respond in a manner that made sense to me at that time in 2020. The way that I tilted the surface caused the materials to behave in different ways, compared to the way in which a brush or pen would affect them. Gravity mediated the experience. The time that the surfaces took to dry became important, as the only action that I could take while this was happening, was to sprinkle chemicals on the surface. I did have some choices through the decisions I made, as to whether I used transparent stains made from soaking soil composites, or opaque chemicals such as carbonates or chlorides. Found objects that were the remnants of previous processes were also dropped onto the PVA polymer. As I worked, I was reminded of Siopis' exploration of the materiality of PVA glue as she used it to comment on the traces of time as it flows into the past. In contrast, the focus with my experiments was to find where the actions of materials in the present took me in the future, as I developed new modes of thinking and artistic practice. This material performativity was an important parameter in my practice (see 1.1 in the research questions).

Siopis' interest in materiality was also based on her view of materials as seen as 'actants'; agents in a performative sense (Siopis in Perryer 2018: 10). When talking about glue (PVA polymer), Siopis viewed it as both an image and raw material and lamented that it would be useful if people could 'view how it behaves' in order to see its agency. She worried that the myth of the overwhelming agency of the 'master artist' overwhelmed the almost hidden agency of the glue (Siopis in Perryer 2018: 37). Jane Bennet's book - *Vibrant Matter* (2010) - has been useful to Siopis and to me, in its discussion of performativity and agency (Siopis in Perryer 2018: 11). Bennet's belief that encounters with lively matter helped humans to understand their 'fantasies

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⁷ 'Shi' is mentioned by Lao-Tzu in his *Te-Tao Ching* (6th century BC). It can be thought of as the internal structuring force contained in all objects as well as the external shaping force of the environment. It explains the connectedness of the world in a non-Western tradition.

of human mastery' underpinned both my and Siopis' work (Bennett 2010:122). Siopis used photographic documentation, descriptions and reflections on both the process and the performativity of materials to ensure that her experiences of this 'lively matter' were communicated to the viewer, as both the ephemerality and the endlessness of the process becomes problematic. I experienced a similar ephemerality and endlessness of the chemical processes, which I have identified as resistances in my practice. I considered these resistances in more detail.

2.3.1.1 Time as a resistance

This contradictory ephemeral but endless nature of chemical time was one of the resistances I encountered in my engagement with materials in my practice. The 'alchemist' in past Western history needed to devise a method of increasing or retarding the speed of a chemical reaction to suit the pace of a human-being which is measured in days, hours and minutes.

In opposition, the reaction of copper metal and sodium chloride (table salt) progressed extremely slowly if it were not hastened by additional chemical reactions. We see examples of this in the slow build-up of green verdigris on copper roof cladding in public buildings like the Durban City Hall, which proceeds over decades. This slow, almost geological time scale could be hastened by humans without affecting the agency of copper, in the interest of the human-being's ability to work together with materials within a given time frame. On the opposite extreme, the change from anhydrous copper chloride, which is brown, to a copper hydrate, which is blue-green, proceeded so rapidly that it is indistinguishable to the human eye or camera. It appeared instantaneous. These varying reaction rates proved difficult for me to work with in the limited time frame of my research, and required an accommodation on my part. This accommodation resulted in the production of videos attempting to capture this time dilation.

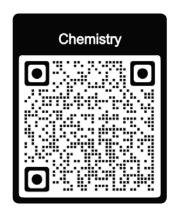


Figure 12: Concrete & chemistry video
Concrete & Chemistry

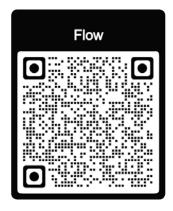


Figure 13: FLOW video Flow



Figure 14: Forest Alchemy video

Forest alchemy

Pickering (1996:567) refered to this dialectic of resistance and accommodation as the 'mangle of practice', where he saw a resistance as "the occurrence of a block on the path to some goal" (1996:567). The various reaction rates in this study were seen as a (time) resistance together with my digital accommodations, together forming the "mangle of practice" and dance of agency. These digital accommodations were also seen as curatorial decisions around 'virtual' exhibitions as per my research question 1.2.

I experienced this resistance as a personal discomfort and disorientation when working with these resistant reaction rates. After reflecting on this disorientation, I realized that my habitual way of working in my artistic practice had been disrupted (Moore, journal entry). As Siopis maintained, this sort of discomfort and disruption created the "opportunity to see things differently" (Siopis in Perryer 2018:13) and created altered relationships between my physical and human agency (as artistic self) and the alchemical materials used, as was stated in my research questions.

My investigations showed that the pathways and properties of both human and material agencies were intertwined and entangled as interpenetrations of these opposites, and the manner in which this occurred is through constant interplay of resistances and accommodations.

"This entanglement is, so to speak, the far side of the posthumanism of the mangle: material agency is sucked into the human realm through the dialectic of resistance and accommodation" (Pickering 1996: 576).

"Furthermore, I will argue that the trajectories of emergence of human and material agency are constitutively enmeshed in practice by means of a dialectic of resistance and accommodation" (Pickering 1996: 567-68).

My habitual way of working was dependent on the methodology of teaching art in a High School environment which I had practiced from 2005 to 2019. My task as a Provincial Trainer in the new curriculum was to lead teacher training workshops, which emphasized this new process or planning aspect of Visual Arts and Design (Moore 2007 Training presentation).

I had become so habituated to this method of working in my own practice that my flow state, and subsequent well-being, had become dependent on it. Csikszentmihalyi's flow theory is a model which explains the state of wellbeing that artist's report experiencing when in the 'zone' - what Csikszentmihalyi calls an "autotelic experience⁸."

However, when the "opportunity to act" (or challenge) is lowered or removed, as well as the "capacity to act" (or skills), then frustration, apathy and discomfit result (Diagram modified from Csikszentmihalyi 1990: 74).

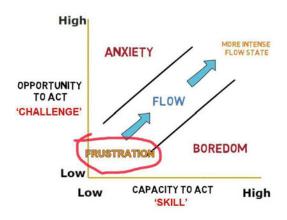


Figure 15: Diagram modified from Csikszentmihalyi (1990:74)

A clue to solving or accommodating this resistance for me, came from Pickering's assertion that scientific experimentation proceeds in two phases - the active and the passive phase. This movement between the two suggested the concept of the 'dance of agency' to him, rather than his original concept of a 'mangle of practice'. He stated that, in the initial active phase, the human sets up the scientific apparatus or, in my case, the support and ubiquitous materials⁹. Subsequently the agency changes and the human becomes passive and waits observantly as the material agency becomes active. This material performativity is independent of any human aspiration to beauty, human-determined aesthetics, or transformation of the materials into an artwork. Subsequent to this action, the opposite occurs as the agency changes and materials become passive while the human becomes active. This movement between the two carried on over a lengthy period of time as a co-engagement between materials and myself occurred in the dance of agency as seen in the works discussed in this section (Pickering 2012: 3). I found the

⁸ An autotelic action or experience is one where the human does not get any external reward. The work or action itself, is the reward.(Merriam Webster n/d)(Csikszentmihalyi 1990: 67)

⁹ By ubiquitous materials, I mean those materials that were easily and commonly available during the COVID-19 lockdown and in hardware store online. Examples would be copper pipe and iron nails. This is discussed later on pg.46.

passive waiting for materials to display their performative qualities, to be the source of my disorientation, as the time frame involved can run into days or weeks (Moore, journal entry).

This new relationship with time for me required the performative nature of the produced artworks to be an on-going process that ran over a few months in the exhibition space as well as constant virtual documentation for my website.

The two material processes pictured in figures 25 and 26, are examples of on-going chemical reactions documented from my work, that happened in the gallery space. Even when the reactions seemed to have stopped, colour and state-changes occurred over a time-frame of months and this was evident in the alchemical. As an insight, I proposed that these on-going demonstrations in the gallery were my accommodation to the time frames of material agency. Video and photographic documentation also assisted.

2.3.1.2 Form as a resistance

Another resistance that I encountered during this initial practice was the formlessness that resulted from my use of PVA glue to preserve the chemical reactions. I related to the words Siopis used when she called the process of making art "painting blind", when she worked with the agency and vitality of PVA glue (Siopis in Perryer 2018:13).

"I had no image or idea in mind, and it was only over the course of the next week that images started to emerge. The initial formlessness of the materials acquired imaginary 'form' the more I looked at it." (Moore, journal entry).

By 'formlessness', I meant the lack of defined, recognizable shapes and illusions of form that resulted from the forces of gravity and material properties acting without my control. Polymer (PVA) wood glue became an essential material for me in this alchemical stage of my practice as it served as a fixative to capture and preserve states of the chemicals never-ending and dynamic existence.

As gravity acted on the materials, a 'formlessness' occurred on the surfaces while I refrained from interfering. This formlessness resulted from the fact that, although the glue was visible during pouring, the colours and textures were not.

Clear acylic medium, which I would have preferred, was not available during the 2020 lockdown so glue became another accommodative material and method. This opened me to the infinite possibilities of the hardware store as a source of art materials. However, I concurred with Siopis in that this formless interaction with glue and gravity was definitely a model that is full of "risk and uncertainty". Siopis stated that:

'Experimenting with unorthodox material in painting generates new ideas. More than that, it offers an opportunity to open one's self to the "life" of nonhuman matter and to find in

this openness an intimate model for relationality in the bigger political picture of the self, of the social body, of ecology: a model that is full of risk and uncertainty.' (Siopis in Perryer 2018:12).

The fluidity of the glue worked with gravity as I tilted my supports and waited for the resultant movement. I suspended all thought and planning even in my 'active' phase as I relied on the agency of the glue and its slow, gravity-assisted transportation of materials across the support (Moore, journal entry).

Documentation using 'Before and After' images conveyed the movement of soil as it crept with the aid of gravity across the page of text, carrying with it the rust solution I had added. While the glue was drying, I entered my active phase and added the remnants of copper and copper chloride that had remained in a mixing beaker, but not in any pre-determined manner. Once the glue/chemicals had dried, then the imaginative process began for me. Siopis maintains that the 'petrification' of the glue became a potential image. By this I understood her to mean that the inky glue became evocative in the sense that she started seeing the possibility of figures emerging (Siopis in Perryer 2018:14). In addition, she also commented that the orientation of the support gave visual clues as to what was occurring.

I certainly found this in my 'Strata: finding water' (figure 29), as geological strata appeared that referenced the drilling of the borehole and the finding of water during the lockdown in 2020.

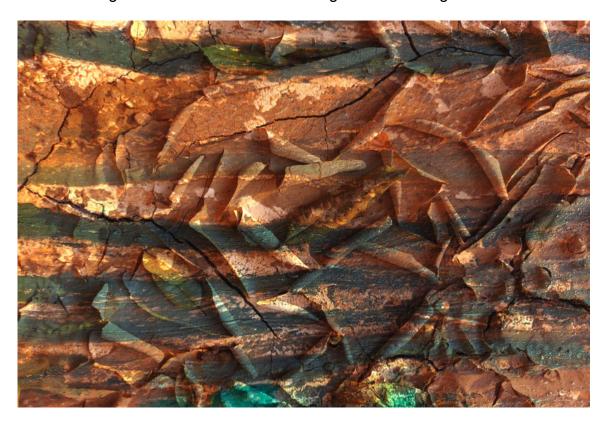


Figure 16: Moore 2020. Strata: finding water. Mud & copper with digital photo of site

When discussing her own glue paintings, Siopis found that "glue can become image and metaphor too." She uncovered metaphor and meaning in the formlessness of the glue by reacting to perceived tensions between figure and ground (Siopis in Perryer 2018:10). In my opinion, this search for meaning imposed her human agency on the materials, a practice which was however, very satisfying for the human viewer. The figure/ground relationship that she used, as well as her use of colour, worked together in a formal or human-determined aesthetic way. For example, the curve of the ink flow in figure 31 suggested a face and a figure, although the title *Gravity's Wave*, still suggested the agency of gravity. She found the wider world "less than enthusiastic" when art was seen simply as encounters with materials and when the sheer materiality of the work was all that's evident, even though this offered "new modalities" as the human was conceptualised as part of the environment and of all matter. This for her became a 'resistance' in her practice. However, Siopis appeared to consider the human aspiration to beauty, human-determined aesthetics, or transformation of the materials into an artwork as still part of her painting practice, and she accommodated this resistance by retaining the practice of 'painting'.

"Many paintings end up in the ditch! But I'm hanging onto the potential within the nomenclature of painting for now" (Siopis in Perryer 2018: 24).

Siopis stated that everything became part of the project. There was no distinction between the products and the process; the human and the nonhuman (Siopis in Perryer 2018:22-23).



Figure 317: Siopis, 2016. *Gravity's Wave.* Glue and ink on canvas. 200 x 125cm. (Siopis in Perryer 2018:71).

¹⁰ By 'formal', I mean a focus on compositional elements such as color, line, shape, texture, and other perceptual aspects(https://www.tate.org.uk/art/art-terms/f/formalism)

This view was reinforced by Lange-Berndt's belief that viewers tend to see materials as an indicator of something else and that were not allowed to be dirty and messy and be themselves. Their use was to be thought about or to think with (Lange-Berndt 2015:12).

The assertion of nonhuman agency in my practice was not intended to detract from human agency but was an attempt to decrease the reliance on language-based, human actions and discourse. Siopis stressed this as well but still retained the name of 'painting' in her practice. Interestingly, Siopis found the formal analytical process to be problematic as well, as she stated, as in my practice, that the object to be analysed needed to stay still to be dealt with, but this was not possible when the 'material presences' were fugitive. One needed to talk, not about the formal aspects of the painting, but to talk about the process (Siopis in Perryer 2018:23-24).

Play was an important part of Siopis' practice as it was part of mine. She saw the physical transformation of material as a metaphor for social and individual transformation and that objective was certainly common in my practice (Siopis in Perryer 2018:30). When I thought of the possible individual 'transformation' in my current practice, I was aware that what I seemed to be doing was an amalgamation of my work in both the laboratory and the studio.

My use of digital documentation and videography was part of my practice as it is with Siopis, when she included the digital component as part of the material realm. She called it another 'dimension of materiality' and saw a relationship between the 'visceral' and the 'virtual' (Siopis in Perryer 2018:33). An argument was made for this being another part of my dance of agency, a dance between the virtual and the physical as well as the human and nonhuman. Barad referred to this type of relationship as an 'agential intra-action' rather than an interaction between agents and sees them both as entangled (Barad 2003:814). Siopis saw the viewing of this digital process on a screen as a way to "pictorialize and sanitise the visceral spill"... another intra-action (Siopis in Perryer 2018:33).

When I looked at my bituminous images hanging in the forest outside my studio, I perceived them as objects 'hanging' inside the physical 'reality' of a forest. When captured in a 360 virtual video though, they started to become like nodes in a forest rhizome, as the other constituents - the other 'agents' - become active (see figure 32)(Estrella 2013: n.p. blog). The other nodal agents seem to be the wind, moving branches, sounds of birds/animals and me as human observer. Estrella explained the concept of travelling and existing in a rhizomatous space as a never-ending indefinable practice.

"Rhizome is like a map. You can enter at any specific point but you cannot trace it because it has no end. In general, rhizome is defined as an interaction system

applied to any division that follows no specific pattern or rules of organization" (Estrella 2013: n.p blog).

These bituminous banners supported representational images of the forest, which immediately made me conceptually uncomfortable (Moore, journal entry). When I thought back to Pickering's view that the performative idiom 'opposes' the representational idiom in both science and art, I wondered if this was in itself a dichotomous Cartesian approach? (Pickering 2013: 17). What it was, for me, seemed more similar to Deleuze's idea that it was a both/and rather than a dichotomous Cartesian either/or scenario. This was in line with Deleuze's rhizomorphic thinking, where all parts of the network/rhizome become equally important. Pickering did not preclude this as he identified 'islands of stability' where humans and the nonhuman interact; where knowledge and its representations of the world grow. But these islands of stability he saw as constantly emergent and transitory, which essentially required constant servicing and maintenance. These islands of stability were considered as 'images' that represented the world and as such acquired form and meaning. He called this constant backwards and forwards movement of servicing and maintenance between human and material agency, the 'dance of agency'. He also referred to this type of dance as 'posthuman', much like Barad did in 2003 (Pickering 1996: 561)(Barad 2003: 803-4).



Figure 18: Moore, 2021. Detail of Bitumen Forest.

2.3.1.3 Scale as a resistance

An additional resistance or constraint in my body of practice, was the question of scale. When I compared the scale of my use of PVA glue with Siopis', I found that the large scale of Siopis' work closed the gap between her body (as one agent) and the material (as the nonhuman agent) so that both become more mutually immersive (see figure 34 - 198.5cm x 303cm). Siopis physically crawled over the horizontal canvas and immersed her body in the messiness of the glue and ink (Siopis in Perryer 2018:9). In addition, when the video of her process was watched on a screen, the demarcation of the edges of the screen created another sense of scale, a "contained visual field bounded by its scale and format, and conditioned by its smooth material surface, all of which pictorialize and sanitise the visceral spill" (Siopis in Perryer 2018:33).



Figure 19: Siopis, 2016. He studies the colour of my dark eyes and writes down all the details.

Glue and ink on canvas, 198.5 x 303cm.

In my opinion, the viewing of images on paper or as printed photographs, had a similar sanitizing effect. I anticipated that a 'virtual exhibition', as it appears on a computer monitor, would also have this sanitizing effect and not be experienced as materials allowed "to be dirty and messy and be themselves" (Lange-Berndt 2015:12). The physicality of the exhibition space was necessary in order to do justice to this. This physicality involved the viewer's body as he/she experienced the actual size of the works and had the opportunity to touch them.

In my alchemical practice, I found that that the scale of performative chemicals suspended in glue, was, in contrast, rather small and intimate, with the result that my body did not exist in a similar mutually immersive manner. An example of this was seen in the tiny 5 Experiments Figures 16 -20. I also found that both, myself and nonhuman performing agents, needed to retain their separate properties so that we become entangled while still retaining difference and autonomy. Here again, videography and large-scale photographic documentation in a physical exhibition space proved part of the solution - an accommodation with my practice's parameters using technology, in this case lightboxes and large print digital prints (60cm x 60cm) (see figures 35 below).

The titling of artworks was a linguistic turn in terms of the vitality of matter (Bennett 2021: 12:17 / 1:14:15). The act of naming a piece, as Siopis did, directs the viewer in a certain direction and Kentridge also noted this in his use of words as elements of the work itself (Mashabela 2018: para 2). With this in mind, I moved towards referencing the material itself in my titling practices, in order to decentralize the human linguistic tendency. The temptation to refer to the small works below (figures 36 - 41) as 'landscapes', would result in a scale confusion. In figure 42 below them, the large size of *Copper Diptych* referred more specifically to the landscape. The viewer was left to make that interpretation without a linguistic clue in the title.

A discussion of scale and its importance on the human viewer included a mention of Pop Art, and, in particular, Claus Oldenburg and Coosje van Bruggen. In the photograph of the sculpture *Free Stamp* (1991)(figure 43), the scale of the work can be easily compared to the human figure. According to Olszewski, the human viewer can find the scale overwhelming, "much as the Medieval faithful were by their Gothic cathedrals." (Olszewski 2017: location 9).





Figure 20: Oldenburg and van Bruggen. 1991. *Free Stamp.* Cleveland, Ohio. Steel and aluminium painted with polyurethane enamel. 8.8 x 7.9 x 14.9m (Olszewski 2017: location 9).

The act of taking a small object, that existed in the mundane, everyday office world where it was seldom noticed, and bringing it to the attention of the human viewer by a monumental scale change, certainly emphasized Siopis point about the impact of a large size on viewers. I found that the unobtrusive, intimate nature of alchemical performativity in my work, had been overlooked and the challenge was, for me, to make this activity visible. Deleuze and Guattari name metal, for example, as best showing this "quivering effervescence" of material vitalism that is usually hidden or invisible (Deleuze and Guattari 1980: 411). Barad reinforced this vitality when she argued for the indivisibility of human and nonhuman at the "queer" atomic level (Barad 2012:46).

My materials were the most mundane and ubiquitous at this intimate, invisible level and a scale change was also a strategy, with technology such as photography, videography and virtual tours being used as an accommodation, much as the scanning electron microscope (SEM) made visible the invisible properties of materials at the micro-level (Open University home page).

2.3.2 Insights

On reflection, one of the challenges for me was to make the shift from pure process, where the materials were the agents, to representation and then back again to my immersion in material agents. In this way the dance of agency included me as well as the vital materials in performative works which sometimes made use of metaphor and meaning. An example of this was found in Figure 44 which is depicted below. However, this search for human meaning in the marks made by vital matter, may just be a symptom of pareidolia¹¹ and so similar to the Rorschach inkblot test. The human tends to find meaning in randomness in a psychological attempt to recentre themselves in the universe.

Another possible issue was the danger of over-sanitizing materials in the interests of a formal aesthetic, and so losing the messiness of the material process. This messiness, though, often seemed to be in itself potentially disastrous, and this required a cognitive shift on the part of the human viewer and artist. The focus of these 'alchemical experiments' existed where the actions of materials took me in the future as indicators of new modes of thinking and of artistic practice. A part of this evolving artistic practice was to think, not primarily about the formal aspects of the painting, but about the embedding of messy process in a different aesthetic. This attempt at decentralizing my agency was never taken as removing it altogether, but rather in focussing attention on the materials' performativity as well. Latour's 'flat ontology' and Bennett's 'heterogenous assemblage' did not remove the human completely as she was part of this

¹¹ Pareidolia is the the tendency to perceive a specific, often meaningful image in a random or ambiguous visual pattern(Merriam-Webster Dictionary online).

ontology and assemblage (Latour, 1999: An Alternative to Beliefs section)(Bennett, 2010:23). Decentralising my agency did not presuppose replacing it altogether with material agency but engaging in a balanced dance of agency.

As an insight, I proposed that these on-going performative demonstrations in the gallery were my accommodation to the time frames of material agency, as mentioned in my intention This was recorded and posted in my journal website. The role of digital media in this accommodation to the constraints of materials, was important to resolve issues of both time and scale and involved curatorial decisions regarding a dynamically interactive virtual exhibition as well as its physically performative nature that ran over a few months in a exhibition space (Ammazulu Sculpture Precinct map pin).

2.4 Working with Rust

Once the importance of material agency was identified as my dance of agency (Pickering, 2007), as was outlined in my question 1.1, I moved around the waste site surrounding my studio's construction site during 2020, in what I identified as a kind of dumpster dancing. This isolated 'dumpster dancing' proved to be an accommodation as it provided me with much needed material and opened my eyes to the possibilities of raw iron, rust and wood in particular. Rusted iron resonated particularly strongly with me, and I was intuitively drawn to use it as one of my materials. By this I mean that these rusted objects, which were usually hard to notice as they appeared disguised by the similar colour and textures of the surrounding wood, soil and leaves, brought themselves to my attention. The mundane 'disappears' from our view and becomes invisible to the human gaze. This resonance between the human and the non-human has been developed extensively by Bennett in her considerations of vital matter. She understands this resonance as occurring because of the formation of a structural assemblage (Bennett, 2010: 23).

"The elements of an assemblage, while they include humans and their (social, legal, linguistic) constructions, also include some very active and powerful nonhumans: electrons, trees, wind, fire, electromagnetic fields." (Bennett, 2010:24).

In my instance, the assemblage consisted of my artistic, human self and the non-human agencies of rust, iron and wood.

Mcphie's pedagogy of psychogeography (Mcphie, 2018) has also been instructive in my understanding of inanimate material agency. Mcphie discusses his pedagogy where he asks his

¹² This dumpster dancing refers to the common phrase of dumpster diving which is the "the activity of searching through dumpsters or other large containers holding waste, in order to find food that can still be eaten or objects that can still be used." (https://dictionary.cambridge.org/dictionary/english/dumpster-diving)

architecture students to interview buildings as if they were human. Like Bennett, he advocates an anthropomorphism that is alien to Western scientific thought. Bennett describes this anthropomorphism as "... an element in perception (which) can uncover a whole world of resonances and resemblances - sounds and sights that echo and bounce far more than would be possible were the universe to have a hierarchical structure. We at first may see only a world in our own image, but what appears next is a swarm of "talented" and vibrant materialities (including the seeing self)" (Bennett, 2010: 99).

Mcphie's anthropomorphic ideas on material agency are also reflected in a poem he quotes where a human converses with a stone. Here, Szymborska, in her *'Conversation with a Stone'*, ¹³ reflects on the difficulty that a human has interacting with the non-human. (Mcphie, 2018: 5). This resonates deeply with my intra-actions with materials. In her chapter on 'The Life of Metals', Bennett maintains that there is "... no point of pure stillness, no indivisible atom (of metal) that is not itself aquiver with virtual force" (Bennett, 2010: 57). I sensed, too, that the rust has "a rate of speed and pace of change" (Bennett 2010: 58) that is not noticed by humans in our fast-paced lives unless brought to human attention. Hence my challenge was to give the rust agency by making it more visible and interrogating the potential aesthetic qualities that might have been overlooked.

In my dance of agency, I chose to use a particular sequence of engagement akin to an actual dance. In my first move of the dance/process, I collected rusted objects whenever and wherever I was on the property. What was important for me was the psychological connection between the rusted objects and my attuned state. This attunement seemed to be what Bennett calls "resonance" with objects (Bennett, 2010: 99). The method of collection was, and still is, very random and relied heavily on chance. An old crate lined with paper was the repository for whatever was thrown in. This occurred over a period of time and, without any input from me, the objects started to stain the paper. My move in response to this was to accelerate the process by using a solution of an acidic salt, ferrous sulphate (a fertiliser), pouring it into the crate and then forgetting about it. I allowed the rust to make its own marks as it were, without my involvement. When I next looked, a week later, a surprising rust 'print' (see figure 47) had developed (Moore, journal entry). My 'dance' move in response to this was to emphasise some of the areas with pencil crayons. A few cast shadows and highlights provided an interesting tension between the flat 2D ghost prints and the 3D illusions (figure 48).

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¹³ see appendix for poem.



Figure 21: Neith Moore, 2020. *Rust print*, old Fabriano, ferrous sulphate, pencil crayon. 35cm x 35cm

This increased my awareness of the 'vital force in materials' (Runge in Lange-Berndt, 2012: 96) and also of Bennett's 'vital matter' (Bennett, 2010) and was a new emergence for me, after my habitual desire for mastery and extreme human control of matter. My challenge was to choreograph the dance of agency so that my involvement did not disappear altogether but that gave materials more agency.

Sitting quietly with the print and its ghostly remnants of objects while following their shapes with a crayon, proved very meditative (Moore, journal entry). I had experienced this before with my bitumen drawings (page 47) and have connected the act of rhythmic movements and the calming of a restless mind with a decrease in somatic pain. This was in keeping with my other mindfulness meditations and ties-in with Varela, Thompson & Rosch's thinking in their work on the Embodied Mind.

"In 1979 Jon Kabat-Zinn developed a program Mindfulness Based Stress Reduction (MBSR) (that) proved remarkably successful at helping chronic pain patients who had hitherto been finding no relief from standard medical techniques." (Varela, 2016: location 739 Kindle).

My second move in the dance/process was to consider and reflect. The print also started me wondering and thinking about the objects themselves and so I picked them up and handled them. The smell and taste became important. I started to draw the objects in response to their touch and the pain in my hands. Kahlo's painting became suggestive, as the iron nails and pain became joined in my mind (Figure 49).



Figure 22: Frida Kahlo, 1944. The Broken Column.

A reflection on Barad's idea of 'queering' became important (in a material sense) as I considered how to use these objects collected from a construction site in an art context so that they would "differ... in some way from what is usual or normal" (Merriam- Webster).

As Barad asks about causality, matter, space and time:

"How can the possibility of the queerness of one of the most pervasive of all critters – atoms – be entertained? These "ultraqueer" critters with their quantum quotidian qualities queer queerness itself in their radically deconstructive ways of being. The aim is to show that all sorts of seeming impossibilities are indeed possible, including the queerness of causality, matter, space, and time." (Barad, 2012: 25).

In my journal I noted that "I visualise a physical area or virtual space as a rust laboratory, which contains the experiments, the chemicals and the record of dances to come. My new work will take place in this 'rust' laboratory. One is already materialising as a record of the temporality of my involvement as the rust moves on its own path at its own pace" (Moore, journal entry).

Many of my movements in these works encountered a physical resistance in the form of pain. Ripping pallets apart, cutting wood, hammering and drilling all exacerbated arthritic pain in my hands and back. My accommodation was to stop the large physical movements and draw for a while. One of the drawings this time involved a form of hand massage with wax over a paper

mask which suggests the object retrieved from the dump. I then added graphite, massaged again, scraped back, added wax and continued in a rhythmic manner. The pencil crayons were dipped in wax and then line after line was added meditatively and rhythmically as I kept my eyes fastened on the textures of the retrieved objects.





<u>Video - Hand meditation LINK</u>

Video - Movement drawing LINK

Hand Meditation

Movement drawing

My third move in the dance/process, was to choose and contain the rust, as an important part of this PLR project is the construction/production of an exhibition, both physical and virtual. I needed this exhibition to be in a shed or laboratory space but not in an art gallery. The piles of waste wood enabled me to construct a container for the objects. Drilling, gluing and hammering were my human agential contributions to creating a stage for the rusted objects to display themselves.

The scale had to be based on the premise that those were the existing collected sizes of the wooden bits and the objects. This was strange to me as this kind of decision making had previously been my 'artistic' choice, not a material choice. This in itself indicates to me a shift in my thinking and in my artistic practice, as is reflected in my research questions. I found my only intentional choice was to limit the number of objects in an attempt to allow them space to be adequately displayed. I was also always aware of the 'resistances' of my body in its painful state and the restricted size of my available studio space during the lockdown phase of the COVID pandemic.

A synthesis of the rusted objects and the record of their properties of staining, oxidising, flaking, disintegrating, penetrating, colour changing, and leaking, took the simplest form of a square.

Because I enjoyed the process of playing with 2D and 3D illusionism, I then added my part of the dance by drawing which had the effect of expanding my dance of agency (see research question 1.1 on pg.3). As the wood was already paint blotched, I added to the disarray by throwing more white wall PVA at it and then messing that up with rusted steel wool and ferrous sulphate. I then repeated the process.

My position was rather that I wanted to allow the materials to have more agency to counteract my previous practice where technical control was my *modus operandi*. Current literature on human/non-human agency and on animate/inanimate agency suggested that this is a worthwhile paradigm shift in our previously humanistic, anthropocentric position.

Writers such as Barad and Pickering have applied this to inanimate materials in science (Barad, 2003:30)(Pickering, 1995: 559), while others such as Morton (2011:24) have applied this ontology to the non/human natural world. Bryant (2011) maintained that Latour, Deleuze and Guattari refer to a 'flat ontology' where the hierarchy which places the human at the apex has been altered in a way that:

"... invites us to think in terms of collectives and entanglements between a variety of different types of actors, at a variety of different temporal and spatial scales, rather than focusing exclusively on the gap between humans and objects." (Bryant, 2011:32).

All are 'equal' - animal, vegetable and mineral. This sense of equality resulted in a new ethical position according to Barad - a new 'ethico-onto-epistemology' (Barad 2007:381). I have already noticed a new sense of resonance with objects/materials in my practice and felt that this development indicated a shift in my thinking towards materials and non-humans which was in line with the new eco-critical thinking that advocated a world-wide shift in the way in which humans think about and conduct themselves on this shared earth.



Figure 23: Moore, 2020. Ferrous oxide. Digital print.

This again applied to my work at the beginning of the COVID lockdown in 2020, as a stained and torn canvas which was used for ceramic work, disintegrated and couldn't be replaced at that time. This constraint gave rise to an accommodation and a new fabric artwork developed while I worked with rust. This was stained further with traces of nails, bars, wire and soaked with ferrous chelate¹⁴. Tears were repaired with wire and embroidery cottons and stained paper was couched onto the surfaces. This proved therapeutic for me and became a total engagement while the lockdown played out (Moore, journal entry).

Rust was usually considered a nuisance and a hazard in our technocratic society (Milligan, 2016:2). It metaphorically represented deterioration and impermanence which could be considered a human-centred constraint, but also change, transformation and human transience which was a philosophical accommodation for me (Milligan 2016:2). The idea that humans may not prevail against a non-human agency such as the coronavirus, or a material agency such as the oxidation of metals, had been an issue of concern and interest to me since the beginning of the global pandemic. What started as a vague concern had now extrapolated into a full-blown anxiety that requires careful research and mindful practice.

Robert Smithson, in 1968, showed a concern for this independent agency of metals when he wrote about the difference between the technological and the artistic value of rust.

"Yet the more I think about steel itself, devoid of the technological refinements, the more rust becomes the fundamental property of steel." (Smithson in Lange-Berndt, 2015:151).

This was a very early idea that materials have their own inherent properties and not only those superimposed by humans. He also noted that humans with a technological mind, feared the aspect of rust that suggested "disuse, inactivity, entropy, and ruin." (Smithson in Lange-Berndt, 2015:151). Smithson's work was guided by a keen sense of entropy¹⁵ and temporality and its place in the world of both nature and the art world. He considered the gallery and the art world to be a restriction, a constraint if you will, on the creativity of the artist.

"His 'nonsite' work, Essen Soil and Mirrors (1969), was laid across the gallery floor. The soil simply sat there on the floor, the same floor that patrons try so hard not to contaminate with food or drinks. The presentation of his 'nonsite' was intensely ironic, and Smithson loved irony. His writing used ironic subtext to guestion the Modernist and Western notions

¹⁴ Ferrous chelate is a fertiliser used for iron deficiency in plants. It is a chelated form of iron oxide (rust) that can be absorbed by living organisms (<u>Starke Ayers website</u>)

¹⁵ Entropy - the degradation of the matter and energy in the universe to an ultimate state of inert uniformity (Merriam-Webster Dictionary)

of the gallery system. Why should art be imprisoned there...but then again why not? They are all one in the same, the gallery, the art and the artist...all are restrained by the thermodynamic force of entropy" (Rasor, 2015: para 5 website).

The type of exhibition that I envisioned paid attention to this idea of a 'nonsite'.

2.4.1 Insights

Ironically, Smithson used gallery spaces to display his work otherwise I speculated that it would have remained unknown because of its inaccessibility, with the *Spiral Jetty* 1970 in a deserted landscape as perhaps his best known example. He exhibited samples in galleries of his earthworks as 'Non-sites' but included topographical maps to reference them and put them back into their earth-context. His position as an artist who wanted to work "like a 'steel welder' or a 'laboratory technician'" (Lange-Berndt 2015: 151) allowed him to identify chemical processes as valid artistic methods, which resonated closely with my work. In this sense my practice related to that of Smithson. His focus on large scale earthworks to realise these aspirations was offset by the necessity of displaying physical materials in a gallery space which created an uncomfortable ironic tension. My work, because of the constraint of scale which my body imposes, was displayed in a shed, but a digital virtual exhibition of the original site was of additional value, as it had the effect of allowing people to view the work without travelling to a remote location (Ammazulu Sculpture Precinct map pin) (as outlined in question 1.2).

2.5 Working with natural UV light

Issues around representation, performativity/process and spiritual healing continued as I engaged with renewed material agency. Here I interrogated areas of the electromagnetic spectrum, concentrating on the ultra-violet component of sunlight. Considerations of aesthetics are also addressed.

"In setting the world before, and in relation to himself, man places himself at the centre of all relations" (Heidegger in Bolt, 2010:29).

In late 2021, after the traumatic death of my husband, I started working with images of myself. In my journal, I noted that "I'm certainly feeling uncomfortable about incorporating my image and I think some of that discomfort comes from Trevor's death because what has happened is I have become separated from him. If I think of how we believed in the middle path (Buddhist Middle Way¹⁶) - he is now one with energy - he is now one with material - but I am left behind. I want to

¹⁶ The Buddhist Middle Way is explained by Varela, Thompson & Rosch as a form of groundlessness that emphasises the enfolding of the organism and environment into each other and the unfolding from one another in

bring myself physically into this more closely so I decided to have a look at photographic means to do this." (Moore, online journal).

In his critique of representation in art, Heidegger (in Bolt, 2010: 65) considers that representation prevents the human from being open to 'what-is', and situates the 'human' in a quest to keep things (objects and materials) under control. This use of representation sounded completely at odds with my desire to decentre myself in this research as the human artist and my quest to relinquish control over the art process. I had also become conditioned by the Platonic idea that mimesis ¹⁷ and representation were one and the same. I agree with Heidegger's critique of representation in art, that "It is the politics of representation, rather than the images that is at issue" (Quoted in Bolt, 2010:36).

Bolt argued convincingly that the production of a figurative artwork such as her painting *Reading Theory, 1995* (Bolt, 2010:3) referenced the materials used as absolute chemical matter, as would be used by an Alchemist (Barthes, 1988:167 quoted in Bolt, 2010: 171). She suggested that the physical nature of the artist's creative actions in her application of paint and the actual sitter as an integral part of the performance, moved the artwork away from modernist representation and towards a posthuman performativity.¹⁸

the fundamental circularity that is life itself. The writings of the Indian philosopher Nāgārjuna founded the Middle Way *or Madhyamaka*. It avoids the extreme of either objectivism or subjectivism, of absolutism or nihilism(Varela, 1991: location 5484 Kindle Edition)

¹⁷ Mimesisused in aesthetic or artistic theory to refer to the attempt to imitate or reproduce reality since Plato and Aristotle (Merriam-Webster dictionary)

¹⁸ Posthuman performativity is discussed in the Literature review chapter 2, and Methodology chapter 3.

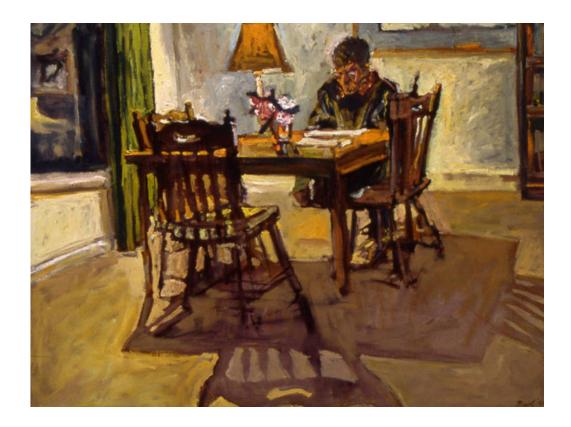


Figure 24: Bolt, 1995. Reading Theory.

This is in keeping with Barad's notions of Posthumanist Performativity.

"The move toward performative alternatives to representationalism shifts the focus from questions of correspondence between descriptions and reality (e.g., do they mirror nature or culture?) to matters of practices/doings/actions." (Barad, 2003: 802).

In my own practice of working with natural UV light this idea of Barad's *practices/doings/actions* was established early in my mind/body. The alchemy of the photo-sensitive chemicals and their dangerous constraints²⁰, my spontaneous 'mutilation' of my portraits and hand images, the immediacy of the sun's UV index at that moment in time and place and the physicality of the found objects used for photograms, all came together as solitary, cathartic performances. This became my 'dance of agency'.

My performative actions began with my actual movement in front of a video camera on time lapse. This allowed me a new freedom of expression in my practice without holding back and feeling inhibited by the presence of another live person. This became a private, cathartic

¹⁹ The idea of the mind/body as a composite entity is one mooted by Varela, Thompson and Rosch. "By embodied, we mean reflection in which body and mind have been brought together. What this formulation intends to convey is that reflection is not just on experience, but reflection is a form of experience itself—and that reflective form of experience can be performed with mindfulness/awareness." (Varela 1991: location 1610 Kindle)

²⁰ The constraints of these chemicals are essentially in their potential toxicity if not used with focus. This is discussed further on.

moment for me as I decentred human photographers and related solely with the video camera (online video https://www.youtube.com/watch?v=cLOdwl-tWTQ).

I then captured stills from this video and produced photo-negatives/photo-positives in Photoshop from them which I printed. I cut these out and collected them in a box where they waited for their moment of action.

The random application of a mixture of potassium ferricyanide and ferric ammonium citrate with gestural sweeps of the brush on the paper, was a separate performance. Only after drying had occurred could the possibilities be experienced. I interred these prepared sheets in a dark place - where they avoided light and waited for activation.

I adopted what I considered to be a state of reflective openness as I sat in my quiet dark studio interacting with the photosensitive paper, arranging photo-negatives/photo-positives on them and adding found objects like rusted chain/mesh/nails that felt necessary at the time. This collection was put into the sun and observed while I sat quietly and mindfully next to it. This state of mindfulness is a meditative practice of mine that was in keeping with my engagement with the Middle Way, as discussed on page 52. The paper gradually turned brownish bronze as the chemicals interacted with the sun's UV and, at a moment of maximum saturation, I removed the collection for developing under running water and an oxidising agent. The prints were dried and left for another day (see figure 57).







Figure 25: Moore, 2020. Process photos (online journal)



Figure 26: Moore, 2021. Photo-negatives of images on transparencies.

Subsequent engagement with each dry cyanoprint suggested a new intervention as a new action. Some were buried; some torn and stitched with rusted wire; some had rust print overlays; others had the addition of my husband's ashes.

The nature of the process - of the chemical dance - resulted in an ephemeral product, as the chemicals and found objects gradually disintegrated the paper. I have boxed the hybrid prints so that the debris fall to the bottom of the box and display themselves. "...ashes to ashes, dust to dust;" (Book of Common Prayer, 1549).

The quiet, solitary ritualistic nature of this *practice/doing/action* seemed to have a shamanic²¹

²¹ In a mundane life, shamanism is practised as a life path. An individual would attempt to be in relationship with the spirit in all things. They would use guidance from non-ordinary reality to intentionally form their own life experience(Lawson, K. no date. University of Minnesota)

quality to it as I communed in a mourning process as part of spiritual healing as per the Buddhist Middle Way (Varela, 1991: location 330). The Nkosinathi Khanyile installation at the Durban Art Gallery has a similar sense of process behind a communing with the departed - here the Zulu *amadlozi*.²²



Figure 271: Nkosinathi Isaac Khanyile, 1999. DAG installation. *Wathint' abafazi Wathint' imbokodo*. Red & white clay, cow dung, wire & grass, glass beads, paper. Dimensions variable

Khanyile stated that "This (installation) focuses on the processes of creating art - to narrate, portray and preserve African cultural heritage. The art object (becomes) a reservoir that is a bearer of one's cultural, historical, geographical, socio-economic, political, spiritual and religious origins. This also means the artwork can be viewed as the mirror image (reflection) of one's identity" (Artist email).

An important idea here was the emphasis on process. The making of the pillars using traditional means like weaving single strands of grass and ilala palm leaves around a wire structure became a metaphor for weaving/creating one's African identity. This process also "evokes the significance of unity as a building block of strength and power. Such a philosophy forms the foundation for the spirit of Ubuntu" (Artist email).

Khanyile's intention was to reflect the diversity of cultural traditions found in the 'new' South Africa while bringing a message of hope and spiritual healing from African traditional belief

²² **Amadlozi is used** among Zulus: an ancestral spirit; a guardian spirit.(Mkhize 2011)

systems. The artist comes from a long line of *sangomas* and many of the shapes and images he has used here refer to this belief system. The pillars themselves are of a size similar to human forms that represent the *amadlozi* (ancestors). Specific shapes refer to the head-dresses worn by women called '*isicholo*' and the belts of beadwork refer to the '*isibhamba*' worn around the waist after childbirth. The brown cow dung found on some pillars is medicinal and is used for cleansing after a death, while the white and red clays were used when initiates train to become diviners in the process of '*ukuthwasa*'²³ (Mkhize, 2011: para 2). The viewer is invited to enter the installation through a low curved door that supports a white paper head. The geometric shapes on the circular discs (like Zulu ear-plugs) could be seen as 'writing' that the *amadlozi* recognize. The space between the pillars evoked a feeling of prayer and meditation for me, where one can sense the *amadlozis*' presence. The process of making the head involves the pulping of recycled paper from books that conveyed knowledge in the past and which now seem to contain the "spiritual elements and DNA residues" (Khanyile, 2019) of those who have gone before (Moore, 2019). This retention of 'spiritual elements and DNA residues' in the artwork, resonated strongly with me as I incorporated Trevor's ashes into my cyanoprints (see fig. 60).

2.5.1 Insights

The performativity and process of my hybrid cyanoprints also provided me with cathartic opportunities for spiritual healing as I interacted with the inevitability of the alchemy of the materials, as outlined in queston1. They operated independently of my control and created the realisation that the physical and spiritual world are all one. In addition, the messy qualities of the cyanoprints paid no attention to human formal considerations such as composition and handling of colour and texture. What emerged has its own life and, eventually, death, as the work disintegrated.

2.6 Working with clay, mycelia, and fibre

The death of my husband and the associated grief I felt, lent an unexpected and further element in the dance of agency as articulated in research question 1.1 (Pickering, 2012:1). Although hardly a 'chosen' parameter in this dance, his unexpected death became critical in developing a further intra-action²⁴ with materials in my practice. The installation - *Lithic Fragments* (see figures 62 - 66) - was, like working with natural light, another physical embodiment of my grief after his death in 2021 (Varela, 1991:location 234). The initial performative engagements with materials such as clay subsequently led to other connective material engagements with fungal

²³ *Ukuthwasa:* The process or period during which an initiate studying to be a diviner or traditional doctor develops the powers of a medium (Mkize 2011).

²⁴ A neologism coined by Barad.(Barad 2003:30) see pg.4.

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mycelia and, later, fabrics and fibre.

In this section I discussed an enactive approach²⁵ to creating a physical repository for grief and pain and this approach made use of a performative aspect in my search for harmony and closure. It also attempted to identify some of the parameters in my practice that functioned as resistances in my 'dance of agency' (see guestions 1 and 1.1 of my research guestions).

Figure 28: VIDEO LINK

Lithic Fragments

2.6.1 Clay - an embodied engagement with grief

This component of the installation existed as a cathartic, performative outcome of beating clay, then allowing fire, heat and chemicals, to modify the clay in ways that were always

unpredictable.

The direct physical engagement with the raw clay became an embodied engagement with grief in my dance of agency (Pickering, 2012:1). The continued scratching and beating with rusted metal mesh, chain and timber anchors, became a metaphor for embedding my pain into the

materials. It became a repository for this pain (see figure 66 for video)(Moore, journal entry).

As I no longer own a kiln, these clay 'fragments' were taken to the UKZN kiln and fired to a bisque temperature, after which they returned to my studio to carry on with the dance of agency. This developed into a major resistance²⁶ for me in my practice as I felt that my engagement with the clay was interrupted and that the flow of my catharsis was impeded.

The chemicals²⁷ which I had used during lockdown were further sprinkled and poured.

I investigated the parameters inherent in my materials during the extreme way my self-built raku gas-kiln burnt out some of the chemicals, including the oxygen, in an unpredictable and irregular manner (see figure 67).

Ruais (Ruais, 2022: last para) also used clay to "Concretize the Psychological State of Being

Copper sulphate, copper carbonate, copper oxide, copper chloride, ferric chloride, ferric oxide, magnesium sulphate.

²⁵ An enactive approach can be considered as another of the New Materialisms. The enactive approach can be loosely considered as the purposeful actions and reciprocal dynamic interactions with the environment as the mind/brain, mind/body, and body/environment function together (Varela 1991: 374).

²⁶ Pickering refers to resistances as obstacles in any dance of agency.(Pickering1993:569)

²⁷ These chemicals are:

Wounded" in a similar way as she felt that her body held memories in a way that the mind did not (Ruais 2022: first para). For me, my body worked with the materials in a way that focused on the interconnected nature of my dance of agency which further allowed me to investigate my research question 1. It expanded my practice into a more emotive and expressive, rather than technical, mode of working with materials. This interaction, or rather enaction, was one consisting of my body, my mind and the materials. This cohesion was an enactive approach in which cognition and memory is held in all these parts and cannot be separated (Varela, 1991: 374)(Moore, journal entry).

Ruais used her whole body to reflect on the relationship between her psychological inner world and the physical external world in which her body, her mind, and the clay, co-habited. In figure 70, *Letting the Fire In, 130 pounds*, a physical exit wound was also ripped through the gallery wall so that her work framed this circular exit. Ruais found the performative nature of this cooperation between body, mind and clay important and in the still of the video below (figure 69), her circular movements extracted and shaped the clay as she focused on the enaction (Varela, 1991: 374). Her firing process was also enactive as she cooperated with wood, fire, heat and the clay (Ruais, 2021: location 07:00) and then used the emergent result as a physical remnant of the enaction. The way in which Ruais used clay as evidence of her emotions rather than as an object, resonated with the new way in which I worked with clay. Her installation *Letting the fire in,* (figure 70) became the evidence of an experience and this was similar to my intention for my installation *Lithic fragments*, which became the evidence of my cathartic performative actions (see video in Fig 66).



Figure 29: Ruais, B. 2021. *Digging In, Digging Out 2021.*Video still.



Figure 30: Ruais, B. 2021. Letting the Fire In, 130 pounds. Pit fired stoneware, 67 x 67 x 3 inches.

This enactive way of dealing with psychological 'wounds' in also found in Hoshino Satoru's work. In 1986 a landslide engulfed Hoshino's studio which deeply affected his work. Perryman explained that the earth can display both nurturing and destructive forces and it is this conflict that Hoshino dealt with as he attempted to create a "passage through this dangerous-seeming chaos" (Perryman, 2014: 102). These passages were physically visible in the difficult entrances to his non-functional clay forms.



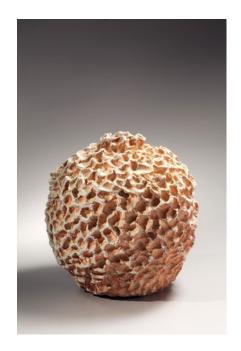


Figure 31: Hoshino, S. 1999. *Rain in Ancient Woodland.* 190 x 400 x 400 cm. Stoneware.

Figure 32: Hoshino Satoru, 2011. Globular *shigaraki*. Ash-glazed wood-fired stoneware. 17 x 17 x 17in

His working method involved a dialogue with clay. This became a type of body language as he pressed his fingers repeatedly into the clay. The clay responded with a distortion; a change in form. He found that this was not a relationship where the clay was passive and the artist active. If he was "too abrupt", the clay "rejects his requests" (Perryman, 2014: 104). The dialogue could only occur if he adjusted his human time to that of the clay - a geologic time frame where particles and molecules move slowly. I have also experienced this new relationship with time in my emerging practice; not only with my physical engagement with clay, but also in my engagements with 'alchemical' time (see Pg.31). Both move slowly and at their own pace. I have found that I have needed to slow down and become more meditative and deliberate in my practice. My 'active' actions and my 'passive' waiting for the clay and chemicals to complete their performative movements, had become my new 'dance of agency' as a new way of experiencing process emerged, as mentioned in my research question 1 (Pickering, 2012:1)(Moore, journal entry).

Hoshino looked for an autonomous form that emerges as a result of "a joint effort" between

body and clay. He looked for a sensory experience where touch is paramount and where the form of the clay spoke to the symbiotic relationship between the earth and the human. He would like his work to be "a new form of life, a new cosmos" that emerges from a horizontal sea of chaos (Perryman, 2014: 106)(see figure 71 above). The forms that emerged were not from his thoughts and control but rather grown from the vibration between the clay and his body. He aimed for a harmony that expresses this process of formation from the ancient, generative earth.

"My purpose in my current work is to re-think this relationship with matter or nature on the level of the physical human body." (Perryman, 2014: 106).

This co-activity or 'joint effort' of clay and human body/mind became increasingly important to me in my practice as I wrestled for some sort of closure regarding death. However, I doubted at the time that much harmony would result from my violent struggles with clay. Instead, I anticipated that my engagement with this installation would result in expressed evidence of pain rather than harmony. This harmony later emerged on as the installation progressed in time.

Hoshino used a coarse red clay which he fired to 850 degrees centigrade, dropped this to 500 degrees and then introduced pine needles. The kiln was then sealed so that no oxidation could occur in the clay, which is the traditional Japanese black-firing method and was similar to the Western interpretation of raku which I used in my work. The emergence of the work from the kiln always surprised him, as it did me, as it expressed the "moment when the unknown factors of nature intervenes in the (human) here and now" (Perryman, 2014: 107). For me, this unpredictability seemed appropriate and spoke to my relinquishing of control as I wrestled with my new modes of practice as identified in question 1.



Figure 33: Moore, 2023. *Lithic Fragments installation.* Fired clay, straw, soil, mycelia, weeds. Dimensions variable.

2.6.2 Mycelia - an entangled engagement with grief

While working with clay, I reflected on other ways in which my human body/mind would become integrated with the physical world around me in a performative way (Moore, journal entry). Merlin Sheldrakes' book Entangled Life: How fungi make our world, change our minds and shape our futures, showed another way in which the Animal (including Homo sapiens) and Plant Kingdoms are entangled with the Fungal Kingdom (Sheldrake, 2021: location 282). I began growing fungi in the summer of 2021 (Moore, journal entry) to engage with this idea physically and became enthralled with smells, shapes and habits of this (to me) new connection. The fungi I chose to work with were *Pleurotus ostreatus*, the oyster mushroom. I wondered how their mycelial connections could work my lithic fragments (Moore, online journal). Again, Pickering's accommodations and resistances came into play as I interacted with the growing physical world that was not under my control (Pickering, 1993:569). The major resistance proved to be contamination. The humidity where I live was conducive to all fungal growth, but also the growth of green mould (Trichoderma) on any organic matter such as shoes. Fungal mycelia such as those depicted below are also vulnerable to these 'attacks'. The green mould out-competed the Pleurotus and eventually caused the death of both the mycelia and itself. Fortunately, the 'accommodation' in this dance of agency proved to be the oxidizing agent, hydrogen peroxide,

that I used in Cyanoprint developing (see pg. 60) and so the dance could continue (Moore, journal entry).







Figure 34: Moore, 2022. *Pleurotus* ostreatus. Digital print.

Figure 35: Moore, 2022. *Pleurotus*ostreatus Mycelia and pins²⁸

Digital print

Figure 36: Moore, 2022. *Mycelial* entanglement. Digital print

In the exhibition *Gills of other Creatures* (2021), Gwen Miller considered these fungi to be metaphors for "the in-between and the rich alchemy of life" (Miller, 2021: 2nd exhibition on website).



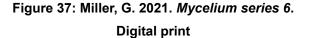




Figure 38: Miller, G. 2021. *Mycelium series 4*.

Digital print

Part of this 'alchemy of life' that Miller mentioned is the role that fungal mycelia play in the breakdown and re-distribution of the chemicals of a past life. The ashes of my husband were incorporated in the installation together with the lithic fragments and the mycelium to create a

²⁸ 'Pins' refer to the hyphal knots that occur at the start of the fruiting process (GroCycle.com).

living cairn. I had been working on my *Lithic Fragments* installation at the same time as a project at the KZN Museum called *Ukuphosa Itshe Isivivaneni*²⁹ which was a collaborative project focussing on the idea of both literal and metaphorical 'stones' which, when placed together in a cairn, created new meanings and narratives (*Ukuphosa Itshe Isivivaneni*, 2022: 7).

In the catalogue for the Museum, I called my lithic contribution a 'Conversation with Stones'.

"My cairn is part of a continuation of work done last year (2021) around the idea of the vibrancy and vitality of matter. This 'vitality' was emphasized by the death of my husband in 2021. It's hard to believe that a human being can disappear when the materials of the human body, including the vibrancy of the soul, are part of all matter around us. I have carried on with this material conversation as I look at the invisible but vibrant life within the unseen world.

I have also shared in this vibrancy as I examined the active roles of gravity, chemicals and the electromagnetic spectrum in my life. I find the activities of infrared as it manifests as fire and heat to be important, as my battered clay bodies are further subjected to temperatures of over 1000° - both in a kiln environment but also with raku firings in my back garden (Bennett, J. 2010. Vibrant Matter: A Political Ecology of Things)" (CVA Collective 2022: 35).

However, the installation at the museum had to be free of all fungal or substrate matter such as straw, as these 'contaminants' are a resistance when viewed from the conservation perspective of a museum. Their re-installation in a shed in October 2022 incorporated mycelia, straw with the lithic fragments again.

²⁹ A Zulu proverb meaning to throw one's stone on the pile (Catalogue 2022: 7)





Figure 39: Detail from *Ukuphosa Itshe Isivivaneni* catalogue. Molten broken bottles. Digital print.

Figure 40: Detail from *Ukuphosa Itshe Isivivaneni* catalogue. Burning clay. Digital print.

In my view, Miller captured the elusive and hidden nature of fungi using digital photography which I also found to be a way to cope with its ephemeral nature. The ephemeral nature of both fungi and many chemical processes was one of the resistances which I identified in my emerging practice as per my research question 1.1 and 1.2 and which I accommodated by using digital and virtual methods.

Mycelia were also important in the work of Kath Fries, as she described her art encounters with the matter-flow³⁰ of sentient existence (Fries, 2017: 11). She too, noticed the constantly changing, impermanent cycles of decay and disintegration, and the inclusion of the human artist within this sentient matter-flow.

³⁰ "The inherently active nature of materials is expressed as 'matter-flow', a New Materialist term recently coined by Tim Ingold, ecological anthropologist and material-culture professor, to emphasis the aliveness and agency of matter-flow." (Ingold 2000 in Fries 2017: 13)





Figure 41: Fries, K. 2016. *Within*. Wood, beeswax, oyster mushrooms (Pleurotus ostreatus), light and water, dimensions variable.

2.6.3 Fabric and fibre - a contemplative engagement with grief

One of the recurring resistant parameters in my emerging practice, was the element of time (as per my research question 1.1). Mycelia growing, chemicals changing and clay slowly drying have all required me to passively wait as these processes could not be forced or controlled (Moore, journal entry). My creative accommodation to this was to start a slow and meditative process of knitting, weaving and crocheting with tubular cotton gauze. This had the additional benefit of giving my body and mind, time and space to rest and recover (Moore, journal entry).

This fibre and fabric construction continued to grow even after it had been tied into and integrated with, the *Lithic Fragments* installation. Small pieces of the clay 'stones', straw, rust, wire and chemicals stained and weighed down the construction as a metaphor for the connections I was attempting to build with the world, both animate, inanimate, living and dead. Haraway considered this form of art-making to be 'sympoietic' or 'worlding-with'; a type of connectivity or enmeshment which was very much part of my emerging practice (Haraway, 2016:58).

2.6.4 Insights

This *Lithic Fragments* installation was a work in progress until January 2023 as I worked in the exhibition venue for two to four days a week. This type of dynamic or process exhibition was in response to my research questions. The intention was to document the exhibition once a week using a Richoh Theta 360 camera. This technology made use of virtual reality when used in

conjunction with a headset and, when viewed on a mobile phone or computer, enabled the viewer to move around inside the virtual space.

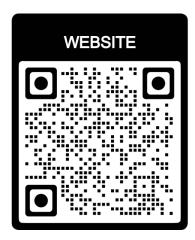


Figure 42: Website hosted on https://www.neithmoore.com/

Chapter 3

3.1 Introduction

In this final chapter I evaluated my use of a mixed methodology to investigate my research questions. I reflected on the limitations of the research and the challenges presented by the project as well as considering the insights yielded by my interrogation of my research questions.

3.2 Application of methodology

My understanding of PLR strengthened as I engaged with this research project and became aware of the feedback loop between my reading, questioning and making work. The practical artworks and experimental processes which were started in 2020, then suggested and informed relevant theoretical research writing, as is typical of PLR. As I researched and reviewed the relevant literature, missing areas emerged and suggested further practical work for me. This was a feedback loop typical of PLR that resulted in my investigation of a new 'dance of agency' that has generated a third creative space for me (Goddard in Barrett & Bolt, 2007: 2610/4512). This 'intra-play' between human and material agencies co-created the questions which underpinned the research which is a feature of PLR. This co-creation of questions by both my human agency and material agency engendered a respect for material agency that I experienced in this creative space.

My online journaling on making/thinking/being proved integral to the creation of the body of work as it became part of the feedback loop (Moore, journal entry). This habit of daily reflection provided valuable material as I looked back over the years that I had been engaged in this study. It provided a safe virtual space where I could ask questions and also answer them as I progressed though time. The website allowed me to share with others in my virtual world during the COVID lockdown and mitigated my isolation. My inner voice could be heard by others all over the world, if I so chose, which proved invaluable.

The restrictions on access to materials during lockdown was an unexpected but serendipitous plunge into an alchemical but mundane world which had been previously invisible to me. Online research enabled me to investigate this world which further informed my practice in a typical PLR manner (Candy, 2006:1). Online libraries (such as Perlego)(Perlego, n/d: website) made me realize that the resistances of a lockdown could be easily transformed by digital accommodations that altered my research practice significantly. The knowledge and theories I accessed were rigorously recorded in my online repositories and my practical work documented, both photographically and videographically and uploaded to digital safe spaces, providing me with easy access to them. This easy access allowed me to weave together the theory and practice with a focus on my research questions. However, the on-going nature of the physical exhibition which ran over two months, precluded any form of premature closure. Virtual exhibitions using interactive software allowed me to record this exhibition development as well.

On reflection, one of the challenges for me was to make the shift from pure process, where the materials are the agents, to representation and then back again to my immersion in material agents. I was able to achieve this my considering that representation can have both performative and processual components as advocated by Bolt (Bolt, 2010: 65). In this way the dance of agency included me as well as the vital materials in performative works which may or may not made use of metaphor and meaning (Barad, 2003: 802).

Another significant learning was becoming aware of the danger of over-sanitizing materials in the interests of a formal aesthetic, and so losing the messiness of the material process, as might happern in *Lithic Fragments*. This messiness, though, often seemed to be in itself potentially disastrous, but this resulted in a cognitive shift on my part which was an evolution in my practice (Siopis in Perryer, 2018:33)(Lange-Berndt, 2015:12).

The focus of these 'alchemical experiments' was to find where the actions of materials in the present took me in the future as indicators of new modes of thinking and of artistic practice. A

part of this evolving artistic practice was to think, not primarily about the formal aspects of the painting, but about the embedding of messy process in a different aesthetic. Latour's 'flat ontology' and Bennett's 'heterogenous assemblage' did not remove the human completely as I found that I was part of this ontology and assemblage (Bennett, 2010:23). I realized that decentralising my agency did not replace it altogether with material agency but allowed me to engage in a balanced dance of agency, as can be seen my cyanoprints (Figure 60).

The on-going performative demonstrations in the gallery were my accommodation to the time frames of material agency, as mentioned in my intention on page 34. This were recorded and posted online. The role of digital media in this accommodation to the constraints of materials, was important to resolve issues of both time and scale and involved curatorial decisions regarding a dynamically interactive virtual exhibition as well as its physically performative nature that ran over a few months in an exhibition space.

The performativity and process of my body of work, also provided me with cathartic opportunities for spiritual healing as I interacted with the inevitability of the alchemy of the materials. They were autonomous and created the realisation that the physical and spiritual world are all one. In addition, the messy qualities of the works paid little attention to human formal considerations such as composition and handling of colour and texture. What emerged had its own life and, eventually, death, as the work carried on disintegrating and changing.

This was in line with my research question 1.1 as spiritual healing became one of the paradigms of my research. This was measured by my self-report as part of the reflexive and meditative process of my evolved practice (On-line journal).

This type of dynamic or process exhibition was in response to my research questions. The exhibition was documented once a week venue using a Richoh Theta 360 camera. This technology made use of virtual reality when used in conjunction with a headset and, when viewed on a mobile phone or computer, enabled the viewer to move around inside the virtual space. This was in response to my question 1.2 regarding virtual exhibitions. (Example hosted on https://www.neithmoore.com/)

PLR and Posthuman Performativity (Barad, 2003: 802), (Pickering, 1995, 2011, 2013 & 2017) (Bolt, 2004: 4) seemed to become more than methods for this research project. They provided springboards for me as both my practice and my thinking were transformed (Moore, journal entry).

3.3 Challenges in this research

As mentioned on pages 31-34, chemical time was a resistance or challenge in my research. By this I mean that the ephemeral but endless nature of chemical time, ensured that I had to adopt a new way of working that became more of a dance. I had to accommodate the active and passive phases of matter as Pickering discussed in his work(Pickering 2012: 3) This enabled me to move between reading theory while I was passive and the materials active, and then creating actively while the materials were passive. This performativity became the essence of my dance and also fitted in closely with the interpenetration of theory and practice that is inherent in PLR.

Another resistance or challenge was the quality of formlessness which was a function of the materials such as glue and gravity as discussed on pages 34-40. However, according to Siopis, one needed to talk, not about the formal aspects of the painting, but to talk about the process (Siopis in Perryer, 2018:23-24). With this mind, I was able to document the process and remain unconcerned about the end products and their inherent inattention to formal Western formal aesthetics.

A third resistance was that of scale. The act of taking a small object that existed in the mundane, everyday office world where it was seldom noticed, and bringing it to the attention of myself and the human viewer by a scale change, certainly emphasized Siopis' point about the impact of size on viewers (Siopis in Perryer 2018:9). I found that the unobtrusive, intimate nature of alchemical performativity in my work, was easily overlooked by me and the challenge was, for me, to make this activity visible. Barad emphasizes the vitality of matter when she argues for the indivisibility of human and nonhuman at the "queer" very tiny atomic level (Barad, 2012:46). My materials are the most mundane and ubiquitous at this intimate, invisible level and a scale change would be a strategy, with technology such as photography, videography and virtual tours being used as an accommodation.

3.4 Limitations of this research

"(The conclusion) can also point out limitations of the project and the degree to which directions that have been opened up for future research." (Barrett & Bolt, 2019: loc 4499)

In this study, the stated research objectives were to examine and interrogate the new choreography in the dance between my human agency and material agencies in order to develop a new mode of thinking and awareness in my artistic practice. In order to achieve this, it was necessary to identify and expand on parameters involving chosen resistances and accommodations in my evolving artistic practice as discussed on page 2. The resistances found in my practice can be re-defined as the limitations and obstacles encountered in the study itself. As the process exhibition will extend from the 9th November 2022 to the 30th January 2023, it is useful to discuss the limitations of this as well. As is common with many PLR projects, a lack of money for exhibition purposes posed the most significant resistance and limitation. A grant enabled the purchase of a TV to showcase the process videos and the printing of some of the photographs as acknowledged on the cover page. In addition, the rental of a venue is usually an expensive item in a project budget, but a fortuitous accommodation to this resistance was the offer of an exhibition venue for 4 months at no cost to me. I was therefore able to work in a large space and expand on my practice which was an accommodation.

I felt that the viewers of the physical exhibition were important and so physical constraints that prevented adequate viewing became limitations. These limitations include the difficult access to the venue to the public. The dissemination of the findings of this PLR project then became problematic with the lack of foot traffic. In order to build public awareness of the existence of material agency, it will be necessary to increase foot traffic to this remote venue in the forest and this might have been achieved by the development of workshops with advertised content on social media. Advertised guided tours or 'walkabouts' could also be used. The constructed website will also aid in dissemination of this project (neithmoore.com). In this manner, the limitations or resistances inherent in the study can be linked to their accommodations as Pickering found in his study on scientific research (Pickering, 1996: 567-68).

In terms of the virtual exhibition, I found that the immersion of the venue in a riverine forest in Kloof resulted in very poor mobile data reception as there is no Wi-Fi or cell towers locally. I find this a limitation in terms of my question 1.2, but will continue to put up QR codes which will direct the viewer to specific videos as seen in the example in Figure 86 for the video PYRE. Alternatively, the videos will be showcased on my website (neithmoore.com). This is further exacerbated by load shedding on the part of Eskom in this area. This load shedding results in the non-function of the TV, the large lightbox and the LED lighting. It also caused many delays in the execution of the research project in terms of power tools and computer equipment.





Figure 43: Example of QR code for the pacific video - PYRE

Figure 44: Moore 2022. Alchemy lightbox.

The section on 'Working with clay, mycelia, and fibre' on page 65, depends on the continued functioning of living organisms in self-regulatory 'autopoiesis'³¹ (Varela, 1991: loc 165). A limitation of this study might be if this fails and the installation has to be removed because of smell, health and safety concerns.

Performative involvement with matter and forces such as that found in historical artefacts and geographical spaces, could be useful in creating new insights in those areas of research. This could be a fruitful path for my next research project. Making the invisible, visible would be a spin-off from my experiences in this project and applicable to many aspects of the seemingly mundane. What is there, but not noticed? The matter-centred constraints of deterioration and impermanence can also be considered as metaphors for personal change, transformation and human transience which is a philosophical accommodation that can be further investigated (Milligan 2016:2). Overall, I felt that my new awareness and acknowledgment of the agency of matter allowed for a more harmonious 'matter-flow' and fewer limitations than I had initially expected (Fries, 2017: 11).

²⁴

³¹ Autopoiesis means self creation or self organisation. The term was introduced by evolutionary biologists Humberto Maturana and Francisco Varela.

3.5 Reflection on the research questions

This reflection is intended to provide a summary of important areas in this research, and what evolved from those aspects.

Initially, my artmaking was constrained by habits of control and technical expertise, as discussed on page 10. Using the meta-cognitive aspects of reflexivity, I attempted to find strategies to question my old attitudes, values and habitual actions, such as those found in extreme technical control (Bolton & Delderfield, 2018: 10). In terms of my actual practice, this involved the facilitation, instead of the control, of materials as the emergent 'artworks' became co-created by the materials and myself. These artworks were then considered to be the 'emergent properties' of the materials themselves and not anthropocentric.

The realization that the properties of the materials involved alternation of active and passive modes that were reminiscent of a dance lead to research about Pickering's theories concerning his 'dance of agency' (Pickering 2012:1). This then became my heuristic for a performative involvement with matter. This heuristic became a robust method of dealing with matter. I was able to suspend judgement about what constituted 'art' and refrain from classifying many of the results as waste to be discarded. This often took months and required a return to bins of erstwhile 'discards' in order to re-engage with them in an embodied way. I found that seemingly random performative actions were important in this research project. The development of this 'dance of agency' became a pivotal point in my new practice.

The death of my husband was another pivotal point in my practice. The initial removal of all human reference from my work in an attempt to give preference to material agency, became tempered with a desire to re-introduce a balance between human and material agencies, as I dealt with the physical removal of an important human by a non-controllable force. I needed to deal with my physical reality of being left behind (see page 58)(Moore, journal entry). This also prompted a deepening focus on human/material entanglement (see page 65) (Varela, 1991: location 234). The intra-connectivity of all matter and its artificial separation into human, vegetable, fungal and mineral, became central to my practice. This was in keeping with Barad and Bennett's idea of the vital matter and the unity of all (see page 10)(Barad, 2003:30)(Barad, 2003: 802)(Bennett, 2010: 62). This concentration on human/material entanglement is on-going as the process exhibition develops, aided by rigorous documentation.

3.6 Conclusion

PLR emerged as the generator for my altered way of thinking. Posthumanist theory (Pickering et al) allowed me to interrogate, in my artwork, the traditional boundaries between the human, the animal, and the inanimate.

I was able to experience the discomfit of relinquishing control over my material world with acceptance instead of resistance. This allowed me the space to take risks and be 'messy' without anxiety, which was transformative for me.

My initial traditional techniques and methods of artmaking evolved over the course of this research into new ways of making/thinking/being, which I found liberating (Moore, journal entry). The initial resistances which I encountered at the beginning of this project were transformed by PLR into accommodations as I learnt to co-exist with autonomous inanimate and animate matter in my body of work, as I utilized my new 'dance of agency' to lead my embodied engagement with material agency in my artistic practice.

What I found most important, perhaps, is that my co-agency has transformed my anthropocentric mindset, which enables me to be more receptive to the world through a performative agency. This is a paradigm shift that I feel to be essential in this current time on our planet.

"Accordingly, based on Lenz Taguchi's (2010) arguments, Murris (2016) claims that there is a performative agency, insofar as nonhuman entities have a certain force and power that can transform our thoughts and our being." (de Queiroz Sousa, 2019: 534)

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Appendix A:

Poem - Conversation with a Stone, By Wislawa Szymborska

I knock at the stone's front door "It's only me, let me come in.
I want to enter your insides, have a look around, breathe my fill of you."

"Go away," says the stone.

"I'm shut tight.

Even if you break me to pieces,

we'll all still be closed.

You can grind us to sand,

we still won't let you in."

I knock at the stone's front door.

"It's only me, let me come in.

I've come out of pure curiosity.

Only life can quench it.

I mean to stroll through your palace,

then go calling on a leaf, a drop of water.

I don't have much time.

My mortality should touch you."

"I'm made of stone," says the stone.

"And must therefore keep a straight face.

Go away.

I don't have the muscles to laugh."

I knock at the stone's front door.

"It's only me, let me come in.

I hear you have great empty halls inside you,

unseen, their beauty in vain,

soundless, not echoing anyone's steps.

Admit you don't know them well yourself.

"Great and empty, true enough," says the stone,

"but there isn't any room.

Beautiful, perhaps, but not to the taste

of your poor senses.

You may get to know me but you'll never know me through.

My whole surface is turned toward you,

all my insides turned away."

I knock at the stone's front door.

"It's only me, let me come in.

I don't seek refuge for eternity.

I'm not unhappy.

I'm not homeless.

My world is worth returning to.

I'll enter and exit empty-handed.

And my proof I was there

will be only words,

which no one will believe."

"You shall not enter," says the stone.

"You lack the sense of taking part.

No other sense can make up for your missing sense of taking part.

Even sight heightened to become all-seeing

will do you no good without a sense of taking part.

You shall not enter, you have only a sense of what that sense should be, only its seed, imagination."

I knock at the stone's front door.

"It's only me, let me come in.

I haven't got two thousand centuries,

so let me come under your roof."

"If you don't believe me," says the stone,

"just ask the leaf, it will tell you the same.

Ask a drop of water, it will say what the leaf has said.

And, finally, ask a hair from your own head.

I am bursting from laughter, yes, laughter, vast laughter,

although I don't know how to laugh."

I knock at the stone's front door.

"It's only me, let me come in.

"I don't have a door," says the stone.

Appendix B: Screenshots of my online journal - neithmoore.com This has been saved as a separate PDF