School of African and Gender Studies, Anthropology and Linguistics

The unequal multispecies entangled human-rat relation: How rodent control reveals colonial legacies in the lives of people of Lwandle/Nomzamo in Strand, Cape Town, South Africa.

A minor dissertation submitted in partial fulfillment of the requirements for the award of the degree of

Master of Social Science in Social Anthropology

Supervised by Susan Levine

Faculty of Humanities

University of Cape Town

2021

Thulasizwe Clements

CMLTHU001

FACULTY OF HUMANITIES

DECLARATION FORM - MASTERS DEGREE CANDIDATES

Name	Thulasizwe Clements		
Student No:	CLMTHU001		
Tel numbers:	0620016601		
E-mail address:	clmthu001@myuct.ac.za		
Word count	25909	**No. of pages**	70

DECLARATION:

1. I am presenting this dissertation in FULL/PARTIAL fulfilment of the requirements for my degree.
2. I know the meaning of plagiarism and declare that all of the work in the dissertation, save for that which is properly acknowledged, is my own.
3. I hereby grant the University of Cape Town free licence to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever of the above dissertation.

Signature		**Date:**	18/08/2021

1 IMPORTANT NOTES

1.1 Candidates for graduation in April and December should submit their dissertation 5 months prior to the graduation ceremony to allow time for the examination process to run its course. While the examination process is carefully managed, the University does not undertake to reach a decision on the award of the degree by any specific date.

1.2 Please note that where a candidate intends to submit for examination, an intention to submit form should have been uploaded to PeopleSoft 6 weeks before submitting the dissertation for examination. Where this has not been done on time, there may be delays in nominating examiners, which will delay the examination process as a whole.

1.3 Candidates who are required to revise and re-submit for re-examination are required to register during the revision phase. Fees will be calculated according to the date of the notification of the "revise and re-submit" result and the date of re-submission. [The Faculty will advise the Fees Office of the final result.]

1.4 Candidates are asked to note that the University will not permit degree/diploma qualifiers to graduate if they have any outstanding fees, fines, interest or dues**. Please ensure that these are settled at least 2 months in advance of your graduation ceremony.**

2 FUNDING AND FEES:

Candidates submitting have 2 options with regard to fees and funding if in 2nd or subsequent year of registration for dissertation/minor dissertation. Please indicate your preference by placing a tick in the appropriate box:

2.1 Not applicable as • First year of registration for dissertation/minor dissertation. No rebate applies (see Fees Rule 8.1) • Handing-in after last date for fee rebate (see deadline dates Fees rule 8.2)	

2.2 If registered for the 2nd or subsequent year in which the dissertation is being completed you can claim a fee rebate and discontinue funding (if applicable) through the PGFO. Please note that physical and library access will be cancelled. If you stay on in the department and receive payment through the payroll, such payment is taxable.	
2.3 To remain registered and engaged in the department while writing up a paper for publication with full student rights and access to facilities. You will be liable for the fees for the year and continued eligibility for funding already awarded for that academic year. Access will extend only until such time as you graduate. Should you need access beyond this, you will need to arrange for 3rd party access within your department.	

Signature		***Date:***	18/08/2021

Table of Contents

Acknowledgments

Throughout the course of my research and writing it has not skipped my mind for one moment that my data and literature draws from people's realities which involve painful experiences and struggles so for that I would like to thank the people of Lwandle/Nomzamo for their contribution to my research.

To God be the glory. I am thankful for where I come from and where I am in life. May you continue blessing me Almighty Lord.

I would like to thank my anchor, my pillar of strength, my prayer warrior, my biggest cheerleader and my ultimate haven, my mother. MaMthembu you are my angel on Earth and because you believe in me, I am able to believe in myself. Nge ndingemntu ngaphandle kwakho. I love you.

To Susan Levine, my supervisor, thank you from the bottom of my heart. The support you have given me on this journey has been amazing. Thank you for the feedback, assistance, critique and encouragement you have shown me throughout this journey. I have no words to express my gratitude but I hope you continue to do this for others.

I would like to thank Prof Fiona Ross who acted as a primary supervisor in the beginning of my Masters journey. I would also like to thank Prof Andrea Rother for being a co-supervisor to my research.

A special thanks to Chris Machelm-Peter and the Anthropology department for the academic and financial support. A huge thank you to the NRF for the funding.

Thank you to my family for the support and constant upliftment. To my three beautiful nieces, Yolanda, Anele and Nontando, I dedicate this dissertation to you guys as an inspiration.

To all my friends who have been a wonderful support system thank you so much. I am certain you guys are tired of hearing me speak about rats for 2 years now.

Roxanne Mathobie thank you for your editing assistance.

Finally I would like to thank myself for all the work that I put in this research and for being a champ throughout this tough process. The journey was long and the journey was hard but I persevered.

"The size of your problem is indicative of the magnitude of your destiny"

Abstract

Rat infestation torments people in poor communities. This is evident in the selling and circulation of agricultural pesticides that are repurposed as rodenticides in the informal settlements of Cape Town. The use of 'street pesticides' has sparked debates about poor urban infrastructures that give rise to rodent infestations on one hand and concerns about animal welfare on the other. This research investigates the connection between the complex issue of rodent management and the inequalities faced by people living in Strand. Thinking about the 'animal turn' in anthropology, this thesis considers the multifaceted issues around human-rat relations, poverty and race inequality in South Africa. The lack of service delivery and the subsequent proliferation of rats and other disease carrying pests negatively impacts the lives of people in poor communities. It is difficult to imagine that within this context the welfare of the rat emerges as a significant discourse in the Western Cape, especially in light of the ways in which political, cultural and socio-economic inequalities are reinscribed by colonial legacies that manifested themselves in the issue of rats and the many divides faced by poor people as highlighted in this research.

Chapter 1

Introduction

Encountering Rats

Rats are small four-legged animals that can swim, scamper and climb on land or in water, typically weighing less than a single kilogram. The impact of these little creatures is largely overlooked in anthropological accounts of poverty, and their existence barely discussed or debated. This could be due to the fact that rats do not rank high in the animal kingdom hierarchy due to their size and association as pest rather than animal, hence their life cycle and interaction is not often emphasized in the growing body of literature on human-animal relations. It could also be due to the fact that the majority of the time, rats do not pose imminent danger to humans, however entwined they are with histories of plague and disease transmission to humans (Swartz et al, 2018). The Biblical story of David and Goliath warns that even the smallest fighters and underdogs can play significant roles with major impacts in our world. The same can be said of the rats who find themselves at a crossroads with humans, and who have complex relations with them. While their existence may not necessarily pose a threat, their physical presence in close proximity to humans is what sparks the debate at hand by bringing rat-human encounters to the forefront of my research interest.

Lo and behold these creatures present to humans as the monsters of the ugly truths of the reality that many people face. Rats are not just small crawling creatures that inhabit urban sewers, bins, and subways or find pleasure in tall fields and wild terrain, but they portend more complex and layered entanglements in multiple social contexts. It is through these entangled webs of meaning that we learn of the nuances in societal depictions of rats as I begin to explore the different multi-layered dynamics as they encounter human beings in different spaces that are embedded in the realities of contemporary South Africa.

Whether referred to as pests or pets, and whether they pose a health risk as vectors of disease or serving therapeutic purposes as domesticated friendly pets, the issue of rats has sparked conflicting debates around rat control in the Western Cape. This is evident through multiple

research projects in the School of Public Health at the University of Cape Town, which focus on the selling of 'street pesticides' and poisons in informal markets in Cape Town's townships. Siphoned off farms, agricultural pesticides are repurposed as rodenticides, which if ingested by rats and humans, have lethal consequences (Swartz et al, 2018). This body of research on the illegal selling of pesticides has revealed that the issue of rat control is multifaceted, and finds itself entangled in political, cultural and socio-economic forces of civic life. This puzzle will soon make sense when we start to uncover the layers of this onion-like image of rats, pesticides, rat poisons, and the people in communities grappling with the unwanted scampering of rats in their homes.

Outline of Chapters

This introductory chapter introduces the multidimensional identities and representation of rats. As highlighted by Birgitta Edelman (2002), the human-rat relationship is a threefold phenomenon, where rats are viewed in pluralistic mode as pets, pests or laboratory animals to advance science. Furthermore, "the identity of the rat as a symbol for dirt", means that the rat also occupied a social imaginary that feeds its metaphorical usage (2002:6).These ideas of the rat as both sentient and symbolic, set a tone for this research dissertation. Likewise, this research is not limited to rats, but unpicks the different themes that result when using rats as a tool for knowledge production about social worlds, and in itself, the ontological subject for research. The rat will not only be discussed in its phantom, pluralistic and shape shifting nature, but will also be used as a tool to unpack the different themes to follow. Once formulated, I bring into conversation the work of Nicoli Nattrass and her organisation ICWild with the research of Andrea Rother from the School of Public Health as I peel back texts -like onions - to uncover the subtle and not so subtle nuances surrounding rat-human relations and their implications for governance.

An analysis of my fieldsite is offered in chapter 2 as I discuss the community in question called Lwandle/Nomzamo located in Strand, Cape Town. The importance of place and the work of composing an ethnographic understanding of the field site is work that opens up a wide array of issues faced in any complex environment or institution (Long, Hunter and Van der Geest, 2008). Furthermore, "in an environment where they are more often muted, these discourses

open up new terrain for socio-cultural enquiry", Long, Hunter and Van der Geest (2008:76). The significance of my unique focus is that I depict the dynamics between rats and humans and the ever widening circles of encounters and players to uncover other layers of poverty and social challenges affecting this community. A beautiful phenomenological approach is used by Asanda Benya (2016) where she uses the lens of space and gender in South Africa's mining industry to unpack the construction of gender identities. Benya's analysis of how space is never neutral but always embedded in political and socio-cultural implications, channels me to interrogate how Strand - my particular field site - came to be figured. I offer a peek into the history of this place and how it is understood, figured, configured and reconfigured through looking at the development of Africa. I do this by drawing on the ideas of Walter Rodney (1972) as he details the events that took place resulting in the underdevelopment of Africa.

Chapter 3 delves more deeply into myriad theoretical framings to extend our capacity to grasp the place of rats in ways that isolate structural violence. Social inequality, the unfair distribution of resources and poor service delivery are some of the themes that underpin the problems surrounding rat exposures and the chemical exposures that attend rat extermination. Delving into the political economy of rat infestation, this chapter reveals the social fault-lines that highlight the gaps- or blind spot- in the work done by Nattrass and the ICWild life, (Buckland and Nattrass,2020). In this vein, I address questions around animal rights and human rights and how we can move forward from these polarised debates. I briefly address the ironic concept of rewilding in this instance as an entry point as we go into addressing the questions around land rights and who has a right to occupy space.

Powered by Achille Mbembe's concept of "necropolitics", Chapter 4 follows the different forms of violence, inequalities and 'death' highlighted by structural violence and political economy in human-rat relations and the environment. Using this concept and its extension of biopower, that has echoed and mapped itself in different issues, I depict the ideas of death while still maintaining the onion-like peeling behaviour to address the implications in humans, the consequences in animals, and impacts on land when death and its forms are revealed as a result of a failing governance. These dynamics reveal the necropolitical forces that still linger over Strand and rest of Cape Town and South Africa as a country.

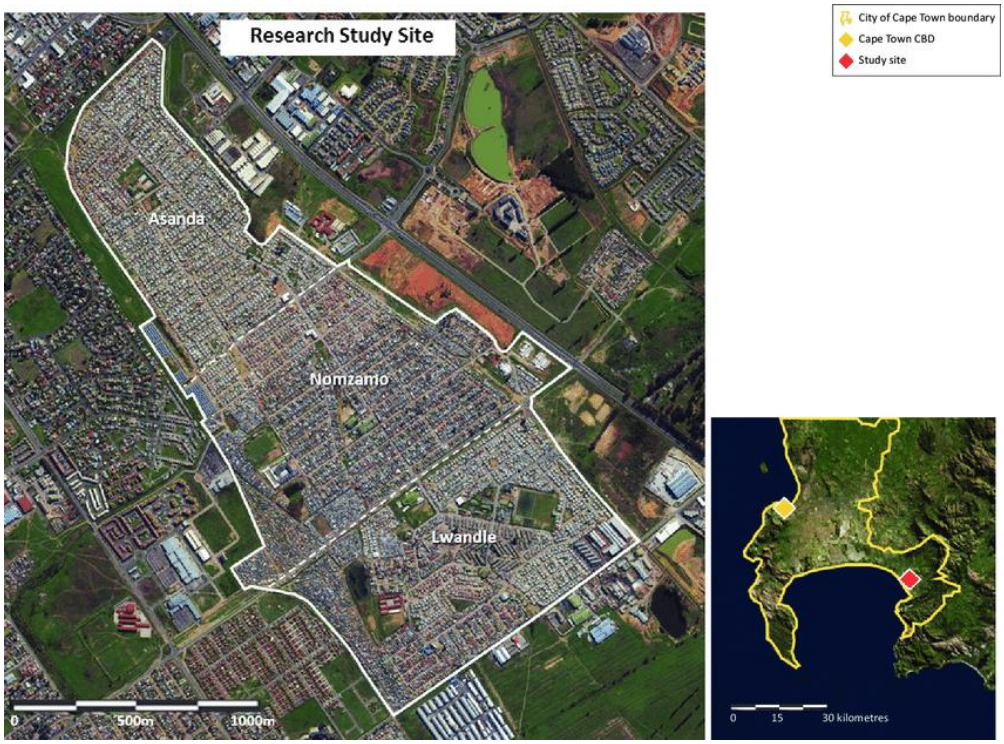

Figure 1: Map of Cape Town, Strand with Nomzamo and Lwandle outlined. Map by Francioli, Alberto. (2020).

Figure 2: Aerial shot of Nomzamo/Strand. Image by Unequal Scenes (2018).

Of rat and human: definition, representation and identity

Rats are just small animals, like any other, who may be favoured or feared by some people as with many other small species in the animal kingdom. For many people, the topic of rats is not one that is on their lips every day, or in their immediate minds. Having to discuss and depict rats in their life cycle and habitat is a conversation rarely mentioned in anthropology (Swartz et al,2018). However, our knowledge of social science constantly reminds us about the dangers of viewing and understanding topics as though they exist in unilateral spectrums. Anthropology asks us to understand that most things are not as they seem and that interpretations and representations of the world are always in flux. I say this in a request that before peeling the onion-like layers of the themes of this dissertation, we briefly put rats and their interpretation and identities up for discussion. As we begin to understand rats, Edelman (2002) presented a notion of understanding them in a threefold way where they may be presented as affection deserving pets, menacing pests, or scientifically researched 'lab' rats. These different rat relations tell us about the figurations of rats in different contexts and how they thrive or die in them.

Another version is that of how particular rats possess a unique personalities or different meanings from a group of rats occupying the same spatial zone. Eldelman, a research associate in anthropology, notes that "masses of rats provoke disgust, while we saw that a single rat could be accepted as a pet" (2002:6). Now we begin to understand and see how the different responses people have to rats is embedded in context and nuanced by circumstance. Petting an animal is a matter of choice by the one doing it, whereas masses of rats occupying a space among humans takes away choice, that is, infestation leaves humans powerless. I will later visit the point of belonging to a place - for rats and humans -, but for now let's further ponder these comparisons. When we get to the crux of the matter we find out that it is in numbers that rats pose themselves as a menace to society. As noted by Alan Buckle and Robert Smith, this is because their behaviour is rooted in "dietary opportunism, athleticism and noncturnality" (2015:5) making them able to exist, thrive and reproduce masses of baby rats at the expense of the spaces they occupy.

These interpretations transcend social and cultural symbolic systems where rats are embedded in deeper meanings. Edelman (2002) exemplifies this in discussing how the rat is seen as a

symbol of dirt and disease. However, I would like to go further in saying that there are some cultural understandings of rats and their presence that have other connotations and implications. In the culture I come from growing up in a Durban township of KwaZulu- Natal with a Zulu background, the existence of rats is sometimes linked to witchcraft. The presence of rats infers that someone has sent some form of evil into your space. The rats carry the evil. There are also witchdoctors who with the intention of bringing people wealth, use white rats - scientifically known as 'guinea pigs'- as they symbolize luck and wealth. Those specific rats are rarely seen in everyday spaces and we rarely question the scientific or biological understanding behind them, but the assumption is that their presence would be significant since they are not seen just by anyone. The not so positive symbolism of rats usually comes from the brown and grey rats. However we are not going to dive into the racial implications behind this, but to note the interesting racial allusion lingering over the difference in these groups of rats. There is also a use of the concept of rats in informal slang when people refer to each other as 'a rat', which maybe an insult to them, meaning they are dirty. Most commonly there is also slang observed in American movies and television programmes where they refer to someone who is unreliable as a rat, a "snitch". All of these references commonly carry negative connotations.

We have reached the point where we are asking why we got fixated in a long rant about rats in this way and it is because I will attempt to marry our understanding of rats and space, to begin understanding the implications that will be produced upon our unpacking of the two. However a few implications can be drawn in what we have understood so far. There is an understanding that the presence of rats in a space allude to dirt and disease also residing there. We begin to imagine the kind of spaces those are and a picture we are being painted is a telling one. We have also been made to understand the opportunistic nature of rats that where there are people with food, rats will attempt to occupy. Where conditions are dirty, methods of keeping pests away are not effective. Therefore, spaces that are abandoned by the city to deteriorate without municipal care offer hospitable niches for rats to thrive in but for people living in these zones, there are limited or non-existent ways of keeping rats away. We now arrive at a dichotomy where poor conditions for humans can be thriving conditions for rats. The tipping scales of humans and rats in shared living spaces are what bring about these debates we find ourselves having. Human lives are laid out in many rules, regulations and laws. However, when it comes to animal lives, rats to be specific, there are blurred lines causing conflict. It is for this reason that I found the need to dedicate brief words in understanding rats, the rat in its multidimensional setting and look at its multiple human representations.

Initial Research Approach

My initial approach was to study the body of research on how the illegal selling of pesticides has revealed that the issue of rat control is multifaceted, and finds itself entangled in political, cultural and socio-economic forces of civic activity. Through this research I had hoped to uncover the layers of the onion-like image of rats, pesticides, rat poisons, and the people in communities grappling with the unwanted scampering of rats in their homes. The main research questions I wanted to pose in this study were initially: *How are figurations of rats as either vermin or pets linked with class, race, and environmental context?; how can we make sense of the figure of the rat as a symbol of inequalities in Strand?; faced with poor living conditions, infrastructural disaster, and economic inequality, how do people deal with the persistent issue of rats, pesticides and poisoning while trying to live normal lives?; how do young people come to acquire agricultural pesticides for the purpose of selling them as rodenticides, and what are the ethical risks involved, mainly around the toxicity of the poison being sold illegally?*

The objective of my research was to carry out a deep ethnographic study of rat control by working in Nomzamo, a community in Strand. As part of a larger project on 'street pesticides' in the School of Public Health, I wanted to investigate the different ways in which rats appear, emerge, create problems, and are eradicated as vermin across class divides, or nurtured as pets. I was particularly interested in the complexly located status of youth regarding exposure to toxicity and the opportunities afforded to some youth to become 'street sellers.' Through interviews and on-the-ground research methods such as walking with residents in their immediate environments, I wanted to attempt to represent the experiences of people (and rats) in Strand by developing narratives around rat control. I drew on theories of social inequality, and historical routes that date back to colonisation in South Africa, as a way to make sense of the narratives from poor youth who sell 'street pesticides' to make a living and those living in zones where the city manages pests.

Research experience: COVID-19

What we know about carrying out research on lives and people's lived experiences is that it can be unpredictable and can never be preconceived. That would be the case with what happened when I carried out my research. My research was met by some trials and tribulations that halted its progress. However, it is worth noting that what disturbed my research was an issue that would see the whole world come to a standstill and not only affect myself and my research. The unfortunate occurrence of the novel corona virus, covid-19 saw our worlds turned upside down as we were trying to make sense of our new reality. As a young person who has never experienced anything of this magnitude this was a horrific and scary experience for me. This meant every student across the country had to vacate residences to go home as we tried to find ways as a country to prevent and stop the spread of the virus. I had to leave for home in the middle of my research as I went to be with my family during the scary times we found ourselves in. During that process a lot of thoughts were frequenting my mind where I had to weigh all that we were dealing with in life and prayed for survival. For the first two months I was not thinking about my research at all as I was focused on my health and that of my loved ones. However, in the midst of finding new ways of living through a pandemic I had to put back on my researcher and scholar hat and get back to fulfilling this project. The new reality brought new ways of thinking and made me rethink my entire project in the new reality in which we lived. All these experiences made it more important that research projects of this nature and peoples' narratives about such issues must continue being shed light on. While rethinking my research I still wanted it to be rooted in my initial topic because I felt as though the answers to my initial questions were very important to uncover and understand. It was through this process that I came to realise the importance of understanding methodology in research that had been stressed during my undergraduate years.

Research Methods

Research methodology forms part of the crucial processes in research. A deep understanding of research methods was of more importance in this research that had to be carried out during a pandemic. The initial aim of my research was built on the selling of illegally street pesticides, the purpose being to reveal and highlight the persisting inequalities that exist in communities in South Africa. The practice of deep ethnography to research the involvement of youth in the urban market of street selling was aimed to tap into the processes involved resulting in their

involvement and the circulation of these street pesticides. The ethnography was to aid in understanding the experiences of people with rats on various levels of social hierarchy. As stressed by Karen O'Reilly (2005), I sought to understand social life as a result of interactions of structure and agency through the practice of everyday life. This understanding further opened me up to a reflexive practice of ethnography as I sought ways of doing research in the new world we found ourselves inhabiting. New ways of carrying research had to be explored as it was important for these stories and texts to be told and emphasised even in a pandemic, as these are real issues affecting real people on an everyday basis. Rethinking how to research transcended into thinking of new modes of living and being. What ultimately matters is that research methods inform us that we do not simply understand and apply techniques, but how we are immersed in and experience life. Being human means that we will confront unexpected things we simply cannot preconceive of. When the normal structures and guidelines of research and writing were disturbed, we had to evolve creative and critical ways of thinking in order to fulfil our commitments as researchers.

Fortunately for me, prior to the unfortunate occurrence of Covid-19 I had the opportunity to experience my fieldsite. I conducted preliminary research in Strand as part of the ongoing study on which this research is based. For many disciplines, but more especially in anthropology, fieldwork forms an integral part of the research that is empirical and worth contributing to the discipline. Judith Okely (2012) stressed that anthropological fieldwork cannot be simplified to simply following a set of techniques that one may learn and apply. It is practical work that involves processes taking place in their different variations of experimentation. What is true of fieldwork is that it requires both practical and theoretical elements. What happens in the fieldsite cannot be predicted or preconceived. In this Okely (2012) disrupted the notion of using the verb 'to conduct' in relation to doing research as it alludes to the fieldwork being managed and handled. She opts instead for 'to experience'. Experiencing a fieldsite like this accounted for any and everything that can take place without having a prior notion of what to expect and that was the understanding of what the methodology in this research attempted to build on. Furthermore, experiencing my fieldsite in this way opened up a deep understating of the place. I unpack this idea to a greater extent in the next chapter as I take a close look and provide analysis of my fieldsite.

Ethnography to my research was very important as this a qualitative type of study that would be looking into people's narratives and experiences of the issues outlined above. Ethnography was not fulfilled due to the limitations and setback caused by the pandemic, however the preliminary research along with existing texts on this research demonstrate these research methods were a good choice for the project. As human interactions were near impossible and life moved towards a digital manner of doing things so did some of the ethnographic practices move into a digital ethnography as I tried to add that to the research in order to produce important ideas that could contribute new text in this area of research. Notwithstanding the limitations of the methodology used, it was important to continue the study to ensure that now more than ever people's narratives and experiences were not being lost or misrepresented. Since I could not do a compendious ethnography, I felt a need to move towards life stories and written texts as I attempted to address questions raised by my research.

As understood by Susan Geigher (1986), life histories are the accounts of a person's life and experiences as they are told, recorded and written by another. This approach opened a gateway of moving this study towards a narrative analysis approach. This approach coupled with a diffractive reading of text phenomena along with the affective turn in anthropology or turn to affect, were core contributors in my methodology. What I attempted to do was unpack ethnographic accounts and methodological perspectives using a diffractive method. I did this by reading "Raw Life, New Hope" (2010) by Fiona Ross through and in conversation with, the ideas of Brian Massumi in his book, "Politics of Affect" (2015). The importance of diffractive reading, as highlighted by Vivienne Bozalek (2017), was that it allowed my reading of one text to emerge more creatively through another text. Bozalek affirmed that "diffractive analysis views difference from the standpoint of a relational ontology, that is, an effect of connections and relations within and between different bodies, affecting other bodies and being affected by them" (2017:46). Taking her lead, I read Ross's 'sense scapes' through Massumi's series of interviews addressing the affective worlds of senses. That allowed a deep understanding of relationships, which is what affect is ultimately about, and further added to the scholarship I used in this study.

Ethics

My research received ethical clearance from the Department of Social Anthropology. I adhered to the ethical standards provided by the Anthropology Southern African (ASnA) and the University of Cape Town (UCT) at all times during data collection, analysis and the writing process. I was mindful of Pat Caplan's (2013) insight that in anthropology, ethics cannot be applied by following a set of guidelines, but are entwined with the discipline's epistemological and theoretical grounding. Adding to this, Caplan suggested that, "it is very difficult to divorce ethics from politics, including politics of knowledge" (2013:27). I was aware that in research, ethics are embedded in politics and the power dynamics that exist in the different environments in which we carry out research. Ethics are in a sense produced as well, in situ.

Cruel people or struggling rats?

For Koen Beumer "the multiplicity of human-animal relations can be better understood by approaching them as situated practices: as practical and precarious accomplishments that take place in specific settings" (2014:8). The aim of this section is to provide the different nuances and narratives that inform people's reactions, responses and experiences with rats and their implications. This will be done by revisiting conversations of inequality among black people and black communities in a critique of the work done by the University of Cape Town's Centre for Social Science Research (CSSR) and Institute for Communities and Wildlife in Africa (iCWild) surrounding the topic of rat and rodent control in the black informal settlements of Cape Town. I will be doing a critical diffractive analysis to understand and unpack the texts written by Nicoli Nattrass (2019) and others on 'rats and rodent control', through the research of Hanna-Andrea Rother, Susan Levine and Alison Swartz from the 'circulation of illegal pesticides and toxicity' which inspired and influenced my research (2018).

To understand people's responses to rats, Adam Buckland and Nicoli Nattrass interrogated the reasons "why people tolerate, and even embrace cruel treatment of pest rodents" (2019:1). This was the aim of the research, which was focussed around animal welfare and rodent control in Site C, an informal settlement in Khayelitsha, Cape Town. Their study was of a quantitative nature as it provided "analyses data from a representative sample of people." They aimed "to explore whether cultural beliefs, exposure to rodent damage and attitudes toward animal welfare shaped people's stance on the humane or cruel treatment of pests", (Buckland and

Nattrass 2019:1). The study is very relevant as there is little research that is done in South Africa on the attitudes of people confronted with the issue of rats. What people have to say about the topic surrounding how rats are treated is understudied, to say the least. The results yielded from this research argued that attitudes informed whether one would "adopt pro-cruel or pro-humane approaches to rodent management" (Buckland and Nattrass 2019:5). That is, those that had been negatively impacted leaned towards trapping and drowning methods which are seen as cruel while others believed that those methods harmed rats. My critique of this is not to say these results were not a depiction of the realities, or that this research is inadequate, but rather not enough light is shined on the reasons that inform people's reactions to the treatment of rats.

The researching and writing tone, language and angle used in this research paints a picture that one might say makes it seems like the people in the informal settlements actually have clear agency on how to respond and perform rodent control. It is not that more people are embracing the cruel treatment of rats but rather the realities that actually drive them to say that as long as the rats are eradicated, the "how" no longer matters to them. It is for these reasons that qualitative studying and understanding of people's experiences becomes important as they produce an understanding of what it means to be confronted with a reality of rat infestation and what informs responses in those contexts. The research then comes across as if there is a more caring approach for the rats over the people living in these insufferable conditions. The tone also alludes to people inflicting violence on rodents through how they treat them in an attempt to control their growing numbers. We simply cannot view these narratives in this manner as we run the risk of completely erasing people's experiences and lived realities.

To someone staying in a shack under poor conditions, the presence of rats is not just about a defenceless rodent. We ought to look at their existence through many lenses. As Buckland and Nattrass argue, "ethical treatment of pests requires the weighing up of a more diverse range of interest and entities than ethics surrounding the treatment of animals in general, especially pertaining to public health and poverty" (2019:2). In this context, the rat represents and is evidence of poverty, with its poor conditions and crowded dirty spaces that people occupy on a daily basis. They already stay in informal housing that alone poses many questions around safety, protection and space. The presence of rats exacerbates those sufferings and constantly

remind them of the reality they face. The existence of rats in their space adds yet another struggle they have to deal with as they try to manage and control the infestation. These are some of the experiences that then inform the reactions and responses people have regarding the treatment of pests in their lived spaces. To understand a rat from someone who has seen it in passing in few numbers or in a controlled environment where the rats did not pose a threat whether directly or indirectly is different to someone who is faced and confronted by populations of rats whose presence impacts their everyday lives.

The research done by Buckland and Nattrass does mention that it understands these implications, but it begs questions as to what extent the ethical expectations of animal welfare is being shifted to people, who clearly have conflicting backgrounds on the issue. People in conflict or pandemic or any struggle are not at liberty to behave in a clearly understood ethical manner as they try to make sense of their lives in the disturbance that threatens and disrupts their livelihood. This is not to say they do not understand rats in other categories, but the intersection taking place here probes new narratives that were not there prior to the human-rat interaction. Once this interaction takes place, then we are exposed to many nuances. These ideas then, begin to answer and also introduce new questions on how people figure, refigure and configure rats. As we begin to interrogate people's responses to rat control, we should also interrogate their interpretations and experiences of their world beyond rat troubles. This interpretation must be understood as lived experiences and not a theoretical understanding only. This point was not sufficiently unpacked in another paper where Nicoli Nattrass, Jed Stephens and Jorich Johann Loubser (2019) discuss the attitudes from city officials to shift the blame to citizens claiming their litter resulted in infestation. However the fact that infestations were mostly due to the failing government systems was not adequately stressed by the officials as not much from the government seemed to change on rat control.

Looking at the question of contested ethics Nattrass, Stephens and Loubser (2019) explored, the debate that took place in Khayelistha around the cage-trapping and drowning of rats "is one of values about how to treat rats and protect wildlife". As discussed by Nattrass, Stephens and Loubser (2019), this happened in 2014/15 where the Environmental Health (EH) officials had a project for creating jobs and hired people in Khayelitsha to trap and drown rats. After learning of this project the National Council for Societies for Prevention of Cruelty to Animals

(NSPCA) instructed the project to be halted arguing that these methods were cruel to rats. Surprisingly, after the lengths to which NSPCA went into halting the project, not much was done to come up with solutions for dealing with rats. Furthermore, halting this project took away the employment opportunities that it had offered the poor people in this community. In a sense it appeared as if there was more caring for rats than for the poor people who were feeling terrorised by them.

Adding to this, this contestation "took place against a back-drop of wider poverty and inequality in Cape Town" Nattrass, Stephens and Loubser (2019). I fully agree with the point made here and would appreciate it if the authors had driven it home to unearth the deeper underlying issues that the people are confronted with on a day to day basis. This then would explain people's attitude to rat control. These attitudes to rats and rodent control are informed by poverty, inequalities and many social injustices that are taking place in their lives. Maybe the rat is not even what they are angry with but rather the bigger issue, the bigger rats, which includes the distinct lack of government support, service delivery and unfair distribution of resources. In trying to understand their behaviour - which is by no means uniform or predictable - we must consider this. To most, the fight is not only about rat control and management, but about other issues that have manifested through rats and are being exacerbated by the presence of rats.

I would also like to critique the tone and angle in which cultural beliefs are introduced and approached in this study. This refers to the Buckland and Nattrass study in which they argue "we hypothesised that those who believe that rodents might be linked to witchcraft would fear and dislike rats and that this would be positively associated with a pro-cruel stance toward them" (2019:5). Here I argue that a more defined hypothesis would have been preferred and an expansion of their theory was needed so that it was better informed. This depicts the cultural belief in witchcraft as if they could justify violence or cruel treatment of animals. The introduction of this argument shows up in their study without much empirical evidence and makes claims that run the risk of misrepresenting people's experiences. Note that I am not disputing the association of rats with witchcraft nor am I claiming that the people in this study did not associate the existence of rats in their homes with witchcraft. Rather, I ask to what extent can rats and witchcraft be associated? I will make an example to draw parallels between the two in further explaining my point. In my culture in Kwa-Zulu Natal, having lived in the rural areas, I have been privy to claims or conversations surrounding witchcraft or the use of

dark magic. Here then I will offer a cultural understanding as a means to look further into the above hypothesis.

The maggot or insect larvae is often associated with witchcraft in my cultural background. There are people who claim that if someone wants to make one undesirable to their partner/lover as a way to take them from that person, or to isolate them from people, they would use witchcraft to make one have maggots appear out nowhere or on the actual person's body. So the understanding is that the presence of maggots would be as a result of witchcraft. However people also understand that if there is food left rotting in a bin or a rotting carcass that would attract and give birth to maggots. The second instance then would be the presence of maggots as a result of decay. In these examples the assumption is that people can distinguish that maggots can be a result of something rotting outside of witchcraft. Would the same logic then not apply to a person staying in a dirt-filled, congested place with food that would attract the rats in their many numbers? So introducing the question of witchcraft in that particular manner undermines people's understating of their own culture, nature and ecosystem. I believe, from their reaction, that people are able to distinguish something that would be a result of environmental conditions and not reduce rats to beliefs or acts of witchcraft. Not to dismiss or undermine the claims by Buckland and Nattrass (2019) that rats could be a result of witchcraft, but to approach people's attitudes to rats as if they would be associated with witchcraft sounds as if it is reducing people's reasons for negatively reacting to rats. Again, I find myself asking who the writers above write for because it does not appear like this approach is addressing people's struggles of inequalities in an adequate manner.

The above work then comes into conversation with my research alongside the ongoing research by Rother, Levine and Swartz as I read the texts in a diffractive method to attempt to answer, ask new questions and try to fill in the gaps of the narratives that might be falling into pitfalls of knowledge production. This makes the work of Nattrass and the ICWild relevant because the attitudes and thoughts are used to draw parallels with my own research as we creatively allow new texts and narratives to emerge. The work I had done by way of preliminary research on the circulation of illegal and highly toxic agricultural pesticides that have been repurposed as rodenticides allows me to probe the obvious tensions between human and animal rights in this context. From the conversations with Thando, the liaison between the University of Cape

Town's School of Public Health with community leaders on the ongoing study, fieldworkers and my actual presence in the field I was able to gain a deeper understanding of the fieldsite. Witnessing and conducting the surveys with the people and also interpreting the data for Professor Rother and her team, I gained noteworthy ethnographic accounts. This positioned me better, to probe the above questions and further attempt to make the above arguments. It was through performing the preliminary ethnographic research in Strand and witnessing how that place was situated that narrowed down the field site and the questions I wanted to gain answers to. The various themes that played out through the ethnographic accounts will be further explored and discussed in conversations to come.

To contextualize the problem, Hanna-Andrea Rother (2010) discussed the unintended consequences created by the involvement of youth in the processes involved in distributing pesticides in poor communities. These processes ranged from selling, handling and making these pesticides which have a lot of implications not only for the people who buy and use them but also the unaware and uninformed youth who are caught in the middle of the processes because of factors outside their control. Some of these factors as discussed by Rother (2010) are lack of jobs, poverty and lack of knowledge in handling pest control strategies that contributes to the rise in the demand and supply of these pesticides. The vicious cycle of the conditions that youth come from sees their means of making ends meet detrimental to their health and those of the ones they distribute and sell to. The challenges faced by people in these communities stretch all the way to lack of housing, poor service delivery and poor living conditions in general, and that as noted by Rother (2016), contributes to the problem of pest infestation that opens up vulnerabilities to diseases.

In exploring the risks to pesticides, Rother (2010) conducted an exploratory study on the highly toxic pesticides in Cape Town. This is relevant to my research as it unpacks the impacts that chemicals have on infants, children and youth. In her research, Rother (2010) found that the consequences of the chemicals on youth through the processes they were involved in were exacerbated more because unlike adults, the youth, were more vulnerable to risks. This exposed them to many effects that may negatively impact their health directly or indirectly in both the short and long term. One of the consequences as outlined by Rother (2010) was the admission to local hospitals of children who were there because of poison ingestions. Even with articles

published nine years ago, the reality has not changed, with children still presenting cases of accidental poisoning because of the presence of street pesticides. Some of these stories were still recent even while conducting preliminary research in the different households. My survey work with residents revealed that children were still accidentally getting poisoned even recently when the field work was conducted and persisted in our Covid times.

The issue of rats and pesticides presented subtle nuances that owe their manifestation to multiple factors. For this Alison Swartz, Susan Levine, Hanna-Andrea Rother and Fritha Langerman (2018) unpacked the social injustice and economic inequalities of child poisoning. In this we are able to see the different relationships that exist resulting in shaping the state of these communities faced with pest infestation. The authors borrow the concept of "toxic layering" from Donna Goldstein to pick apart the multidimensional issues that exist in an event of a child poisoned by pesticides. Swartz et al (2018) unravel that in a case of a poisoned child the implications go far beyond bodily systems to include environmental degradation, hunger, pollution, biology and other social factors that intersect to determine children's health. That is to say the children's health in poor conditions are deeply embedded.

The ethnographic research by Swartz et al (2018) on children and their caregivers presented the gruesome realities that agricultural pesticides have on these poor communities. The article opened up by introducing Mandy who was 4 years old at the time "suffering from organophosphate poisoning" (Swartz et al, 2018:247). This case highlighted the very complex and dire outcomes that the contact between humans and these pesticides have through children getting poisoned by them. The case of Mandy was in 2008 which is more than 12 years ago, however these realities have not changed because "the Red Cross War Memorial Children Hospital (RXH) in Cape Town documented an increased trend in children admitted for pesticide poisoning" (Swartz et al, 2018:248). Highlighted here is how there is a serious health problem that has been around for so long but not much is done about it. Then the questions of the lack of reaction and solutions from government starts to emerge which these issues are unpacking using many theoretical frameworks, some of which reveal the political economy and structural violence on who the resources such as health care are for, and who falls behind in receiving them.

In addressing the issue above, Rother in her research on the emerging urban informal sector highlighted that the main reason it is hard to control and possibly prevent, selling of toxic pesticide is because government is "turning a blind eye" (2016:241). These communities then become neglected and that results in the vicious cycle of a continuing sale of pesticide and continuing cases of child poisonings. Rother sums up her argument in the study by saying "as long as pest infestation is a problem linked to lower socioeconomic status, and commercial pesticide are seen as ineffective and/or expensive, street pesticide will continue to be sold" (2016:246). I share the same critique as Rother in that as long as the conditions that allow for pests to be present in the lives of these people and the reality that keeping them in the disadvantaged socio-economic bracket, then all the issues raised by the research will still be very much present in the next 10 years.

These realities are further highlighted in discussion by Christi Godsmark and Hanna-Andrea Rother (2019) that high rates of unemployment contributed to the sale of street pesticides as a form of income for vendors. Building to the point that if unemployment is still rising then people will seek alternative ways to make ends meet and one of them as will be highlighted in my research would be to sell street pesticides. In their research to address other alternatives to toxic chemicals, Godsmark and Rother found that the sale of street pesticides is "a lucrative business" (2019:3) that offered vendors an income because of increasing pest infestation. The sad realities of living amongst pests also offered an income alternative to those who were in need of one but at the cost of the health of the youth and children.

The hopes and intentions of my research were to unpack the bigger picture that could likely be racism, inequality, and social injustice through unfair distribution of resources, service delivery and unemployment. Through using the case study by Nattrass and ICWild as an entry into my research I was picking apart how these issues have been written about to explore and probe new questions that revealed many implications in the process. At this stage the various themes that keep popping up in this chapter have not been expanded on and have not been theoretically analysed. This is because they are taking a journey and making their way into chapter 3 where they will be met with literature as they formulate arguments for this dissertation.

In this introductory chapter I have answered the question of how neither individual human nor rats are fully responsible for the dirt, contamination, toxicity, or foul environment where rats can cause bodily or physical harms. The multispecies approach revealed the layered implications that shaped the treatment and responses to rat control that humans have. Informed by historic, cultural, and socio-economic factors these ideas mapped out the different realities of poor people. Through a diffractive reading of Massumi and understanding of sense-scapes by Ross I further will unpack, using the lens borrowed from the anthropological turn or affective turn, the layers of inequalities faced by these people. I discuss the conversation, texts, literature and research as I reflect on the purpose of the chapter and in turn the overall purpose of my research dissertation.

Chapter 2

Walking the Strand

Considering the field

I joined this project on the circulation of illegal rodenticides in July 2019 as part of an ongoing research project on toxic environments with the School of Public Health and Anthropology. In preparation for entering the field I took courses in both of these departments to fulfil requirements for doing interdisciplinary research. This included me joining Susan Levine (supervisor), Andrea Rother (co-supervisor) and her research team from the School of Public Health to settlements including Samora, Khayelitsha, Site B and Nomzamo, and eventually Strand on the rat traps project. This was the opportunity to experience the fieldwork and thus conduct preliminary research on the circulation of illegal and highly toxic agricultural pesticides that have been repurposed as rodenticides.

This also included myself as a researcher listening in on fieldworkers as they carried out the interviews for the surveys on different households who were affected by the rats. I too would dress in the t-shirts of the fieldworkers and conducted an interview surveys or two to just gain further perspective on the research and ethnographic accounts. However the main task was to gain as much perspective in the fieldsite and project so that when I returned to conduct my research I would be familiar with the place and also the people. Later on in the year I performed the interpreting and transcribing duties of these interview surveys for the above mentioned research. I will not discuss the other research, however I am providing the accounts of what led to my angle of research and the choice of the fieldsite.

One day in the field when we visited the community of Nomzamo in Strand, prior to conducting surveys, ethnographic conversations and participant observation, I was fascinated and in awe of the setup of the communities there. As we were driving on the road I observed these beautiful homes that look like they would sell at high costs. Not even a minute later when we turned on the road to where we were headed I was facing informal settlements, filled with shacks and homes built with improper housing material. This was mind-blowing to me. Not that I had

never seen the beautiful homes or informal dwelling of shacks but I was shocked by the close proximity of these two worlds living just next to each other. As with the other places we carried out the fieldwork for the day, walking around in the community and chatting to the people. With all of this happening I was still interested in these two worlds situated the way they were which was something I had not observed on the other fields. As we drove off with my supervisor I could not get out of my head the dichotomous living conditions I had seen there and it kept playing in my mind and the more conversations I had about the place the more interested I became. This led me to making the decision to take a closer look in an attempt to understand the place and thus making it the field for my research.

This chapter does a close analysis of the fieldsite to unpack and unpick discourses that have come to shape the current conditions and setup of the informal settlements like Nomzamo. I will further zoom out to understand the fieldsite on a greater scale as I take a peek into the African history of development to further address the questions of how the current poor conditions came to be. Through using the understanding of politics of space I will show that spaces are never neutral but are figured, configured, reconfigured by ideas that are embedded in political, cultural and socio-economic factors. That will address questions around the legacies of colonialism and apartheid that have mapped and manifested themselves into the spaces and therefore lives of the people and pulling them into an intersection with the rats.

As stressed in the methods section fieldwork is an essential part of research in Anthropology as fieldsites offer a deep ethnographic understanding of different nuances taking places in people's lives. This is a way of ensuring that we carry out good research. Each fieldsite differs from another and hence it is important to approach each one with specific and relevant perspectives. The understanding that fieldsites cannot be predetermined and preconceived as what takes place usually carry elements of the unexpected, does not escape me. In an ethnography taking place in hospital, Long, Hunter and Van der Geest (2008) have written on the two perceptions of a "hospital-as-island and hospital-as-culturally-embedded" in reflecting on interactions and dynamics that take place in a hospital as a field. These reflections open up understandings that each fieldsite is embedded in multifaceted intersections that require ethnographic understanding to unpack. In essence the idea that "hospitals are ultimately liminal spaces, where people are removed from their day to day lives, taken into a betwixt and between

space of being diagnosed, treated, operated upon, medicated, cleansed etc" (Long, Hunter and Van der Geest, 2008:73) is emphasized here. I go on further to claim that almost every space has a transitional element to it and hence it is important to understand fields with this approach. These nuances further drive the point of how important it is to have an ethnographic understanding of fieldwork and sites as they contribute significantly to research. The sensitivity of the tone in which the above authors conduct research in a hospital is the one I employ as I unpack my fieldwork and site.

Further, adding to the above perspective Anna Versfeld produces in-depth ethnographic research on tuberculosis and substance use which she conducted in multiple healthcare spaces. She goes into detail, highlighting the clear hierarchical dynamics that were taking place between doctors, healthcare workers and patients. In her analysis she also discussed the ideas of how the spaces she was conducting her research in were represented and presented themselves. Versfeld discussed how the racial legacies of the city of Cape Town and the country as a whole had clearly marked themselves in the makeup of the hospital in that "patients in the hospital tended to be "Black" or "Colored" and senior staff were predominantly "White"" (2017:14). She said there was no space to ignore her "automatically signalled privilege" (Versfeld, 2017:14). We were once more exposed to the different dynamics of the field where race was a fundamental point of reference for the different roles that the people occupying the healthcare spaces that Versfeld conducted her research in. However as she manoeuvred around those fieldsites she did so with an understanding of her positionality and privileges doing the research with the sensitivity and ethnographic understanding that I am stressing here. I revisit her analysis of her fieldsite later when I discuss the implications of spaces as the argument she presents supports the one I make when I argue and unpack the dynamics in my research fieldsite. This was to stress and reiterate the importance of a deep ethnographic understanding of relevant fieldwork and site in research as I introduce Nomzamo as a site for conducting my research.

Fieldsite: Lwandle/Nomzamo

Exotically defined for marketing purposes, Strand is a place offering property and housing options that are often pleasing to a viewer's eye, convenient, and offering world-class beach

areas, but without losing its small town feeling. Strand, which in Afrikaans means beach, is a seaside resort town in the Western Cape, South Africa. Located about 50 km southeast of the Cape Town City Bowl which is a 45 min to an hour drive. It forms part of the Helderberg region of the city of Cape Town Metropolitan Municipality. Strand was established in 1714.

However, that is not all that Strand is, or rather a complete representation of the communities comprising Strand and its surroundings. A less well-off and in fact a poor, low-income, shack-filled, damp, clustered community with many poor living conditions called Lwandle/Nomzamo community can be found in Strand. Both Lwandle/Nomzamo names are sometimes used interchangeably referring to both places. This may be attributed to the fact that Nomzamo was born as a result of overpopulation in the Lwandle area which was initially designed as cheap accommodation for "single male workers" during the apartheid years.

Initially Lwandle, which means ocean in isiZulu, was a township in Strand that during apartheid was designated for black people. This township was established in 1958 to accommodate male workers, and it was in 1960 when hostel structures were built to accommodate migrants from the Eastern Cape who had to carry pass books to live in the city and to control their movements around Strand. When apartheid started to fall apart with people revolting against it, the government lifted the requirements of carrying pass books resulting in the sneaking in of migrants that included women into Lwandle. The population then grew to informal areas and the government saw the need to relocate the growing numbers and thus of moving people and building houses for them in what would be Nomzamo an official township in Lwandle. Today the population of what was meant to be 500 employed men grew to be approximately 60 000 people.

Arriving at the field we start off at the office of the councillor. Outside its gates and fences is a cul-de-sac which poses as a tiny rank with fewer than 7 taxis that were used to transport people from that specific areas to town, Cape Town CBD. The councillor was a male and his receptionist a female and both of them were Xhosa speaking. Our reason for being there was because the t-shirts, rat traps, surveys and pamphlets were kept in the office of the councillor for the rat trap project. All the fieldworkers who were working on the project were Xhosa

speaking young men and women in their 20s. The reason was that the population of Nomzamo was made up of a majority black Xhosa speaking people. Even the fieldworkers confirmed that Xhosa people or at least the majority of the people who stayed there are black Xhosa. Though the population stats accounts for 92% black people in Nomzamo and the race dots belonging to Colored and 'other' being present in this area for the purpose of this research we mainly refer to black Xhosa speaking people as those are the ones we encountered. That being said we acknowledge all people of colour who were displaced by segregation and apartheid.

Moving around Nomzamo we could see the communal taps that were either crooked or showing signs of rusting and missing the structure meant to keep them in place. These taps were sitting in either a puddle or surrounded by muddy water. The informal routes we were using to move between shacks some had planks places over them because there were chasms with moving water underneath. On the far end of the chasm as we moved was the outdoor toilet block that was shared amongst people. Behind it was a chasm that men wearing boots were cleaning and unclogging as the dirt and things being disposed of had blocked the water from moving, causing a smell. This is an issue in a place that is already filled with waterlogged areas and growing shrubs are characterizing it. These waterbeds and muddy grounds made an environment for long shrubs and other bushes to grow that were not being taken care of or cut by anybody.

Street vendors or street sellers are common in these places and at almost every corner on the dusty roads of the informal settlements one finds a line of sellers crowding these already congested roads. On these blocks the street vendors were selling everything from braai meat, fruit and veggies, basic necessities for households like bathing soaps, bread and cold drinks etc. These are the same street sellers' blocks where one would find the illegal rodenticides that are being circulated in these communities to deal with the issue of rats. These places sell things that one would not find in normal stores nor supermarkets as they are not produced or manufactured by companies. These street vendors, varied from young black people to older middle aged people comprising both black men and women. These informal markets make up the larger portion of the market and sustainability in the lives of the people staying in Nomzamo. As we walked through I observed people buying from the street market constantly as it is their first place to go to since proper markets are few and far between. This was the

pattern for other informal settlements we had visited. This was a clear trend in the life that people in these types of spaces were living. This was the norm in black communities.

Those who have written on Strand and its surroundings comment on the inequalities that linger over the communities. Informal settlements, land invasion, constant migration are part of the realities that form the experiences for the population of Strand. Witness Mutero and Tendai Makwara (2018) performed a study on the causes and economic impacts that land invasion had in South Africa, and Strand was one of its case studies. In their finding Mutero and Makwara (2018:375) discuss that the illegal occupation in Lwandle was driven by lack of government support in providing accommodation for people. This resulted in the people occupying both the government and private owned lands like in the case of the Lwandle area. The July of 2014 as discussed by Mutero and Makwara (2018) saw the Law Informant personnel forcefully removing the people who were illegally occupying SANRAL land in the Lwandle area. That was another factor contributing to the makeup of the communities of Lwandle. The major contributor to the migration and land invasion problem was owed to urbanisation with people migrating from rural to urban areas seeking a better life. These people as described by Mutero and Makwara (2018) came from the Eastern Cape and were majority Xhosa-speaking which makes up 82% of the black ethnic group in the Lwandle areas.

The study by Samed Bulbulia and Ashley van Niekerk (2012) looked into a safety promotion project in the two under-resourced communities in the Strand namely Broadlands Park and Nomzamo. Nomzamo which means “rise up “or “awaken” as discussed by Bulbulia and Van Niekerk (2012) is an informal settlement that at the time of the study was being transformed into low-cost government houses. At that time the community comprised of a clinic, two primary schools and one secondary school, and a community hall. However with the nature of informal settlements and the constant influx of people these infrastructures may have drastically changed, especially the number of houses. Hermanus Geyer and Faziel Mohammed (2016) describe the population and demographic space of Strand as owed to the hypersegregation that influenced the setup of the communities in the Strand. The argument presented by Geyer and Mohammed (2016:37) was that even with the desegregation in South Africa, with formerly white neighbourhoods having diversity, there seems to be more economic segregation, transforming racial segregation into class-based segregation. This is what they

explained, took place in most Western Cape communities where socio-economic conditions creates these divides between the rich and the poor.

The statistic of Strand communities as presented by the 2011 census put the population of Lwandle at 19 818 and Nomzamo at 40 710 which approximates to the 60 000 that is usually used when referring to these townships. This number is subject to change because of the challenge for government to account for populations in informal settlement areas for reasons like migration. However, even in recent reports this number is still used which means official reporting bases it on the 2011 census or it is the number believed to represent the population. Therefore, for the purposes of describing the population of Nomzamo/Lwandle, 60 000 will be the estimate used.

A website called Unequal Scenes (2020) presents a video showing an aerial projection of Strand and Nomzamo, showcasing the difference in visual setup of the housing, roads, and infrastructure of the two communities. In the video there is a clear depiction of inequalities captured where there are nice properly built houses on the one side of Strand, while on the other side the Nomzamo community is characterized by shacks, dusty roads, and crowded spaces. It is almost like pinning opposite ends of the economy against one another. Those who can afford looking at those who cannot afford depicting 'the haves and the have nots'. The close proximity of these neighbourhoods creates within them many dichotomous nuances that are unpacked in my research to understand their nature. Note that this trend is not limited to Strand, or rather Cape Town and the Western Cape, but is consistent with the rest of the South Africa because of apartheid and segregation. It is then important to trace back how far this issue goes to understand its depth.

The underdevelopment of Africa

To achieve the last above mentioned point we ought to look into the history of Africa as it informs us of what contributed to the current condition our continent finds itself in. One specific book was chosen here because this literature, unlike many others that do a disservice to African history, makes claims and supports them with empirical evidence. Walter Rodney

writes about the assumptions and biased literature on Africa that for many decades, especially from the western gaze, view Africa and Africans as having had nothing to contribute to literature or science prior to colonization. Africa was depicted as backward and somehow, a stand-alone continent, especially when compared with Europe. For the purposes of my research, how Africa came to be regarded as in need of development, Rodney's critique of underdevelopment in the book, "How Europe Underdeveloped Africa", will prove helpful.

Rodney (1972) begins by defining development in a human society when he argues that it is a multiple-sided process. As we have time and time again overtly stated that the ideas that inform constructions of societies and systems are embedded in political, cultural and socio-economic factors, that sentiment must be kept as we look into the ideas surrounding development as discussed by Rodney. For that Rodney (1972) discusses how development can be on an individual level as people increase their skills capacity, responsibility and freedom, and at a societal level through a joint ability to deal with an environment in an understanding of science and technology. The level at which we achieve these increases then determines how developed we are. Through comparing the levels Rodney (1972) discusses how we then come to observe uneven underdevelopment as we compare the levels of advancement between groups. These terms as defined are used as points of reference on which this critique bases the argument of development and underdevelopment.

Rodney (1972) suggests that the plundering of Africa during colonialism led to underdevelopement. Conquest across the continent resulted in the many inequalities that still linger over Africa decades after colonisation, and shaped most of the problems of racism, inequality, and the uneven distribution of disease, death, and the rats in my research. For a deep understanding on how development of Africa has come to be, Rodney (1972) looks at societies using four lenses. There is the idea of development in Africa before Europe; development in Europe before it expanded to other places; the contribution of Africa to Europe; and contribution of Europe to Africa. These four stages - if I may call them that - would allow for the unpacking of many assumptions about Africa in early colonial literature. Spiking out along these phases or stages, new forms of poverty, wars, inequalities, racism and gendered oppression emerged, which opened Africa to the many vulnerabilities that she now faces. Uneven rat infestation along class and race lines is one manifestation in the impoverished

informal settlements in Cape Town. The rat for the purposes of my research carries both an ontological status and a metaphor, and through unpacking it in this manner we are able to reveal the many nuances behind this problem.

Rodney (1972) provides evidence in using different African states and how they were before colonial interference. He speaks of how Egypt under foreign rule was tied with Arabia and Turkey in terms of internal development. When Egypt was colonised it had to send its wealth which was food, and revenue, which was detrimental to it as a state. Adding to that Rodney (1972) speaks of how Ethiopia was a proud empire state with smaller states and kingdoms which was skilled in architectural development before European contact. Furthermore Zimbabwe, known as Great Zimbabwe, had great constructions in bricks. After Cecil Rhodes sent his agents to rob and steal from the nation, he claimed that the ruins and Zimbabwe culture had been built by white people. These are but a few examples used by Rodney to describe Africa prior to colonial domination. He notes that there was evidence of great development in agriculture, construction and many other modes of productions in many African states before European interference.

Rodney (1972) notes that during the times of colonial contact Africa may not have been in the stages of communalism however it was still in a transactional stage indicating how it was in a development stage. I further add the argument that the fact that African development by European standards was not recognized was in itself an introduction of colonialism and erasure of an Africa history of development, even before the colonial events took place. Definitions of development were never going to be universal for all and hence I dispute how Africa was perceived prior to European contact. There have been many arguments made to justify colonialism in that Africa was not developed or advancing economically prior to European contact. The truth of the matter is that Africa developed Europe at the same rate as Europe underdeveloped Africa. Africa gave gold, minerals, labour, food, land and more, even her people, and it seems she's still giving today but in return she has lost more than she has gained.

Another point by Rodney (1972) on Europeans as they claim to have been so developed was that nowhere in Africa was slavery used a mode of production and there were no social

revolutions in Africa whereas European societies had experienced them. All these examples are evidence that much of Africa's underdevelopment was due to her contact with Europe and the stains have now been left on Africa and much of history does not account for that but instead choose to study Africa as having been backwards and not developed. It is for this reason that we took a small journey to peek into history so we can better understand who was responsible for where we are. That said, what Rodney also did in his book was critique this development in an integral manner also accounting for what Africa herself could have done to land herself in this position. We are not dismissing that the state of where Africa is could have been due to her doings, but the evidence proves that the majority of the underdevelopment came as a result of European contact.

I use the text by Rodney mainly to reiterate the argument that Africa's current ongoing impoverished conditions and systems are mostly due to colonisation and imperialism and over the years these systems have borne legacies that we still see today like racism and segregation. It is important to note that the book by Rodney is a very well thought out, researched and in-depth text that contributes significantly to African history. Though it is not done enough justice to in this dissertation because it came to highlight the injustice systems imposed on Africa and her people by the European settlers. As Rodney argued and presented evidence that Africa was always gearing towards development and advancement but after the European contact it has left her underdeveloped.

In the context of South Africa, apartheid segregation continues to mark the lives of people living in zones of abandonment like the ones in the informal settlements of Strand in Lwandle/Nomzamo. In essence colonial domination and political economy, to be expanded on later, are responsible for the persisting failing political and economic systems of our country and societies. It is important to note that apartheid and colonialism are over but the barriers they built are still very much present and yet to be dismantled as they continue to manifest themselves in the lives of people. The townships and informal settlements produced by apartheid and segregation represent the realities of the country's economic system. Whether the social development and economy are succeeding or failing we get to see them in the townships. They represent the level of success in democracy and the uneven distribution of rights, responsibilities, resources and those manifest themselves in the townships where the

failing government system and policies can be observed if they are true for citizens of the state. The impact of the decisions policy makers and government make can be traced in these townships to the scars of apartheid and segregation which are still visible for all to see.

Politics of Space

As was the argument for fieldsites, each and every space carries political, cultural and socio-economic implications. Spaces are never neutral. Politics of space are informed by different things like the famous intersection of race, class and gender, and many other things produce and reproduce spaces we occupy and inhabit. Our sense of being and belonging is associated with the spaces we inhabit. Thus our experiences are shaped by these so called politics of space. In a prison we are labelled as prisoners, people who are not abiding by the law. In churches, we are presumed good and moral people. This then transcends the assumption that the people occupying the informal settlements are seen as impoverished, struggling and displaced bodies. These claims can be made through observing the spaces that different bodies occupy. These spaces are being constantly shaped by the factors mentioned above.

The importance of space politics is that it allows us to imagine and understand how space occupies both a literal and figurative meaning. We speak of personal space, or needing space when we mean other interpretations in language use like wanting to be left alone when one gets in too close proximity to other bodies. This is not to dwell on that but to justify the reason for including space politics as an angle as I expand our understanding of the fieldsite and spaces in general. Through using this phenomenon I will expand on what has been echoed through history in looking at the dynamics taking place in my said field by using the lens of politics of space in different contexts as I build a deeper understanding of space, place and land.

Carrying this conversation Benya (2016) attested that spaces are as a result of social relations when she discussed gender identities in mining in her thesis. Benya (2016) argues that in mining spaces were constructed and inhabited in gendered ways and that they depicted power and produced power in different ways. This point is supported by Puwar (2004) who argues that spaces are not open to just anybody as they are connections between bodies and spaces in

constant contestation. Certain barriers exist, whether visible or invisible, which is very telling of whether directly or indirectly, which bodies belong in which spaces. These barriers owe their legacies to colonial domination as the driving tool that introduced a need to distinguish which, why and how they belong in certain spaces. That which Puwar (2016) notes is deemed 'out of space' of bodies who are said to not have a right to belong in line with bodies and spaces being subject to political, historical and conceptual grade book of belonging.

Benya states "the different spaces produce workers as much as they are produced by workers" (2016:178). To which Puwar notes that "bodies do not simply move through spaces but constitute and are constituted by them" (2004:32). In contextualizing this in the South African context and particularly the fieldsite Nomzamo, we fully grasp the nuances that have been discussed so far about the people and the space they occupy. The interactions and barriers that they confront everyday keeps them intertwined in this web of poverty and undesirable conditions as they are produced by it and also lack the means of changing their circumstances further produce and indirectly perpetuate those spaces. This is evident in what was observed by Versfeld (2017) in her fieldsites that South Africa legacies of inequalities had come to shape which bodies became sick and what they suffer from, who offered them health service and what kind of service they received from where. Versfeld further adds that "history is revealed in patterns of substance use seen, and media and state responses to that use" (2017:25). This is similar to how the inequalities are seen in rat infestation and rodent management and how there is little discussions of these issues from those not directly affected. The fact that we are oblivious to the realities that people from certain spaces face is exactly the kind of question that this research hopes to raise and possibly answer, hence this approach to understanding space becomes relevant.

In her book called "A Bed Called Home", Mamphela Ramphele expands on these ideas as she discussed the life of hostel dwellers in Cape Town. In this book she unpacked space in its multifaceted versions not limited to the obviously physical, but transcends to the political, ideological, social and economic as would have been discussed above as she speaks of the beds and bed holds in hostels that were the realities of the dweller in the limited spaces they occupied. Ramphele (1993) has written how defining the hostel dwellers as members of bed holds had implications for their personhood because it was based on the quality and quantity

of space. Restricting and limiting a person's being to a confined hostel could only yield negative consequences if the person is being defined in the contexts of a bed. That strips them of their privacy and in turn dignity. That being either the intended or unintended consequences of the persisting issue around housing that has always lingered in our country. Furthermore, Ramphele (1993) highlighted how the beds were seen as a symbol that connected an individual to the larger society and that reducing them to beds had serious consequences for the overall role one plays in society. This notion further highlights the importance of spaces and the implications they play when they come in contact with their inhabitants.

The point and reason I went on about the importance of space and its politics is because it transcends to the larger questions surrounding land. In this chapter I was analysing my field site, Nomzamo of which I provided context for and to paint a clear picture I zoomed out to unpack South Africa and Africa in the context of colonial domination so we can begin to understand how spaces like Nomzamo were born. I employed frameworks that were relevant in addressing the issue in-depth and also to answer and give rise to new questions. The emerging questions will be addressed in the following chapter as the overarching themes of this dissertation are in conversations with one another.

Chapter 3

Theoretical Framings

Affective Worlds

The human-rat relation and encounters in spaces faced with adverse effects, reveal many ideas that affect theory can enliven. This would highlight the shifting ideologies of people in poor societies. The different events people live through inform and are informed by the contemporary world as they deal with their daily lives. The different transitions that people go through as a result of colonial domination, segregation and apartheid legacies inform how people relate to one another and the surrounding world. Affect reveals how people relate to the past, present and future as the various uses of the term are unpacked to explore the nuances that might have fallen through the cracks of knowledge production.

Rich ethnographic accounts by Fiona Ross in "Raw life, New Hope" (2010), highlight the realities of informal settlements and how they shape people's experiences of inhabiting them. Ross (2010) recalls 'The Park', a name she gives to the informal settlement where she conducted her research. Characterized by shacks, no water supply, lack of sanitation and refuse management, the people in her study mirror my own. Much like the description of the hospital or clinic as a field described by Debbie Long, Cynthia Hunter and Sjaak van der Geest (2008) as being an island that cuts off its inhabitants from the rest of the world, residents in The Park also behaved according to accepted practices within their community. The Park had sets of rules and cultural practices that peoples attached to their sense of belonging and this contributed to their behaviour, movements and communications.

In my research, another contribution I consider, is the methodological practice of using a diffractive method while reading and during my analysis. I have done this by reading Raw life, New Hope (2010) into the ideas of Brian Massumi in his book, Politics of Affect (2015). The importance, as highlighted by Vivienne Bozalek (2017) of using a diffractive methodology is that it allows for one text to emerge more creatively through another text. Furthermore, Bozalek affirms that "diffractive analysis views difference from the standpoint of a relational ontology, that is, an effect of connections and relations within and between different bodies, affecting

other bodies and being affected by them" (2017:46). Taking this lead, I will read Ross's 'sense scapes' through Massumi's series of interviews addressing the affective worlds of senses. This would allow a deeper understanding of relationships, which is what affect is about, as I highlight the arguments of my research.

The politics of affect are concerned with the intersecting events as a result of embodied practice. It is important to note that a lot of times there has been a misunderstanding and misconception of what affect means in social science, as there is not a stable definition. For the purpose of this research paper, I deploy certain understandings for the contexts that I discuss. Gerda Roelvink (2010) explores how affect came to shape the thinking and knowledge production within the anti-globalisation movements rising in 2001 to oppose neoliberalism. In the testimonies provided by people in the World Social Forum movement Roelvink (2010) observed that they emerged with new ideologies of what the world was meant to be. These dialogues shared between people as retaliation depicted the affective force between people who had been impacted by violence and police brutality. What emerged from this work was that the individual bodies gathered together having shared common experiences resulted in shared ideologies about the world and thus depicting what Connolly (2002:75) has termed, "contagion of affect". This idea of 'contagion' is carried through different channels or sites of relational events. For this body of work I wrestled with theory of affect in the context of movement, to understand how collective capacity for any given action or decision is embodied. The sharing of the testimonies, much like the shared sufferings of the people, emerged as a shared discourse which showed a shift away from political dialogue. This shift resulted from a collective move away from neoliberal ideologies towards a politics of affect tied in "politics of affirmation that aims to generate economic possibility" (Roelvink 2010:3).

For Nigel Thrift, affective worlds include "embodied practices that produce visible conduct as an outer lining", (2004:60). That being one of the perceptions of what affects is adding, it "hinges on adding capacities through interaction in a world which is becoming" (2004:60). The understanding of affects here is one that is concerned with thoughts in process and the constitution of practices as a result of encounters between individuals and existing things. The take away from the work of Thrift in understanding the politics of affect is that, "in the attribute of body and mind, affect structures encounters as a series of modifications arising from the

relations between ideas" (2004:62). I note here that the version of affect being discussed is the one dealing with mind and body capacities to be altered as a result of interactions between other things in a world of becoming as they themselves are becoming. It is also one of unlocking thinking or understanding not only existing within human jurisdiction, but transcends inhuman or transhuman levels. These types of encounters open up more dimensions and understanding of being and becoming in the 'natural' world of being.

Adding to this, Thrift (2004) makes an example of how the aggressive training in the military conditioned soldiers to be combative in wars even though this would not have been their 'natural' reaction. To achieve this, Thrift (2004) expands that fear is controlled and aggression and anger are channelled in particular situations as responses. Though he notes the extremenity of the example, Thrift (2004) views this as the "engineering of affect" in spite of histories of emotions. In its extreme nature this example sheds light on the work of the politics of affect in the lives and experiences of people and existing things. In the context of my research, I argue that the embodied practices that people exhibit are as a result of the many transitions throughout the era of colonial domination. The affect that they embody and the mind's capacities as responses, reactions and surviving in the constant encounters of poverty, unemployment, toxic environment and other social injustices owe their constitution to the politics of affect.

The work of Massumi that interests me, is the result of a series of interviews held between himself and a number of other theorists. I am, however, particularly interested in the responses he gives as he takes us on many journeys of the affect theory. The purpose of a diffractive method is that unlike others, where for instance in a reflective analysis, I would attempt to draw on how the experience and theories mirror each other, I strongly attempt here to look how new nuance or even new questions can emerge as a result of reading different works in conversation with one another. My little background in first year physics informed me that the diffraction of light, which is how the term is most commonly understood, occurs when there is an interference in light waves and a medium is used to produce the new patterns of light. That thing that happens when the shiny side of a CD (compact disk), for data storage, makes those rainbow colours (light waves) after a light or the sun shines on it is diffraction in physics. So think of it here as how encounters with the work of authors would read into each other to produce new patterns or nuanced ideas that inform the theory, subject or research methods. It is also fitting

that in this case, this very section is fixated on encounters, which is ultimately what affect theory is made up of.

One of the key arguments Massumi (2015) drives home is that affect is rooted in the "manyness" of the understanding of the term. In this he notes the misrepresentation and misconception that scholars and theorists have fallen into as it pertains to the term. So the argument is that instead of trying to encapsulate the term with a stable definition, understanding it as events or processes is generative. Exploring affects Massumi (2015) notes, "it is a dimension of life-including of writing, including of reading-which directly carries a political valence" (2015:vii). This encompasses the various contexts of the processes. Massumi is concerned with "the capacitation of the body as it's gearing up for passage towards a diminished or augmented state is completely bound up with the lived past of the body" (2015:49). In this he added that, "what we think of as subjective elements, such as habits , acquired skills, inclinations, desires, even willings, all of which come in pattern of repetition", (Massumi 2015:49). These are the key versions of the politics of affect I focus on as I interweave in my analysis these ideas with the work of Ross as they interact, enact and act by the people in her research.

There are parts of affects that have to do with emotions, however the events surpass just emotions only to unpack the deeper encounters. However that is not to say emotions do not play a role in the politics of affect. As noted by Ross (2010) in an encounter with one of her participants who was angry that someone had refereed to their child 'a bergie's child and their home as a 'throw away house'. We find this in research Ross performed in the informal settlement in Cape Town dubbed 'The Park' that was inhabited by people who had been moved from their homes because of segregation. So much had transpired in the lives of these people as they found themselves struggling through poverty, unemployment and many adverse conditions as they sought decent housing in a post-apartheid city. They found that much of the colonial legacies were still very much present through the stigmas and practices much like the study of my research. We then look at these responses and experiences with the theory of affect. Ross (2010) writes on the humiliation and feelings of displacement the people in her research experienced. Elsewhere Nattrass, Stephens & Loubser (2018) have written something similar on the displaced bodies, the forgotten of the communities that my research looks into. These

emotions help us understand the affective world of the people in The Park and in the context of my research the people in the informal settlements in Strand.

Ross uses a phenomenological approach, as she looks into the experiences of the residents in The Park using sense-scapes. By sense-scapes Ross (2010) recalls her struggle to map the fieldsite as she had remembered it since so much had changed. However the struggle with displacement and a sense of disorientation for Ross (2010), was not only due to geography but also embodied relation with the landscape. Thus using different senses like smell, sound and placement revealed the embedded social and cultural practices of the people of The Park. In this, Ross (2010) discusses how her own sense of being was disrupted when she returned to her field site many years later and couldn't reconfigure the geography of the area. This feeling brought about disorientation and displacement as what was meant to be a familiar space to her was no longer that. She notes that she understood then that the sense of disorientation carried with it "physical, emotional and cognitive components: coming to know a space was not the product solely of visual relation with a landscape but an embodied one" (Ross 2010:58). This description made by the author resonates with the ideas of politics of affect that have been stressed by Massumi and some of the theorists. Outside of this I wish to imagine for a moment if the sense of disorientation felt by Ross introduced such deep nuances considering that she was temporarily experiencing this space and had prior experienced it on temporary bases as a researcher, how much or deeper do these senses run for people who call these spaces home. The use of the politics of affect in this sense is to prompt our imagination as we try to understand the people living in informal settlements who are faced with many daily struggles.

These sense-scapes as observed by Ross (2010) represented and revealed the routines of people in The Park. She expands that the "sound-scape would create a sense and representation of the rhythm that characterise the settlement in relation to the landscape in which it is embedded" (2010:65). While the "smell-scape would reveal rhythms of the day and of the week and time of the year" (Ross 2010:66). Reading these ideas in line with Massumi's observation that "politics, apprehended affectively, is an art of emitting the interruptive signs, triggering the cues, that attune bodies while activating their capacities differentially" (2015:55). Massumi makes an example of how an alarm is perceived as a sign of danger or threat and how we respond to it, is telling of the politics of affect. We may conclude, as Massumi (2015) discussed,

that there is no danger attending false alarm, but we would have come to the conclusion of risk based on our effective relationship with danger. While Ross uses the illustration of rhythms as patterns, Massumi (2015) depicts these as bodily attunements. Whether we consider them as rhythms or attunements, these capacities of embodied practises reveal the nature of the affective worlds we produce.

Ross affirms that "our sense of space, then, is an intimate one. It rests on rhythm and deeply ingrained practices, themselves emotive and emotional" (2010:66). Elsewhere the politics of space would have alluded and confirmed this point, however reading this into the ideas of affective politics further reveal the possibilities of becoming between bodies and environments. Massumi confirms, "we're in affect, affect is not in us" (2015:114). These ideas inform us of these patterns and processes of the environment and the people occupying it in that there are times where they have no control over the space and the implications that come with it. They find themselves affected, but by virtue of existing and interacting with them, will also affect. I wish to revisit a point made by Ross as I contextualise the parallels I draw here. Ross (2010) speaks of how the people at The Park shared this sense of humiliation or shame at their families visiting them because of where they stayed and it reached points where their families would not visit them because of where they stayed and the stigma attached to those spaces.

The politics of affect reveals how poverty, segregation and other social forces affecting people in informal settlements becomes a hindrance, or driving force negatively impacting the practice of kinship. This humiliation grew out of people's desire for not wanting their families to see them while they stayed in unfavourable conditions. This reveals the depths of these forces on the lives of people insofar as their kinship practices and relationships. Poverty has always played a role in the constitution of family structures. We grew up hearing about people's fathers who went to urban areas to work in mining and to pursue job opportunities. Migrant labour leaves those family structures incomplete and without fathers for extended periods of time. That has also contributed to how people come to define or redefine family structures in the context of their experiences. Through affect theory, we observe how people are affected and also affect the constitution of these things as they move through life.

I then draw parallels to unearth these things in the context of my research. The people of Lwandle/Nomzamo in Strand and other informal settlements of Cape Town faced with rat infested realities collectively share the notion of wanting to free their spaces of rats. The ways of surviving via the illegal circulation of poison and the attitudes of rat management all owe their existence to the affective world they find themselves in. For some, their survival is threatened by the presence of rats because of the many embedded implications they carry as have been discussed earlier on in this research. The shift in their ideas of how to treat rats and the questioning done on their animal ethics should also be understood in the context of a politics of affect. It is them whose reality is a process of becoming on the platform that is filled with rats. Their bodies and those of rats are positioned in the spaces that carries historical, cultural and economic politics that reveal how they respond with the pattern and rhythms that are observed in the context of rats and rat control. The themes that would have been emerging throughout this research are no longer just themes but have become the very processes, practices and acts of attunement as described by Massumi .These connections between human and transhuman entities in the affective worlds have come to constitute the life experiences under the banners of poverty, segregation and colonial domination that confront people as they grapple with their day to day life.

Political Economy

In its general definition, political economy looks at the manner in which resources are distributed in a country. This is obviously not a full definition of the term as these manners reveal forces embedded in different structures, but rather an idea of what we speak of when we consider political economy. In this section I look at various themes that have emerged in my research using political economy as a tool of analysis as we unpack the problems surrounding political and socio-economic forces especially in the South African context and issues leading to the structural violence that constantly manifest and are perpetuated in the lives of the people in informal settlements.

For Don Robotham political economy is described by “an analysis approach which treats the economy from the point of view of production rather than from that of distribution, exchange, consumption or the market” (2005:41). The definition of the approach by the author is one that

favours more the social elements of production rather than the economics of distribution and exchange. This Marxist concept came about especially in anthropology where we are interested in exploring the multiple layers of human action that inform economic life including the "system of production, distribution, exchange , and consumption" (Koening and Matejowsky 2005:4). This theory deepens the understanding of the political and economic layers of a country. I am drawn to William Roseberry's breakdown of political economy that attempts "to constantly place culture in time, to see a constant interplay between experience and meaning in a context in which both experience and meaning are shaped by inequality and domination" (1989:49). According to Roseberry, political economy has another meaning where it "attempts to understand the emergence of particular peoples at the conjunction of local and global histories, to place local populations in the larger currents of world history" (1989:49). For the purposes of my research these are the definitions of political economy I employ as tools of analysis.

In South African societies, which have borne the costs of colonialism and apartheid and their many legacies, a focus on political economy as a theory of analysis becomes essential in research. Marked by the segregation practices that were introduced by apartheid laws and acts that resulted in dire realities for the majority of people in the country, the political economy of these societies were doomed from the get go. Mutero and Makwara (2018) discovered that failure from government and municipalities to provide housing resulted in people illegally invading lands without consent such as the one that people in Lwandle occupied. The driving factors for these in the context of the Lwandle community as discussed by Mutero and Makwara (2018) was the persisting poverty, lack of government support and an attempt at forcing government to build houses for the people. All these factors highlight the importance of a thorough consideration of political economy. The research by Geyer and Mohammed (2016) revealed that the increasing inequalities and the racial homogeneity in some societies still perpetuates the hyper segregation and class-based segregation. Though there was a change in some societies that showed race diversity, economic segregation still lingered and continued to manifest in the lives of people in the low income societies. This then saw a class-based divide in societies while the country was still attempting to dismantle the racial segregation.

I use political economy to understand the human-rat encounter and the politics of rat management. It may appear unusual to do this, however the reason should be apparent as to why we must consider political economy as we discuss the intersection between rats and people in this social context. The occurrence of rats in certain spaces in neither incidental nor always due to natural forces, but there are other aspects we must consider that set up or give birth to the platform that have allowed for the said interaction. These aspects as revealed in this section can be traced to economic and political triggers.

I adopt the understanding of Anthony Oliver-Smith that "vulnerability is generated through a causal chain of root causes embedded in ideological, social, and economic systems, the dynamic pressures of a demographic, socioeconomic, or ecological nature, and specific sets of unsafe conditions which, when combined with a natural hazard, produces a disaster" (2009:14). This understanding in part, reiterates the tone of this research in looking at these issues on multiple levels, understanding the many sides and aspects of people's struggles and realities. We are able to formulate a deeper understanding of how their daily lives and practices are embedded in historic, cultural, political and socioeconomic factors that are in constant intersection and affects these people in various ways. The research by Oliver-Smith (2009) found that the rise in population, population density, consistent impoverished conditions and hazardous working spaces exacerbated the vulnerabilities of both natural and technological hazards and thus triggered the disasters. This came about after paying attention to disasters using the political economy as a framework for analysis.

To contextualise the political economy of disaster in my research would introduce new ways of understanding the depth of what political economy looks like in low income societies, and what implications emerge as a results of failed economic and political systems. This is mapped out and manifested in my research on rat infestations that in itself, is entangled with other issues of society. The basic argument would be that how we have arrived at this research about rats and the poor people struggling to make sense of their lives while sharing spaces with rats would be as a result of the political economy perspective in the Strand communities. Nattrass, Stephens and Loubser (2009) acknowledge that the issues surrounding rodent control in Cape Town have long been a political struggle in townships that still operate under racial segregation and economic inequalities. This is evident in the contestation of rodent control, however there

was never any solid solutions from the government side when they halted the project for the drowning of rats. Nattrass, Stephens and Loubser (2019) add that because of their locale the informal settlements are prone to these infestations because of improper structures, congested housing and improper handling of waste. In these conditions, rats thrive.

So this being a factor due to the government's lack of ability to produce housing for its citizens sees them being trapped in areas that perpetuate conditions that attract rats and thus creates another layer to poor living conditions. Adding to this, Godsmark and Rother note that the "influx of people to high density communities increases pressure on service delivery systems, public health infrastructure and resource availability, ultimately increasing vulnerability" (2019:2). In a country that already battles to provide the basic necessities for it citizens, the problem surrounding urbanisation caused by people in pursuit of job opportunities and to move closer to resources, further causes a strain on a government that is already struggling. This then creates this vicious cycle of poverty and failing government. People move for job opportunities but are confronted by more poverty and unbearable living conditions which add on to an already failing system. In the context of the informal settlements of Cape Town, Buckland and Nattrass (2019) discuss how the communities look to street pesticides for solutions to the rat issue as they are less expensive than commercial products. Street selling thrives as a business because people are in need of these pesticides. The use of street pesticides creates a temporary solution since the very same pesticides pose danger to their lives as they are poisonous and toxic to not only them but their children.

Highlighted by political economy, not only are these people confronted by rats but solutions to deal with them that are seen as adequate are either dismissed as discussed above on the project of drowning or inaccessible in terms of pesticides sold in stores. This could either be due to pricing or the distance to the supermarkets. The immediate solution then becomes the street pesticides which on their own pose a higher risk and further introduce the new problem of poisoning and toxicity. The solution then quickly dies and gives birth to a new problem that further threatens the unbearable living conditions of these societies. This understanding further highlighted the social injustices suffered by these people and how affected they are by structural violence. By Bandy X. Lee's definition, structural violence "refers to the avoidable limitations that society places on groups of people that constrain them from meeting their basic

needs and achieving the quality of life that would otherwise be possible"(2019:123). As discussed and illustrated above, these limitations are entrenched in the social structures of society. By way of colonial legacies, these social injustices reinscribe themselves and history in contemporary life.

Ultimately, I hope to have demonstrated above the value of political economy for mapping these failing issues of political and economic systems in South Africa, where societal breakdown intersects with and manifests itself. The role of rats was one that depicted a story about how it looks when the government is not able to fulfil its state mandate for its citizens. As told, 'garbaged' bodies are forced to reside in poor living conditions and have to share them with rats on top of that. Political economy reminded us of what we have been echoing all along about how colonial domination and its legacies are still bleeding into the informal settlements like Lwandle/Nomzamo.

Land reform and multispecies approach

> "Land is power, land is wealth, and, more importantly, land is about race and class. The relationship to land – who owns it, who works it and who cares for it – reflects obscene levels of inequality and legacies of colonialism and white supremacy in the United States, and also the world".
>
> -Nick Estes, The Guardian, April 2021.

In this section I use the extension of structural violence and political economy as I address human, animal and land rights. In the context of South Africa I use land reform to explore land rights and their implications on people, and in this research I consider rats too. The land reform refers to the redistribution of land to those who were dispossessed during apartheid segregation. Exploring structural violence reveals how social injustices are actual violations of human rights and at the crossroads of these concepts I reveal the intersection of animal welfare and human rights as these issues overlap each other in their manifestations. I then suggest that a move towards a good consideration of multispecies approach opens up new possibilities, some of

which look into the concept of rewilding as we move towards socially just worlds for inhabitants of the ecosystem.

Land right as defined by Jeremie Gilbert is the "right to use, control, and transfer a parcel of land" (2013:115). Though not legally regarded as a human right Gilbert (2013) argues that it is hard to divorce human rights from land rights as the two are intertwined in reality. In that the land rights "constitute the basis for access to food, housing and development", Gilbert (2013:115) asserts these are also fundamental basics of human rights. This means whatever affects land rights will manifest as a consequence and have a dire effect on the human right. The land rights like the many principles outlined in my dissertation are embedded in political, economic and social-economic forces. Gilbert discussed that land rights are influenced by "hierarchal and segregation systems where the poorer and less educated do not hold security of land tenures", Gilbet (2013:115). This understanding transcends the politics of space to a point that it could mean some people get to have autonomy over land and control what happens to it. This imbalance of rights then sees one group elevating their rights to land more than others. This autonomy can eventually lead to the controlling of humans as well when these 'land owners' can detect who can and cannot occupy lands. That understanding depicts the importance of land rights and is most relevant in the context of South Africa where the land question has been in debate for almost all South Africans due to the history behind African land.

Returning to the opening quote from the newspaper article by Nick Estes (2020) titled *Bill Gates is the biggest private owner of farmland in the United States. Why*? The opening quote summed the reasons why there's obsession around the issue of land all over the world. In South Africa especially with the understating of the African background outline by Rodney, land could potentially be the biggest resource that people were stripped of during colonialism and apartheid. Before even unpacking the deeply layered implications of land even at its bare form we can understand why land rights are important. The discussion of space politics above then further reiterated the mapped inequalities that came as result of unequal distribution of the land.

In South Africa a country recovering from colonialism and the harsh wounds of apartheid, land reform was introduced as a means to counter the effects of segregation that was suffered by people of colour (non-Western). Due to the lingering colonial domination legacies it is no surprise then how land reform is met with so many limitations because of how these legacies are still manifesting in societies. For Ruth Hall the purpose of land reform was introduced as a means "to redress the injustices of apartheid and, by redistributing land to black South Africans, to transform the structural basis of racial inequality" (2004:213). As the country attempted to move past the apartheid era many processes were put in place to absolve the country of it inequalities that had lingered for so long. The importance of land reform was especially emphasised because of what land means and what it represents. While land rights aimed at performing a socially just task, Hall (2004) discusses that political economy revealed how it had met limits and in whose interest it been regenerated. That is evident by the existing racial and social inequalities in the lands of South Africa today.

The importance of land was highlighted by the Ross (2010) research where she detailed how the people from The Park had anxiously awaited proper housing for so long and how much the issue of housing and land meant to them. Some of these things highlighted their tie to feelings of humiliation, kinship practices, senses and landscape relations and the many issues emphasised by political economy. As explored by Hall (2004) the demand for land was seen by the poor as an opportunity to better themselves through urbanization. However the problem with this was that land reform as many societal practices was tied in political and economic powers where there was control of how land would still be redistributed. It is these reasons that gave birth to the many informal settlements that are stamped on the South African country. The failure of government to fulfil the mandate of land reform can also be seen as a violation of land rights because people are still dispossessed as with the case of communities in Lwandle/Nomzamo. The living conditions they endure is a sign of the vicious circle of the structural violence in their lives due to failing land reform practices.

According to Kathleen Ho (2004) the theory of structural violence is fundamentally based on the understanding that a hindrance of human agency resulting in human needs not attained violates the basic human right. That means the structures of social injustices which hinder the living and development of people in societies are examples of structural violence. The stubborn

poverty and active dispossession of people through land segregation are the two biggest villains in this context as they produced many other struggles that have forced their ways into people's lives. This structural violence as discussed by Ho (2004) is built in systems and depicts itself in societies in the unequal power and consequences for the people. Its layers as Ho (2004) discussed, are also built around this fundament and manifest themselves in aspects of economic and social inequalities as the most common injustices as highlighted in this research. The example of the consequence used by Hall (2004) of the growing divide caused by land inequality played a major role in HIV/AIDs and was tied in the changing dynamics of households and the labour force. While the issue of land reform focusses on the divide between rich and poor there was also a rise in the issue of HIV/AIDs as an underlying vulnerability for the poor and dispossessed. These issues manifested because of structural violence brought by land segregation.

For this research it is seen in the constant battle against the infestation of rats because of people and government structures. The dispossession consequences of the failing land reform results in the building of informal settlements that people end up sharing with rats. The Lwandle/Nomzamo community is one that is characterised by improper structures, swamp areas, inadequate toilets structures and waste management systems as some of the lingering struggles. As the government failed to deliver services these struggles fell onto the shoulders of citizens. Walking around my fieldsite I recall observing men who were removing waste from this dam-like swamp that had formed and made a 'river' of some sort. The stagnant water had collected next to community taps that were not well-kept and hence eventually leaked and had water running because of the broken taps. That on its own posed numerous health scares for the communities which goes back to the structural violence incited by poverty and segregated lands. Waste management had also become part of the responsibility of these communities. This is because garbage collecting trucks had no proper routes on which to move around these communities. Then it comes as no surprise how the issue of rat was intense on these communities because they had to deal with these issues themselves. The halting of the rat trap and caging project on the basis of animal welfare discussed before was seen as a slap in the face by these communities as the government was not aiding them but was now preventing alternative solutions. This conundrum is one that must be understood in this context, of layered issues, as opposed to attempting to address people's attitudes and treatment of rodents as if it is a standalone issue. The issue is politically, culturally and socioeconomically embedded.

This was the reason to approach this kind of research with a multispecies approach of understanding. According to S Eben Kirksey and Stefan Helmreich "multispecies ethnography centres on how multiple organism' livelihoods shape and are shaped by political, economic, cultural forces" (2010:545). This is the study of more than one species which here was primarily the humans and rats of the Strand community. This research in it outlook was built on the premises of the understanding of multispecies. The interrogation of the human-rat species was by way of approaching it with a multispecies manner. The importance of this consideration of the human and nonhuman was signified when we used affective theory to explore relations of the nuances between the two. This understating encouraged a look at beyond just the living or human to also incorporate the transhuman entities. What is stressed by Kirksey and Helmreich (2010) is that it should be about affording agency and consideration to the nonhuman but also "to force us to radically rethink these categories of our analysis as they pertain to all beings" (2010:563).

Animal rights by Elisa Galgut (2017) are understood in the context that the "humane regard and care only insofar as maltreatment of nonhumans may impact negatively our treatment of humans". It ties the animal ethics to how humans treat animals and it seems dependent on the discretion of a human. That is to say humans have to agree on what maltreating animals looks like. If there are conflicting beliefs then some cultures might deem something as cruelty towards animals while others do not see it that way. The assumption however is that human beings would respect the rights of animals. The ill treatment of animals as Galgut (2017) discussed was based on the arguments that the humans have unique characteristic and capabilities that place them above the non-humans. This argument Galgut (2017) expands in the context of racism where non-western groups were compared to animals under the banners of racist ideologies. It goes as far as people being outraged when ill treatment of animals is being compared to racist acts or slavery. Though the two cannot be comparable, the outrage seems to lean more towards people thinking they are more morally superior to animals. This shows that they view the non-human as lesser. Understanding the social injustices that people, who were discriminated against had endured, it seems troubling how they would reinforce the divide and hierarchies between them and animals. Ending the vicious circle of inequality calls for us to radically think about and uphold all rights in place for all things in existence.

A beautiful article called *South Africa's land reform policies need to embrace social, economic and ecological sustainability* from The Conversation perfectly sums up the argument and approach I conclude with. In the article Mograbi, De Vos, Shackleton, Clements, Bezerra, Coetzer and Maciejewski (2020) argue that the land reform policies are too fixated on transferring land ownership to people and ignore the interactions between humans and the ecosystem. Mograbi et al (2010) discuss that this is a disservice to the goal of land reform for equitable and sustainable land. Just like land reform is embedded in political, cultural and socioeconomic factors then the ecological systems are also tied to these forces by virtue of being an extension of lands. This would mean structural violence suffered on the basis of land inequality have implications for all land inhabitants. This approach begs for an understanding that transcends just distributing land equally between humans. If the argument is to move towards a space of social justice then this must be applicable to all things that exist. Our treatment of ecology must be socially just because in as much as we affect it, it affects us. The authors, Mograbi et al (2020) discuss that outcomes like climate change, biodiversity loss and land degradation also play a role in land reform processes as they are tied to the makeup of the lands. The consideration as we move towards land equality must bear these things in mind.

This opens the door in an attempt to finally imagine the project of 'rewilding'. The article called *Toads, spiders, daddy long legs, even mice: let them all share our homes* in The Guardian by Ros Coward (2020) speaks to the perspective of rewilding our spaces for the benefit of animals and nature. Coward (2020) discussed the project in advocating for saving and preserving nature's jewels like farmlands and nature reserves. The argument by Coward (2020) is that we must do away with the extinction mentality of the creatures in our homes and around our homes. Here it is argued that nature should not be controlled and fenced out but should be treated with an embracing and preserving mentality. Early in the research I would have argued how that is not an option for people infested with rodents and pests however I say this is possible if the bigger issues outlined are addressed and we are living in a society moving towards social justice for all things.

Chapter 4

Necropolitics

Necropolitics in human, animal and land relation

By now I have discussed the political economic framework that underpins this research. To bring my research full circle, I draw our attention now to Achille Mbembe's concept of necropolitics. In this chapter I make use of a phenomenological approach to unpack the concept looking at it's implications for humans, the consequence on animals, and impact on the land. The fundamental understanding of 'a matter of life and death' embodies a new meaning as we discuss the forms of life and death for those who are favoured by the necropolitics. Echoing the peeling of onion-like layers allows us to tap into the many necropolitical forces and their interpretation and manifestations on civic life.

I reintroduce the diffractive reading method to consider the way Mbembe picks up where Foucault left off as this concept is said to be an extension of biopower. I adopt the understanding of diffraction by Vivienne Bozalek and Michalinos Zembylas as "a useful tool highlighting the entanglement of material-discursive phenomena in the world" (2017:2). The focus is on configuring reality or in other words the performative. Fitting here as the focus on entanglement is a key point of this research as stated by the title of dissertation, "The possibility of including non-human together with humans was another advantage of using diffraction" (Bozalek and Zembylas 2017:6). As highlighted by the multispecies approach this inclusion is important in this research and thus echoing this notion of diffraction helps provide deeper meanings. The interesting thing here about using diffractive phenomenon is that its introduction came about as an alternative to reflexivity. This is because feminists as discussed by Bozalek and Zembylas (2017) were not satisfied with the epistemological practices of reflexivity. The very same phenomenon is now used to attend to Mbembe's extension from Foucault's 'biopower' as the concept did not adequately address the necropolitical power of death.

Michel Foucault (1978) coined the term of biopower where he speaks of a form of political control over the populations by government. According to Foucault "there was an explosion of

numerous and diverse techniques for achieving the subjugation of bodies and the control of populations, marking the beginning of an era of 'biopower'" (1978:140). Biopower represented the power of government to administer life through the various systems. This sees government having a hand in deciding who gets life and what qualify of life they are afforded. This kind of choice or 'power', by the government, as discussed by Foucault (1978) revealed forms of racism. The inherent racism here is not only subject to the apparent definition but encompasses other categories that see other populations being afforded life while others are not. The choice of how life is administered exists along these categories which Foucault states "it is no longer a matter of bringing death into play in the field of sovereignty, but of distributing the living in the domain of value and utility" (1978:144).

The emergence of biopower rose to overthrow the idea of the power of death. The idea of biopower came to promote life for populations, in doing so death in the realms of power was ignored. However Achille Mbembe (2003) recognised the importance around the idea of the power of death and hence introducing the concept of necropolitics. Though very relevant and important the idea of biopower was incomplete if it did not adequately discuss the power of death. What Foucault left out was the "subjugation of life to the power of death" (Mbembe 2003:39). As an extension of the idea of Foucault's 'power of life', Mbembe in his essay on necropolitics aimed to address the gaps of biopower. Both concepts by these authors were inspired by the critique of sovereign power 'to let live and let die' and thus a diffractive reading of these two allows for deeper understating of the overlapping ideas.

For Mbembe "the ultimate expression of sovereignty resides, to a large degree, in the power and the capacity to dictate who may live and who must die" (2003:11). This reveals what Foucault may have not covered that is the layered manifestation of the necropower that Mbembe unpacks in his work. In his discussion, Mbembe argues that 'right to kill' is but one of many forms of necropolitical forces. It does not always mark itself clearly but uses various forms of death to depict necropolitical tendencies. This extension, necropolitics, also includes the notions of social and civil death and the various forms of political violence. Drawing on the varying examples from slavery, apartheid, colonization and various themes of my research Mbembe (2003) expands our knowledge of necropower in the contemporary worlds.

The necropolitics coined by Mbembe speaks of the use of social and political power in controlling "who may to live and who must die". This is the ultimate understanding on which we build this chapter. This is the concept my research is meant to unpack the issues highlighted above in the contemporary world we live in. This idea extends what Foucault terms biopower, "that domain of life over which power has taken control" Mbembe (2003:12). This biopower is built into the ideas of sovereignty as having the power to decide who lives and who dies. For that Mbembe (2003) discusses that concept of power is understood in reference to the state of exception, that which is based on "Nazism, totalitarianism, and the concentration/extermination camps". Fitting here is the use of death camps as a "metaphor for sovereign and destructive violence and as the ultimate the absolute power of the negative" Mbembe (2003:12). That leading to the understanding as discussed by Mbembe (2003) of origin modernity was in the multiple conceptualisation of sovereignty which is biopolitical. This further highlights that if the power of the negative exist then death must have more power than given credit for by the work of Foucault.

These are the understandings to which Mbembe extends the idea of necropolitics to address the tendency of some people being confronted by forms of deaths, where he mentions the social and civil deaths as some and also the political violence. I will also be looking into ideas by Foucault as stressed by Mbembe of structures that value certain groups more than others in the wake of the forms of death we look into. This is seen with countries' and states' obsessions with population control under the guise of protecting while concealing the ugly forms of divides imposed on people. The understanding of politics is presented in two ways that of "a project of autonomy and the achieving of agreement among a collectively through communication and recognition" and when we speak about the "sovereignty as the production of general norms by a body (the demos) made up of free and equal men and women", Mbembe (2003:14).

On power, Mbembe as seen on Foucault's biopower discussed that it presents itself as "a split between living and the dead" and transcends to the divide of groups and subgroups based off "biological caesura" of which Foucault recognises is racism (2003:17). Power in itself as a concept unbound and forever evolving is present in all of existence and as we unpack the concepts above a similar understanding of power applies to them as they borrow some tools from it in their attempt at dictating over people. The multiple understating of power and politics

reiterate the understanding that the death discussed here too will be discussed in deeper layers other than its obvious definition. Also note too that the motivation behind necropolitics by Mbembe was also aimed at addressing not only right to kill but also that "death forces" have located different bodies in different walks of life and thus of different states of life and death.

It is important that I look into necropolitics of the different key players in my research before an analysis of how they manifest in conjunction with the contemporary study like this research. I attempt to unpack the implications on human lives, the consequences on the animal cycles and the impact on land as certain groups are elevated by privilege to live while other are located in spaces where many forms of death confront them. I draw on Tony Sandset (2021) article called *The necropolitics of COVID-19: Race, class and slow death in an ongoing pandemic*. In the article Sandset (2021) uses the work of Mbembe in picking apart what the concept could reveal about the health disparities in the midst of the Covid-19 pandemic. Here, Sandset (2021:1411) notes "part of the necropolitical regime of health care is that certain health care systems have created an environment not conducive to life but to slow violence". This is the point Mbembe was driving towards in his extension of the understating of biopower in the necropolitics. The Sandset (2021) article based on articles in the UK found that COVID-19 had disproportional impacts on black, Asian and middle eastern communities. This is because "socio-economic factors produce an environment akin to the necropolitical environment that expose certain people to vulnerabilities" (Sandset 2021:1416). This article served to produce new understandings of applying the concept of necropolitics in contemporary manifestations. In a similar manner that is what I attempt to do on the examples that follow.

In Mbembe's understanding, necropolitics transcends the power of who lives and gets to die but acknowledges the conditions that would put people in danger of death in its various forms. That is to say the exposure to conditions that hinder their lives as discuss by the structural violence and in itself being forms of death. Mbembe on this is adopting the understating of racism and in the context of South Africa, apartheid as a form of death brought by necropolitics. The child poisoning through accidental ingestion discussed by Rother (2010) exposed the imminent dangers of the conditions of necropolitics. Versfeld (2017) discussed the implications of inequalities in healthcare when they manifested themselves on who became ill and what healthcare services they received, who offered these services and what kind of services they

received. Here the discussion of how the minority poor groups were exposed to the danger that put their life at risk is the ultimate depiction of necropolitics. The people in this research residing in poor conditions met with rat infestation which is a sign that they are being exposed to death. The dictating of who received what kind of healthcare based on who they are exposes the necropolitics.

The failure by the state and government of fair distribution of resources perpetuates these deaths or puts citizens on platforms to be killed as they live in inhumane conditions. The failure of the government to dismantle colonial legacies and apartheid promotes the death of citizen. The power still residing and fixated on the minority privileged groups is still promoting the necropolitical factors. The unemployment, poverty, segregation, racism and the many negating forces are in a constant vicious circle tied in necropolitics and they themselves are the different versions of death that people in my research and similar have to live through or in this argument die through. These issues are hindrances as stressed above on political economy and structural violence to the life of people and as stressed by Mbembe that political violence is also tied in ideas of biopower and the biopolitical in which necropolitics is extended. In the context of the people in my research this is the tip of the iceberg on the effects that necropolitics had and still has in their lives.

The main arguments for Buckland and Nattrass (2019) on the inhumane treatment of rats and Nattrass, Stephes and Loubser (2009) on the ethical welfare of animals in how the poor communities dealt with them is centred on the unfortunate consequences rats find themselves in when encountering people in the informal settlements. The debates surrounding how rodent control should look also have to tie in what necropolitics loo s like for these animals. The conditions which have attracted these rats to these spaces with human being is what invited troubles in their life cycles. These conditions of people building homes in congested areas where dirt and waste are ripe attracts rats whose nature is to find food in such spaces. It is then they are met by unwelcoming bodies of humans who are at liberty to share spaces with them in that manner. These conditions being promoted by the negligence of government at providing housing and adequate resources are now being manifested in this encounter between humans and rats.

Also too let us address the neglect, or rather the valuing, of human lives over wildlife that has left species such as rats vulnerable to death by humans. These conditions, too expose the necropolitical factors in a country. The unclear laws surrounding animal treatment discussed by Buckland and Nattrass (2019) expose how humans are clearly placed higher than animals and when push comes to shove the right to kill is taken by these humans as they believe to be more valuable than the animals. These are but some of the consequences themselves that animals suffer as the necropolitics force them into areas where they are met by poor people whose lives are exposed to political violence and thus have negative treatment of them due to where they are positioned in life.

The land also bares some of the harsh realities of the necropolitical forces. Not only do these realities take place on land as a platform but it too is affected in the process. I revisit the book, "The Political Economy of Hazards and Disasters" by Jones and Murphy that discusses a similar undertraining of who gets helped and sacrificed in the faces of disasters. Here Jones and Murphy (2009) discussed that disasters had a correlation with political economies of societies where they were prone in areas of low income places. This led to the discovery discussed by Jones and Murphy that the vulnerabilities caused by political economic factors such as poverty and racism had exposed people to specific environmental hazards. These conditions had made them susceptible to such hazards. For this we could speak of the frequent fires that engulf many shacks and informal settlement we always hear about on the news. This is due to the type of cooking and heating systems used in these homes. The materials that build these houses along with congestion exposed them to fires that have devastating effects. These areas, like the majority of Cape Town's informal settlements, are situated in areas that are prone to waterbeds after heavy rains and have other consequences such as diseases which cause a ripple effect which is tied to necropolitics. These shacks are usually built in an improper manner and some in places not approved by the government so that also introduces other factors like the disturbance of nature that was there. In turn as the people we also produce toxicity through materials we use and what we take from nature. The lack of care for the wildlife as mentioned above by the state or those favoured by biopower also has negative effects on the land. Above on the point of rewilding I mentioned a just consideration for all things and necropolitics exposes how the unequal and unfair distribution of rights and resources has negating forces on all.

When these things come into play together we are exposed to a bigger picture of how deep the necropolitics are. These arguments expose how necropolitics still favour some while exposing others to a deadly fate. Based on socialism, elitism and classism we are exposed to just a few forces that have placed others high in receiving resources, healthcare, land and fair treatment. Through using the multi-layer approach that we have been echoing in this dissertation to unpack the Mbembe argument, we see that the necropolitics come to life and manifest themselves in the lives of poor people like the ones in this research as echoed by above literature. The conditions that the people in Lwandle/Nomzamo live in are ones of poverty, unemployment that promote structural violence and further exacerbate and perpetuate certain forces of oppression that continue to disadvantage their lives and compromise their health and the inaccessibility to healthcare systems which sees them face, and as Achille Mbembe stresses, death.

The rats coming in contact with people on the backdrop of all these civic life forces on specific land exposes the necropolitics as Mbembe intended. Poverty forcing people to build on certain land while taking from it and not caring for it is not in their control as they are confronted by poverty, unemployment and overall colonial legacies. The makes the land what informal settlements become which is characterised by poor living conditions with poor waste management systems and failing toilet systems. Adding an infestation of rats and pests in this mix sees the struggles of these people multiply as they seek affordable and effective alternatives at dealing with the issues that their government has failed them in. Now they are exposed to illegal pesticides which are a danger to them and their children while they face danger with rats. The rats in their attempt to find food and shelter walk into warzones created by necropolitics and debates about their death arises. This interplay in its depiction maps out how necropolitics look in the context of this research.

Conclusion

In closing, using the rat as a tool of knowledge production about social worlds and in itself as an ontological subject of research, revealed the onion-like layers of the deeply embedded issues affecting the people of Lwandle/Nomzamo in Strand.

The multispecies approach highlighted the understanding that allowed us to consider more than one species and opened up this research to unpacking and unpicking the rat-human interactions alongside land relations. The conversations and texts on these interactions and relations revealed the culturally, politically and social-economically embedded practices that affected the rats and people in poor communities. Signified here was the violation of rights for rats, humans and environments and the lingering structural violence that manifests in many forms of their existences. These issues were traced back to failing government systems that were derived from colonial legacies.

The life cycle of rats alongside the journeys of people in the Strand revealed the patterns of racism, poverty, unemployment, toxic lands, and an overall negligence of the government for the citizens in poor communities. These issues had dire implications for these societies as they struggled to make sense of life while sharing a space with rats. This also influenced their attitudes and treatment of rats in their spaces. When encountering rats and other pests in places that burden them on a daily basis, how they reacted to them was influenced by where they were positioned in life. What rats represent in poor communities is different from elsewhere where people are not confronted by poverty, crowded spaces, failing government service delivery, unemployment and toxic lands. For the people in poor communities the debate on rat control is not just a topic of discussion but lived experiences. Using the onion-like outlook the layers began to peel back and the suffering of both people and rats was revealed. Through using the rats as a gateway to unpacking the bigger picture I began to realize that almost all issues negatively impacting poor societies can be traced back to the structures of social injustices. At face value the issue of rat does not present itself as something resulting from deeper issues but upon engaging with the research, layers are revealed. Rat is also a tool being used by the failing

government systems that invite them in areas that have poor conditions for people but are favourable to rats.

The living conditions of poor communities carry historical contexts. Ingrained in segregation, apartheid and colonialism, these spaces confirmed that there is more to them than meets the eye. Interrogating these spaces through the lens of space politics revealed the dark past that was suffered by Africa and her lands. The dark times of European contact rendered African lands 'underdeveloped'. The affective turn highlighted the influence that poor lands had in the communities. There was also an emergence of shared collective practices which were sometimes positive and sometimes not so positive. The shifting ideology from political domination towards affective ideologies towards economic possibilities were some of the positive aspects. Highlighted by Ross (2010) sense-scapes these influences transcended just grappling with life in the face of poverty to the attitudes and practices of kinship. People were affected in how they forged family bonds. These would be some of the not so positive aspects of these influences introduced by space. However, highlighted here are the connections in affective worlds that has positioned rats and humans opposite, across and next to each other in the backdrop of societal layered issues.

The persisting structural violence highlighted various hierarchical divides on people and rats. It further pushed people in the outskirts of life and rendered them disposed bodies. Once disposed, it made it easier for government to ignore them and the country to fail its citizens as it pushed them to confront necropolitical deaths. In South African the question of land is a key player in the fight for democracy and decolonisation. This is why land was unpacked on the political economy spectrum to highlight the negative consequences suffered by not only humans but other species of the ecosystem. This revealed the importance of land not only as a background against which these layered issues manifest but also as the biggest tool leading the social injustice conversations suffered by both the human and the rats. This also shed light to how the issues were infringing on the rights of those who were side-lined to the parts of life that were not conducive to adequate living.

To ground my work, conversations and theories I used necropolitics, to in a sense wrap up the themes that have been emerging in my research along the lines of necropolitical powers. That is to say the issues emerging here depict the struggles and injustices .This draws on the problematic tendency of the government to dictate to its citizens within the rules of 'biopower'. It addresses the ultimate issue of the country's control of citizen that is privileging some people while disadvantaging others. This dichotomy exists on the axis of race, class, economy and various societal structures. The dictatorship derived from colonial legacies maps itself on the lives of rats, human and land relations revealing the constant vicious cycles of different social injustices. The ultimate revelation here is that these issues can be traced to the biased tendency of a country on the privileged groups while failing the underprivileged groups. The failure from government to honour its mandate for all citizens pushes poor people to the rails of necropolitical deaths as highlighted by structural violence and the political economies of societies. It further alludes to the streams of poisons that have oppressed poor people coming from government drenched in the gravy of colonisation.

Following rats in this manner as a gateway revealed the horrific nature of the realities that poor people are faced with on a daily basis. Also revealed was the negative impacts suffered by the pests and environment when poor people are displaced by life conditions and further neglected by the government. The different identities the rat embodied was contextual and informed by cultural, political and socio-economic practices. Such can also be said of the people who were existing alongside these rats. Their experiences, responses and interactions with the rats, land relation and each other was also informed by these embedded practices. Through that they further perpetuated these vicious struggles as they tried to exist in a world that affected them while finding alternative ways of surviving.

The limitations noticeable in this research were, moving away from the initial questions because of the lack of adequate fieldwork due to Covid-19. I would, as a recommendation, revisit the issue of agricultural pesticides that were repurposed as rodenticides and interrogate the involvement of youth around the illegal acquirement and selling of these poisons. A deep ethnographic study to follow the channels of these 'street poisons' would benefit the ongoing research further in the project of rat infestation in poor communities in Cape Town. That angle of the research would benefit literature in this area and was the direction I had planned to go

on. How this research has also undertaken to address the fundamental questions in this study and the take away is that neither rats nor the people of these communities are responsible for the horrors they suffered. The government harbours colonial tools that have produce the toxic layers mapped in the dissertation.

References

Anthropology Southern Africa, 2005. Ethical guidelines and principles of conduct for anthropologists. *Anthropology Southern Africa*, *28*(3-4), pp.142-143.

Benya, A.J., 2016. *Women in mining: Occupational culture and gendered identities in the making* (Doctoral dissertation, University of the Witwatersrand, Faculty of Humanities, School of Social Science).

Bernard, H.R., 1995. Direct, reactive observation. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*, *2*, pp.310-331.

Beumer, K., 2014. Catching the Rat: Understanding Multiple and Contradictory Human-Rat Relations as Situated Practices. *Society & Animals*, *22*(1), pp.8-25.

Bozalek, V., 2017. Slow scholarship in writing retreats: a diffractive methodology for response-able pedagogies1. *South African Journal of Higher Education*, *31*(2), pp.40-57.

Bozalek, V. and Zembylas, M., 2017. Diffraction or reflection? Sketching the contours of two methodologies in educational research. *International Journal of Qualitative Studies in Education*, *30*(2), pp.111-127.

Buckland, A. and Nattrass, N., 2019. Understanding Preferences for Humane and Cruel Treatment of Pest Rodents in Site C, Khayelitsha, South Africa. *Journal of applied animal welfare science*, *23*(3), pp.315-324.

Buckle, A.P. and Smith, R.H. eds., 2015. *Rodent pests and their control*. CABI.

Bulbulia, S. and van Niekerk, A., 2012. Sustainable safety volunteerism in the Strand, Western Cape: Volunteer identity, motivation and socio-organisational experiences. *African Safety Promotion: A Journal of Injury and Violence Prevention*, *10*(2), pp.51-63.

Caplan, P., 2003. Introduction: anthropology and ethics. In *The Ethics of Anthropology* (pp. 1-33). Routledge.

Coward, R., 2020. *Toads, spiders, daddy long legs, even mice: let them all share our homes*. [online] the Guardian. Available at: <https://www.theguardian.com/commentisfree/2020/aug/30/toads-spiders-daddy-long-legs-even-mice-let-them-all-share-our-homes> [Accessed 11 August 2021].

Edelman, B., 2002. 'Rats are people, too!': Rat-human relations re-rated. *Anthropology Today*, *18*(3), pp.3-8.

Estes, N., 2021. *Bill Gates is the biggest private owner of farmland in the United States. Why? | Nick Estes*. [online] the Guardian. Available at: <https://www.theguardian.com/commentisfree/2021/apr/05/bill-gates-climate-crisis-farmland> [Accessed 11 August 2021].

Francioli, A.P., 2020. Energy use strategies and implications for fire risk amongst low-income households. *Jàmbá: Journal of Disaster Risk Studies*, *12*(1)./ jamba.v12i1 (Map)

Foucault, M., 1978. *The history of sexuality: An introduction* (Vol. 1). New York: Pantheon Books.

Galgut, E., 2017. Animal rights and African ethics: Congruence or conflict?. *Journal of Animal Ethics*, *7*(2), pp.175-182.

Geiger, S.N., 1986. Women's life histories: Method and content. *Signs: Journal of Women in Culture and Society*, *11*(2), pp.334-351.

Geyer, H.S. and Mohammed, F., 2016, March. Hypersegregation and class-based segregation processes in Cape Town 2001–2011. In *Urban Forum* (Vol. 27, No. 1, pp. 35-58). Springer Netherlands.

Gilbert, J., 2013. Land rights as human rights: the case for a specific right to land. *SUR-Int'l J. on Hum Rts.*, *18*, p.115.

Godsmark, C.N. and Rother, H.A., 2019. Part of the solution–an engaged scholarship approach for the sustainable reduction of street pesticides and poisonings. *Global public health*, *14*(10), pp.1535-1545.

Hall, R., 2004. A political economy of land reform in South Africa. *Review of African Political Economy*, *31*(100), pp.213-227.

Ho, K., 2007. *Structural violence as a human rights violation* (p. 3). Essex: University of Essex.

Kirksey, S.E. and Helmreich, S., 2010. The emergence of multispecies ethnography. *Cultural anthropology*, *25*(4), pp.545-576.

Koenig, D. and Matejowsky, T., 2015. The Contributions of Economic Anthropology to the Political Economy of Cities. *Economic Anthropology*, *2*(1), pp.1-21.

Lee, B.X., 2019. *Violence: An interdisciplinary approach to causes, consequences, and cures*. John Wiley & Sons.

Long, D., Hunter, C. and Van der Geest, S., 2008. When the field is a ward or a clinic: Hospital ethnography. *Anthropology & Medicine*, *15*(2), pp.71-78.

Mbembe, A., 2003. Necropolitics. *Public culture* 1, 15(1), pp. 11-40.

Mograbi, P., De Vos, A., Shackleton, C., Clements, H., Bezerra, J., Coetzer, K. and Maciejewski, K., 2020. *South Africa's land reform policies need to embrace social, economic and ecological sustainability*. [online] The Conversation. Available at: <https://theconversation.com/south-africas-land-reform-policies-need-to-embrace-social-economic-and-ecological-sustainability-145571> [Accessed 11 August 2021].

Mutero, W. and Makwara, T., 2018. The Economic Impact of Illegal Land Invasion: A Case Study of Lwandle Informal Settlement. *Cape Town, South Africa*.

Nattrass, N., Stephens, J. and Loubser, J.J., 2019. Animal welfare and ecology in the contested ethics of rodent control in Cape Town. *Journal of Urban Ecology*, *5*(1), p.juz008.

Okely, J., 2012. *Anthropological practice: Fieldwork and the ethnographic method*. London:Berg

Oliver-Smith, A., 2009. Anthropology and the political economy of disasters. *The political economy of hazards and disasters*, pp.11-28.

O'Reilly, K., 2005. *Ethnographic methods*. Routledge..

Posel, D. and Ross, F.C. eds., 2014. *Ethical quandaries in social research*. Cape Town: HSRC Press.

Puwar, N., 2004. Space invaders: Race, gender and bodies out of place.

Ramphele, M., 1993. *A bed called home: Life in the migrant labour hostels of Cape Town*. New Africa Books.

Robotham, D., 2005. Political Economy. A Handbook of Economic Anthropology. JG Carrier.

Rodney, W., 1972. *How europe underdeveloped africa*. London: Bogle-L'Ouverture.

Roelvink, G., 2010. Collective action and the politics of affect. *Emotion, Space and Society*, *3*(2), pp.111-118.

Rohner, R.P., 1977. Advantages of the comparative method of anthropology. *Behavior Science Research*, *12*(2), pp.117-144.

Roseberry, W., 1989. *Anthropologies and histories: Essays in culture, history, and political economy*. Rutgers University Press.

Ross, F., 2010. *Raw life, new hope: Decency, housing and everyday life in a post-apartheid community*. UCT press.

Rother, H.A., 2010. Falling through the regulatory cracks: street selling of pesticides and poisoning among urban youth in South Africa. *International journal of occupational and environmental health*, *16*(2), pp.202-213.

Rother, H.A., 2016. Pesticide vendors in the informal sector: trading health for income. *New Solutions: A Journal of Environmental and Occupational Health Policy*, *26*(2), pp.241-252.

Sandset, T., 2021. The necropolitics of COVID-19: Race, class and slow death in an ongoing pandemic. *Global Public Health*, pp.1411-1423.

Swartz, A., Levine, S., Rother, H.A. and Langerman, F., 2018. Toxic layering through three disciplinary lenses: childhood poisoning and street pesticide use in Cape Town, South Africa. *Medical humanities*, *44*(4), pp.247-252.

Thrift, N., 2004. Intensities of feeling: Towards a spatial politics of affect. *Geografiska Annaler: Series B, Human Geography*, *86*(1), pp.57-78.

Unequalscenes.com. 2020. *Unequal Scenes - Strand / Nomzamo*. [online] Available at: <https://unequalscenes.com/strand-nomzamo> [Accessed 11 August 2021].

Versfeld, A., 2017. *Intra-occurrence and health impactors: Tuberculosis, substance use and treatment in Cape Town, South Africa* (Doctoral dissertation, University of Cape Town).