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Faculty of Humanities

Exploring the decolonisation of the Environmental Management Curriculum in a Rural Historically Disadvantaged Institution of Higher Education

By

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DECLARATION

I, Inocent Moyo declare that "**Exploring the decolonisation of the Environmental Management curriculum in a Rural Historically Disadvantaged Institution of Higher education**" is my original work and that all sources have been accurately reported and acknowledged, and that this document has not previously, in its entirety or in part, been submitted at any university to obtain an academic qualification.

DEDICATION

To the triumph of ontological sovereignty

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ABBREVIATIONS/ACRONYMS

CBD: Convention on Biological Diversity

CEPS: Cultural Emergent Properties

DRC: Democratic Republic of Congo

HDI: Historically Disadvantaged Institution of Higher Education

IKS: Indigenous Knowledge Systems

IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

NASFAS: National Student Financial Aid Scheme

NEMA: National Environmental Management Act

NGOs: Governmental Organisations

PEPS: Personal Emergent Properties

SEPS: Structural Emergent Properties

TEK: Traditional Ecological Knowledge

ABSTRACT

In the Global South generally and South Africa specifically, calls for decolonising the university curriculum have gained momentum in the recent past. In South Africa, this was aptly demonstrated by the 2015/2016 #FeesMustFall protests which called for *inter alia*, a transformed university and its curriculum. This has led to calls for the decolonisation of academic disciplines like Geography, among others. Against this backdrop, this study analyses the decolonisation of the Environmental Management curriculum in a rural historically disadvantaged institution of higher education. The specific objectives are to (a) identify the basis of knowledge that constitutes the current Environmental Management curriculum in the discipline of Geography in a rural HDI using the curriculum document and the interview inputs/perceptions from academics and students, (b) assess the limitations and/or problems of the current Environmental Management curriculum using the notions of biography and geography of knowledge and (c) explore pedagogic approaches to recentre the biography and geography of knowledge in the current Environmental Management curriculum. To achieve these, a qualitative study was utilised in terms of in-depth interviews with two academic staff members and ten fourth-level (Honours) students who taught and studied this module in question, respectively. The findings suggest that the content, knowledge, and pedagogy in the Environmental Management curriculum under consideration is Eurocentric because it excludes IKS. In addition, the study findings suggest that both academics and students have identified gaps and/or limitations in the current Environmental Management curriculum because its locus of enunciation is not Africa and South Africa. This is the context within which the respondents in the study have suggested the need to include IKS which could contribute to epistemic access, epistemic presence, epistemic freedom as well as cognitive justice. All this suggests that a decolonised Environmental Management curriculum should include IKS as an integral component. In terms of pedagogy, the practical element must be emphasised together with the introduction of IKS holders into the learning spaces. By extension, assessment should address existing environmental problems in the settings where students and community members live. The suggested assessment approaches include action research. The proposed Environmental Management curriculum must not be alienated and alienating. It must be about the production of knowledge for life.

Key words: Curriculum decolonisation, Environmental Management, Geography, South Africa

CHAPTER 1: INTRODUCTION

1.1 Introduction

In the Global South generally and South Africa specifically, calls for decolonising the university curriculum have gained momentum in the recent past. In South Africa, this was aptly demonstrated by the 2015/2016 #FeesMustFall protests which called for *inter alia*, a transformed university and its curriculum (see e.g., Ndlovu-Gatsheni, 2015; Le Grange, 2016; Heleta, 2018; Behari-Leak and Mokou, 2019; Mahabeer, 2020; Maluleka, 2021). This has led to calls for the decolonisation of academic disciplines like Geography (Long et al, 2019), among others. There is an active debate about why and how Geography as a discipline is Eurocentric and continues to be gripped by and thus under the firm clutches of coloniality. For instance, Long et al (2019) have illustrated that in South African universities, geography courses on environmental management and/or conservation exclude the Indigenous Knowledge Systems (IKS), despite its demonstrated efficacy. There is also an overreliance on Western theoretical and methodological approaches. Thus, the current problem with geography as a discipline in South Africa is that "we are studying Africa from within using a lens that is without" (Long et al, 2019:2). In this regard, there is a need to understand and evaluate South Africa and the world from an African or South African perspective, rather than approaching the same through the lens of an external academic tradition. This calls for introducing the resistance slogans into the classroom and beginning to theorise and to strengthen the African identity within the academic community as well as legitimise it as distinct from the West but equally valuable (Long et al, 2019).

It has, therefore, been proposed that one of the ways through which the curriculum in the discipline of Geography can be decolonised is by using decolonial theory, which can allow academics and students to speak back to Eurocentricity. In a review of the state of the decolonisation of the undergraduate geography curriculum at South African universities, Knight (2018) suggested that there is a potential for decolonisation or general commitment to the goal of decolonisation by geography departments in all 26 universities. Different institutions faced different challenges and were therefore at different levels in terms of responding to the imperative of decolonising the knowledge in the curriculum, and how it was taught and assessed or evaluated. This suggests that curriculum decolonisation in the discipline of geography in general and South Africa specifically, is an area of active research and

scholarship. This study is located within this context but focuses specifically on the Environmental Management curriculum (Honours/4th level module) in the discipline of Geography in a rural Historically Disadvantaged Institution of Higher Education (HDI).

Decolonisation is a continuous process that started with dethroning the physical empires but is now focused on confronting and dismantling coloniality or the colonial present. Coloniality survives colonialism and it is the afterlife of colonialism. As an afterlife of colonialism, coloniality did not end when African countries for example, attained juridico-political independence at the dethronement of colonialism and apartheid (Mignolo, 2000, 2005; Wynter, 2003; Ndlovu-Gatsheni, 2015; Ndlovu-Gatsheni, 2013). Coloniality is a less visible and/or hidden, complex, sophisticated, and enduring vestige of colonialism. Coloniality, therefore, upholds colonial-like relations and is not a natural state of the world, but an invented power structure whose organising principle is race that has produced and continues to produce a hierarchical order of human beings in which Europe and North America and their knowledge system are considered superior and civilized while the rest of the world and its knowledge system is classified as primitive and savagery (Mignolo, 2000, 2005; Wynter, 2003; Ndlovu-Gatsheni, 2015; Ndlovu-Gatsheni, 2013).

This is the context within which decolonisation has emerged as a global movement against and to unsettle and dismantle the colonial present. The link between decoloniality and decolonisation is that "decoloniality announces the broad 'decolonial turn' that involves the 'task of the very decolonization of knowledge, power, and being, including institutions such as the university'" (Grosfoguel, 2007; Mignolo, 2005; Maldonado-Torres, 2007; Mignolo, 2007 cited in Ndlovu-Gatsheni, 2013:14). In this sense, decolonisation is the doing of decoloniality, in terms of practically putting in place strategies and/or actions which challenge coloniality in its various dimensions and manifestations. It entails among others, challenging and changing Western epistemologies, and restoring the culture, language, and personhood of the formerly colonized people (see e.g., Grosfoguel, 2007; Mignolo, 2005; Ndlovu-Gatsheni, 2013, 2015, 2018, 2020). This is why this study focuses on the decolonisation of the Environmental Management curriculum in a rural HDI based on the observation that there is a colonial present in the curriculum in question because of the erasure of IKS.

The five phases of decolonisation, namely rediscovery and recovery; mourning; dreaming; commitment, and action are relevant in defining what and how curriculum decolonisation is

conceptualised, understood, and operationalised in this study (Chilisa 2012). The notions of rediscovery and recovery entail colonised people rediscovering and recovering among others, their own history, culture, language, and identity, given that colonialism destroyed and then invented the history of the colonised people in different parts of the world and especially in the Global South (see Wynter, 2003). This means that "not only did colonization invent the colonized, it also disrupted the social patterns, gender relations and cosmological understandings of the communities and societies it invaded. In doing so, it rearticulated particular European understandings" of the world (Lugones 2011; cited in Bhambra 2014:118). The impact of this was the (dis)organisation (Moyo, 2020) of "the world into homogenous, separable categories arranged through hierarchical dichotomies and categorical logics" (Lugones 2011; cited in Bhambra 2014:118). As such, at its very core, decolonisation should be about ″the recovering, valuing, and internationalizing of postcolonial Indigenous epistemologies, methodologies, and methods″ (Chilisa, 2012: xvi). The question of mourning relates to the awakening of the colonised to the colonial present which permeates their everyday lives, and it is an integral part of attempting to heal from the brutality of colonisation and coloniality. It is this mourning which leads to dreaming, precisely because it is in the process of awakening and mourning that the formerly colonised begin to see the world from their biography and geography. This includes the recognition of their histories and IKS, *inter alia*, as pillars of new futures and possibilities outside Euromodernity. These are new futures and possibilities free from or critical of Euromodernity. The question of commitment relates to political activism in terms of the resolve that the colonised make to write themselves back into history, knowledge, and humanity (see Chilisa, 2012). This is important because colonisation excluded colonised people from the human family to the category of the subhuman (Wynter, 2003; Ndlovu-Gatsheni, 2013). The notion of action entails the translation of dreams and commitments into concrete actions and procedures to achieve decolonisation for the benefit of all people including Indigenous communities (see Chilisa, 2012).

Against this backdrop, this study explores how the Environmental Management curriculum in a rural HDI can be decolonised. This is because the current curriculum in question does not include IKS. By grappling with the question of how the curriculum under consideration can and must be decolonised, this study explores issues of rediscovering and recovering, mourning; dreaming, commitment, and action in the context of bringing IKS back into the curriculum and more importantly how and why this needs to be done so that it reflects the biography and geography of both the community, the students and academics. Differently stated, this study

engages with the limitations or problems of the current Environment Management curriculum, why and how it must be decolonised, and finally what it must look like so that it is reflective of an African University and not a university in Africa. This is a curriculum decolonisation task that troubles and unsettles the complacent position and status of Euromodernity in a curriculum like Environmental Management. In the context and limits of this study, this speaks to all five phases of decolonisation proposed by Chilisa (2012).

1.2 Background and context

The rural HDI in question was established in the 1960s by the apartheid government for a few black people who were expected to make it to university based on the apartheid government policies of separate development. As a result, the institution like other HDIs still bears an apartheid legacy (Africa and Mutizwa-Mangiza, 2018). Consequently, investigating the issue of curriculum decolonisation in an HDI which must reinvent and free itself from the ghost of apartheid and colonialism in an academic discipline like Geography in which there are serious calls for decolonisation, is necessary. Calls for curriculum decolonisation bring to the fore matters of epistemic access (Boughey, 2005; Morrow, 2009; Shay, 2015; Luckett and Shay 2017) and epistemic presence (see e.g. Mbembe, 2015; Shay, 2013, 2015; Luckett and Shay 2020). Epistemic access generally means that academic ways of knowing are inclusive so that all people from different backgrounds and classes access the curriculum (Boughey, 2005; Morrow, 2009) whereas epistemic presence calls for the inclusion and representation of other knowledge which transcends Western canon and its Eurocentricity (see e.g. Mbembe, 2015; Heleta, 2016; Ndlovu-Gatsheni, 2018, 2020). Epistemic access is necessary because physical access to the University does not necessarily translate to access to the curriculum due to a plethora of socio-historical, economic, cultural, and other factors (Boughey, 2005, 2008; Boughey and McKenna, 2016). This could be the reason why in South Africa many university students from underprivileged backgrounds and communities fail (Boughey, 2005, 2008). Such students are inside the university walls but at the same outside the same because of an exclusive curriculum.

Epistemic presence brings to the fore the need for the recognition of other forms of knowledge besides the Western canon. Such knowledge must be seen as being legitimate because they are and have equal worth as any other knowledge (Mbembe, 2015). If a university lives up to its founding principles as a place, space, and institution where different knowledges flourish leading to open epistemic diversity and critical cosmopolitan pluriversalism (Mbembe, 2015),

it then becomes necessary to question and correct through decolonisation, instances where this is not so, and this logic drives this study. Against this backdrop, the notions of epistemic access and presence are the two axes that anchor this study and thus assist in analysing and making sense of how the Environmental Management curriculum in the discipline of Geography in a rural HDI can and must be decolonised.

1.3 Problem Statement

In South Africa, the National Environmental Management Act (NEMA) [No. 107 of 1998] provides the general guidelines and frameworks which must inform environmental management in terms of its conceptualisation, implementation, and practice. Central to environmental management is the need to ″place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably″ (NEMA, 1998:11). Section 2(4)(b) states that ″environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option″ (NEMA,1998:13). Overall, Section 2 (Chapter 1) of NEMA suggests that all forms of knowledge including traditional and ordinary knowledge must be considered in matters of environmental management and governance. What is therefore problematic is that the Environmental Management curriculum in the discipline of Geography does not include traditional forms of knowledge or IKS as one of its focus areas of study. This becomes a decolonial issue because of the need to restore IKS into the curriculum since it is a complete body of knowledge that needs to be studied in its own right as immortalised in NEMA, just like the Western canon. Thus, the basis of analysing the decolonisation of the Environmental Management curriculum is that NEMA states that IKS must be included and the fact that it is not, is therefore, a matter of decolonisation which this study takes up.

Differently stated, if NEMA states that Western knowledge and traditional knowledge must be mobilised in Environmental Management and Governance, why has this not been done? What do the academics charged with teaching this curriculum think and say? What about the students? What do the academics and students think concerning the practical ways of decolonising the Environmental Management curriculum to afford epistemic access and promote epistemic presence? This is not a question of if the Environmental Management curriculum can be decolonised but what must be done and how, in pursuit of what Shay (2015)

and Luckett and Shay (2020) correctly see as the unavoidable and overdue imperative of an inclusive and transformed curriculum in a South African university. Therefore, this study examines how the Environmental Management curriculum must be decolonised to include IKS because NEMA expects this to be so. In analysing this decolonisation, the focus is the curriculum in question and what the people involved in teaching and learning it want it to be decolonised and how. In this sense, the study should demonstrate how the Environmental Management curriculum must be decolonised based on both the expectations of NEMA and the people on the ground (academics and students). To press the point further, it needs to be emphasised that any curriculum and the disciplinarisation of knowledge does not come from God but from people to serve particular needs and purposes (Foucault, 1982). If there exists an Environmental Management curriculum that espouses Eurocentricity, that immediately shows there is an epistemological problem that must be decolonised to produce knowledge for existence and life and not for power.

1.4 Research questions and objectives

1.4.1 Main research question

The overarching research question of this study is;

How can the Environmental Management curriculum in the discipline of Geography in a rural HDI be decolonised?

1.4.1.1 Secondary research questions

a) What are the hegemonic orders in the current Environmental Management curriculum?

b) What or which aspects of the Environmental Management curriculum need to be decolonised?

c) How can the Environmental Management curriculum be decolonised to promote epistemic access and presence?

d) Why does the biography and geography of knowledge in the current Environmental Management curriculum need to be recentred?

1.4.2 Research aim

The aim of the study is to explore how the Environmental Management curriculum in the discipline of Geography in a rural HDI can be decolonised.

1.4.2.1 Research objectives

The specific objectives of the study are to;

a) Identify the basis of knowledge that constitutes the current Environmental Management curriculum in the discipline of Geography in a rural HDI using the curriculum document and the interview inputs/perceptions from academics and students.

b) Assess the limitations and/or problems of the current Environmental Management curriculum using the notions of biography and geography of knowledge.

c) Explore pedagogic approaches to recentre the biography and geography of knowledge in the current Environmental Management curriculum.

1.5 Organisation of the study

This mini dissertation is constituted of six chapters. Chapter 1 provides an orientation to the study by discussing the study background, the problem statement, aims and objectives, and research questions. Chapter 2 discusses the theoretical foundations of the study in terms of the theories which provide an analytical framework for this research. These theories are decoloniality and Gramscian counter-hegemony. Chapter 3 provides a conceptual framework and literature review on curriculum and curriculum decolonisation in relation to the discipline of geography. Chapter 4 describes the study context and methodology by outlining the study setting as well as the methodological approach in terms of the research paradigm and design as well as data collection and analysis procedures and ethical considerations. Chapter 5 analyses the data which was collected in response to the research objectives and questions. Chapter 6 is the last chapter, which presents a summary of the study research and proposes recommendations regarding practical strategies that need to be followed to decolonise the curriculum.

1.6 Chapter summary

This chapter introduced the mini dissertation by discussing curriculum decolonisation and why it has generally become important, necessary, and unavoidable more so in the discipline of Geography generally and the Environmental Management module in a rural HDI. The chapter also problematised the study by foregrounding the reality of the erasure of IKS from the Environmental Management curriculum and why and how this provides a scholarly site which the study occupies.

CHAPTER 2: THEORETICAL FRAMEWORKS

2.1 Introduction

To provide a theoretical framework, this study deploys decolonial theory and the Gramscian notions of hegemony and counter-hegemony to make sense of the decolonisation of the Environmental Management curriculum in the discipline of Geography in a South African rural HDI. As such, this chapter starts with an analysis of decolonial theory followed by Gramscian notions of hegemony and counter-hegemony and their theoretical purchase in this mini dissertation.

2.2 Decoloniality

A good starting point for understanding decoloniality is to first explain coloniality. Coloniality does not mean the same thing as colonisation because the latter is a historical moment whereas the former is a structure that sustains colonial-like relations between the formerly colonised countries and the colonisers (the Empire) (Mignolo, 2000, 2005; Wynter, 2003; Ndlovu-Gatsheni, 2015). It constitutes "the invisible vampirism of technologies of imperialism and colonial matrices of power that continue to exist in the minds, lives, languages, dreams, imaginations, and epistemologies of modern subjects in Africa and the entire Global South" (Ndlovu-Gatsheni, 2013: 48). Coloniality "survives colonialism. It is maintained alive in books, in the criteria for academic performance, in cultural patterns, in common sense, in the self-image of peoples, in aspirations of self, and so many other aspects of our modern experience. In a way, as modern subjects we breathe coloniality all the time and every day" (Maldonado-Torres, 2007:243). This results in coloniality being a structural power, epochal condition, and epistemological design which is at the center of the current world order (Maldonado-Torres, 2007). The full implication of this is that the current world order is an "epistemic and ideological trickery" which has placed Europe "at the centre of the idea and philosophy of human history and which is a cultural expression of Euromodernity mediated by the inferiorization of others and superiorization of Europeans" (Ndlovu-Gatsheni, 2018:1). Decoloniality thus seeks to challenge and unmask this trickery premised on three concepts which are the coloniality of power, coloniality of being and coloniality of knowledge (see e.g. Ndlovu-Gatsheni, 2013). Below is a discussion of these concepts leading to an identification of what is most applicable to this research, which serves as an analytical guide.

2.2.1 Coloniality of power

Coloniality of power condenses around the asymmetrical power relations between European and North American countries on the one hand and the Global South on the other, which are

separated by an imaginary abyssal line. Based on the abyssal line whose organizing principle is race, European and North American countries belong to the Zone of Being whereas countries in the Global South belong to the Zone of Non-Being (see Santos, 2007). In this sense, the unseen abyssal line has led to abyssal thinking which has materialized in Whiteness as a symbol of complete human beings and "Others" as incomplete human beings (see Santos, 2007). Thus, this bifurcation into the Zones of Being and Non-Being has justified the imposition of slavery, exploitation, epistemicides and linguicides on the latter by the former because they are assumed to be complete human beings with a right to rule over those considered subhuman (see e.g., Wynter, 2003; Ndlovu-Gatsheni, 2015). Coloniality of power "is a concept that decolonial theorists use to analyse the modern global cartography of power and to understand how the modern world works" (Ndlovu-Gatsheni, 2015:33). This may include the teaching or imposition of the Western curriculum on African people to continue the domination. The point is that knowledge and where it comes from matters to the extent that it shapes and constructs reality based on which power rests.

2.2.2 Coloniality of being

Coloniality of being refers to the colonisation of the human itself (Maldonado-Torres, 2007). This is a question of human ontology, but our current understanding of what it means to be human is a legacy of colonialism to the extent that it projects a Eurocentric construct of who or what a human being is (Wynter, 2003). This means that the Eurocentric "conception of the human, which over represents itself as if it were the human itself" illustrates the coloniality of being on which modernity rests and has instituted itself (Wynter, 2003:260). That is, "the construction of Man, derived from Christian theology, secular philosophy, and Western sciences, is equated to and normalised as the correct and only way of being human" (Desai and Sanya, 2016:713). A case in point is that during the Renaissance period the Latin- Christian *homo religiousus* was overtaken in importance by *homo politicus,* in which a human being was the White Man who was governed by the so-called scientific logic, reasoning, and the state. This is the context within which racist theories of human evolution which led to the categorisation of human beings (by nature difference) as propounded by Charles Darwin gained importance (Wynter, 2003). The point is that such constructs "have developed in tandem with theology, science, and the formation of the modern nation-state" (Desai and Sanya, 2016:713). If that is the case, which it is, that invention was introduced to human existence, the question of being human or the ontology of the human shows that all human beings are the same and have a common ancestry (Wynter, 2003). Differences that have been manufactured by

Europeans in the past and whose impacts have led to murder and the enslavement of some people are false and these must be exposed, their impacts known and acknowledged so that new futures can be forged.

This is an important issue to raise because if being human "centres the truth of deep solidarity, one that recognises that human beings are inextricably bound to one another, to all planetary life, and to the cosmos" (Desai and Sanya, 2016:718), this is the site which can be occupied by a higher education curriculum to construct new truths and futures which foreground this truth about being human. This is particularly so given that "revisioning curriculum drawing on Wynter engenders a pedagogy of solidarity that can disturb and reject static cultural essentialisms and confront how White supremacy continues to inform what is worthwhile knowledge" (Gaztambide-Fernández 2012 cited in Desai and Sanya, 2016:718). More than that, it ″appals us that the West can desire, extract and claim ownership of our ways of knowing, our imagery, the things we create and produce, and then simultaneously reject the people who created and developed those ideas and seek to deny them further opportunities to be the creators of their own culture, and own nations″ (Smith, 2012:1).

Thus, Wynter (2003) suggests that curriculum decolonisation must be disruptive to the extent of exposing and unmasking Eurocentrism, its lies, and deceit. This must involve introducing into the curriculum the difficult questions about the past and how they manifest in and implicate the present, than a casual reference to the history. Curriculum decolonisation must be "informed by how we understand what it means to be human and what we hope for our collective future" (Desain and Sanya, 2019:716). Drawing on the proposition by Wynter (2003) that being human essentially involves the recognition that the human race shares a common origin and is bound together in solidarity and a common future, this is the context in this study where I bring to the centre stage matters of decolonising a Geography curriculum in the form of an Environmental Management curriculum so that it also captures the IKS of African people. It is contended that the curriculum cannot be complete if it is only based on Western canon. Therefore, how the people who teach and learn this curriculum, as well as want it decolonised is an important point of conversation in this study.

2.2.3 Coloniality of Knowledge

Coloniality of knowledge is about "the politics of knowledge generation as well as questions of who generates which knowledge, and for what purpose" (Ndlovu-Gatsheni, 2013:11). The notion of coloniality of knowledge allows one to question why Europe and North America are

the center of knowledge leading to the rest of the world including Africa and its people being regarded as and reduced to subhuman people without knowledge (see e.g. Wynter, 2003, Heleta, 2016; Ndlovu-Gatsheni, 2018, 2020; Maluleka, 2021). This overrepresentation of Europe has led to universities in Africa and not African universities which are active sites for reproducing Eurocentricity. This also means the curriculum which is taught in many African universities is what Hopper and Richards (2012) refer to as the software of coloniality. While on the subject of the software of coloniality, Hopper and Richards (2012:45) reminds us that;

> Law, like economics, science and education is a box. These boxes constitute four pillars of modernity. Law protects the propertied; science valorises a mechanistic worldview over holistic cosmologies; economics upholds a metaphysics that justifies survival of the fittest over the metaphysics of sharing that governs a large majority of livelihoods in the world; education refuses to recognize and build on the knowledge that the children from non-western systems of thought hold. Among the four boxes, circuits of fragmentation and dehumanization are masked and rationalized.

In this regard, "what is even more disturbing is that African children and youth begin a journey of alienation from their African context the very moment they step into the school, church, and university door" (Ndlovu-Gatsheni (2013:11). The children "begin the painful path of learning to hate their progenitors as demons, they begin to be taught that all the knowledge they possessed before coming to school was nothing but folk knowledges, barbarism and superstitions that must be quickly forgotten" (Ndlovu-Gatsheni (2013:11). Such alienation is indicative of the extent to which coloniality has invaded the mental universe of the colonised people (Quijano, 2007). This invasion of the mental universe has been characterised as the destruction and removal of the hard disk of the original Indigenous knowledge systems and replacing it with a download of software of European knowledge and language into the African minds (Ngũgĩ wa Thiong'o, 1986, 2009). This amounts to the Europeanisation of the world and subalternisation of the rest of the world, including Africa (Ndlovu-Gatsheni, 2018).

Using the notions of epistemic access and/or justice, it is, therefore, possible to analyse how the academics and students involved in the Environmental Management curriculum see as problematic and why and how this needs to be addressed. In this regard, decolonial concepts (which are discussed in detail in Chapter 3) like epistemic freedom, cognitive justice and biography, and geography of knowledge are mobilised to understand and propose how the curriculum in question must be decolonised afford to epistemic access and presence. For instance, epistemic freedom which essentially refers to the "right to think, theorize, interpret the world, develop own methodologies and write from where one is located and unencumbered by Eurocentrism" (Ndlovu-Gatsheni, 2018:13), should assist to not only to question why and how IKS is excluded in the curriculum in question, but also how the same IKS must be included

to achieve epistemic access and presence. Adopting such an analytical stance assists this study in examining the problem around the fact that the Environmental Management curriculum in the discipline of Geography in a rural HDI does not include traditional forms of knowledge or IKS as one of the focus areas of study.

Taking all this into consideration, one must return to the question of what decoloniality is, as promised at the beginning of this discussion. Therefore, decoloniality

> is a concept, it's an analytic, but it's also, which is particularly key for me, a form of praxis, which is increasingly assumed by social movements, by communities, by engaged intellectuals, by artists, by activists and many, many others against the ongoing violence, dispossession, and war altogether waged against specific bodies, against people's cultures, knowledges, spiritualities, and against nature, and for the insurgent and resurgent creation, construction, and possibility of other modes of that knowledge being existence in life (Walsh: 2021:1).

Decoloniality "resists or is against colonial domination. It is not just resistance or a posture of resistance, but it's for the ongoing creation of ways of thinking, of ways of knowing, of ways of sensing, being, and living outside coloniality. Outside or despite coloniality, and in its borders, its fissures, and it's cracks. So, in that sense decoloniality necessarily brings forth or points to the issue of coloniality" (Walsh, 2021: 1). At the "centre of decoloniality is the idea of remaking the world such that the enslaved, colonised, and exploited peoples can regain their ontological density, voice, land, history, knowledge and power" (Ndlovu-Gatsheni, 2015:23). To press the point further, decoloniality "can be best understood as a pluriversal epistemology of the future - a redemptive and liberatory epistemology that seeks to de-link from the tyranny of abstract universals" (Ndlovu-Gatsheni, 2013:13).

Differently stated, coloniality has led to the dismemberment of colonised people in the form of the genocide, epistemicides and linguicides among others and decolonisation, including that of the curriculum which is proposed in this dissertation is, therefore, a liberatory project aimed at remembering/confronting the effects of coloniality (Ngugi wa Thiong'o, 2009, Ndlovu-Gatsheni, 2015). This is all important because "decoloniality is distinguished from an imperial version of history through its push for shifting of geography of reason from the West as the epistemic locale from which the 'world is described, conceptualised and ranked' to the ex-colonised epistemic sites as legitimate points of departure in describing the construction of the modern world order" (Ndlovu-Gatsheni, 2013:13). In all this, it is important to emphasize that decoloniality "is not a singular theoretical school of thought, but a family of diverse positions that share a view of coloniality as the fundamental problem in the modern age" (Ndlovu-

Gatsheni, 2013:13). The relevance of decoloniality as a theoretical framework in this study is that it assists to examine a university curriculum in a so-called post-colonial state, in which at its face value (Environmental Management curriculum) appears inclusive, but its exclusion of IKS shows that it is driven by coloniality, which must be corrected.

2.3 Gramscian and neo-Gramscian theory

Antonio Gramsci, an Italian theorist whose thoughts were influenced by Marxism, is credited with the notion of hegemony. Hegemony, in Gramsci's view, entails elites gaining the support of "the great masses of the population to the general direction imposed on social life by the dominant fundamental group" (Gramsci, 1971:145). Hegemony, as it relates to the entire world, is "based on a coherent conjunction or fit between a configuration of material power, the prevalent collective image of world order (including certain norms), and a set of institutions which administer the order with a certain semblance of universality" (Cox 1981:139). A connection can be made between the Gramscian hegemony and coloniality of power and colonial matrix of power. This is because coloniality of power and colonial matrix power lead to Eurocentric domination, which can be equated to Gramscian hegemony. Such hegemony is maintained by *inter alia,* the media, education, and religious institutions which contrive consent and a semblance of legitimacy (see e.g., Heywood, 1994) because based on the link “between the economic structure and the state with its legislation and coercion, stands civil society” (Gramsci, 1971: 209).

Civil society in the original Gramscian idea refers to institutions like the media, educational institutions, and religious institutions that aim to strengthen the hold of the capitalist state on the public (see, for example, Morton 2003). Modern civil society is not included in this definition. This brings to the fore the idea of a historical bloc, which is defined as a unity of "economic and political aims, but also intellectual and moral unity... on a 'universal' plane" (Gramsci 1971:181). A historical bloc is defined in this context as “the way in which leading social forces within a specific national context establish a relationship over contending social forces. It is more than simply a political alliance between social forces represented by classes or fractions of classes. It indicates the integration of a variety of different class interests that are propagated throughout society” (Morton, 2003:157).

Hegemony is “located in the overlapping and interactive structures of society, economy, culture, gender, ethnicity, class, and ideology which can be constitutive of and sustain political

authorities" (Cox, 1994: 366). As such "the general notion of the state includes elements which need to be referred back to the notion of civil society (in the sense that one might say that state = political society + civil society, in other words, hegemony protected by the armour of coercion)" (Gramsci 1971:263). In this sense, institutions like schools and universities which are controlled by elites are tools for sustaining hegemony based on the fact that such institutions select and control what is taught and how (curriculum) and in this way impose the direction of the state and social life, according to what the elites want (see e.g., Carroll and Greeno, 2013; Morton, 2003). Stated differently, institutions like universities use the curriculum as technologies of surveillance to ensure that students study what conforms to the socio-political and economic and other orders and hegemonies. Seen in this light, the curriculum, therefore, assumes the role of the Foucauldian panopticon (see Foucault,1977) to control, discipline, and produce docile subjectivities that subscribe to the direction of the state as desired by the elites.

Notwithstanding, it is not impossible for the populace to oppose such hegemony and control because they (people) engage in a "war of attack" (Gramsci 1971). A "war of attack" can only succeed if there is a preceding "war of position", in which the ideas and beliefs of people need to be changed to align with a revolutionary stance (Gramsci 1971). This is the context within which it has been advanced that hegemony generates counter-hegemony (just like coloniality generates decoloniality) due to the hegemonic order's inherent contradictions and its inadequacy to address the needs of the oppressed people (see e.g. Morton 2003). As such, hegemony and counter-hegemony can be regarded as "simultaneous double movements" that are mutually constitutive (Persaud 2001:49). That is why Gramsci`s ideas (neo-Gramscian theory) such as counter hegemony have been used to question existing political, economic, social, and other hegemonic orders, including the creation of knowledge itself, in broader social and political discourses (Heywood 1994). This is the context within which this study utilises Gramscian and neo-Gramscian ideas of counter-hegemony to question and decolonise the Environmental Management curriculum within the discipline of Geography in a rural HDI. That is to say, the provided Environmental Management curriculum provides a site or arena to think of or propose alternatives to the *status quo* in a typical simultaneous double movement. This research can also be seen as constituting a "war of position", leading to a "war of attack" in the form of the actual decolonisation of the curriculum in question. This can be seen as unsettling or challenging the hegemony of the current Eurocentric curriculum with its Eurocentric hegemonic orders like the practice of Environmental Management which has

effectively erased IKS. This is worth emphasizing because all curricula are not innocent because they carry and transmit ideologies and hegemonic orders (Jansen, 2017). To put it in Althusserian framing, the curriculum, therefore, becomes an ideological state apparatus or an instrument through which the ideologies of the elites are implemented leading to the domination of the populace. There is no use of force or the army and police- the Althusserian repressive state apparatus, but knowledge and ideology.

In other words, the elites control and discipline the populace through ideologies transmitted by the curriculum. Although this may also apply to other disciplines, it is advanced that what is particular about the Environmental Management curriculum is that Western canon is taken as the standard, otherwise why is the whole IKS not in the curriculum? This makes the case of Environmental Management very striking. This is why this study through conversations with academics and students draws attention to the fact that the curriculum under consideration is incomplete because it excludes the IKS. Drawing attention to the incompleteness of the curriculum will galvanize academics and students to delve into the deep questions of why this is the case and why and how this needs to be changed within the logic of decolonisation. This is considered counter-hegemonic in the true neo-Gramscian proposition.

2.4 Chapter summary

The discussion of decolonial theory and the Gramscian notions of hegemony and counter-hegemony in this chapter suggests that the Environmental Management curriculum in the HDI under consideration is haunted and troubled by the colonial and apartheid demons and ghosts, which must be exorcised and permanently cast out. This is because these theoretical frameworks have assisted in shining the light on problematic aspects of the curriculum under consideration and by these means allowed difficult questions such as what/which knowledge drives and the limitations of the current Environmental Management curriculum to be raised. The analysis of data (Chapter 5) assists in responding to these questions to advance proposals on how the curriculum must be decolonised.

CHAPTER 3: CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

3.1 Introduction

This chapter discusses the main concepts that underpin this study to build a conceptual framework that is integrated into the literature review, focusing on decolonising the curriculum. These concepts include biography and geography of knowledge, epistemic freedom, cognitive justice, and Foucauldian Panopticism. As such, the chapter focuses on these concepts and then at the same time integrates them with a critical review of the literature on decolonisation and curriculum in general and in relation to the discipline of geography generally and Environmental Management specifically to provide a context for this study.

3.2. Biography of Knowledge

The biography and geography of knowledge is the ″geopolitical ordering of knowledge and the questions of who produces knowledge, how and where, and for what purposes″ (Walsh, 2012:11). Asking these questions leads to the recognition of the fact that the geopolitics of knowledge production have placed Europe and North America in a position of dominance because they produce the knowledge which forms the basis of many university curricular globally. This is predicated on the fact that due to colonial conquest, Europeans not only exterminated natural life leading to genocides but also exterminated the knowledges and languages (epistemicides and linguicides respectively) of the colonised people (Ngugi wa Thiong'o 2009a; Ngugi wa Thiong'o 2009b) and in their place, was installed Eurocentricity. Fanon (1968:210), puts it this way; ″colonialism is not satisfied merely with holding a people in its grip and emptying the brain of all form and content. By a kind of perverse logic, it turns to the past of oppressed people, and distorts, disfigures, and destroys it″. This is why Ndlovu-Gatsheni (2018: 24) correctly argues that "on the graveyard of African Indigenous knowledges, colonialism planted European memory". The effect of this is that "Western enlightenment thought has [...] posited itself as the wellspring of universal learning, of Science and Philosophy [...], it has regarded the non-West —variously known as the ancient, the orient, the primitive world, the third world, the underdeveloped world, the developing world, and now the global south —primarily as a place of parochial wisdom, of antiquarian traditions, of exotic ways and means" (Comaroff and Comaroff 2012:1). In the context of Africa, the acceptance of the Eurocentric curriculum in universities as universal has meant that "the African academy has remained a site of inculcation of Western knowledge, values, ways of knowing and world views

that are often taught as universal values and scientific knowledge" (Ndlovu-Gatsheni, 2018:29).

This makes Europe and North America the producers of what has been accepted as universal knowledge, but, all this must be ″confronted, and a different thought constructed and positioned from the histories and subjectivities of the people″ (Walsh, 2012:11). One dimension of the content of this confrontation is that African scholars, in African universities together with their students and communities, must contribute to the knowledge in the curriculum that is taught if this knowledge is to be relevant and contribute to authentic education. This directly speaks to the Environmental Management curriculum which is the focus of this study to the extent that it excludes the IKS of African people. This fact suggests that what is taught is Eurocentricity, and the paradox is that such knowledge is about managing the African environment. This effectively means European ideas of how the African environment should be managed are used as the standard based on how and what students and by extension future environmental managers and/or practitioners are taught. Such a curriculum is entrenched in *″speaking about* versus *speaking or working with″* African people (Walsh, 2012:21). It is in this sense that in this study the notion of the biography of knowledge is used to deepen the analysis of how the Environmental Management curriculum must be decolonised if it is to be about and centered on managing the African environment by Africans. It is problematic that the knowledge of African people is not reflected in a curriculum that is taught in an African university to African people and this becomes a decolonial matter.

If the curriculum is to be meaningful and effective, the concept of biography of knowledge suggests the need to understand and integrate the views of the people involved in the curriculum. African people have valid knowledge systems, especially about managing their environment. It must be remembered that before the European conquest and the subsequent dispossession of African people of their land, they (African people) had lived in harmony with nature and successfully conserved and managed their land. It was through colonial conquest and the dispossession of land and converting it into Protected Areas that suddenly constructed African people as destructive to the environment (Nelson, 2003). For scholars like Nelson, this environmental apartheid, which assumed the supremacy of Western environmental conservation approaches over those that Africans had effectively used for centuries to conserve the environment, demonstrates that "like Christianity historically, current environmentalism is possessed of a missionary spirit. In this respect and others, the rise of environmental

colonialism is not unrelated to Christianity in defending forms of colonialism" (Nelson 2003:67).

What is instructive about environmental colonialism is that it has mostly led to among others, the undermining of IKS relevant to environmental conservation (Moyo, 2022). In this (il)logic, Africa had to be protected from Africans and this protection was led by Europeans through environmental apartheid and the entrenchment of Eurocentric epistemologies in conserving the environment (see e.g., Neumann 1998, 2001, 2002, 2004a, 2004b). As has become apparent, there was nothing special, civilisational and/or conservatory of the environment by the European settlers but ideological and epistemological chicanery to conceal and justify land grabbing or theft (see e.g., Neumann, 1998; Nelson, 2003; Ramutsindela, 2004; Moyo, 2022). This is why decolonial scholars have referred to colonialism and coloniality as "sick, decadent and decivilizing" (see Cesaire, 2000:31) and a declaration of war against humanity (Ndlovu-Gatsheni, 2020).

This background is intended to show that African people have always had and can produce the knowledge that can be taught in modules like Environmental Management, and this can be done by capturing their views and lived experiences and how they understand and practice environmental management. This is tantamount to the rediscovery and recovery (Chilisa, 2012) in which African people must rediscover and recover what was lost because of colonial conquest. African people must write themselves back to knowledge and history. In other words, using the notion of the biography of knowledge, this study analyses and proposes the concrete actions and/or steps that need to be taken to decolonise the curriculum such that the knowledge of African people is an integral part of the curriculum with an equal weighting and standing like Western canon resulting in ecologies of knowledge (Santos, 2014) and ontological pluralism which recognizes multiple realities and knowledges (see e.g., Ndlovu-Gatsheni, 2015; Maluleka, 2021). African people, which includes academics, and students must contribute to the production of knowledge by making an input into the curriculum in terms of its content and how it is taught and assessed beyond what is currently available and practiced. All this responds to and expands the application of the issues of epistemic access and presence in the context of decolonising the Environmental Management curriculum as explained in Chapter 1. In this sense, ″all of this is to say that in confronting the hegemony and coloniality of western thought, it is necessary to also confront and make visible our own subjectivities and practice″ (Walsh, 2012:20).

3.3 Geography of Knowledge

In the definition of the biography of knowledge in Section 3.2, it is evident that both biography and geography of knowledge are linked. If the biography of knowledge is about who produces knowledge, then the geography of knowledge is about where the knowledge is produced. In this view, the fact that Eurocentric knowledge has attained a universal status, Europe is regarded as a teacher of the world and the idea of Africa as a pupil is pervasive (Ngugi wa Thiong'o, 1986). This means that Europe is overrepresented in epistemology, social theory, and education (see e.g. Chakrabarty, 2000; Ndlovu-Gatsheni, 2018). The result of this overrepresentation is that knowledge and the world are interpreted from a European perspective. This must change in terms of ″taking ourselves seriously and confidently thinking from where we are located, that is, accepting Africa as a legitimate epistemic centre from which we make sense of the world. This way we begin to resolve the problems of intellectual extraversion and epistemic dependence″ (Ndlovu-Gatsheni, 2015:39). This amplifies the position by Ngugi wa Thiong'o (1993: xvi–xvii) on ″the need to move the centre from its assumed location in the West to a multiplicity of spheres in all the cultures of the world″. This recentering essentially involves the provincialisation of Europe and the deprovincialisation of Africa (see e.g., Chakrabarty, 2000; Ndlovu-Gatsheni, 2018). Europe is one of the provinces of the world and it is not the world and therefore, the provincialisation of Europe entails confronting and reducing its overrepresentation in epistemology, social theory, and education. Provincialisation is deEuropeanisation of the education, epistemology, and social theory among others. DeEuropeanization should therefore be seen ″as 'deprovincializing Africa' – an intellectual and academic process of centring of Africa as a legitimate historical unit of analysis and epistemic site from which to interpret the world while at the same time globalizing knowledge from Africa″ (Ndlovu-Gatsheni, 2018:4). It is about shifting the geography of reason (Gordon, 2020).

In other words, the locus of enunciation (Grosfoguel, 2007), which is referred to as the"geo-political, body political and social location from which the world has to be seen and interpreted" (Ndlovu-Gatsheni, 2018:40) should be Africa. In our university curriculum, we must speak from Africa which must be the locus of enunciation. In this sense, "the starting point is to be clear that Africa is the base from which we look at the world. This repositioning of our worldsensing entails taking the African archive as the starting point in our research, teaching and learning″ (Ndlovu-Gatsheni, 2018:39). This should be seen as a refusal to remain within

imperial reason (Mignolo, 2007). Europe is not and should not be the center of Africa`s consciousness. Africa is not an extension of Europe (see e.g. Mbembe, 2015). Taking all this into consideration, the notion of the geography of knowledge assists this study to deepen the analysis of how a curriculum like Environmental Management must be decolonised so that it reflects the locus of enunciation as Africa. This is why the emphasis of this study is on how the curriculum must be decolonised because it excludes the IKS of the African people. Such decolonisation of the curriculum can assist in achieving or attaining the epistemic presence of the formerly colonised people whose knowledge was either killed or silenced, or both. Indeed, if Africa is a legitimate epistemic centre, which it is, from which to analyse, interpret and understand the world (Ndlovu-Gatsheni, 2018), it is necessary to rediscover and recover IKS back into the curriculum like Environmental Management. This should lead to ecologies of knowledges and ontological pluralism (Santos, 2007). Ecologies of knowledges and ontological pluralism will assist in exposing the lie around the universality of Euromodernity. Such an analytical position is ″informed by a strong conviction that all human beings are not only born into a knowledge system but are legitimate knowers and producers of legitimate knowledge″ (Ndlovu-Gatsheni, 2018:24). To use the words of Bhambra (2014:116), "the issue is more about re-inscribing 'other' cultural traditions into narratives of modernity and thus transforming those narratives—both in historical terms and theoretical ones—rather than simply renaming or re-evaluating the content of these other 'inheritances'". Spivak (1990:228) refers to this as "reversing, displacing, and seizing the apparatus of value-coding" leading to knowledge or epistemology being "geographical in its historicity" (Mignolo, 2000:67).

3.4 Epistemic Freedom and Cognitive Justice

Epistemic freedom is the "liberation of reason itself from coloniality" (Ndlovu-Gatsheni, 2018:2). It is ″different from academic freedom. Academic freedom speaks to institutional autonomy of universities and rights to express diverse ideas including those critical of authorities and political leaders. Epistemic freedom is much broader and deeper. It speaks to cognitive justice; it draws our attention to the content of what it is that we are free to express and on whose terms″ (Ndlovu-Gatsheni, 2018:4). Cognitive justice is the acceptance and recognition that different people in different parts of the globe have different ways of knowing and interpreting the world and their existence (Santos, 2014). Decolonial scholars refer to this as globalectics or pluriversality which ought to materialise when all human beings and their ways of knowing, culture and worlds are seen as normal, recognised, and accepted (Ngugi wa Thiong'o 1986; 1993; 2012; Ndlovu-Gatsheni, 2018). Such is the essence of open epistemic

diversity which should fuel a pluriversal curriculum leading to pluriversal cosmopolitanism (Mbembe, 2015). Thus, in the world, Africa and South Africa, we have different ways of understanding, interpreting, and conserving the environment, and it should raise questions as to why the Environmental Management curriculum in a South African university excludes IKS. This questioning should lead to commitments and actions for its (IKS) unapologetic re(introduction) into the curriculum. The prefix-re-is deliberate because the IKS of African people was silenced, inferiorised and invisibilised during the colonial conquest, and now is the time for recovery, remembering, restoration and healing. This is why the problem statement of the study is centred on how the Environmental Management curriculum must be decolonised because it needs to be, precisely because it excludes IKS. That is a matter that cries for addressing and unapologetically so if different ways of knowing should be accepted in pursuit of and in the spirit of pluriversality.

Seen thus, epistemic freedom should lead to cognitive justice because if people such as Africans in South Africa have the freedom to question Eurocentrism and propose alternative epistemologies, that should necessarily lead to acceptance of the different ways of knowing and interpreting the world. This is why Ndlovu-Gatsheni (2018:4) notes that

> epistemic freedom is about democratizing 'knowledge' from its current rendition in the singular into its plural known as 'knowledges'. It is also ranged against overrepresentation of Eurocentric thought in knowledge, social theory and education. Epistemic freedom is foundational in the broader decolonization struggle because it enables the emergence of the necessary critical decolonial consciousness.

Differently stated, bringing to bear the biography and geography of knowledge as well as epistemic freedom and justice in this study amounts to epistemic disobedience which involves de-linking "from the very foundations of Western concepts and accumulation of knowledge. I mean to shift the geo- and body-politics of knowledge from its foundation in Western imperial history of the past five centuries, to the geo-and body- politics of people, languages, religions, political and economic conceptions, subjectivities, etc., that have been racialized (that is, denied their plain humanity)" (Mignolo, 2007:13). Furthermore, by questioning the very content/foundation of the Environmental Management curriculum and why it excludes IKS, which must be recovered back into the curriculum, the study advances rethinking thinking (Hoppers and Richards, 2012).

This is because ″the task for rethinking thinking is therefore precisely this: to recognize the cultural asphyxiation of those numerous ‘others’ that has been the norm, and work to bring other categories of self-definition, of dreaming, of acting, of loving, of living into the commons as a matter of universal concern″ (Hoppers and Richards, 2012:8). At the centre of rethinking thinking is to learn to unlearn to relearn (Tlostanova and Mignolo, 2012). In the context of this study, I am rethinking thinking around the Environmental Management curriculum in terms of its content and how the introduction/addition of IKS as an essential element could assist both academics and students to unlearn Eurocentrism to relearn the correct Environmental Management that is pluriversal with Africa as the locus of enunciation. This is essentially about ″forgetting what we have been taught, to break free from the thinking programs imposed on us by education, culture, and social environment, always marked by the Western imperial reason″ (Tlostanova and Mignolo, 2012:7).

3.5 Panopticism

Panopticism is a Foucauldian concept derived from the surveillance machinery of prisons or Jeremy Bentham’s Panopticon/The Inspection House developed in the 18th and 19th centuries. Jeremy Bentham envisioned the Panopticon as a circular prison or institutional building with a central watchtower from which a single guard could observe all the inmates or occupants without them being able to see the guard. The architectural design was intended to create in the part of prisoners a feeling of constant surveillance and the perception of being always under observation, thus influencing behaviour and instilling a sense of discipline and control (Foucault, 1977). The central aspect of the Panopticon was the psychological effect it had on those being observed. This is because prisoners of the Panopticon would never know when they were being watched or not, which would lead them to internalize the idea of constant surveillance. To this extent, the Panopticon fostered a culture of self-censorship, as people, or in the case of prisoners were more cautious about their actions and/or behaviours, even in the absence of actual surveillance, thus leading to a form of self-regulation and conformity to societal norms or institutional rules. This internalization would, in theory, lead to self-regulation and conformity to societal norms, even when no actual guard was present (Foucault, 1991).

Differently stated, the key psychological mechanism at play in the Panopticon is the idea of self-policing or internalising discipline. This is because prisoners internalised the idea that they were under constant observation, which led them to regulate their behaviour in line with the dictates of authority. The uncertainty of whether or not prisoners were being watched created a sense of omnipresence, making the system more effective than actual constant surveillance. This suggests that the effectiveness of the exercise of power is through ″power of mind over mind″ (Foucault, 1991:206). In this sense, the effect of the Panopticon is ″to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power″ (Foucault, 1991:201). The argument made by Foucault (1977; 1991) is that the functioning of power is in its impact on people that they were being watched. Therefore, the individualisation and internalisation of power are referred to as Panopticism. In other words, a person ″who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection″ (Foucault, 1991:2002-2003). This is the context within which Foucault (1977) expanded Jeremy Bentham's Panopticon idea beyond physical architecture to understand power and control and how it materialised and dematerialised at various institutional and other levels including among others, schools, hospitals, and factories.

This means that Foucault (1977, 1991, 1995) used the Panopticon as a metaphor for the disciplinary techniques which were used by governments and their institutions to order and control people to the extent of making them docile and easy to manipulate. Another way to look at this is that for Foucault, the Panopticon was not a physical building and/or architecture, but a technology of power and control - it represented how governments and institutions in society exercised control and discipline over their populations (Foucault 1977, 1991, 1995). In this regard, it has been argued that traditional educational settings, with their hierarchical structures, strict rules, and surveillance-like monitoring of students, can be seen as resembling a Panopticon. In such environments, students may feel constantly observed by teachers or authority figures, leading to a form of self-discipline and conformity to societal norms (see e.g., Angus and Winslade, 2015). Indeed, some scholars have contested the idea of panoptic education institutions because not only was surveillance, not total, but also that it could be resisted (Gallagher, 2010). Notwithstanding, there is an acceptance that Panopticism is relevant in an educational setting because the use of surveillance is “at the heart of the practice of teaching” (Foucault, 1995:176) and this is not only possible because of the hierarchical

structures and the rules, but also through the curriculum which controls what students learn and think. For example, Bushnell, (2003) shows that the curriculum can limit autonomy and creativity based on its content and as well as how it was taught.

It is in this context that this study deploys the Foucauldian Panopticism to expand and deepen the analysis of the Environmental Management curriculum in a South African university by pointing to its coloniality (Eurocentric epistemology of the curriculum) which is arguably intended to control and monitor what African people know about Environmental Management. The exclusion of the IKS in the curriculum in question can be taken to be a clear indication of controlling what people know and think about Environmental Management. Put differently, the content of the curriculum is meant to control what academics and students know and think about Environmental Management as a European concept. To this extent, Environmental Management becomes what Hopper and Richards (2012) refer to as a software of coloniality. In this regard, the Panopticon in this study is the Environmental Management curriculum which reinforces and entrenches existing power structures and hierarchies, as those in positions of authority wield the power of observation and control through what academics teach and students learn. The curriculum becomes a monitoring and surveillance tool. This has resulted in the marginalization of African people and their IKS.

It should be remembered that colonial conquest led to Europeans dispossessing African people of their land and constructing their (African people) environmental management practices as dangerous to the environment (Moyo, 2020; Nelson, 2003). This became possible because of the institutionalisation of fortress conservation approaches which involved the eviction of people from their ancestral land and sacred places based on the view that environmental management and the conservation of biodiversity could be achieved by the establishment of Protected Areas to keep people away from interfering with the function of biodiversity. As the name suggests, fortress conservation also involves the creation of strong, isolated, and heavily guarded areas for the conservation of wildlife and ecosystems (see e.g., Brockington, 2002). This very fact of the existence of Protected Areas led to the institutionalisation of Eurocentric ways of environmental management (see e.g., Mojo et al. 2020; Brockington, 2002, 2004; Brockington and Wilkie 2015; Adams and Hutton 2007; Neumann 1998; 2004a, b). In the name of conservation and environmental management, Indigenous people in Africa and their IKS have been displaced and dislocated and their livelihoods shattered (see e.g., Brockington, 2002, 2004; Brockington and Wilkie 2015; Adams and Hutton 2007; Neumann 1998; 2004a, b).

To give a face of legality to these displacements, the colonisers invoked the *terra nullius,* principle. As is known, *terra nullius* was fiction because it is known that there was no such thing as unoccupied land in Africa for example. At the center of fortress conservation approaches was/is the forcible removal and exclusion of African people from areas in which they have been living for generations, which led to the displacement of people (Brockington, 2002, 2004; Brockington and Wilkie 2015; Adams and Hutton 2007; Neumann 1998; 2004a, b). The extent, depth, and consequences of this displacement have been equated and/or compared to human disasters like civil wars (see e.g. Brooks 2005; Agrawal and Redford 2009; Brockington and Igoe, 2006). Such a development was indicative of the imposition of wilderness on African people (Neumann,1998). This was tantamount to the construction of Africa as a "lost Eden in need of protection and preservation" (Neumann, 1998:80). In this regard, Environmental Management which teaches Indigenous ways of environmental management is not preferred because it can unmask the lie around Eurocentric approaches to environmental management as the only way of environmental management. This can also generate questions about the unequal land ownership and distribution patterns which are predicated on colonial conquest and the European model of environmental management.

Another way to look at this is that fortress conservation was not about conserving and/or managing the environment in Africa for example, but a ploy to dispossess people of their land and then exploit and plunder the natural resources for the benefit of the colonisers. These colonial paradigms of environmental conservation and management have unfortunately remained strong in the so-called post-colonial period (see e.g., Adams and Mulligan, 2012). This is the context within which one can suggest that there is a connection between how environmental management as a European concept and practice remains strong to protect unequal land ownership patterns. If during the colonial era, environmental management was used as a technology to dispossess African people of their land in the name of biodiversity conservation and management and such patterns have remained fundamentally unchanged, it means that what is taught and practiced as environmental management still serves the same purpose. For instance, in many so-called post-colonial states, African people are blamed for causing environmental problems and thus justifying the creation of Protected Areas (see e.g., Erni, 2015; Mathews, 2003). Moreover, Ramutsindela (2004), has clearly and adequately shown that Protected Areas should not be regarded as innocent programmes targeting

environmental conservation and protection, but also as technologies through which colonial land ownership patterns and systems of governance are sustained.

Cases in point to prove this argument include the fact that just before political independence, many white landowners in Southern African countries such as Botswana, Namibia, South Africa, and Zimbabwe utilised the notion of Protected Areas to maintain their property rights. This was done by converting agricultural farms into Protected Areas which were then protected by the laws of the newly independent southern African states to the disadvantage of people who had been displaced during colonial conquest (Ramutsindela (2004). Such white landowners were afraid that the newly independent African nation-states would confiscate their land if it remained as agricultural land, but they could not do so if it was classified as a Protected Area. Therefore, the growth and increase in the number of Protected Areas in so-called post-colonial states in Africa should also be seen as being indicative of the increase of colonial land ownership patterns and the displacement of African people under the gaze of the so called independent African nation-states. Put differently, Protected Areas are other ways of continuing and sustaining colonial land ownership. And yet current environmentalism valorises Protected Areas as the best way to preserve biodiversity and achieve environmental management - the coloniality of Protected Areas and the embedded injustices are not fully highlighted in the Environmental Management curriculum.

The point being made here is that Indigenous communities continue to be marginalised (Ramutsindela 2004), even as there are so-called moves to include such Indigenous communities who have suffered from the creation of Protected Areas (see e.g. Ramutsindela 2004; Brockington 2004; Nadasdy 1999, 2003). Even more saddening is that the so-called post-colonial states continue to be pressured by powerful large international conservation Non-Governmental Organisations (NGOs) to displace Indigenous communities under the banner of environmental management and conservation (see e.g., Cernea and Schmidt-Soltau, 2006). It is unfortunate, if not saddening that ″practices linked to the last century and centuries before that, are still employed to deny the validity of Indigenous peoples` claims to existence, to land and territories, to the right of self-determination, to the survival of our languages and forms of cultural knowledge, to our natural resources and systems of living within our environments″ (Smith, 2012:1).

Seen thus, it is in the interests of the elites and those who own land to sustain an environmental management curriculum that marginalises and/or invisibilises and inferiorises IKS and African ways of conserving and managing the environment. The curriculum, therefore, becomes an instrument of power and control in terms of being a surveillance mechanism that discourages any thoughts of environmental management outside the Eurocentric canon. This is not about the surveillance of prisoners in Jeremy Bentham's Panopticon or The Inspection House, but the use of the curriculum to monitor and control what people know, accept as truth (even if its lies), and practice as the model of environmental management. The result of this is that such a curriculum produces docile subjects who see their IKS as superstition or demonic practices. This is why we have academics and students whose locus of enunciation is Europe and North America when they are in Africa. Such African people can even defend to death the eviction and displacement of fellow Africans from their land in the name of environmental management because they have been blinded by the curriculum to think that Africans are a danger to the environment.

The curriculum that such academics and students teach and learn respectively, has controlled and disciplined them to despise their IKS or anything African. They have a European interpretation and understanding of their lives including the management of the environment. The point is that if the curriculum is a "particular, historically formed knowledge that inscribes rules and standards by which we "reason" about the world and our "self" as a productive member of that world" (Popkewitz, 1997: 132 cited in Wynter, 2003: 271), this means that the same curriculum can be a technology of "social regulation that discipline our ontological understandings of the Self and Other" (Wynter, 2003:271).

Accordingly, Eurocentricity in the form of Eurocentric curricula such as Environmental Management which excludes IKS becomes an instrument of power and control to the extent that what academics teach, and students learn legitimises the Eurocentric canon as the standard. Students are therefore afraid to think of anything outside the Eurocentric canon because it is regarded as a sign of a lack of sophistication and proper education - they despise IKS (see Ndlovu-Gatsheni, 2013). This can be taken as a demonstration of the internalisation of the Eurocentric norms of environmental management deriving from the curriculum. What they have studied monitors and policies how and what they think about environmental management including despising and discarding IKS. Such a curriculum alienates academics and students from their African background and knowledge and is indicative of the extent to which

coloniality has invaded the mental universe of colonized people (Quijano, 2007), removed the hard disk of previously existing endogenous knowledge and in its place, downloaded the software of Eurocentricity including its knowledges and languages (Ngũgĩ wa Thiong'o, 1986, 2009). This internalised individual policing is emblematic of the Foucauldian Panopticism. This background is intended to lay the foundation to propose strategies for decolonising the Environmental Management curriculum towards the attainment of epistemic freedom, cognitive justice, and epistemic access and justice. Therefore, by enacting epistemic disobedience, this study advances the need for a decolonised Environmental Management curriculum that breaks free from the shackles and clutches of the metaphorical Foucauldian Panopticon.

3.6 Curriculum

The word curriculum is derived from Latin *currere*, which means to run the course (Pinar, 2011). What is essential to the notion of running the course is the individual experience in terms of what people who interact with the curriculum must go through (Pinar, 2011). Over the years this definition of the curriculum has undergone some shifts. For instance, Grumet (1981) defined curriculum as the stories that students are told about their past, present, and future. Aoki (1999) posited that our conception of the curriculum must not be limited to the planned curriculum but must also extended to the lived dimension, in terms of how both academics and students experienced the curriculum. More recently, Wallin (2010) has advanced that curriculum should be seen as a field of creative potential predicated on it being a way of approaching the world-what a curriculum does or can potentially do.

Taking into consideration the etymological foundations of the notion of curriculum as running as well as the proposition by Grumet (1981), Aoki (1991), and Wallin (2010), what is common in all these are the impacts of the curriculum on students and society. When people run, there is an impact, and likewise when they are told stories or use the curriculum as a creative force. If the curriculum is seen as lived experience, it requires "taking seriously how students are experiencing the current university curriculum" (Le Grange, 2016:7). Likewise, if the curriculum is viewed as a creative site, means that it "is a space of struggle, creativity and transformation" (Le Grange, 2016:7). This study accepts these different concepts of curriculum on the basis that they all, but in different ways stress the importance of participation by people involved and the impact, both direct and indirect.

3.6.1 Decolonising the curriculum

In a study that explores the decolonisation of an Environmental Management curriculum, the question of 'how students are running' and 'where they are running to' comes to the fore. Linked to this, is what stories about Environmental Management are being told to the students. Are students in an African university told Eurocentric stories about environmental management or are they told African stories? If knowledge is at the center of the curriculum, which it is, what "counts as valid knowledge" (Bernstein, 1975:85), and how is this knowledge, packaged, taught, and assessed or evaluated (Shay, 205) in the Environmental Management curriculum from which stories are told? To underscore the importance of knowledge and how it can empower or disempower, Ndlovu-Gatsheni (2020) uses the example of the Bible and the Tree of Knowledge, fruits of which Adam and Eve were forbidden from eating. This tree of knowledge was in the center of the Garden of Eden, which suggests the centrality of knowledge in human ontology. It was when Adam and Eve ate the forbidden fruits from the Tree of Knowledge at the center of the Garden of Eden that they gained knowledge and noticed that they were naked. In this sense, the knowledge of good and evil led to the new reality (ontology) that they were naked. To this extent, epistemology predates and/or gives birth to ontology and not vice versa.

This argument is amplified by Mignolo and Walsh (2018:135) who assert that

> what matters is not economics or politics or history, but knowledge. Better yet, what matters is history, politics, economics, race, gender, sexuality, but it is above all the knowledge that is intertwined in all these praxical spheres that entangles us to the point of making us believe that it is not knowledge that matters but really history, economy, politics etc. Ontology is made of epistemology. That is, ontology is an epistemological concept.

The question of whether or not the knowledge in the Environmental Management curriculum blinds and keeps students and even academics despising their IKS without them realizing that they are, comes to the fore. When Adam and Eve discovered that they were naked, they covered themselves with tree leaves. The point being made here is about the knowledge in the Environmental Management curriculum and the extent to which it is partial or intended to blind students so that they do not see and access the real knowledge, which will unleash their creative and development potential in line with the curriculum as lived as propounded by Aoki (1999). In this context, one is reminded of the Foucauldian Panopticon and its self-policing impact in terms of the individualisation and internalisation of surveillance, which limited what people could think and do. This invokes the following question; Does the Environmental Management

curriculum provide students with creative potential and the space to unleash their creative and development potential?

Posing these questions also brings to the fore the three distinctions of the curriculum which are the explicit, the hidden, and the null (Le Grange, 2016). The "explicit curriculum is what students are provided with such as module frameworks, prescribed readings, assessments guidelines, etc. The hidden curriculum is what students learn about the dominant culture of a university and what values it reproduces. The null curriculum is what universities leave out – what is not taught and learned in a university" (Le Grange, 2016:7). This study utilises these three types of curricula as an entry point to understand how academics and students involved in the Environmental Management curriculum want it decolonised. For instance, this study examines the explicit curriculum and brings to bear what the students and academics want decolonised to promote epistemic access and presence. Linked to this, the study also analyses the values which the Environmental Management curriculum transmits and how this implicates epistemic access and presence. Furthermore, the study examines what the Environmental Management curriculum has left out and why and how this relates to epistemic access and presence as well as the creative potential of students.

The preceding explanation of how the notions of the explicit, hidden, and null curriculum are utilised in this study as analytical entry points to propose how and what needs to be decolonised in the curriculum in question is important in rethinking decolonising the curriculum in question. Therefore, the central approach to thinking about decolonising the curriculum in question is rethinking the Environmental Management curriculum or what Le Grange (2015 cited in Le Grange, 2016:8) refers to as "rethinking of the subject". This entails rethinking the knowledge of the curriculum in question so that it is also representative of African voices or IKS. This resonates with the four principles of decolonising the curriculum which are relational accountability, respectful representation, reciprocal appropriation, and rights and regulation (see Le Grange, 2016, Chilisa, 2012). Relational accountability is about the connectedness of all parts of the curriculum and that the curriculum must respond to all relations including those that are non-human. On respectful representation, the curriculum is called upon to be inclusive of Indigenous people and their IKS. The issue of reciprocal appropriation entails the generation of knowledge which must benefit both the university and community and finally, rights and regulation relates to ethics and integrity around knowledge generation especially from, but not limited to Indigenous communities (see Le Grange, 2016). More than this, the views of

academics and students should provide direction in terms of the specificities around the knowledge in the curriculum and how it is taught and assessed or evaluated.

Accordingly, and for reiteration, what is important for the present purpose is that based on the discussions in the preceding sections, it is evident that in the absence of IKS, the stories that students have been told in Environmental Management (the so-called curriculum) are stories of Europe and Europeans. Students have been told and taught about Eurocentricity as if it were their (the students) past, present, and future. This is tantamount to the installation of European memory in the consciousness and reality of African people (Ndlovu-Gatsheni, 2018). This is indicative of the twisted and sick logic of colonialism and Eurocentricity in that it fabricates and invents the history and culture, *inter alia* of colonised people (Fanon, 1968; Wynter, 2002). It is not surprising that the locus of enunciation of many people in Africa is Europe and North America, because their own past has been obliterated to the extent that Euromodernity is their point of epistemic reference. In the context of the present study, it, therefore, becomes evident that the curriculum under consideration is problematic and needs to be decolonised to bring back the African stories about the past, present, and future of Environmental Management.

It is anticipated that doing so will shift the biography and geography of knowledge in the curriculum to Africa and South Africa. Such a

> shifting of the geography of reason means a number of decolonial moves. In the first place, it challenges the imperial/colonial historiographical tendency of making European and North American historical experience the template of measuring other historical experiences and that Europe and North America are the only repositories of rational thinking. In the second place, it challenges the Hegelian idea of an Africa that existed outside the geographical reach of reason (Ndlovu-Gatsheni, 2015:33).

In the context of this study, this constitutes epistemic disobedience which should lead to epistemic access and the presence of both academics and students.

3.6.2 IKS and Environmental Management

It is fully understood that the notion of indigeneity/Indigenous communities is contested especially in the case of Africa. This contestation arises because of complex past migrations and cultural assimilations, which have complicated claims of indigeneity (see e.g., Guodaar and Bardsley, 2021). This has led to the assertion that all Africans are Indigenous. The problem with this generalisation is that it is all-inclusive and even accommodates colonial settlers and their descendants who have been responsible for the enslavement of other people like Blacks

and Indians etc. Such a definition also accommodates the colonial narratives of *terra nullius* and thus justifies the expropriation of land by White colonial settlers based on the myth that it (land) was not occupied. In this study, indigeneity is taken to mean "the socio-spatial processes and practices whereby Indigenous people and places are determined as distinct to dominant universals" (Radcliffe, 2015:221). This view resonates with the propositions of the African Commissions' Working Group of Experts on Indigenous Populations Communities (African Commission's Working Group) (Report of the African Commission's Working Group on Indigenous Populations/ Communities, 2006), which states that Indigenous communities exist in Africa and can be identified based on past suffering and continuing processes of marginalisation in their countries.

Such Indigenous communities

> suffer from discrimination as they are being regarded as less developed and less advanced than other more dominant sectors of society . . .They are subject to domination and exploitation within national political and economic structures that are commonly designed to reflect the interests and activities of the national majority. This discrimination, domination and marginalisation. . . threatens the continuation of their cultures and ways of life and prevents them from being able to genuinely participate in deciding on their own future and forms of development (Report of the African Commission's Working Group on Indigenous Populations/ Communities, 2006:89).

The point is that indigeneity should be seen ″as relational with deeply historical, institutionalized and power-inflected ontologies. To think about settler colonialism as an ongoing effect, not a singular event, recognizes how patterns of engagement with and oppression of indigeneity pervade the colonial present and its geographies beyond the specific locales associated with Indigenous peoples″ (Radcliffe, 2017b:220. With this in mind and if generalisation is possible, the terms Indigenous/Indigenous communities will be used in this study to refer to people who have suffered and continue to suffer exploitation and domination as a result of settler colonialism and coloniality.

Although the definition of IKS, also referred to as Indigenous science, traditional knowledge, ethnoscience, traditional ecological knowledge (TEK), native science and traditional wisdom, among others, is debatable (see, e.g., Mwangi, 1998; Rozani, 2009), it is generally understood to refer to a "body of knowledge built through generations living in close contact with nature and it includes a system of classification, a set of empirical observations about the local environment, and a system of self-management that governs resource use" (Mwangi, 1998:2). IKS has several qualities, including being ingrained in local peoples' experiences and being

passed orally through the generations, making it subject to change and/or improvement over time (Mwangi, 1998). What is important to highlight is that IKS varies from one place to the other based on the relationship that people in a particular place have had with their environment (Mwangi, 1998). Stated differently, Indigenous knowledge systems are not universal because they are not the same or shared by all Indigenous communities globally based on that not only are they diverse, but also vary significantly from one community to another. This is predicated on the fact that IKS is informed by and based on the cultural, historical, and environmental contexts of specific Indigenous groups and then shaped by their unique experiences, beliefs, and interactions with their environment. Indeed, there is the recognition that IKS shares some common elements found in many Indigenous communities like its relationship with the environment and oral traditions, among others, but the point being made here is that the specificity of knowledge, its practices, and beliefs among others, vary across Indigenous communities. This makes IKS unique to a particular territory, place, culture, and/or society (Mwangi, 1998; Warren et al. 1993).

Furthermore, IKS covers a broad range of themes, but in this study, reference is limited to knowledge about environmental management in a South African context. IKS holders' intimate relationships with their environments and possession of beneficial conservation mechanisms make IKS relevant for environmental management and conservation (Ross et al., 2016). Because of this, IKS has quickly emerged as a crucial tool for coming up with innovative environmental conservation approaches when combined with Western methods (Tengö et al., 2017). IKS's recent inclusion in international environmental governance organizations like the Convention on Biological Diversity (CBD) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) demonstrates its importance in environmental conservation and governance (Tengö et al., 2017). Therefore, it can be concluded that "the use of Indigenous knowledge to inform contemporary environmental policy decisions and management solutions is a growing global phenomenon" (Robinson and Wallington 2012:1).

Since 1994, there has been an appreciation of the importance of Indigenous communities and their IKS in environmental governance and conservation in South Africa. As such, co-management agreements between the state and Indigenous communities which are focused on the preservation of natural resources are proof of this. Co-management or collaborative management aims to include Indigenous peoples in the process of environmental governance, management, and conservation (Ward et al., 2018). In this regard, the goal is to include

Indigenous communities and other relevant stakeholders in environmental management for socioeconomic benefits as well as fair devolution of access to and use of natural resources (Silva and Mosimane, 2014). The inclusion of Indigenous communities illustrates that they are important stakeholders in the management of the environment. The corollary is that IKS is a crucial component of environmental management and should be taught as a fundamental subject in universities. All this signals the importance of decolonising the curriculum like the one under consideration. This informs the analytical stance adopted in this research in terms of the decolonisation of the Environmental Management curriculum to incorporate IKS.

3.6.3 Decolonising the university geography curriculum

Globally there is the realisation that the university geography curriculum needs to be decolonised (see e.g., Nayeri and Rushton, 2022; Liang, 2021; Esson and Last, 2020; Radcliffe, 2017a). Some scholars (see e.g., Liang, 2021) have argued that the starting point in decolonising the geography curriculum lies in the introduction of critical pedagogies in the discipline which emphasises a change in how geography is taught. This can start with "ensuring a diversity of teaching staff, not just reading lists; enabling decolonial pedagogies; encouraging social justice, liberation and decolonization; using creative and innovative teaching tools; decolonizing assessment criteria; and embedding decolonization across the curriculum" (Laing, 2021:1). There are also calls for a geography curriculum which promotes discussions about colonialism, race and slavery and as well as promoting the agency of students to critically engage with every day geographical issues (Nayeri and Rushton, 2022). Similar calls have been made by Esson and Last (2020:668) who have advocated for "the incorporation of explicitly anti-racist praxis" in the teaching and learning of British Geography by emphasising the recognition of other people, especially the formerly colonized, saying the "unsayable", and giving people space to experiment with their own histories. With a focus on universities in Australia, New Zealand, India, South Africa, and South America, Lobo and Rodríguez (2022:40) have called for a "scholarship that embodies fearlessness, interdependence, and generosity nourished by collaborative, ethnographic research *with*, not about, vulnerable, marginalised, and racialised bodies". Furthermore, in the South African education context and more specifically higher education landscape, several policies have been crafted to support the general goal of decolonisation such as among others, the Department of Education (1997); National Development Plan (2012), and the Commission of Inquiry into Higher Education and Training (2017). In particular, the Commission in question was precipitated by the 2015/2016 #FeesMustFall protests and their calls for the decolonisation of the entire higher education

landscape. Overall, the recommendations of the Commission generally supported the calls for decolonisation of higher education in South Africa.

Specific to Environmental Management, there have also been calls for its decolonisation because it continues to follow colonial practices which displace and dispossess many Indigenous communities of their land and resources in many parts of Africa and Asia. For instance, based on an analysis of the current practice of environmental management in the Democratic Republic of Congo (DRC), Kenya, and India, it has been suggested that there is a need for environmental management to put at the centre stage the knowledge, needs, livelihoods and marginalisation of the Indigenous communities. Such marginalisation and plunder of the land and resources of these Indigenous communities have been spearheaded by present-day nation-states with the backing of powerful international NGOs involved in environmental management and conservation (see e.g., Domínguez and Luoma, 2023). In some North American universities, there are not only mounting calls for the decolonisation of geography and environmental studies/management curriculum (see e.g., Baldwin, 2017; Tuck et al. 2014; Tuck and Yang 2012; Zaragocin 2019), but there have also been curriculum changes that target dismantling racism and adopting decolonial approaches in the teaching and learning of environmental studies/management (Bratman and DeLince, 2022). The drive behind this is ″unlearning some of the more common histories surrounding the origins of the environmental movement, and more capaciously imagining the environment itself as a space where people live, work, and play″ (Bratman and DeLince, 2022). Additionally, ″widening an epistemological scope of understanding and confronting narratives surrounding who is affected by the efforts of environmentalists, moreover, are important dimensions of unveiling the larger structures underpinning white supremacy in academia″ (Bratman and DeLince, 2022).

In this regard, there are initiatives not only to remove misguided narratives in the environmental studies/management curriculum but also to introduce other epistemologies beyond those which are Eurocentric. This is intended to remove frameworks that promote and sustain dominant structures (McKittrick 2006) and to highlight and illuminate ″the ways in which environmentalism itself is implicated in legacies of forced labor, displacement, dispossession, and disenfranchisement″ (Bratman and DeLince, 2022:196). The introduction of other epistemologies in environmental management must involve ″a paradigm and culture shift oriented toward recognizing that knowledge is not owned by anyone and broadens fields of knowledge to include traditionally excluded perspectives. It also considers the power dynamics

that underpin the creation of knowledge″ (Bratman and DeLince, 2022:196). In the representation of the other epistemologies, this should transcend tokenism. For instance, the value of IKS should be the recognition that it is a body of knowledge, which does not need validation by Western science or need to be used only if complementing Western science (Nadasdy 1999). In the final analysis, ″embracing epistemological plurality requires the narratives, knowledge systems, and concerns of marginalized actors and communities to be recognized, if not also given increased centrality within courses″ (Bratman and DeLince, 2022:196).

Taken together, all this shows that there is active research on the issue of decolonising the environmental management curriculum in universities in Africa, Asia, and even in North America. I, therefore, locate this study within this growing corpus of literature which questions and calls for the decolonisation of the environmental management curriculum because there is a colonial present in its epistemology and praxis. All this points that ″within the field of environmental studies and sciences, there is a considerable amount to unlearn and to question with regard to the interplay of whiteness and exclusionary narratives, as well as a number of specific opportunities that arise through re-orienting our pre-existing assumptions about what environmentalism is, whom it aims to support, and what it can become″ (Bratman and DeLince, 2022:195). Therefore, this study advances that reorienting the Environmental Management curriculum such that the biography and geography of knowledge and locus of enunciation are African and South African, constitute epistemic disobedience and cognitive justice which can contribute towards the academic access and presence of the African people.

3.3 Chapter summary

This chapter discussed the main concepts which provide a foundation for this study. These concepts include *inter alia*, the biography and geography of knowledge, epistemic freedom and cognitive justice, Foucauldian Panopticism, curriculum decolonisation and IKS. The discussion of these concepts leading to the conceptual framework which was intertwined with the literature review was intended to locate the present research within existing studies and debates that champion the decolonisation of the curriculum in the discipline of Geography generally and Environmental Management specifically. The conceptual framework and literature review suggest that Eurocentric heteronormativity is dominant in the Environmental Management curriculum in the Global South and South Africa specifically and this provides the basis for decolonising such a curriculum in a South African university.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter discusses the study context in terms of elaborating on the HDI described in Chapter 1 (Section 1.2) to illuminate the contextual and structural conditions of the university in question. A discussion of the structural conditions of the HDI under consideration inevitably invokes Margaret Archer's social realist theory which is built on three main concepts which are structure, culture, and agency (Archer, 1995). Margaret Archer's social realist theory is deployed in this methodology chapter for two reasons. First, a discussion of the cultural and structural conditions of the HDI under consideration is necessary (and it cannot be done without reference to Margaret Archer's social realist theory) because it assists in understanding the conditioning of the curriculum under consideration as well as how and why it must be decolonised. Second, the social realist theory is deployed as an analytical framework (this is fully explained in Section 4.3.2.1.2 below). The chapter also discusses the case study research design and the qualitative research approach that is followed in this study. Also discussed are data generation and analysis procedures as well as the ethical considerations that were followed.

4.2 Study setting

The HDI under consideration is a comprehensive university in a rural setting. It is constituted of four faculties which are Commerce, Administration and Law, Education, Humanities and Social Sciences, and Science, Agriculture and Engineering. The University recruits most of its students from the surrounding rural areas, the majority of whom come from disadvantaged backgrounds and are dependent on the National Student Financial Aid Scheme (NASFAS) to fund their studies. NASFAS is also haunted by administrative and financial problems (see e.g. Pitt, 2021) and this complicates the financial status and well-being of some of the students. Some of the structural features of the university are generally favourable such as the vision and mission around the transformation of the University to a "Node of African Thought". The University`s 2022-2027 Strategic Plan projects the University as a "Node of African Thought[1]. This essentially condenses around transforming the university at an epistemic level in terms of what Mbembe (2015) refers to as the pedagogic presence of the formerly colonized African subjects. It also entails among others changing what is taught and how it is taught, which

[1] UNIZULU Vision 2027: A Node of African thought-Strategic Plan

involves a recentering of knowledge so that the Western world ceases to be at the center of Africa`s consciousness (see e.g., Ngũgĩ wa Thiong'o, 1986, 2009; Ndlovu-Gatsheni, 2013, 2015, 2018, 2020).

These structural conditions in the university provide a generally positive context for my study which targets decolonising the Environmental Management curriculum as discussed in the preceding chapters. Nonetheless, in discussing the structural and cultural conditions of the HDI under consideration there is no intention of presenting a simplistic view of these conditions as being favourable or to romanticise them. The intention is to suggest that there are structural and cultural conditions in the university which resonate with the goals of this study, with a full understanding that some structural conditions can work against the promotion of decolonisation even as they purport to support the same.

The point being made here is that not all critical stances and theories are decolonial, and as Gordon (2020), reminds us, a Eurocentric critique of Eurocentrism is not decolonial but can in fact strengthen the same Eurocentrism. Here I am referring to affirmative versus transformative change. Affirmative involves cosmetic changes, while transformative can involve authentic changes (Cross, 2004) which break and disrupt the *status quo* that I am advocating for in this study. Therefore, the 2022-2027 strategic plan, and the "Node of African Thought" which is championed by the Vice Chancellor of the HDI should be celebrated because they have led to concrete steps and activities which target challenging and dismantling coloniality. This means that these changes will unsettle the *status quo.* That is to say, the "Node of African Thought" promises to lead to morphogenesis as opposed to morphostasis (Archer, 1995). It needs to be added that the Vice Chancellor of the HDI in question is unapologetic about transforming the university within the logic of the "Node of African Thought". Indeed, this can be seen in the following declaration;

> Through the current UNIZULU Vision 2027, we have taken a bold but worthwhile decision to move beyond creating a discursive space designed to ignite new imaginations about the future trajectory of the University, but also to develop alternative ontological and epistemological orientations anchored on African thought. In this regard, our knowledge and social project at UNIZULU is informed by our own African history and identity which we don't apologise for[2]

Taken together, the consideration of the structural and cultural conditions in the university is intended to illuminate that this study targets decolonising the curriculum in question in a way

[2] Statement made at the Inaugural Lecture on African Thought, University of Zululand, 17-19 November 2022 by Prof X Mtose, Vice Chancellor, University of Zululand.

that leads to morphogenesis in terms of the content of the module, what is taught and how it is assessed. The decolonisation of the curriculum proposed in this study is therefore intended to be disruptive within the given structural conditions of the institution.

4.3 Research design

A research design outlines the research roadmap in terms of data generation and analysis procedures to respond to the research questions (Creswell 2014). In this study, a case study is adopted which is "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin 1994:13). It aims for an in-depth exploration of social reality leading to the illumination of real-life events, experiences, and perceptions (Yin 1993, 2003). In this study, a qualitative case study of academics and students involved in an Environmental Management curriculum in the discipline of geography at a rural HDI is used. The units of analysis are the academics and students teaching and learning Environmental Management respectively. By units of analysis is meant what or who is being studied and explored (Babbie 2007). The views and experiences of these units of analysis are examined to generate meaning out of which explanations are developed in response to the research aim and objectives. Another way to look at this is that "meaning making is key to scientific endeavour: its very purpose is to understand how specific human beings in particular times and locales make sense of their worlds" because "sense making is always contextual, a concern with 'contextuality'- rather than 'generalizability' motivates research practice and design" (Schwartz-Shea and Yanow 2012:10-11).

4.3.1 Research approach

Issues of experience and perception are best studied through a qualitative approach because it assists in getting the emic perspective, how people or research participants understand and interpret the world around them (Hoare et al, 2013). Therefore, this study follows a qualitative research approach which is defined as naturalistic and exploratory leading to a deeper understanding of social reality (Creswell 2014; Creswell and Plano Clark 2007; Iosifides 2011).

4.3.1.1 Qualitative research methods

This section discusses the sampling, data generation and analysis employed in this study.

4.3.2.1.1 SAMPLING

Qualitative research follows non-probability sampling procedures to determine the sample size of research participants. Non-probability sampling involves the determination of a sample without following the probability sampling theory and it utilizes several sampling techniques, such as quota, snowball, and purposive sampling (Creswell and Plano Clark 2011). Purposive sampling was followed to select academics and students as research participants. Purposive sampling does not use a mathematical formula to determine sample size but follows clearly defined informal sampling frames (Mertons 2010; Creswell and Plano Clark 2011). Although there are no set parameters for selecting qualitative samples, the main recommendations include the researcher(s)' prior experiences and certain sample sizes from earlier qualitative studies, like those published in journals. As an illustration, phenomenological research studies advise using a sample size of 6–10 participants (Creswell and Plano Clark, 2011).

Informed by this context, this study purposively selected 2 academics (over 35 years of age) and 10 Honours students leading to a total sample size of 12. The number of Honours students varies from one year to the next, but in 2023 there were 10 (aged 22 years and older) who were registered for the Environmental Management module taught by two academics. The rationale for selecting these research participants is that the academics teach this module in question and have been in this role for an average of over 10 years. It is therefore assumed that they have a deeper understanding of the knowledge in the module and what needs to be decolonised and how. The students learn and study the module. This means that they have experienced and continue to experience the curriculum as a creative site (Le Grange, 2016:7) and this should provide deeper insights into issues of decolonisation concerning the module in question.

4.3.2.1.2 DATA GENERATION

Decolonial scholars like Smith (2012) have challenged the coloniality of research and research methods and data collection. This is the context within which Smith (2012) asserts that the dirtiest word in the world is research because carrying out research has consistently involved colonial-like practices such as among others reducing Indigenous communities to sources of data only (that needed to be mined) and not researchers. An essential element of such practices is the total disrespect of Indigenous communities because it involves the extraction of their knowledge, claiming and asserting control and ownership of the same knowledge and ways of knowing, inventions, and other products. At the same time as the extraction of and asserting control over the knowledge of Indigenous communities, research has involved rejecting the same Indigenous communities as members of the human family and preventing them from

having any further chances to shape their own cultures and indeed destinies (Smith, 2012). This is why in this thesis, there is a preference for the word data generation instead of data collection—the intention is to transmit the idea that this research involved the generation and co-creation of knowledge and less data collection. As a result, this study used unstructured in-depth interviews (Appendices A and B) to generate data from both academics and students. It is assumed that the in-depth interviews afford the research participants the freedom to speak (conversations), and this is consistent with decolonial position of this research. This entailed recorded face-to-face interviews. These interviews lasted a minimum of an hour to several hours. In this study, unstructured in-depth interviews are assumed to be the most appropriate data collection technique because they are "a means of gathering critical information about the social world" as they provide an understanding of "possible underlying, casual mechanisms". Further, in-depth interviews "can be powerful means for an interpretative understanding of participants' points of view, lived experiences, preferences and perceptions" (Iosifides 2011:178-179). Notwithstanding, it should be noted that qualitative research in general has come under heavy criticism for not being scientific enough because of the assumption that it generates subjective data. Such criticism is too simplistic and needs to be dismissed because "when we try to elicit someone`s subjective beliefs, we could say that we are trying to objectively represent their subjectivity. That something is my subjective belief does not entail that it cannot be true. Subjectivity also refers to the subjective quality of all knowledge – that it can be of and for subjects, and is situated and embodied, even though it is mostly about objects" (Sayer 2000:60).

4.3.2.1.3 DATA ANALYSIS

Creswell (2009:176) endorses an inductive approach to analyzing qualitative data. Such an approach assists in building "patterns, categories and themes from the bottom up, by organising the data into increasingly more abstract units of information". Informed by this, I deployed Margret Archer`s Social Realist Theory and in particular, the Morphogenetic Framework/Cycle (Archer, 1995) as an analytical tool within which the thematic approach (explained in detail below) was used to analyse the data. Key to Margaret Archer's Morphogenetic Framework are three main concepts which are structure, culture, and agency (Archer, 1995). Structure is the physical and human domain of social positions, relations, and responsibilities and culture refers to ideas, values, and beliefs (culture and structure are referred to as parts), whereas agency is the world of action and interaction (the people) (Archer 1995). In this dissertation, examples of structure and culture include among others, the historical and

geographical location and specificity of the HDI as well as its institutional policies and programmes. Examples of people include lecturers (like myself), Faculty Deans, and students. The interaction between structure, culture, and agency results in morphogenesis in which there is a change in agency, culture, or structure and in morphostasis the opposite is true.

Agency is mediated by people "who operate within a particular structural or cultural system. In the interplay between structure, culture, and agency, emergent properties come about, and emergent powers are exercised as agents interact with structure or culture" (Slemming, 2019:154). In this sense, the actions of people are conditioned by structure and culture and in which "conditioning refers to the way in which the space offers constraints or enablements for the exercising of human agency. In time, the outcomes of a cycle of human interactions will produce a new conditioning for further cycles of morphogenesis or –stasis" (Case, 2015:844). This is why Archer (1995) advanced the notions of structural emergent properties (SEPs), cultural emergent properties (CEPs), and personal emergent properties (PEPs) to illuminate such morphogenesis or stasis to the domains of structure, culture, and people. The Morphogenetic Framework/cycle is composed of three parts which are structural conditioning or how the power of the parts condition people (T^1), social interaction or the interaction between structure and agency (T^2-T^3) and social elaboration which demonstrates whether or not interaction has led to change (T^4) (Archer 1995).

Using the lenses of the Morphogenetic Framework, the six steps of thematic analysis entailed the following. First, I prepared the data in terms of arranging the written notes and recorded interviews. This was followed in the second step by preparing the data for analysis. In the third step, I read through the data to understand what the research participants stated in the interview sessions. In reading through the data in the third step, I invoked Archer's Morphogenic Framework to understand the structural conditioning of the Environmental Management curriculum from the experiences and perspectives of the study participants (T^1). This led me to code the data by assigning discourses or establishing common themes to interview data in the fourth step. The overarching question that was being answered at this stage of data analysis is; How has structure affected/conditioned the Environmental Management curriculum? This was followed by providing an analysis of the contestation between the students and lecturers on the one hand (people) and parts (structure and culture) on the other in the fifth step (T^2-T^3). The focus at this stage was on those parts or aspects of the Environmental Management curriculum that academics and students wanted decolonised, why and how to achieve epistemic access and presence. The analysis highlighted the students' and academics' reflexive

deliberation about the Environmental Management curriculum (Archer, 1995). Reflexive deliberation was taken to be indicative of personal emergent properties (Archer, 1995) as these students and academics were challenging the structure by exercising their agency. They had developed new perspectives or properties. The fifth step therefore involved the identification of the themes, described them, and interrelated them.

In the sixth step of thematic analysis, which focuses on developing meaning/interpretations by interrelating the themes in the analysed data in relation to the objectives of the study (Creswell 2009, 2014), I invoked the last step of the Morphogenetic framework which is structural elaboration. This was achieved by synthesizing what the academics and students wanted the decolonised Environmental Management curriculum to look like in terms of content, knowledge, and pedagogy (T^4). This was considered important because structural elaboration should "surely be the end goal of any true higher education: an individual who has been able to formulate ultimate concerns and enact projects towards that end; also a student who occupies that role in a way which gives expression to their personal identity" (Case, 2015:850). Figure 4.1 below illustrates the six steps within the logic of the Morphogenetic Framework which were followed in qualitative data analysis.

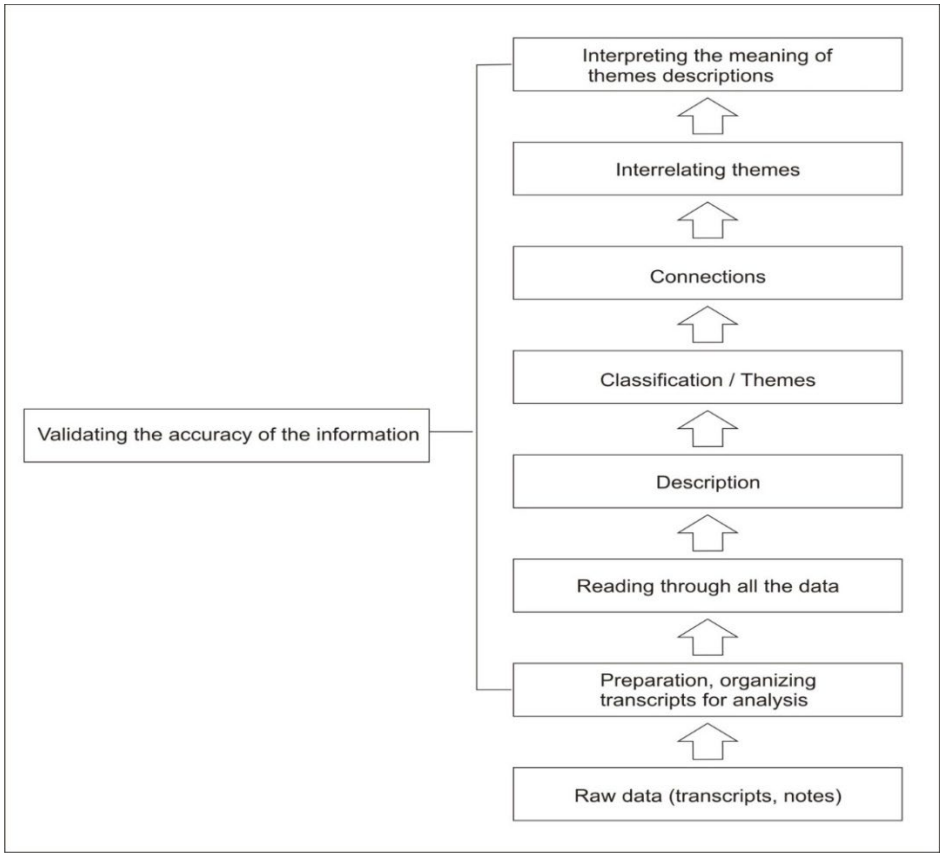

Figure 1: Steps in qualitative data analysis (Creswell 2014)

4.4 Trustworthiness and authenticity of qualitative data

There are several strategies that researchers use to establish the trustworthiness and authenticity of their qualitative data. In this study, multiple data generation strategies and thick descriptions were used (Geertz, 1973) For example, I relied on in-depth interview data and also analysed the curriculum document itself. Thick description involved providing detailed and comprehensive descriptions of the research context, methods, and findings (Geertz, 1973). This assisted in increasing the transparency and authenticity of the research. In addition, reflexivity was utilised (Creswell, 2014). Reflexivity involved being aware of and reflecting on my biases, assumptions, and values as a researcher that may influence the research process and findings.

4.5 Ethical considerations

Ethics in research refers to correct and best practices when carrying out any study (Hyry-Beihammer et al, 2013; Giorgini et al, 2015; Roberts 2015). That means there are moral standards as well as checks and balances that must be attained before one can carry out a research study or during the research study process. Such balances relate to the right of the researchers to obtain knowledge, the rights of those being researched not to be harmed, and the rights of society to benefit from ethical research (Montello and Sutton, 2006). All these point to several ethical requirements which must be satisfied before or during a study and they include the following.

The first ethical issue is consent. Since this study involves academic and university students (human beings), they had to provide written consent. This is why an information and consent form (Appendix C) was used which research participants signed and agreed to participate in the study. In this consent form, the purpose of the study was fully explained so that people agreed to take part with a full understanding of the risks, sharing of personal information, and other implications and impacts. In other words, no one was forced to participate in a research study and even if they agreed to participate, they have the right to withdraw at any given time, should they so wish or feel uncomfortable in further participation in the research. The second ethical requirement that I implemented in this research concerns anonymity, which means that no personal information or information that identifies the research participants concerned was collected. Related to this is the third ethical principle which is confidentiality which means that as the researcher I did not reveal the identities of research participants, even if these were known to or by the researcher.

The fourth research ethics principle relates to honesty and integrity. In conducting this study, I was honest by not falsifying any information related to the research being conducted. The falsification of information or data can occur at many levels, such as during data generation as well as analysis. In the case of data analysis, the findings were not falsified to meet the researcher`s preconceived ideas. That is to say, the results of a research study were presented as accurately as reflected by the findings of the study.

The fifth principle concerns plagiarism and this relates to the need to acknowledge all sources of information that have been used in conducting a research study. In this study, I did not use the work or ideas of other people/researchers without acknowledging or referencing them. The sixth principle is the researcher's positionality. This includes the researcher`s personal connection and/or attachment to the study which may implicate or colour not only the way data is collected and ultimately its quality, but how the data is analysed, presented and the production of a research report (Haynes, 2012).

4.6 Researcher`s Positionality

In qualitative studies, the positionality of the researcher refers to how the researcher's social and personal identities, experiences, and values shape their perspective and influence the research process and outcomes (Haynes, 2012). Positionality is an important consideration in qualitative research because it can affect the trustworthiness and authenticity of the research. This is why in this study, my positionality and reflexivity are clearly and fully explained. I work at the rural HDI as a lecturer. I understand the contexts, and the curriculum in question as well as the academics and students. Although I am interested and involved in issues of curriculum decolonisation, I fully understand and implemented an ethical research process. To mitigate the potential impact of my positionality, I approached the study with an awareness of my biases and values and took steps to minimize their influence on the research process. This included reflexive practices such as regularly reflecting on and documenting my own positionality and using multiple sources of data and perspectives to authenticate the findings.

4.6.1 Insider research: Advantages and challenges

From the description of my positionality, it is evident that this is insider research, because I have intimate knowledge of the research participants, study context and related settings (Mercer, 2006). Therefore, a brief commentary on the benefits and challenges of insider research is necessary. The advantages of insider research relate to the fact that familiarity with the study setting can be beneficial in terms of assisting the researcher to follow particular lines

of enquiry and thus in the process reach the necessary analytical depth and nuances (Mercer, 2006). The challenges include the fact that familiarity with the study setting may lead to the researcher taking the research for granted, leading to overlooking asking important questions on the assumption that some things are obvious or avoiding some contentious or sensitive questions/issues ((Mercer, 2006). The researcher may ″assume their own perspective is far more widespread than it actually is″ (Brekhus, 1998 cited in Mercer, 2006:7) leading to over generalisations. Notwithstanding, this research was ethically conducted in the light of my positionality and insider position.

4.7 Chapter summary

In this chapter, the contextual and structural conditions of the HDI under consideration were described to provide an extended background of the study. This was followed by a discussion of the methodological approach of the study starting with the research paradigm, design, and approach as well as the data generations and analysis procedures. Also discussed in this chapter are the trustworthiness and authenticity of qualitative data as well as the ethical considerations which were taken to ensure that the research is ethically sound. All this suggest that the methodological foundations of the study are sound, and the data collected by these mean authentic of which the next chapter analyses.

CHAPTER 5: DATA ANALYSIS AND DISCUSSION OF FINDINGS

5.1 Introduction

This data analysis chapter is organised into three main sections which respond to the study objectives and research questions. The first part analyses (using the module outline and interview data from academics and students) the basis of knowledge that constitutes the current Environmental Management curriculum. The intention is to identify the hegemonic orders in the current Environmental Management curriculum. The second part assesses the limitations and/or problems of the current Environmental Management curriculum using the notions of biography and geography of knowledge. This assessment shows aspects or components of the Environmental Management curriculum that need to be decolonised leading to the third section of the chapter that discusses how the Environmental Management curriculum can be decolonised in terms of among others rethinking the pedagogic approaches to recentre the biography and geography of knowledge.

5.2 The basis of knowledge in the current Environmental Management curriculum

To respond to the question of the basis of knowledge in the Environmental Management curriculum, the following themes/discourses emerged from the data analysis; Westerncentric focus of the curriculum, silencing/erasure of IKS and decolonisation and co-existence of different knowledges.

5.2.1 Westerncentric focus of the curriculum

The Module/Course Outline is sequentially organised as follows; Introduction to environmental management, sustainable development, environmental issues, political ecology, climate change and people, multilateral environmental agreements, governance, and environmental management tools and strategies. The introduction to the environmental management theme focuses on the notion and practice of environmental management as well as environmental philosophies and ethics. It was the opinion of the students who were part of this study that the Eurocentricity in the introductory part of the curriculum under consideration derives from the fact that the notion/concept of environment management is informed by European epistemologies. In other words, the view of the students was that there was an overwhelming influence of Western theories and knowledge which dominated the current Environmental Management curriculum. For example, environmental management philosophies and ethics are European understandings of environmental management, because there is no consideration of African, let alone South African notions of environmental

management that are informed by South African contexts and Indigenous knowledge systems. The point is that an introduction to environmental management in an African and South African context ought to show awareness of historical and contextual understanding of this phenomenon.

Indeed, one student correctly questioned:

"Why an introduction to environmental management (ethics and philosophies) failed to include South African or at the very least African understandings of the same" (Student 3, October 2023).

Students wanted an introduction to environmental management to be balanced by showing that it is not a European concept and praxis, but that it existed and was practiced in Africa even before the colonial and apartheid regimes (also see e.g., Nelson, 2003; Neumann, 1996, 1998, 2001). It may well have not been called environmental management, but all the same amounted to conserving and protecting the environment. The contention is that environmental management was not introduced by Europeans, because Africans successfully conserved and managed their environment, and for this reason, an introduction to a module on environmental management in Africa and South Africa must not erase this history. In this regard, one of the students observed that

> *"at the moment we are taught many things, but it seems like most of the theories, policies, and concepts are very European. For example, why are all the protocols and policies that countries sign initiated by mostly Western countries" (Student 3, October 2023).*

This observation amplifies the argument made by decolonial scholars about the politics of knowledge generation in which the West and North America are producers of the knowledge and teachers of the world (see e.g., Wynter, 2003, Ndlovu-Gatsheni, 2018, 2020). In the context of the curriculum under discussion, this is a matter that should not be allowed to continue any longer and how it can and needs to the discontinued is discussed in-depth in the following parts of this chapter. Topics that are covered under sustainable development include the imperative of and sustainable development debates and practices. While the students emphasised the need for sustainable development in terms of the careful and not wasteful use of resources, they were of the view that the notion of sustainable development is colonised. This is why one of the respondents asserted that

> *"I was not aware until recently that concepts such as 'sustainability' are considered as colonial. It would be interesting if we could explore such things in class as well" (Student 4, October 2023).*

The view of the study participants was that in a South African and African context, there is a need for academics and students to be critical of concepts and practices that keep them under coloniality even when there were proclamations of shaking off the same. Taken further, the student argued that an uncritical understanding and application of sustainable development would amount to entrenching coloniality just like past development efforts and initiatives which were championed by Western European and North American countries. Far from developing Africa and other developing countries, such Eurocentric concepts and practices have led to the underdevelopment of Africa as well as the plunder of its resources (also see e.g., Escobar 1984, 1995). The discussion of how sustainable development within the logic of environmental management needs to be decolonised is discussed in-depth in the following parts of this chapter.

The focus of the theme on climate change and people is climate adaptation and mitigation, climate change and food security, and the politics of climate change. The views of all the students who were part of this study on this theme were that it was relevant for the level of their study, especially the section on the politics of climate change. Nonetheless, there was a concern about the lack of explicit labelling of concepts and practices which sustained coloniality. This also applied to the section on multilateral environmental agreements, which in the view of the students sustained the coloniality of knowledge and power. The students suggested that

> *"coloniality and its enduring legacies needed to be named instead of being called nice names which suggested progressiveness" (Students 3 and 4, October 2023).*

There is a detailed discussion on this matter in Section 5.3.

5.2.2 Silencing/erasure of IKS

The theme on environmental issues focuses on air, water, energy, forests and biodiversity and ecosystems. The part of the course on political ecology engages with political issues in environmental problems such as drivers of environmental degradation in South Africa and the implication of this on human livelihoods. The students were generally happy with the topics on environmental issues and political ecology. However, they contended that the content and discussion on these themes need to be deepened because

> *"we really need to try incorporating more of our own (African and South African) thinking. Yes, in class when examples are given, we use examples and case studies from South Africa and Africa, but I don't think that is enough" (Student 4, October 2023).*

Detailed insights on the meaning and implications of this are provided in Sections 5.3 and 5.4 below. The theme of governance engages with matters related to environmental governance in South Africa. The last section on Environmental Management tools and strategies focuses on Integrated Environmental Management and Integrated Environmental Management tools. All the interviewed students suggested that the last themes were relatively relevant for the level of study, but the problem was that the issue of environmental governance was a European construct, because it invisibilised the African ideas and practices of environmental governance. The students wondered if the themes on environmental management tools and integrated environmental management could not be more effective and relevant if they also included Indigenous knowledge and governance systems. In other words,

> *"the inadequacy of the curriculum is that it does not fully represent all cultures and races in terms of the approach to and practice of environmental governance issues, thus emphasizing the urgency of fostering greater inclusivity" (Student 4, October 2023).*

5.2.3 Decolonisation and co-existence of different knowledges

The academics were of the view that although the environmental management curriculum needed to be decolonised, it was currently well-rounded. In this regard, one academic argued that environmental problems transcend the boundaries of nation-states, which requires a global perspective in environmental management education. This means that

> *"it is important that we acknowledge that in environmental management, environmental problems are not localised but are transboundary. Therefore, we also need to conform and follow international standards to some extent. This is kept in mind when teaching students, to ensure that they can engage globally on theoretical and practical issues" (Academic 1, November 2023).*

The academic further argued that the current content of the Environmental Management curriculum was problem-driven and influenced by environmental issues. They stated that the understanding of environmental management is framed by the problems encountered, such as those related to capital greed and resource extraction. Although these are often framed as being colonial, environmental issues often occur in various contexts. For example,

> *"issues like deforestation are attributed to capitalism and the West, but even within our contexts and localities, we are guilty of perpetuating these problems" (Academic 1, November 2023).*

In this regard, the academic was of the view that the current Environmental Management curriculum was

"accessible and understandable to students. We introduce basic concepts from the first year so by the time they reach Honours they can engage and are not overwhelmed. Although I think the current curriculum is well-rounded, I think it could still benefit from a practical element where we go out into the field" (Academic 1, November 2023).

Nonetheless, the current Environmental Management curriculum cannot be regarded as well-rounded if it excludes IKS. There is no amount of Eurocentric cannon that can make the Environmental Management curriculum well-rounded if it excludes other bodies of knowledge like IKS. In addition, awareness of global issues and theories does not have to be at the expense of local contexts, knowledges, and practices. The insistence by academics on including the so-called global theories and concepts shows the coloniality of the Environmental Management curriculum because there is nothing global about a curriculum that sidelines other knowledges. The moment a curriculum excludes other knowledges, it loses the title of being global. In this regard, it needs reiteration that the West and North America have appropriated the title of being global by making their epistemologies dominant, when in fact they are just one of the provinces of the world and not the world. This is why there is a need to reduce the overrepresentation of Europe in epistemology, social theory, and education. Seen thus, decolonising a university curriculum like the one under discussion constitute the deEuropeanisation or deprovincialisation of Africa which is "an intellectual and academic process of centring of Africa as a legitimate historical unit of analysis and epistemic site from which to interpret the world while at the same time globalizing knowledge from Africa" (Ndlovu-Gatsheni, 2018:4). This is the context within which in the final analysis the academics accepted that emphasis on the

"ongoing nature of research and the idea that no single form of knowledge has all the answers highlights the importance of mutual relationships between different knowledge systems" (Academic 2, November 2023).

Curriculum decolonisation was necessary to create space for multiple narratives and knowledge systems and creating space for marginalised knowledge, and challenging stereotypes and misconceptions. In this regard,

"decolonisation for me is about opening space for all the various narratives, you know, that did not have space in the past. It is also about demystifying the misconceptions and the stereotypes that have been built by those who controlled the colonial or the imperialist narrative and knowledge" (Academic 1, November 2023).

By invoking the Morphogenetic Framework (T^1) as explained in Chapter 4, one sees that the structure and culture in terms of the acceptance by academics of the curriculum as sacrosanct has conditioned the Environmental Management curriculum and positioned it as well-rounded and global. Indeed, the Gramscian notions of hegemony (see Chapter 2, Section 2.3) assist one to make sense of why academics would even suggest that a Eurocentric curriculum is well rounded. Gramscian hegemony draws attention to the fact educational institutions like universities can be used to sustain hegemony by teaching a curriculum that imposes the direction of the state and social life (see e.g., Carroll and Greeno, 2013; Morton, 2003). Hegemony is such that a university curriculum like the one under consideration is taken as the law of God and thought of as global and universal because elites have said so, even when it is not. This is similar to the Foucauldian panopticon (Foucault 1977, 1991, 1995) and in this case, the curriculum is a technology of power that is in control. It controls what academics and students know and think about environmental management as a concept and praxis. This may lead to academics and students thinking that the provided Environmental Management curriculum is global when it is not and has never been.

However, the discussion on decolonisation and the recent positioning of the University under consideration as a *"*Node of African Thought*"* has led to contestations (T^2-T^3) in which all students and academics have begun to be critical of the curriculum in question. As indicated in the first parts of this section, all students have begun to question the Environmental Management curriculum. Although the students stated that some sections of the curriculum were relevant, they also argued that the same have been insufficient in so far as IKS has been left out. Similarly, academics also essentially agreed that the curriculum needed to be decolonised. This social interaction or the interaction between structure and agency (T2-T3) is discussed in-depth in the following section by highlighting what needs to be changed and how in the curriculum under consideration. In addition, the awakening of the academics and students to the coloniality in the environmental management curriculum amplifies the first three stages of Chilisa`s (2012) five stages/phases of decolonisation (see Chapter 1, Section 1.1). These are rediscovery and recovery, mourning and dreaming. The academics and students are rediscovering and recovering their epistemologies and agencies which were erased and or silenced by colonialism which invented history and humanity (see Wynter, 2003). The same academics and students are mourning and dreaming because they have awakened and can fully understand the pervasiveness of coloniality in the education curricula they are studying, leading them to want a change. In this sense, morning leads to healing and dreaming.

5.3 Limitations the current Environmental Management curriculum: On biography and geography of knowledge

From the interview data, there was a general agreement that the current Environmental Management curriculum has limitations. The themes which emerged from the data that speak to the issue of the limitations of the curriculum under consideration include the localisation of the curriculum as well as the introduction of practical components and underrepresentation of IKS are discussed in detail in the following sections.

5.3.1 Localisation of the curriculum and introduction of practical components

The students who were part of this study felt that the current Environmental Management curriculum was not sufficiently responding to the local contexts because there was no practical application of the theories and related concepts in the curriculum in question. The respondents illuminated the existing disparity between theoretical content and practical application in the curriculum and the need for localisation of the Environmental Management curriculum. The consensus among respondents is that the curriculum should be meticulously tailored to the South African context, integrating more local case studies and examples. This localising of the Environmental Management curriculum was seen as a pivotal step to enhance its relevance and practical applicability in the South African context. In this regard, one respondent stated that

> *"if environmental management is being taught, it should focus on the South African context and on us creating solutions that are relevant to us. Yes, in class I think we attempted to do this, but I would like to see it done more" (Student 8, October 2023).*

This call was amplified by another respondent who stated that the curriculum needed to be

> *"more practical and applicable, transcending theoretical constructs to address environmental challenges that people faced in their contexts" (Student, 6 October 2023).*

More than that, one student asserted that

> *"Environmental management is not a theoretical thing. We need to be out in the field looking and seeing the things we talk and learn about it in class" (Respondent 2).*

Indeed the call by students for the localisation of the curriculum in question as well as the introduction of the practical components was also echoed by academics who highlighted the

> *"importance of including local knowledge, experiences, and practices in the curriculum to ensure relevance and applicability" (Academic, 1, November 2023).*

The call by academics and students for a contextually relevant curriculum that addresses the needs of communities resonates with the argument by Wallin (2010) on the necessity of the curriculum to be a field of creative potential in terms of preparing students to deal with real-world issues and problems. Aoki (1999) refers to this as the lived dimension of the curriculum. Le Grange (2016:7) also suggests that the curriculum should be "a space of struggle, creativity and transformation". All this also responds to the matters of biography and geography of knowledge. More importantly, the 2022-2027 strategic plan of the HDI under consideration is very clear about the need for the curriculum to be contextually relevant in terms of among others reflecting African issues and perspectives. What this suggests is that the academics and students want an Environmental Management curriculum that tells relevant African stories (see Grumet, 1981) so that students run a relevant course (see Pinar, 2011) to a future that leads to epistemic access and presence and ultimately cognitive justice.

5.3.2 Underrepresentation of IKS

All students who were part of this study expressed profound concern about the glaring absence of IKS in the curriculum. In this regard, one student stated that

"I think we were only taught about IKS in another module and not Environmental Management. It would be beneficial because if we included it more, then we could realise that we should not rely on Western knowledge" (Student 1, October 2023).

The respondent argued that there was an inherent value of IKS in Environmental Management because it was pertinent to local contexts and had the potential to offer pragmatic solutions to pressing environmental issues and problems (Student 1, October 2023). Within the same context, another student also stated that

"IKS is important because I consider it to reflect who we are as a people. We need to learn more about it and how Environmental Management and IKS can work together" (Student 2, October 2023).

This was echoed by another respondent who suggested that the current curriculum could benefit from the

"integration of IKS, but it (curriculum) should not be changed completely" (Student, 9, October 2023).

This respondent asserted that integrating Western and IKS would lead to the co-production of knowledge and a better curriculum. This was also explained further by another respondent who suggested that

"IKS must be integrated into the teaching content and decision-making processes in the module" (Student 7, October 2023).

Stated differently, it was the view of respondents, that the introduction and integration of IKS could potentially enhance environmental conservation efforts and offer invaluable local insights which are at the core of decolonisation. The views of the students also resonate with that of the academics who also suggested that IKS needed to be introduced to the current Environmental Management curriculum. For instance, one academic stated that

"IKS has a role to play in environmental management, however today it is problematic because how do we define Indigenous? Where do we find Indigenous communities?" (Academic, 1, November 2023).

The respondent highlighted that the concept of IKS is challenged, highlighting the need to question who qualifies as Indigenous and what constitutes IKS. The respondent acknowledged the adaptation and adjustment of IKS over time, emphasising the importance of understanding it as a heritage that evolves. The respondent further asked;

"who are the custodians of Indigenous knowledge? There is a need for us to also decolonialise our idea of what is IKS. IKS does not mean ancient knowledge. What was seen or understood as Indigenous has surely changed over time" (Academic, 1, November 2023).

Indeed, the academic raised important issues and the problematics about IKS, and these have been dealt with in detail in Chapter 3, Section 3.6.2 and will not be repeated here. What perhaps deserves commentary is the view by the respondent that the importance of including IKS in the curriculum lies in that it ensures the relevance and applicability of environmental management. More so, the idea that no single form of knowledge has all the answers emphasises the role and relevance of IKS in the curriculum in question (Academic, 1 and Academic 2, November 2023).

This call by the academics and students essentially responds to the question of the biography and geography of knowledge to the extent that they (academics and students) want to see a curriculum that incorporates IKS. The respondents also want to theorise and understand environmental management from an African and South African perspective. In the view of the respondents, this could lead to a reinterpretation, analysis, and development of principles for managing the environment beyond the Eurocentric frame. This can also lead to the epistemic presence of the African people as well as epistemic access in that students may be in a better position to understand the scope, logic, methodology, and practice of environmental

management beyond some abstract Eurocentric theories. In other words, there must be the restoration of the role and place of African knowledge where management of the African environment is concerned. Indeed, one of the respondents even stated the need for diverse perspectives in the curriculum which leads to epistemic access enabling students to apply concepts within their unique cultural and other contexts (biographies and geographies) (Student 9, October 2023). More than that, the restoration of IKS and different ways of knowing should lead to cognitive justice which is the acceptance and recognition that different people in different parts of the globe have different ways of knowing and interpreting the world and their existence (Ndlovu-Gatsheni, 2018).

In this sense, the decolonial concepts of the biography and geography of knowledge which revolves around who produces knowledge and from where assist in making sense of why and how IKS should be introduced to the environmental curriculum so that people and students in South Africa contribute to the generation of knowledge in the curriculum in question. After all, the curriculum should equip students to become citizens or political subjectivities who manage and conserve the environment in South Africa specifically and Africa in general. To press the point further, the introduction of IKS as suggested by the academics and students should dispel the myth that Eurocentric knowledge is the knowledge and this destabilisation of the current complacent status of Eurocentric canon in the Environmental Management curriculum amounts to troubling its hegemony. This should lead to the triumph of globalectics or pluriversality (Ngugi wa Thiong'o 1986; 1993; 2012 cited in Ndlovu-Gatsheni, 2018) and the recognition and acceptance of the normality and validity of South African and African epistemologies and ontologies. It is posited that this would give power to African people and students to rewrite themselves back into knowledge and history and by those means regain their power which was lost by the invention of the history of the human.

Furthermore, the position adopted by both academics and students in terms of proposing the decolonisation of the curriculum which positions their biography and geography illustrates all five phases of decolonisation and is advanced by Chilisa (2012). The first three phases have been reinforced in Section 5.2 and discussed in detail in Chapter 1, Section 1.1. What needs emphasis here is that academics and students are advocating for rediscovery and recovery; mourning; dreaming; commitment, and action. In specific terms, they have identified the problems with the Environmental Management curriculum, they now know that they have valid knowledge and history that was erased and/or hidden by colonialism and coloniality, and they

now want to write themselves back to history, knowledge and humanity and also know how and why they are committed to those ideals.

5.4 Pedagogic approaches and recentring the biography and geography of knowledge

Based on the discussion of the basis of knowledge that makes up the current Environmental Management curriculum and the limitations of this, the academics and students proposed pedagogic approaches that need to be adopted to give life and effect to the goal of a decolonised curriculum in question. In this regard, this section of the data analysis illuminates the last stage/step of the Morphogenetic framework which is structural elaboration (T^4). The attempt is to illustrate what all the respondents wanted a decolonised Environmental Management curriculum to look like with respect to content, knowledge, and pedagogy (T4). The themes which emerged from the data analysis in this respect include, introduction and incorporation of practical components to the curriculum, and the introduction and integration of IKS into the curriculum,

5.4.1 Introduction and incorporation of practical components to the curriculum

Concerning pedagogic approaches, the students emphasised the need for the practical implementation of environmental management beyond theories. In this regard, one of the students stated that

> *"the module content does not really teach the practical parts of environmental management. For example, for the Environmental Impact Assessment, we had someone from a government department come in to explain the whole process, but I still think a practical aspect would have really helped us not only understand but apply it" (Student 9, October 2023).*

Another also stated that

> *"environmental management is not a theoretical subject. We need to be out in the field looking and seeing the things we talk about and learn about it in class" (Student 2, October 2023).*

Likewise, one academic also stated that the need for a

"practical element where we go out into the field" (Academic 1, November 2023).

Still on the matter of the practicality of environmental management, the students advanced that

> *"it would be very interesting if we included IKS in the module. This would be helpful especially if we invited someone from the community or someone knowledgeable on IKS to teach us more on it" (Student 4, October 2023).*

If all these suggestions are seen through the prism of decolonial theory and Gramscian and neo-Gramscian theories of hegemony and counter-hegemony (see Chapter 2, Sections 2.2 and 2.3), it can be suggested that the proposal to introduce a practical element and also invite IKS holders to contribute to teaching and learning could lead to disruptive changes on the Eurocentric curriculum. First, the introduction of a practical approach could assist the students in applying theories and determine whether or not those that were Eurocentric were relevant to South African contexts. This can further lead to changes to the curriculum in terms of the introduction of theoretical and other approaches that resonate with and/or respond to the South African context. This could produce knowledge that is relevant to the South African environment and life. It should be remembered that academic disciplines should not be cast in iron and stone; they are not the law of or from God, but simply disciplinarisation of knowledge to meet particular needs and purposes at a particular time (Foucault, 1982). Therein lies the need to practice environmental management to produce knowledge for life in a South African and African context.

5.4.2 Introduction and integration of IKS into the curriculum

It has been indicated that in terms of content, knowledge and pedagogy, the respondents wanted the introduction of IKS (see Sections 5.2 and 5.3). This was reiterated by the respondent who asserted that

> *"IKS is very important, we should not rely so much on 'book knowledge', we could even go out into the field and explore how IKS can be used to respond to the environmental issues" (Student 4, October 2023)*

The proposal to introduce IKS holders from the community to explain how they use IKS to manage the environment can advance epistemic access. The idea of IKS holders and students co-producing knowledge gives effect to decolonial practices in education. This is because the knowledge in the curriculum will not be alien and alienating and this amounts to rupturing and undermining the coloniality of knowledge, but also the coloniality of power- processes of healing, recovering, and remembering. Taken further, this healing, recovery, and remembering leading to among others epistemic freedom, should necessarily constitute the provincialisation of Europe and the deprovincialisation of Africa (see e.g., Chakrabarty, 2000; Ndlovu-Gatsheni, 2018). While on the question of knowledge, the proposal of involving IKS holders and students, could lead to knowledge in the Environmental Management curriculum being democratic and not imposed. It would include the views and experiences of the people for it to be meaningful and impactful. It could lead students to think of their IKS as well and what they can contribute

to environmental management. Doing so could assist students to imagine and reimagine themselves and their communities as people with valid knowledge that can be practically applied to manage the environment. Parts of assessments in this regard could include action research by the students. It is argued that this is the essence of producing knowledge for life within a decolonial praxis. Of course, the introduction of IKS holders into university lecture rooms may have challenges, but with effective planning it is possible. The challenge should not be that people from the community are not educated and knowledgeable, because they are. Indeed Smith (2012:1) draws attention to the need to resist ″practices […] still employed to deny the validity of Indigenous peoples` claims to existence, to land and territories, to the right of self-determination, to the survival of our languages and forms of cultural knowledge, to our natural resources and systems of living within our environments″.

The point being made here is about the introduction of IKS as another logic of environmental conservation with an equal weighting to Western epistemology to lead to the co-production of new knowledge. In making this suggestion to decolonise the curriculum, the objective is to bring theory and practice together at a concrete level of application. This will take decolonisation/decoloniality away from textbooks and the library to the individual and community levels so that change can occur. This is the context within which Bhabha (1994:256) reminds us that "we must not merely change the narratives of our histories but transform our sense of what it means to live". It should be remembered that the curriculum is a "particular, historically formed knowledge that inscribes rules and standards by which we "reason" about the world and our "self" as a productive member of that world" (Popkewitz, 1997: 132 cited in Wynter, 2003: 271). Therefore, this means that the same curriculum is a technology of "social regulation that discipline our ontological understandings of the Self and Other" (Wynter, 2003:271). In all this lies the relevance of a decolonised Environmental Management curriculum that regulates a proper ontological understanding of all people in a South African context.

5.5 Chapter Summary

The data analysis for 10 students and 2 academics suggests that the current Environmental management curriculum is Eurocentric as illustrated using the curriculum document itself and the perceptions of the academics and students. The discussions in the chapter have therefore suggested the strategies that can be followed to decolonise the curriculum content, knowledge, and pedagogy to reflect the biography and geography of academics and students. The chapter

therefore proposes that decolonising Environmental Management in this way could lead to the production of knowledge for life that is not alienated and alienating.

CHAPTER 6: SUMMARY AND CONCLUSIONS

6.1 Summary

The analysis of the data in this mini dissertation suggests that the basis of knowledge in the current Environmental Management curriculum is Eurocentric because it excludes IKS. This has implications on the knowledge, teaching and assessment in the curriculum in question. Therefore, what I present below are a set of conclusions I make from the data generation and analysis and discussion, interwoven with theory and concepts. Although these conclusions are not exhaustive, they draw attention to the following.

6.1 Erasure/silencing of IKS in the Environmental Management Curriculum

The curriculum document itself as well as interview data from academics and students have shown the glaring omission of IKS. Even though NEMA suggests that all forms of knowledge must be included in environmental management, the curriculum under consideration is silent on this. In specific terms, Section 2(4)(b) states that "environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option" (NEMA,1998:13). The fact that IKS does feature suggest that the curriculum in question is driven by a colonial present. It should be remembered that coloniality "survives colonialism. It is maintained alive in books, in the criteria for academic performance, in cultural patterns, in common sense, in the self-image of peoples, in aspirations of self, and so many other aspects of our modern experience. In a way, as modern subjects we breathe coloniality all the time and every day" (Maldonado-Torres, 2007:243).

6.2 Integration of IKS and co-production of knowledge

Conversations with both academics and students suggest that the introduction and integration of IKS into the curriculum under consideration could lead to a contextually sensitive and relevant curriculum. This suggestion is best captured by the view that

> *"incorporating IKS is pertinent to local contexts and has the potential to offer pragmatic solutions" (Student 3, October 2023*).

Such a curriculum could lead to the co-production of better knowledge that responds to the needs of communities and thus strengthen the engagement of the university within its setting and beyond. This can lead to the locus of enunciation (Grosfoguel, 2007) in the curriculum being Africa in general and South Africa specifically and thus contribute to epistemic access,

epistemic presence, and epistemic freedom as well cognitive justice. This draws attention to the "repositioning of our world sensing […which…] entails taking the African archive as the starting point in our research, teaching and learning" (Ndlovu-Gatsheni, 2018:39). This is about shifting the geography of reason (Gordon, 2020) and the deprovincialisation of Africa which is "an intellectual and academic process of centring of Africa as a legitimate historical unit of analysis and epistemic site from which to interpret the world while at the same time globalizing knowledge from Africa" (Ndlovu-Gatsheni, 2018:4).

6.3 Co-teaching and researching with Indigenous communities

One of the main issues which emerged from the data analysis is the need for the involvement of Indigenous communities, especially IKS holders in the co-teaching of the curriculum under discussion. In particular, students were critical of the reliance on what they called book knowledge (Student 4, October 2024) and wanted to see more practical application which involved the introduction of IKS holders in the teaching-learning spaces. By extension, assessment should address existing environmental problems in the settings where students and community members live. The suggested assessment approaches include action research. The proposed environmental management curriculum must not be alienated and alienating. It must be about the production of knowledge for life. This is essentially about "forgetting what we have been taught, to break free from the thinking programs imposed on us by education, culture, and social environment, always marked by the Western imperial reason" (Tlostanova and Mignolo, 2012:7).

6.4 Implications of the study

The findings of the study have direct and specific implications on the curriculum under consideration in terms the knowledge, teaching and assessment.

6.4.1 Introduction of IKS as one of the key themes in Environmental Management

The study findings suggest the need to include IKS as one of the key themes in the curriculum in question. This suggests that the module in question should be reviewed in this regard. This is necessary because knowledge in the curriculum in question can only be global if it is pluriversal (Mbembe, 2015). Eurocentric knowledge is not pluriversal, it is just but one of the knowledges, which should not be taken as the standard (Ngugi wa Thiong'o, 2012; Ndlovu-Gatsheni, 2018). The fact that the current Environmental Management curriculum excludes IKS means that it is incomplete. Therefore, the introduction and integration of IKS into the curriculum should be seen as the drive towards ecologies of knowledge (Santos, 2014),

pluriversality and globalectics (see e.g., Mbembe, 2015; Ndlovu-Gatsheni, 2018) or ontological pluralism (see e.g., Ndlovu-Gatsheni, 2015).

6.4.2 Involvement of IKS holders in the co-teaching and researching

For the effective co-production of knowledge and teaching, there is a need for the department that hosts the curriculum to consider inviting IKS holders into their lecture rooms. If the argument by Smith (2012) that Indigenous communities should exercise their agency to create and produce among others knowledge is taken seriously, this suggestion should not be seen as utopian and if nothing else, normative, but necessary if authentic curriculum decolonisation is to be attained. In any event, this could serve as one way of contributing towards making the HDI more engaged within the communities in which it is located.

6.4.3 Practical components of Environmental Management

There is an urgent need for the introduction of practical components in the curriculum in question. These practical components should entail among others addressing/solving known and pressing environmental problems within the context of the HDI and beyond. Indeed, curriculum as practice or social change teaches us that "learning … doesn't just involve the acquisition of facts about the world, it also involves acquiring the ability to act in the world in socially recognized ways (Brown and Duguid, 2001: 200 cited in Hibbert et al., 2017:559). All this suggests that the knowledge in the curriculum must be part of society. It cannot be something that is external to society and if it is, it becomes a vacuous or an empty curriculum.

6.5 Areas of possible future research

The study was limited to a particular scope and therefore other elements encountered during the study fell outside of the study's limits. Consequently, the following are suggested as possible areas for future research.

6.4.1 The structural and cultural conditions that reproduce and entrench coloniality in the environmental management curriculum. It is suggested that an in-depth study of this nature could lead to a nuanced understanding of the resilience of coloniality in the environmental management curriculum. This could lead to the identification of clear targets around which decolonisation can be unleashed.

6.4.2 The constitutive relationship between the environmental management curriculum and racial capitalism. This researcher assumes that the coloniality of university curricula like environmental management normalises racial capitalism, land dispossession, and dehumanisation in the name of conservation and environmental management. A study of this

nature could be potentially ground-breaking in a South African context to the extent of demonstrating the link between education, land dispossession, and hierarchised life.

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APPENDIX A: INTERVIEW GUIDE-ACADEMICS

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Interview Guide: Academics

Project Title: Exploring the decolonisation of the Environmental Management curriculum in a rural Historically Disadvantaged Institution of Higher education

Name of researcher: Inocent Moyo

Email: minnoxa.m@gmail.com

Cell: 0639579674

Participants

I am doing this research to understand how the Environmental Management Curriculum in the discipline of Geography in a rural Historically Disadvantaged Institution of higher education can be decolonised. The questions below are just **a general guide for our discussion, because this is a conversation more than an interview session**. I anticipate that this information will contribute to the project of curriculum demonisation in the discipline of geography in the HDI in question. If some of the questions are difficult for you to answer, you have the right to withdraw or to skip any issues that you do not want to discuss. If and when the need arises, I will translate our discussions. Your active participation in giving ideas, commenting, and engaging is essential for the completion of this study. Please remember that your participation is voluntary, and you reserve the right to withdraw from the same, should you so wish.

SECTION A: WHAT IS THE BASIS OF KNOWLEDGE IN THE ENVIRONMENTAL MANAGEMENT CURRICULUM?

What knowledge is taught in the Environmental Management curriculum

2. What is the source of this knowledge and why?

3. What is missing? How? Why?

4. The National Environmental Management Act of 1998 (NEMA) states that Indigenous Knowledge Systems must be included in a curriculum on issues of environmental management. Is IKS included in the curriculum? Why do you think this is not the case in this curriculum?

SECTION B: LIMITATIONS AND/OR PROBLEMS OF THE CURRENT ENVIRONMENTAL MANAGEMENT AND THE NOTIONS OF BIOGRAPHY AND GEOGRAPHY OF KNOWLEDGE

1. How do you understand epistemic access and presence?

2. Is the biography and geography of the people in which the curriculum is taught reflected? From which position is environmental management taught and assessed? Why? What are the problems/limitations? How and why?

SECTION C: HOW CAN THE CURRICULUM BE DECOLONISED? WHAT MUST BE DONE AND HOW?

1. How do you think this module can be decolonised to improve environmental management and general environmental governance and development?

2. How can other knowledge be included in this module in terms of the content, teaching and learning, and assessment?

3. In your view how can epistemic freedom and disobedience be included in this module in terms of content, teaching and learning, and assessment?

4. How can this curriculum be decolonised such that academics and students start thinking and operating from their biographies and geographies?

APPENDIX B: INTERVIEW GUIDE-STUDENTS

Interview Guide; Students

Project Title: TITLE: Exploring the perception of geography academics and students towards the decolonisation of the Environmental Management Curriculum in a rural Historically Disadvantaged Institution of higher education.

Name of researcher: Inocent Moyo

Email: minnoxa.m@gmail.com

Cell: 0639579674

Participants

I am doing this research to understand the perception of geography academics and students towards the decolonisation of the Environmental Management Curriculum in a rural Historically Disadvantaged Institution of higher education. The questions below are just **a general guide for our discussion**. I anticipate that this information will contribute to the project of curriculum demonisation in the discipline of geography in the HDI in question. If some of the questions are difficult for you to answer, you have the right to withdraw or to skip any issues that you do not want to discuss. If and when the need arises, I will translate our discussions. Your active participation in giving ideas, commenting, and engaging is essential for the completion of this study. Please remember that your participation is voluntary, and you reserve the right to withdraw from the same, should you so wish.

SECTION A: CURRENT SOCIAL AND TEMPORAL CONTEXTS

1. What are your views on curriculum decolonisation in the Environmental Management curriculum?

2. Are there any current or proposed institutional policy changes that impact curriculum decolonisation?

3. Describe your experiences in the content, learning, and assessment of this module.

4. Do you consider the curriculum to be inclusive of your context, realities, and expectations?

SECTION B: DECOLONISATION AND EPISTEMIC ACCESS AND PRESENCE

1. What is your understanding of epistemic access and presence?

2. Please outline for me the content of the Environmental Management curriculum and explain to me what you think are its shortcomings considering the demands of epistemic access and presence.

3. What needs to be decolonised and how in respect of the knowledge in the curriculum and how it is taught and assessed?

SECTION C: ENCOUNTERS OF AND EXPERIENCES OF THE CURRICULUM

1. How have you experienced this module? What I mean here is; Has the module made you understand environmental management better? Did it change or enrich your views on environmental management? Do you feel empowered around the topic of environmental management? How? Why?

2. What experiences would you like to change? How? Why?

SECTION D: INDIGENOUS COMMUNITIES AND IKS AND DECOLONISATION

1. The National Environmental Management Act of 1998 (NEMA) states that Indigenous Knowledge Systems must be included in a curriculum on issues of environmental management. Is IKS included in the curriculum? If not, why? If yes, what improvement do you recommend?

2. Do you think Indigenous communities can play a role in decolonizing the Environmental Management curriculum?

3. How do you think this module can be decolonised to improve environmental management and general environmental governance and development?

4. How can other knowledge be included in this module in terms of the content, teaching and learning, and assessment?

5. In your view how can epistemic freedom and disobedience be included in this module in terms of content, teaching and learning, and assessment?

6. How can this curriculum be decolonised such that academics and students start thinking and operating from their biographies and geographies?

APPENDIX C: INFORMATION SHEET

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Faculty of Humanities

INFORMATION AND INFORMED CONSENT FORM

TITLE: Analysing the decolonisation of the Environmental Management curriculum in a rural Historically Disadvantaged Institution of Higher education

Name of researcher: Inocent Moyo

Dear Participant

This is an invitation to participate in a study on curriculum decolonisation in the discipline of geography and the module Environmental Management. This information sheet is intended to provide you with all information about this study so that you decide whether or not you will participate.

Information on the research

This study aims to analyse how the Environmental Management Curriculum in a rural Historically Disadvantaged Institution of higher education can be decolonised.

What is your role?

You will be requested to voluntarily answer interview questions presented to you by the researcher. The interview session(s) will be recorded to accurately capture your responses, but should you be unwilling, this will not be done. All recorded interviews will be safely kept for use by this researcher.

Even after agreeing to participate in the study, you have the right to withdraw at any time should you feel uncomfortable and unwilling to further participate. In addition, you have the right to request that your responses be removed from the study and the researcher will gladly comply.

Anonymity and confidentiality

By participating in this study, your identity will be kept anonymous. For example, your actual names will not be used, Instead, fictitious names will be ascribed to your responses to ensure confidentiality.

Informed Consent

Your informed consent is required before interviews can be undertaken. Below is a consent form that you must complete and sign as an indication of a voluntary agreement to participation in this research.

CONSENT FORM

TITLE: Analysing the decolonisation of the Environmental Management curriculum in a rural Historically Disadvantaged Institution of Higher education

a) I am aware of the purpose of this research project and will participate in the project by answering interview questions from the researcher.

b) My participation is entirely voluntary and should I at any stage wish to withdraw from participating further, I may do so without any negative consequences.

c) I will not be compensated for participating in the research.

d) By signing this informed consent declaration, I am not waiving any legal claims, rights or remedies.

e) A copy of this informed consent declaration will be given to me, and the original will be kept on record.

I, …….. have read the above information / confirm that the above information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all questions that I wished to ask and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurized in any way and I voluntarily agree to participate in the above-mentioned project.