

**AN EXPLORATION OF AN INDIGENOUS AFRICAN EPISTEMIC ORDER: IN SEARCH
OF A CONTEMPORARY AFRICAN ENVIRONMENTAL PHILOSOPHY**

by

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Abstract

There is an urgent need to develop sustainable solutions to the epochal environmental problems that the world at large and Africa in particular are currently facing. The current environmental philosophy does not seem to be able to resolve satisfactorily all the environmental crises of our world, as they have been largely influenced by Western oriented perspectives on one hand that are laden with dualistic and anthropocentric view of the world, and are ethics based on the other hand, and as such focuses less on human beings' relationship with Nature. To the extent that attempts were made by scholars to advance an African orientation in environmental philosophy, these attempts have been bedridden with over-reliance on ethics. Relying mainly on ethics as the philosophical framework for addressing environmental issues, it neglects the epistemological dimensions of the African intellectual thoughts. To this end, minimal results has been achieved in the quest for panacea to environmental crisis, especially in Africa. This study, thus, advances an African outlook in environmental philosophy that would be both participatory and interdisciplinary in the quest for more meaningful and pragmatic problem-solving frameworks in environmentalism. The research seeks to further improve in the development of an African oriented Environmental Philosophy by committing to the exploration of an African epistemic outlook for environmentalism. This exploration is hinged on the epistemic stance abstracted from indigenous knowledge systems of African people in general and the Yoruba and Igbo people of the Western part of Nigeria, in West Africa, in particular. Accordingly, the research queries the tendency of the current discourse of environmental philosophy to over rely on ethics. The study further argues for a shift in the conceptual framework, approaches and methods employable in confronting the environmental challenges besetting the world today. It opines that we construct African environmental philosophy from the idea of "African Epistemic Order" (AEO). It argues that an environmental philosophy that is African in orientation, must have a conceptual understanding of the ontological and relational holism pervading the African epistemic order. Such an understanding will enhance the reordering and healing of the damaged human's relationship with the natural environment (Nature). This study, therefore, provides building blocks for an environmental philosophy that is both African in making, global in practice and affirming respect to Nature.

Abstract in isiZulu

Kukhona isidingo esiphuthumayo sokuthola izixazululo eziqhubekela phambili ngesikhathi sezinkinga zendalo umhlaba wonkana, kanye ne-Afrika imbala ezibhekene nazo okwamanje. Okwamanje amafilosofi endalo abonakala engakwazi ukuxazulula izinkinga zendalo zomhlaba wethu ngokwanele. Lokhu kungoba kunomthelela omkhulu wemibono yamazwe aseNtshonalanga (enomthelela omkhulu wombono we-dualistic and anthropocentric ngomhlaba) kanti ngakolunye uhlangothi, kanti futhi ngenxa yokuthi aphantsi kwenqubo yama-ethics ngakolunye uhlangothi. Kanti ke ngenxa yalokhu, kugxilwa kakhulu ebudlelaneni phakathi kwabantu kanye nemvelo (okusho indalo yangokwemvelo). Ngisho noma imizamo yenziwe zifundiswa ukuqhubela phambili umbono wefilosofi yendalo, le mizamo ikhathazwe kakhulu ukuncika kwezama-ethics. Lolu cwaningo luqhubela phambili umbono ngesilosofi yesi-Afrika ngokwendalo, ezokwenza ukuthi kube nokubili, ukubamba iqhaza kanye nokuxhumana kwemikhakha ehlukene ekuthungatheni kwayo uhlaka lokuxazulula izinkinga olubambekayo ngokwendalo. Ucwangingo lufuna ukuthuthukisa iFilosofi yesi-Afrika ngokwendalo ngokuzimisela ukuthungatha umthombo nombono wolwazi ngokwendalo. Lokhu kuthungatha kuncike kwisimo sezomthombo wolwazi otholakala kwizinqubo zesintu zabantu base-Afrika ngokunabile, kanti ikakhulukazi ngabantu bamaYoruba kanye nama-Igbo kwingxenye eseNtshonalanga neNigeria, eNtshonalanga Afrika ikakhulukazi. Lolu cwaningo, ngakho-ke luyisakhelo sefilosofi yendalo, engesi-Afrika ikakhulukazi, kodwa ebheka kumazwe omhlaba ngokwenza, kanye nokuqinisekisa mayelana Nemvelo.

Abstract in Sesotho

Ho na le tlhoko e potlakileng ya ho ntlafatsa ditharollo tse tsitsitseng tsa mathata a nako a tikoloho ao lefatshe ka bophara, haholo-holo Afrika, a tobaneng le ona hajwale. Difilosofi tsa hajwale tsa tikoloho ha ho bonahale di ka kgona ho rarolla mathata ohle a tikoloho a lefatshe la rona ka mokgwa o kgotsofatsang. Lebaka ke hore di anngwe haholo ke dikgopolo tsa Bophirima (di le boima jwalo, ka lehlakore le le leng le nang le pono e habedi le le nkang botho bo le bohlokwa ho boteng ba lefatshe) ka lehlakoreng le leng hobane di thehilwe hodima melao ya boitshwaro. Kahoo, ha di shebane haholo le kamano dipakeng tsa batho le tlhaho (ke hore, tikoloho ya tlhaho). Le ha boiteko bo entswe ke ditsebi ho ntshetsa pele tlwaelo ya Maafrika ho filosofi ya tikoloho, boiteko bona le bona bo na le boitshetleho bo fetelletseng ho boitshwaro. Phuputso ena e ntshetsa pele pono ya Seafrika filosofing ya tikoloho eo e ka bang ya tshebedisano le ya ho kopana ha dithuto tse fapaneng

molemong wa ho batla meralo e nang le moelelo le ho rarolla mathata bothateng ba tikoloho. Patlisiso ena e batla ho ntlafatsa ntshetsopele ya Filosofi ya Tikoloho e sekametseng Afrika ka ho itlama ho fuputsa pono ya tsebo ya Afrika bakeng sa tikoloho. Patlisiso ena e ipapisitse le boemo ba tsebo bo nkilweng ditsamaisong tsa tsebo ya matswallwa tsa batho ba Maafrika ka kakaretso le batho ba Yoruba le ba Igbo ba karolo e ka Bophirima ya Nigeria, Afrika Bophirima ka ho kgetheha. Phuputso ena, ka hona, e fana ka motheo bakeng sa filosofi ya tikoloho eo e leng ya Seafrika ka botlalo, e akaretsang tshebetsong, mme e tiisang bonnete ba Tlhaho.

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Conference presentations

Chapters 2, 3, 4, and 6 are based on the following conference presentation:

1. 7th Annual UNISA Student Research and Innovation Showcase held at Enoch Sotanga Hall, University of South Africa, Sunnyside Campus, Pretoria, South Africa between 15 and 17 August 2018. I presented the paper titled: **“In Search of an African Environmental Epistemology”**.
2. Twenty-Second Annual Meeting of The International Association for Environmental Philosophy (IAEP) titled: **“There Is No World”** held at The Nittany Lions Inn, State College, Pennsylvania, United States of America, between 20 and 22 October 2018. I presented the paper titled: **“On the Idea of an African Environmental Philosophy: An Epistemic Approach”**.
3. 2020 Annual Philosophical Society of Southern African (PSSA) Conference held at Salt Rock Beach Hotel between 13 and 15 January 2020. I presented the paper titled: **“Contemporary Challenges in Environmental Philosophy: A Conceptual Re-thinking”**.

The following conference presentations are based on Chapter Five.

4. 42nd World Congress of the International Institute of Sociology (IIS) titled: **The Social Sciences, New Conservatism and New Radicalisms** held at the University of the Witwatersrand, Johannesburg, South Africa between 5 and 7 September 2018. I presented the paper titled: **“De-Epistemicizing Knowledge in The Quest for Environmental Justice in Post-Colonial Africa”**.
5. Development Studies Association (DSA) 2020 Conference, titled: **“New Leadership for Global Challenges”** held (virtually) at the University of Birmingham, UK between 17 and 19 June 2020. I presented the paper titled: **“Enhancing Regional Leadership Responses to Climate Change Effects in the Lake Chad Basin: An African Epistemological Approach”**.

Statement of Length

This thesis contains 80,081 words including footnotes and in-text citations but excluding the reference list and other annexures.

The thesis contains 90,386 words in total.

Key Terms

Title of Thesis:

An Exploration of an Indigenous African Epistemic Order: In Search of a Contemporary African Environmental Philosophy

Key Terms:

Environmentalism, African environmental philosophy, indigenous knowledge systems, African epistemic order, complementarity, environmental crisis, African environmental epistemology.

List of Abbreviations

AE	African Epistemology
AEE	African Environmental Epistemology
AEO	African Epistemic Order
AEP	African Environmental Philosophy
AIKS	African Indigenous Knowledge Systems
CEE	Complementarity Environmental Ethics
EC	European Commission
EP	Environmental Philosophy
IKS	Indigenous Knowledge Systems
ILP	Individual Luck Principle
IPCC	The Intergovernmental Panel on Climate Change
PDP	Parental Debts Principle
PEE	Parental Earth Ethics
UNCHE	The United Nations Conference on Human Environment
UNDP	United Nations Development Programme
UNFCCC	The United Nations Framework Convention on Climate Change

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Chapter One

General introduction to the study

1.1. Background to the study

This study advances the critical role that African epistemology (AE) could play in the quest for solutions to everyday problems of the world, with the focus on the environmental crisis. The global world is facing environmental challenges ranging from resource depletion, increasing desertification, soil erosion, ozone layer depletion, climate change as well as declining terrestrial and aquatic biodiversity. Solutions have been and continue to be proffered, but the problems seem unabated. As a result, there is a dire need to develop more sustainable solutions to these epochal environmental problems and challenges. The imperativeness of such sustainable solutions, even with regard to Africa, is better appreciated in the view of Munyaradzi Maware (2014:xiv) that “we are at a time in Africa when the talk on environmental crisis...is high on the agenda of the continent”. The quest for solutions thus becomes imperative for the continent in the face of the unpleasant results of the environmental crisis, for which many nations are embarking on a “new green economy” (Jackson and Victor 2013)– an economy where environmental value forms the ideological core. The need thus appears crucial for Africa to be more heard in combating the epochal challenge of environmental degradation. Hence, the aim of this study is to examine the viability of an African epistemic framework for the African orientation in environmental philosophy.

African environmental philosophy (AEP) will be seen in this study as the philosophical examination of the environmental challenges of the contemporary world from an African

perspective. In other words, the study makes an intellectual exploration of the relationship between African Philosophy and environmentalism¹. A pertinent question to consider here is; why there is a need for African environmental philosophy if the environmental crisis is a global phenomenon? Against such query must come the reasoning line that environmental specificities make environmental challenges felt more particularly in some parts of the world than in others. Chigbo Joseph Ekwealo argues that the theories or conceptual frameworks advance for environmental problems are often determined by the ideologies and worldviews of the affected people (2011:8). This is in coherence with Bunyan Bryant's view that "countries of colour and low income [e.g., Africa] are disproportionately impacted by environmental crises of the world" (2011:12). This research sees the quest for an African orientation in Environmental philosophy in the light of the intellectual task raised by Ojomo (2010 and 2011). The challenge for the contemporary African scholar in Ojomo's view is the task of constructing an "adequate African environmental philosophy" (2010:60-62). She noted that the construction of an environmental (philosophy) that is African in making for the environmental challenges of Africa is "most fundamental for contemporary African Philosophers because of the importance of the African Environmental experiences" (Ojomo 2010:62). This research is thus aimed at developing an effective theoretical response that can inform practice to the global challenge of the environmental crisis from African parlance², through the exploration of the Indigenous African epistemic worldview.

¹ Environmentalism could be viewed as that intellectual platform upon which environmental issues, problems, challenges, concepts, movements and discourse are debated and practiced. It stands for the series of activities ranging from academic to political, economic, social or cultural that are directed towards protecting the quality and continuity of life through prevention of pollution, natural resources conservation, land use control methods and polices, animal liberation, and social ecology to mention but a few. See J. Baird Callicott and Robert Frodeman (2009, 111–13).

² The term 'African parlance' will be employed in this study to identify with ideas, concept or worldviews that are of African origin, of African expression or demonstrates the articulation of thoughts in a manner common to the people of the African continent.

The thesis's usage of the phrase 'African Epistemic Order' (AEO) presupposes that there is a unifying point arising out of the various epistemic worldviews of Africans. As rightly opined by Bell, "Africa, does not have a single culture that is to be understood, it is a large, diverse and sometimes enigmatic continent with a diversity of cultures" (2002:X). However, this research argues alongside Kaphagawani and Malherbe (2002) that an African Epistemology [AEO] is employed in the generic sense as when we use the phrase 'African Philosophy' (2002: 220). The authors further noted that the usage of any term as a suffix to 'African' in the generic sense "does not deny that there are significant variations among the many cultures in Africa" (2002:220). In other words, though Africa is characterised by diversity of culture and practices, there are however common themes to be found within most African worldviews (Behrens 2014: 65). Put in another form, to say that an idea or term is homogeneously African (as in African Philosophy, African thinking, African epistemology, African Science etc.) is rooted in the unified vision of culture in the continent Martin Nkernkian (1999:8). The unified understanding of cultural orientation in the African continent accounts for the undesirability to isolate any socio-cultural practice, say, religion, as such practices permeates all aspect of the Africans' life despite the existence of varying sets of beliefs and practices by different segments of the continent (Mbiti 1969:1). It thus becomes understandable that by virtue of the unified expression of thoughts common to various cultures of the continent, the usage of the term 'African' to identify a worldview, culture, idea or concepts from the continent, is homogeneously employed (Nkernkian 1999:9-10). Thus, in line with Thaddeus Metz (2007a:332-333) certain practices and ideas are recurrent themes that are common in the African ways of life but absent from the West.

By using the term African epistemology or AEO, this study relies on the method in which essential thoughts are abstracted from the common or everyday practice to formulate concepts and ideas. Thus, identifying any view, idea or concept as ‘African’ is based on the strand of sub-Saharan thought common to many of the varying cultures in the African continent (Metz 2012a:389). This implies that there are some commonalities in the various African cultures, which are not prevalent or observable in Western culture, which permit the generic usage of the term ‘African’. This method also enables us to identify particular African epistemic worldviews common to most African cultures and also informed by a strand of intellectual thought common to African culture. However, an objection could be raised against homogenising a concept or practice for Africa through observable facts from some sections of the continent as insufficient to characterise the whole continent. To such a query, it should be noted that geographical labels be it Asian, Western or African are “not exclusive to, exhaustive of, or fixed in the relevant *locale*” (Metz 2015:1176). In other words, to apply a term to a geographical location is a means of identifying features that persist over a long period and are recurrent in a *locale* such that such features are less prevalent elsewhere. Thus, the use of the term ‘African’ as prefix – [African (prefix) Epistemology (suffix)] – to any concept in this study, despite the limitation of examining all cultures or segments in the continent, is an identification function conventional to intellectual literatures bordering on geographical labels or classification.

Examining the nature, scope and character of the epistemic stance that is prominent in the African worldview will thus be done by exploring the indigenous knowledge systems of various African cultures particularly of the Yoruba and Igbo people of the western part of Nigeria, in West Africa. In other words, the research’s focus is contextualized within the ontological and relational holism

pervading the epistemic worldview of Africans. The goal is to explicate, from the epistemic views of these African cultures, ideas that would be appropriate for the reconstruction of an African environmental philosophy. Hence, the term ‘Indigenous African Epistemic Order’ will be employed in this study to mean an empirico-rational³ way of perceiving and reacting to the world in a manner that is indigenous to the African cultural worldview. As such, the term ‘epistemic order’ will represent a people’s doctrine concerning the nature of knowledge. It will be employed to denote the process or manner by which “an African comes to know or claims to know that something is the case” (Kaphagawani & Malherbe, 2002: 220). ‘African Epistemic Order’ will denote the knowing process that is not only peculiar to the indigenous African people, but which also encapsulates the nature of epistemic realities in contemporary African culture. Such contemporary or current epistemic development from an African parlance, it must be noted, is rooted in indigenous epistemic worldviews. Thus, AEO includes what it means to know; justification of knowledge claims; the how’s of knowledge acquisition; the determinants of the validity of knowledge and the dissemination of knowledge claims in the African cultural setting. However, this research will not be oblivious of other indigenous systems of knowledge acquisition and justification from indigenous communities outside Africa. Such recognition is with the understanding that “there are different approaches and perspectives [that cultures employ to] understand the world around us” (Jimoh and Thomas 2015:117). As argued by (Jimoh 2018:7), IKS is an appraisal of the sense of rationality by which a people make meaning out of reality and thereby foster a harmonious interaction among themselves. This shows that IKS is a knowing process that is unique to a particular society. The research chooses to focus mainly on the IKS of

³ The empirico-rational stance of African epistemology is more espoused in the fifth chapter to revealing the interconnections of the subject and object of perception in knowledge claim. The inherent viability of this interconnection is further explicated in the sixth chapter for an application to environmental discourse.

the African which is known in academic parlance as African Indigenous Knowledge Systems (AIKS). The reason for the focus on the AIKS is not to give room for unwarranted comparative analysis of epistemic worldviews of diverse geographical locations. Focusing on the epistemic system that is indigenously African is to explicate the African epistemic process as an alternative framework for further development of an African orientation in environmental philosophy.

The need for an alternative framework for the task of constructing an adequate African environmental philosophy is taken to be imperative in this study due to the identifiable gaps in existing studies. Scholars have advanced ideas with respect to philosophical discourse on the environmental crisis from the African point of view. This attempt was pioneered by Odera Oruka's "Ecophilosophy and the Parental Earth Ethics: On the Complex Web of Being" (1994); Kwasi Wiredu's "Philosophy, Humankind and the Environment" (1994); Segun Ogungbemi in his "An African Perspective on the Environmental Crisis" (1994), (2001); and Godfrey Tangwa's "Some African Reflections on Biomedical and Environmental Ethics" (2004). Others in the field include Workneh Kelbessa (2005:17–34.), (2014:31-61), (2018); Munyaradzi, Murove (2004:195-215); Thaddeus Metz (2010), (2013), (2017a), (2017b); Philomena Ojomo (2010:43-63), (2011); Kevin, Behrens (2010:465-484), (2014:63-82); Chigbo Joseph Ekwealo (2011); Munamoto, Chemhuru (2016:41-51), (2017b); Roland Olufemi Badru (2018) and Olusegun Steven Samuel and Ademola Kazeem Fayemi (2019), (2020) to mention but a few. Whilst these scholars have advanced a form of an African orientation in environmental philosophy, this research aims to develop on their ideas and to show that they fall short, because of their over-reliance on ethics and the neglect or under-exploration of the African epistemic process in environmental worldviews.

Querying the over-reliance on ethics in the application of philosophy to environmentalism is important to this study as it reveals the significance of the need for calling for a change in the philosophical approaches and methods of engaging with environmental issues. For my study, such a query necessitates the view of environmental philosophy as a field of study that surpasses the application of ethics in environmentalism. This view is hinged on the argument that environmental philosophy covers an enormous range of studies, with ethics being just a part of it. Also, this view is in consonance with J. Baird Callicott's argument that environmental ethics should be taken as one in the pool of various applied philosophies to environmental issues (1984:299). Thus, from this view of environmental philosophy comes the part-whole relationship between environmental ethics and environmental philosophy that informs the query of over-reliance on ethics in the field of environmental philosophy. This part-whole relationship between environmental ethics and environmental philosophy informs Michael Zimmerman's view that environmental philosophy cannot be reduced to environmental ethics (1998:viii); as well as Colyvan (2006:97–99) that it is a dangerous conceptual mistake to think that philosophical concerns in environmentalism only fall within the purview of ethics.

Furthermore, on arguing for a beyond the ethical perspectives in environmental philosophy, the present researcher advances an epistemological approach to the question of environmentalism. One major concern in this epistemological stream of inquiry into environmentalism is identifying what is problematic with the present assumptions concerning human knowledge about the relationship (or lack thereof) between humans and the natural world. This is in the bid to move towards considering how human beings ought to conceive of such knowledge. Thus, we are lead in this research to an idea of environmental epistemology which according to Scarfe, is “both

descriptive as well as prescriptive” (2008:98). From various studies from the African perspectives in environmental philosophy, the need for an epistemological consideration has been noted by a number of scholars. Ekwealo (2011:10–11) implicitly noted the need for an epistemological dimension as he argued that the functionality of African Environmental Philosophy is a consistent and coherent global ethical platform that is mainly achievable through the consideration of African Environmental Philosophy which is rooted in the ontology of complementary dualism. Also, Badru (2018:198–202) noted that epistemological perspectives for African Environmental Philosophy proffer a coherent framework for advancing sustainable environmental democracy. Arguing for the development of a functional environmental policy in Africa, Workineh Kelbessa (2018:309–323) calls for the imperativeness of paying attention to epistemological dimensions of African intellectual thought for a grasp of the attitudes, values and emergent environmental concerns.

However, these studies did not commit to the exploration of the epistemic outlook for environmentalism. My study fills this specific lacuna. Arguing in accord with Bryant (2011:7), this research will put forth that epistemology provides the foundation for a culture’s worldview, which in turn determines the mental constructs that people use in understanding reality. This means that a culture’s epistemology provides the foundation for the culture’s experience and understanding of reality. Arguing further, Bryant holds that “epistemology as a value laden- social construct informs our pedagogy, our scientific inquiry and our truth; and by implication, our ethics, morality and modality for adjudging right and wrong” (2011:8). Thus, to talk of an environmental philosophy that is African in orientation, is to have a conceptual understanding of the epistemic order of the African culture for engaging nature. This is to enable us to arrive at a framework for environmental philosophy that is both African in making and global in practice.

The “African Epistemic Order” (AEO) in this research work, is consequently employed as an alternative framework for engaging environmentalism. It is a framework that operates differently from the dualistic and dichotomous construal of reality inherent in traditional Western epistemology, which has been found by this study to be at the root of the unethical human-nature relationship that engenders the misuse of nature, and hence, perennial environmental crises. I argue in this study that the African epistemic process offers an understanding of knowledge in which there is a unification of the subject and object of perception/knowledge. This understanding engenders a sound recognition of the object of knowledge as significant in the scheme of knowledge acquisition. Such recognitions, I further argue, has a way of enhancing our understanding of the natural environment, our relationship with and usage of nature, and engenders sound ethical guidelines for an environmental consideration. Epistemology as a theory of knowledge aims to “inform and explicate practice – to determine how people can know and act within the specific symbolic, cultural and social structures and institutions they inhabit” (Code 1995:190). Thus, it could be held that epistemology is about the how and what of the claims we make concerning the facts of our existential experiences. Seeing epistemology from the prism of existential experience entails a critique of Western traditional epistemology, where epistemology is presented from the prism of abstract knowledge (1995:204). This epistemic detachment of the subject from the object of knowledge has also been identified by Christopher Preston (2003:3–10) as “disconnecting place and mind”. For Preston (2003:5), the philosophers that have shaped Western intellectual positions on the epistemological front detach the subject from the object of knowledge. By so doing, these scholars, as noted by Preston, “are guilty of neglecting the nonhuman world when they offer critical analyses of why thoughts and beliefs take the particular

shape they do” (2003:xi). It should be noted that, an epistemic process fashioned on the prism of an isolated subject of knowledge is bound to be exclusive of the object of knowledge.

The adoption of AEO as an alternative perspective underlines the significance of usage of many varied solutions for the challenges of environmentalism. Thus, the usage of Western epistemology as a sole perspective on knowledge, notwithstanding its weaknesses, is inadequate. But plurality of knowledges accounts for the meaningfulness of the epistemic practices from any segment of humanity: Western, Southern or Eastern. On the viability of the plural nature of knowledge, Olademo (2009); Maldonado-Torres (2012:1–10); and Grosfoguel (2011; 2012:88–104 and 2013), have queried the universalising agenda of the Western epistemic process as the ideal for all other cultures of the world. These scholars, to mention but a few, have argued for ‘pluriversal epistemology’. In the idea of pluriversality, there is an inherent recognition and affirmation of equality in all cultures of the world. The idea of pluriversality engenders contestation of equal thought processes for enrichment, advancement and development of knowledge forms. Thus, for Grosfoguel (2012:91-102), to think pluriversal is “by engaging histories and knowledges in different parts of the world... [to produce] critical decolonial knowledge that is rigorous, comprehensive, with a worldly scope that is non-provincial”. To further put the argument on pluriversality in clearer perspectives, Mignolo’s argument becomes essential:

... [P]luriversality [is] sensing the world as pluriversally constructed. Or if you wish, pluriversality becomes the decolonial way of dealing with forms of knowledge and meaning exceeding the limited regulations of epistemology and hermeneutics... Pluriversality as a universal project is aimed not at changing the world (ontology) but at changing the beliefs and the understanding of the world (gnoseology), which will lead to changing our (all) praxis of living in the world... Consequently, pluriversality as a universal project means that the universe cannot have one single owner. Pluri – and multiverses are convivial, dialogical or plurilocal exists independently of the state and corporations (Mignolo 2018:x–xii).

One appreciable fact from the foregoing is the grounds for conversation that pluriversality opens up among different cultures of the world. Intellectual dialogue is achieved out of mutual understanding and respect. This allows for the viability of knowledge forms and processes from any segment of the world, including the AIKS.

The significance of intercultural engagements for sustainable knowledge has also been emphasised by Boaventura de Sousa Santos (2018:78) as he argues for an ‘ecology of knowledge’ and ‘intercultural translation’. For him, both are essential for enhancing cognitive justice. He argues thus:

The ecologies of knowledges are collective cognitive constructions led by the principles of horizontality (different knowledges recognise the differences between themselves in a non-hierarchical way) and reciprocity (differently incomplete knowledges strengthen themselves by developing relations of complementarity among one another) (2018:78).

The practicability of intercultural dialogue thus, opens up the frontiers for discussing alternative viewpoints from other cultures, which are equally authentic and significant contributors in the scheme of knowledge. Hence, the position of this study to explore AEO for the discourse on environmentalism. The present author is of the view that AEO has the potential to unlock an understanding of the human’s place in the scheme of existence as a being that is part of nature. Such understanding, it will be argued has the possibility of engendering sound, harmonious, and symbiotic interrelationships between humans and the environment.

1.2. Rationale for the study

The challenge for this research is to show how the indigenous African Epistemic Order provides grounds for an environmental philosophy that is African in making and global in practice. The pragmatic quest of this study's attempt is essential in view of Wiredu's work, *Are There Cultural Universals?* (1998), wherein he shows the significance of Africa's intercultural communication with other cultures of the world. The study seeks to, among other things, pursue this pragmatic quest by examining how Indigenous African epistemic worldviews could contribute towards addressing the epochal challenges of environmental degradation. The research will thus be presenting AEO as an epistemic alternative that could enrich humans' knowledge concerning the environment, as well as our attitude and method of usage and valuation to the environment. This kind of epistemological framework, the research will show, is conducive and appropriate for the establishment of a contemporary African environmental philosophy. This is because AEO proffers grounds for the mentality, relationship, and ethics that is not endangering to nature, but constitutes nature and the whole gamut of the environment—in which humans also participate—as a harmonious part of the 'organism' called earth.

The importance of this position is to buttress—as done by various scholars including Cheney and Weston (1999), Gordon (2002), Preston (2003), Scarfe (2008), Kawall (2010), Oyekunle (2011), Bryant (2011) and Shepard (2012) – that a continual concentration mainly on ethics and studies of morality in the quest for the panacea to the epochal environmental crisis, is a mere attempt to undermine the vastness of the challenges of environmentalism and a sheer intellectual understatement. It is strongly believed therefore, that this epistemic approach for an African orientation in environmental philosophy would:

1. give a robust upliftment to various intellectual approaches of relational orientation hitherto advanced in the field of African environmental philosophy;
2. proffer a framework upon which African environmental philosophy could be holistically discussed;
3. make available an alternative pathway towards the development of ‘other’ environmental philosophical worldviews outside those of the Western orientation;
4. increase knowledge in the application of Indigenous African epistemology to environmental issues.

Though it could be argued that the views advanced herein are swimming against the tide of the known traditional intellectual heritage in Western environmental philosophy, I however take refuge in the words of Albert Einstein (1954:157) that “... [h]umanity is going to need a substantially new way of thinking if it is to survive”. As a matter of fact, our species as a whole is ready and waiting for just such an idea to come along and encourage rampant environmentalism as a way of protecting something that humans are not only part of, but profoundly intermingled with: the environment.

1.3. Statement of the problem

There is a tremendous need to develop sustainable solutions to the current environmental problems and challenges. The current environmental philosophy and ethics – which are Western oriented – fails to properly accounts for the epistemic grasps of the outlook, stance, tenets, attitudes, and principles of indigenous environmental concerns. The quest is thus for an African outlook in

environmental philosophy that would be both participatory and interdisciplinary in the quest for more meaningful and pragmatic problem-solving frameworks. This study seeks to further improve in the development of an African oriented environmental philosophy, but which hinges on some indigenous African theories of knowledge. The research argues for a sustainable solution to the environmental problems of our world as it is based on epistemological theories that do not separate and therefore place into antagonism the knowing subject and the known object. The study develops a view of the human person and the natural environment in which the two are seen as an integral part of one another, and as a result the human person may adopt a respectable approach towards the natural environment instead of an objectifying and exploitative approach.

1.4. The significance of the study

The purpose of this study is to add to the scanty existing literature in the area of developing an epistemic framework for investigating the African understanding of the contemporary environmental crisis. This is done with the intent to attempt a reconstruction of the existing African views in environmental philosophy from the parlance of African indigenous epistemic orders. In other words, the thesis fills the gap of the neglect and under exploration of African epistemology in the construction of an African environmental philosophy that is in line with African intellectual heritage.

1.5. Aims and objectives

This thesis aims to explore the Indigenous African epistemology in order to bring to the fore some of its salient features that can help resolve the issues and challenges of environmentalism. This is with the intent of showing that the Indigenous African epistemic thought process proffers a reliable ground for the reconstruction of an African orientation in environmental philosophy. The research

seeks to address the urgent need to push for alternative approaches that will be firmly rooted in the Indigenous African Epistemic Order

The research's objective is to show that an African environmental postulation that has its bedrock on the value-laden stance (normative) and social constructivism (descriptive) of the Indigenous African epistemic order, would give a viable reconstruction of environmental ethics that is coherent with 'African ontology' (Tangwa 2004). The research will also show that an explication of the Indigenous African epistemic worldview could proffer grounds for the knowledge needed to entrench "reason, experiences and will for the practicability of the idea of [an] 'ethic of nature relatedness'" (Ogungbemi 1997: 109). The present author is of the view that a reconstructed orientation for African environmental philosophy", fashioned from the light of the Indigenous African epistemic order, would:

- (1) help build a better understanding of the place of humans on earth as a part of nature, and not as a superior species apart from nature;
- (2) reveal the relevance and importance of other nonhuman members of the earth organism;
- (3) foster a harmonious interrelationship between humans and nature that is hinged on a symbiotic principle of existence;
- (4) aid evaluation of the series of environmental act and crises of our contemporary world, thereby engendering nature conservation by putting the science and policy of the use and disuse of the natural environment on the right footing; and

(5) give a holistic approach in seeking panacea to the pervasive problem of the environmental crises.

1.6. Methodology

The study employs philosophical methods of critical analysis, conceptual clarification, analytic reflection, as well as rational engagement with existing theories on African environmental philosophy. This is to enhance an impartial examination and articulate appraisal of differing concepts and theories; unearth the methodological gaps in some of the attempts for advancing an African orientation in environmental philosophy; and thus make the epistemological perspective in environmental philosophy a desideratum. Also, the research employs – in a bid to re-interpret texts and some cultural practices of indigenous African people – the hermeneutical method. Logical reconstruction of existing ideas is done to aid the creation of utilised concepts. In essence, as a purely qualitative research, the work adopts an intellectual querying method and critical analytical approach, within the quest for a practical model which is needed for African environmental philosophy to thrive, both as an academic theory and as a viable tool for policy makers, environmental activists, and humanity at large.

1.7. Chapter overview

The thesis is arranged into seven chapters.

1.7.1. Chapter One: General introduction

This chapter will feature the introduction to the thesis of the research. An examination of issues that lead to the background of the thesis is done to enlighten readers about the thrust of the study

and its importance. The essence of such an examination is to make sense of the ‘quasi-theoretical’ base for the study through analytical reflection. With a detailed enunciation of the Statement of the Problem, Purpose of the Study, Research Questions, Definition of Key Terms, the chapter brings to the fore the relevance of the research to audience. The introductory chapter also includes an overview of all the chapters of the study, ending with a summary that encapsulate the position of the thesis.

1.7.2. Chapter Two: Contemporary challenges to environmentalism

The thrust of the second chapter is the discussion of the development and progress of environmental philosophy. The discussion considers the contemporary challenges to the discipline of environmental philosophy. A conceptual analysis of the environment as a dynamic system which guarantees the life of both human and nonhuman beings will be undertaken. Thereafter, an attempt is made to problematise the idea of environmentalism. Conceptualising environmentalism allows for an examination of the human activities with the environment. It is argued that human-environmental contact has grave consequences for the perennial crisis of our contemporary world: deforestation and desertification, Ozone layer depletion, Global-warming, Atmospheric contamination, and climate change. The effects of these anthropogenic degradation of the environment form the fulcrum of the environmental crisis troubling the world. Further, an overview of environmental philosophy is undertaken to develop a foundational understanding of environmental philosophy.

1.7.3. Chapter Three: A critique of the Western orientation in environmental philosophy

The Third Chapter of the study focuses on the critique of what I regard as the foundation of the environmental crisis. The chapter is concerned with problematising the epistemic foundation of the environmental crisis through a critique of the Western intellectual tradition. This chapter argues that the current environmental crisis ravaging the world is a consequence of the subject/object, mind/matter dichotomy dominant in the traditional Western intellectual heritage. The chapter unveils the fact that anthropocentric environmentalism is structured upon the religious, epistemological and technological framework of the traditional Western culture. In this chapter, attempts will be made to critique the standard epistemic standpoints provided by the traditional Western epistemological framework with its roots in Cartesian duality. To this end, the Western epistemic framework – especially as institutionalised by the Cartesian intellectual project – will be explored in conjunction with how such frameworks dovetail into the Enlightenment foundation for science and technology. It is noted that this dualistic epistemic framework permeates the emerging and enduring intellectual thoughts of the traditional Western orientation.

The chapter deconstructs the intellectual tradition of the West which favours reason, as that which is eternal and indestructible, over and above the external world. A critique is done on the Cartesian epistemic thought as the major prototype of the traditional Western intellectual heritage. The Cartesian idea, it is argued, inhibits the understanding of the holistic and complete interconnectedness of the human with all other nonhuman members of the earth.

1.7.4. Chapter Four: A critique of the current African orientation in environmental philosophy

The fourth chapter is preoccupied with the examination of some of the current efforts at conceptualising African environmental philosophy. The critique is done in lieu of the distinction

raised in the second chapter of this study between environmental ethics and environmental philosophy. Thus, the crux of the exposition in this chapter is based on the presupposition that African environmental philosophy is a genre of African philosophy. As a study situated in the field of African Philosophy, the chapter will attempt to carve out a working definition of African Philosophy. Conceptualising African Philosophy is important for this study to place the research understanding of what African epistemology, and consequently African environmental philosophy is, in proper perspective. African environmental philosophy is thus considered in this chapter as a rational and critical discourse on environmentalism from the African parlance. The chapter proceeds to problematise some of the current attempts at providing solutions to the environmental crisis from the standpoint of African Philosophy. The exploration of these attempts shows that they fall short because of their over-reliance on ethics, and the under-exploration of the African epistemic process in their approaches.

1.7.5. Chapter Five: The nature of the “African Epistemic Order” (AEO)

The fifth chapter of this study centres on the idea of the “African Epistemic Order”. With the need for an epistemologically-enhanced environmental framework being raised from the lacuna observable in the various orientations in African environmental philosophy examined in the previous chapter, the need to enunciate the epistemic process that the framework centres on arises. This is in the bid to strengthen the position of this study, namely that indigenous African epistemic ideologies could be explored for a better comprehension of the human-nature relationship. To achieve this, the chapter will be arguing for an ‘epistemic order’ of African orientation that is devoid of ethnocentric tendencies and uncritical nativism. Such epistemic presentation, it is argued has the tendency to engender practical explanation of the possibility to contextualise objective

existential realities of life. The “African Epistemic Order” will thus represent the African method and doctrine regarding the nature of knowledge. Having enunciated the idea of African epistemic order, the next discussion is to attempt to explicate this epistemic process for an environmental discussion. Such an explication will be in sync with the position of this research work that the African epistemic order has the viability to engender an African orientation in environmental philosophy.

1.7.6. Chapter Six: Towards an African environmental philosophy

The focus of the sixth chapter is the explication of the potency of the Indigenous African epistemic order for the resolution of environmental crises. In espousing AEO, the chapter shows that the two agents of epistemic valuation are complementary and interrelates functionally. In other words, both the subject of perception (humans) and the object of perception (environment) will be shown to be bound together in a unitary ontological worldview. The chapter will conclude by arguing for a modest role, for ethics in African environmental philosophy. Attempts are thus made to show that an epistemologically inclined ethical view is possible due to the normative and descriptive nature of AEO.

1.7.7. Chapter Seven: Findings and general conclusion

This chapter features a summary of the study and a detailed conclusion, in which attempts are made to show the pragmatic stance of an African environmental philosophy hinged on African epistemic thought-processes. Such attempts aim at showcasing the applicability of the framework of an African epistemic oriented environmental view in bridging the gap between theory and praxis. This is achieved by enunciating the workability of the proposed epistemic framework to

environmental policy making, environmental justice, and the balancing between the quest for development and concerns for the natural environment in Africa.

1.8. Summary

This study is aimed at unveiling the viability of African epistemology to serve as a framework for engaging with contemporary existential challenges, with a focus on the environmental crisis. This is in consideration of one of the research objectives: bridging the gap between philosophical theory and praxis. The study argues that anthropocentric epistemic process contributed mainly to the environmental degradation damaging the world today. Western traditional epistemology structured on the abstract faceless subject that is detached from the epistemic object, accounts for what Bryant calls a “partiality of knowledge” (2011:213). Such knowledge forms misguide the advancement of science and the misappropriation of technology, which often results in dangerous pollutants in our atmosphere, epistemic injustices, hazardous waste dumping, and general misuse of the environment (Bryant 2011:214). Exploring how we know in the indigenous African way, may enhance solutions to existential challenges of life. In the face of the environmental challenges ravaging the world today, an alternative knowing process that will be conceptually viable and ecologically accountable becomes imperative. The alternative, the study argues, is made possible in the African Epistemic Order. An examination of environmental crises from the prism of African epistemology denotes and emphasises the abasement of over reliance on ethics in the discourse of environmental philosophy. Recognising environmental crises as a crisis of epistemology, presupposes the following issues that forms the focus of this study:

1. The dogma of detaching the epistemic subject from the epistemic object is a ground for anthropogenic causes of environmental degradation.

2. There is the need for an alternative epistemic framework that recognises the complementarity of the operational stance of the epistemic subject and epistemic object. This is provided for in the AEO.
3. By recognising the epistemic significance of the physical world, object of knowledge or nature in the acquisition and dissemination of knowledge, the AEO appears fitting for a contemporary environmental philosophical discourse.
4. The epistemic framework of AEO cognitively grounds an ethical agent in an ecologically enhanced position to relate with nature.
5. Knowing how to relate with nature engenders the ethical proprieties needed for a human-nature relationship that is environmentally informed.

Although the ideas put forward in this thesis are by no means all-encompassing and conclusive, they nevertheless aim to serve as the basis for future research on African environmental philosophy that is epistemologically based.

Chapter Two

Contemporary challenges to environmentalism

2.1. Introduction

The contemporary world is faced with environmental crisis of an unprecedented scale ranging from resource depletion, increasing desertification, soil erosion, ozone layer depletion, and declining terrestrial and aquatic biodiversity. The challenges posed by this crisis have become like recurrent and perennial in modern society. This chapter thus begins by examining the idea and problem of environmentalism, and the ensuing contemporary challenges grappled with by scholars in the field of environmental philosophy. It further discusses the human-nature relationship which plays out in humans' engagement with nature. A critical panoramic view is subsequently made on the perspectives of Western environmental philosophy.

The chapter also identifies some of the intellectual challenges being faced by contemporary environmental philosophical discourse. The challenges to be identified include: the quest for alternative approaches in the study of environmental philosophy; overcoming anthropocentrism; and environmental socio-politics, among others as. The examinations of these areas of study in environmental philosophy is geared towards unveiling corollary issues surrounding the development of environmental philosophy as a study that surpasses only ethical consideration. Engaging with these contemporary intellectual challenges is apt for this research, as it helps to conceptualise environmental philosophy as a genre of an applied form that operates beyond ethical consideration.

2.2. Environmentalism conceptualised

Studies⁴ have revealed that an attempt at conceptualising the term “environment” is difficult. The reasons are not far-fetched. (1) the concept is broad and multifarious. Thus, it includes sociological, economic, political, aesthetic, philosophical, medical, and cultural dimensions. (2) a critical look at the concept ‘environment’ reveals it as an enormous and vast subject that spans from the microbial actions of an organism to the size of the world’s population.

Etymologically, the concept has been traced to the French word “*viron*” meaning a circle, a round or the world around (Callicot and Frodeman 2009:309). In addition, Agagu (2004:8–9) noted that, the concept of ‘environment’ conveys the idea of “external conditions and influences affecting the life of an organism or entire societies, or the physical and biotic infrastructure supporting populations of all kinds”. Furthermore, environment could be viewed as the physical and material bases of all life. Little wonder then that Omotor opines that the “environment is all the interacting factors that surround, influence, and direct the growth and behaviour of individual beings, groups, species and communities” (2000:147). However, a more enlarged scope of the concept ‘environment’, is provided by Tairu. For him, to talk or write of the environment is to refer to the “combination of natural objects (living and non-living), objects made by human beings, the interrelationships between these and various circumstances which surrounds people on earth” (Tairu 1998:13). Whereas Sanda, from a sociological perspective, conceived ‘environment’ as a “system within which living organisms interact with the physical elements” (1988:88). One could

⁴ See Sebastian Moffatt & Niklaus Kohler’s (2008) formulation of a broad perspective of the environment, especially as that to which is to be “understood as a complex social-ecological system” that involves the interaction, on a series of levels and scales, of diverse multiple-related metabolisms (2008:253). Also, in Magnus Boström and Debra J. Davidson (2018) who enunciate the difficulty of explaining concept: ‘environment’. It is averred that the concept requires a transdisciplinary stance for a sound explanation. Only on this note would, the authors argue, the “biases and blinders” of the science; explanatory power; social; cultural or geopolitical considerations in the attempt to conceptualize environment, be avoided (2018:15).

thus infer that the environment is the accumulation of both internal and external influences and conditions that have effects, in one way or the other, on the living conditions of an organism.

From the foregoing, it may be observed that the concept ‘environment’ goes beyond a static configuration of the earth’s surface: the atmosphere, hydrosphere, lithosphere or the biosphere⁵. Rather, the environment connotes a dynamic system that guarantees the life of both human and nonhuman beings. At the same time, it is a place where living organisms flourish, where cultures develop, and societies are forged. Conceptualising the environment in this manner reveals how significant the environment is to the physical, social, economic, political, spiritual, etc, well-being of all the constituent members of the environment. It further shows the illogicality of relying on a ‘one-method fits all’ approach in the field of environmental philosophy. Thus, as a place that enhances the development and flourishing of people, culture, and society; engaging in ideas that are indigenous to a particular culture or society in addressing their environmental challenges becomes imperative. This further explains the position of this study, to look beyond the ethical framework in environmental discourses, for an exploration of the African epistemological process.

Consistent with this description, the participants of the 2017 conference on the theme, *Environmental Impact Assessment of South Africa*, conceptualised environment as “the physical ecosystem (biotic and a-biotic elements), social, economic, cultural, aesthetic, psychological, and political dimensions in their various interactions and interrelationships” (Gerber *et al*, 2017:67).

Hence, reference to ‘environmentalism’ has to do with the natural condition in which people,

⁵ These terms are used to designate the various elements of the environment; the liquid realm or elements of the environment such as lakes, rivers, streams, seas; the solid elements, i.e. ground, the rocks and soils; and the habitable part of the earth in which living organism are present.

animals, plants, living or non-living organisms, as well as nature in general live, and are connected with the environment. In other words, environmentalism could be viewed as that intellectual platform upon which environmental issues, problems, challenges, concepts, movements, and discourse are debated and practiced. Environmentalism, therefore, stands for the series of activities ranging from academic to political, economic, social, or cultural that are directed towards protecting the quality and continuity of life through prevention of pollution, natural resource conservation, land use control methods and policies, animal liberation, and social ecology, to mention but a few (Callicot and Frodeman 2009:111).

Organised environmentalism, in keeping with the delimitation set above, began with the conservation movement in the late nineteenth century, wherein scholars argued for the establishment of state and national parks and forests, wildlife refuges, and national monuments intended to preserve noteworthy natural features (Callicot and Frodeman 2009:110–112). After World War II, increasing encroachment on wilderness land evoked the continued resistance of conservationists, who succeeded in blocking a number of projects in the 1950s and 1960s. Among these was the proposed Bridge Canyon Dam that would have backed up the waters of the Colorado River into the Grand Canyon National Park in Arizona, United States of America (Hargrove 1989:ix). Consequently, the public was becoming aware that the conservation of wilderness and wildlife was but one aspect of protecting an endangered environment. Thus, growing concerns arose about the unethical disposal of waste, about disposal, dwindling energy resources, radiation, air and water pollution, and pesticide poisoning: particularly as described in Rachel Carson's influential *Silent Spring*, 1962 (Callicot and Frodeman 2009:185–86). The concern for these and

other environmental problems engaged a broadening number of sympathisers and gave rise to what became known as the “new environmentalism” (Merchant 2002:24).

The new environmentalism had a broader goal: “to preserve life on the planet” (Merchant, 2002:45). ‘Environmentalism’, therefore, can be associated with any movement, idea, conception, discipline and worldview advocating for the conservation, preservation and the management of resources geared towards the preservation of life on the planet. It also promotes the protection (and restoration, when necessary) of the natural environment through intellectual discourse, advocacy for and changes in public policy and enlightenment for change in individual behaviours (2002:85–86). Environmentalism as a movement, as argued by Andrew Light covers broad areas of institutional oppression (2002). Examples of such oppressions, he noted, dovetail on – but are not limited to – the issues and areas of “consumption of ecosystems and natural resources into waste, dumping waste into disadvantaged communities, air pollution, water pollution, weak infrastructure, exposure of organic life to toxins, monoculture, and various other focuses” (2002:32–35).

2.3. Humanity and the environment

Most of all what we see upon the face of the earth today could be credited to the ingenuity of the human race. The history of human development has impact on the environment. As Woodhouse (2009:522) rightly noted, transformation of the physical environment has been an integral part of the development of human history since human emergence. Human interaction with the environment and other nonhuman nature could, thus, be seen as a necessary and creative activity needed for the emancipation and welfare of humanity. In body and in mind, in thought and in

action, the human person is the explorer, the discoverer, and the creative destroyer in nature. The ability of imagination, reason, intellect, empathy, emotional subtlety and toughness makes it possible for humans not to just accept or live in the environment as it is but to change it to suit its own desires. To this end, it could be noted that the versatility and uniqueness displayed by humanity had made humans not only focal figures in the landscape of the earth, but as essential parts of the ecosystem.

Given the explorative and exploitative nature of the human race, “no other living things have assaulted the environment as humans” have done (Mbakwe 1982:67). Historically, the human ancestral lineage depended on the environment for survival (Callicot and Frodeman 2009:67). In other words, s/he obtained food by hunting game, fishing and gathering wild fruits, seeds and roots. In fact, it will not be an understatement to assert that the social, economic, religious, cultural, and political lives of humans depend primarily on the environment, particularly upon the land (Mumford 2009:63–65). Mumford however noted that the story, in contemporary times is different (2009:66). With the advent of technology, humans are no longer simple: s/he makes unprecedented noise, exhibits unsurpassed uncleanness via the humongous and indiscriminate disposal of hazardous waste and enjoys all sorts of modern technologies that are environmentally unfriendly (2009:66). Indeed, the enormous power of modern technology is constantly placing strains on the environment and breaking vital links in the web of biological and physical processes that sustain the ecological systems in which humans live (Katz 2016:22–23).

It could, thus, be held that the contemporary scientific and technological world operates largely with a cutting edge mentality of use (Dusek 2008:8). The “frontier mentality” is a human-centred

view that enhances the unbridled use of nature and the nonhuman environment to fulfil human needs (Mumford 1999:88). This attitude shows little regard for the consequences of the various exploitative actions characterising the feat of scientific technologisation. The frontier mentality also violates the guidelines for using natural resources especially as enunciated in the principles of justice governing property appropriation, as argued by the British Empiricist, John Locke (1690). For Locke, the only justification for the ownership, appropriation or usage of the natural resources is if there is enough and in good condition for others ([1690] 1980). Articulating what has come to be known as the ‘Lockean Proviso’, Locke opines that:

Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this nobody has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state [that] nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others ([1690] 1980:27)

For Locke therefore, the usage of the natural is by all reason of appropriateness ought to be guided by the dictum: leaving for others *enough and as good*. The Lockean provisos could be queried for lack of conceptual clarification on the terms employed in the ‘Proviso’. For instance, John T. Sanders, has question the vagueness of the provisos’ key terms: ‘enough’ ‘as good’ and ‘others’. These terms, undefined by Locke in the treaties, left the proviso open to a wide range of constructions (Sanders 1987:377–79). Also, the Lockean Provisos seems restrictive in its application. This is obvious, as the proponent employs the proviso mainly to apply to appropriated natural resources. The Proviso accounts for the usage and protection as it were, of owned resources.

This is in exclusion of unappropriated natural resources. What happens to the wildlife, the forest, and other untapped nonhuman part of nature? How are they supposed to be catered for, conserved and managed, even in the idea of *enough and as good for other*?

However, the Lockean proviso, could pass for an in-genuine arbiter on the management of the built environment. In that vein, it would be a guide to enhancing the consideration of the distant people and future generations (*others*) in the usage and management of built environment-like hydraulic infrastructures, power dams, bridges, hospitals and lots more. This consideration will thus be a guide at avoiding the consequences of the frontier mentality in leaving natural resources *enough and as good*. To act otherwise, is to engage in the unbridled use of the nonhuman environment; a key act of the human-centred use of nature. Noted is the fact that this human-centred attitude has been part of human thinking for much of the history of humanity (Woodhouse 2009:520). The driving force for this worldview is the quest to develop and achieve the sustainability of human welfare.

Of importance to note is the fact that humans' assault on the environment is not a recent phenomenon. For example, in the section of the *Critias* concerning *Atlantis* (111b–d), as noted by Carone (2001:122), Plato described, with disgust, the deforestation of Attica and the resultant soil erosion and drying of springs. Carone expressly presented the grave situation of the Attica forest after the excessive human act of timber felling for ship making, provision of food and materials for the support of the massive armies of Atlantis. These activities led to deforestation of the Attica forest, massive erosion and drought. In describing what was left of the forest, it was noted that “what now remains compared with what then existed is like the skeleton of a sick

man... all the fat and soft soil having wasted away, and only the bare framework... of the land being left” (Carone 2001:122–124). It was noted that Plato clearly blames humans for the destruction of forests, noting that the cut timber still existed as beams in large buildings, leaving only “food for bees” (2001:30) (flowering herbs and shrubs) on the hillsides. One could thus aver that, this attitude of misuse of nature not only happens at the contemporary world, but that elements of misuse of nature abound even in the pre-industrial age. This points to the fact that anthropocentric attitude in the nature-human relationship, is a variant of ways and manners to disrupt, distort and utterly destroy nature and the nonhuman environment. It must be noted here that the natural environment is of crucial importance for social, economic and biological sustainability. For the continued existence of life on earth, nature proffers resources for food, energy, recreation, medicines, and other resources for industrial products. The diversity of nature not only offers humans vast power of choice for their current needs and desires, but it also becomes the source of solutions for the future needs and challenges of humankind. The ability of the natural environment to emerge, maintain existence via self-sustaining means of biodiversity and evolutionary cycle, informs to a great extent the inherent capacity of nature to support the existence of all organisms.

However human interaction with nature puts undue pressure of high magnitude on the natural environment in terms of inefficient usage, as well as in disrupting nature and natural landscapes. In other words, humans’ engagements with nature involve a series of activities that are human-centred and, to a great extent, cause the loss and the destruction of the natural environment. Through various activities like agriculture; energy creation and consumption; transportation; industrialisation; tourism and recreation; science and technological innovations; humans interact

with nature in such a way that they endanger the very nature that sustains their lives. This research thus explores how some, if not all, of these environmental challenges emanating from human engagement with nature could be addressed from an African epistemological point of view.

In the subsequent section, I will examine the panoramic stance of human activities with nature and the ensuing consequences of such engagements, especially as they relate to the contemporary period.

2.4. Implications of human engagement with the environment

Following the calculation of a quintessential environmental philosopher, Holmes Rolston III, the year 2021 is about twenty-one years into what he termed the “unique century” (2012:1). With myriads of environmental crises scourging the world today, one could say that the uniqueness of the century is reflective of the tremendous surge in the adverse effect of human unbridled use of the natural environment. As a matter of fact, the United Nations Framework Convention on Climate Change (UNFCCC) sang the chorus of the “concern for the environment and the welfare of the earth” (UNFCCC 2015:1–32). In the proposal by the president of the UNFCCC for the Adoption of the 2015 Paris Agreement, it was noted that the concern of the United Nations focuses on:

- Recognising that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions;
- Recognising that deep reductions in global emissions will be required in order to achieve the ultimate objective of the Convention and emphasising the need for urgency in addressing climate change;

- Acknowledging that climate change is a common concern of humankind... (UNFCCC 2015:1–2)

What is obtainable therein, is the severe consequences of environmental degradation that is resultant from the rampant use of nature through various activities of humans. So grave are human activities on the environment that Rolston noted that humans could “jeopardise the planet’s future” (Rolston 2012:2). I present below some of the perennial crisis of the environment in the 21st century that are consequent upon the human’s use and misuse of nonhuman nature, which takes the forms that I will articulate below.

2.4.1. Deforestation and desertification

Deforestation is forest clearing on a large scale for agricultural development, urban growth, industrial expansion, and general pressure from increased populations. On the other hand, desertification in the view of The Intergovernmental Panel on Climate Change (IPCC); a body of the United Nations created for providing scientific information on the reality of the anthropogenic cause of environmental crisis, is the process where the lands are reduced to a desert-like condition (IPCC 2007:67). Deforestation has reduced the diversity and stability of the world’s forests. As a matter of fact, the critical data and scientific findings on the climate crisis observe that deforestation is one of the major drivers of climate change (WMO 2019:5).

In consideration of Africa alone, it is observed that,

... large-scale clearing of forests, the burning of biomass, and charcoal burning have led to the depletion of forests in Africa and have contributed to global climate change [as] seventy-six percent of the African population relies on solid fuels, and only twenty four percent has access to electricity (Dimah 2001:12-14).

At this excessive rate of resource consumption, one could better imagine the gradual extinction of hundreds of species of plants and animals because of the destruction of forests and other habitats that Africa has at present. For instance, Dimah noted in the case of Nigeria that, constant deforestation has caused the extinction of plants and animals (2001:15).

A desert is most often defined as an area where annual rainfall is between 10 and 20 inches. More specifically, semi-arid deserts receive less than 23.6 inches of rain annually, arid deserts less than 7.8 inches, and hyper-arid deserts less than 0.98 inches (Gudorf 2009:214). Desertification is thus the “land degradation that is caused by climatic variation and human activities” over a period of time (2009:214). In other words, desertification could be termed as the destruction of dry land ecosystems, resulting into the reduction and loss of productivity. Desertification is often caused by natural phenomenon or human made activities. Human-made desertification includes: overgrazing; over cultivation; bush burning and general environmental misuse. These are actions fuelled by selfish the human-centred use of nature. On this, Christine Gudorf (2009:216) noted that “since the agricultural revolution of 8000 BCE, humans have been governed by an agricultural mindset that dismisses as unimportant any land not usable for farming”. Such unbridled usage of land is putting strain on dry land, enhancing loss of nutrients in the soil and increasing the desert regions of the world. As warned by Heinz Kimmerle (2006), “increasing desertification is a threat not only to the earth’s human population, but also to its overall biodiversity” (2006:253). Some of the effects of desertification are the loss of vegetation, soil erosion, drought, famine, landslides. In addition, effects of the anthropocentric (a concept which I shall discuss in detail later) use of this non-renewable (land) resource have caused low productivity in agricultural products and can also

be attributed to the shortage of arable plants in our societies today. Cattle rearing, commercial plantation and logging also, to a great extent, contribute to the causes of deforestation.

2.4.2. Ozone layer depletion

The ozone layer is found at a height of about 20-30km above the earth surface and it provides a protective layer that prevents the penetration of the sun's ultra-violet rays (IPCC 2007:82). The report further argues that:

Ozone, the tri-atomic form of oxygen, is a gaseous atmospheric constituent. In the troposphere, [The lowest part of the atmosphere from the surface to about 10 km in altitude where clouds and weather phenomena occur] ozone is created both naturally and by photochemical reactions involving gases resulting from human activities (2007:85).

The ozone layer is a thin part of the atmosphere that shields the Earth's surface from the damaging solar radiation which is harmful to plants, animals, humans and the ecosystem (Hourdequin 2009:132). The depletion of the ozone is "the thinning of the ozone in the upper atmosphere" (2009:131). The pollution of the atmosphere through the release of chlorofluorocarbons gases produces from the huge engines and factories of modern industrial usages, causes the depletion of the ozone layer (the protective coverage from ultraviolet rays), and this results in environmental degradation. It should be noted that such exposure to high ultraviolet rays is inimical to skin and could result into various degrees of skin diseases. This is in line with Judith Andre's (2009:216) observation that "as the ozone layer thins, skin cancer increases, and so do cataracts". Also, low productivity in agriculture is caused by ultra-violet rays. Additionally, increases in ultraviolet radiation affects water bodies, disturbs aquatic life which supports the food chain, and causes death

and loss of aquatic animals. The IPCC 2018⁶ report noted that the continuous depletion of the ozone layer has a way of increasing the overall ozone-related mortality. The report argues that:

There is high confidence that ozone-related mortality could increase if precursor emissions remain the same, and that higher temperatures could affect the transmission of some infectious diseases, with increases and decreases projected depending on the disease (e.g., malaria, dengue fever, West Nile virus and Lyme disease), region and degree of temperature change (IPCC 2018:241).

Clearly, there are adverse consequences resulting from the misuse of nature, and sundry activities of human beings that constantly degrades the environment.

2.4.3. Global Warming

Global warming (GW) is the result of the continued build-up of greenhouse gases in the atmosphere. It is the “measurable increase in the average temperature of the Earth’s atmosphere, oceans and landmasses” (Nweke 2018:150). This is a situation precipitated primarily by actions of those who advocate for theories of anthropocentrism on the usage of the environment. The 2018 report of the Intergovernmental Panel on Climate Change holds human activities to be responsible for the increase of global warming above pre-industrial levels. The report had it that “human activities are estimated to have caused approximately 1.5°C of global warming ... Warming from anthropogenic emissions from the pre-industrial period to the present will ... continue to cause further long-term changes in the climate system” (2018:2–5). The IPCC (2007), argued that the “[w]arming of the climate is unequivocal, as is now evident from observations in increases in

⁶ The IPCC 2018 report tagged Global Warming of 1.5°C is a special report organized at the instance of the 2015 Paris Agreement to assess the impacts of global warming of 1.5°C above pre-industrial levels. On the other hand, the IPCC 2007 report earlier noted in this study is a Synthesis Report (SYR) on various scientific and assessment outputs on the issue of climate change. The 2007 report confirms the reality of climate change as mostly a cause of human activities and confirms the possible increase of global warming in the future. The 2018 special report on the other hand emphasizes the adverse effect of climate change on people, ecosystems and livelihoods around the world. It also, among other things, reiterates the essentiality of limiting the warming level of the globe to 1.5°C above the pre-industrial world, as levels above 1.5°C is proven to cause irreversible damages to the global world.

global average air and ocean temperatures, widespread melting of snow and ice” (2007:3). For Holmes Rolston, the global earth is “warming through greenhouse gas emissions and deforestation” (2012:4). The harmful gases, which include carbon dioxides, methane, nitrous-oxide, chlorofluorocarbons to mention but a few, block some of the heat radiated from the earth, so causing the greenhouse effect. Informed by the graveness of the situation, Rolston further noted that global warming is an imminent threat to human’s well-being and continuous existence on earth. (2012:9). The major anthropogenic causes of increasing emissions of greenhouse gases are numerous. These causes include: burning fossil fuels for energy and transport; the clearing of forests which reduces carbon dioxide absorption; cattle raising which produces methane emissions as a by-product; and the use of industrial technologies that pollute the environment (IPCC 2007:6-9). These activities have resulted into evidential effects which include rising sea levels, increases in extreme harsh weather, heat waves, changes in wildlife distribution disappearing glaciers and polar ice, damage to coral reefs and the abundance of disease vectors (Maslin 2004:2–4).

Although Africa, as part of the global world shares in the degradation of the environment, because of her colour and low income, bears the effects of environmental hazards more than the developed nations (Bryant 2011:126-127). Bryant’s concern was succinctly expressed by Maslin: “Be under no illusion: if global warming is not taken seriously, it will be the poorest people in our global community, as usual, that suffers most” (2004:3). This, thus, becomes a motivation for this thesis in arguing for a framework that would be fit in the discourse of environmental crisis generally and global warming in particular.

2.4.4. Atmospheric contamination and climate change

Atmospheric contamination and climate change are environmental conditions characterized by the reduction in quality of the air environment (IPCC 2018:89). It is a condition that can be caused by either natural and/or human activities. Some of the natural causes are volcanic eruption,

whirlwinds, earthquakes, to mention but a few. However, anthropogenic or human induced causes, which account for the main degradation of the environment includes: inappropriate waste disposal; gas flaring; oil exploration; industrial pollution; coastal erosion burning of fossil fuels; deforestation for agriculture; and industrial activities. The effect of such human activities according to Nils Zimmermann, is the “unprecedented increase in atmospheric CO₂ concentrations from 280 parts per million (ppm) 200 years ago, to about 400 ppm today” (Zimmermann 2016:45). Thus, the overloading of the atmosphere and of ocean waters with carbon is the major cause of climate disruption which is known to impact both aquatic and terrestrial lives and contribute to bio-diversity loss (Rolston 2012:23). Noted is the fact that the effects of climate change if not properly curtailed could lead to climate-related risks to: health; livelihoods; food security; water supply; human security and economic growth (IPCC 2018:269). Such climate-related endangerment of humans is expected to be of adverse effect in regions of the world that are poor, of low income, and undeveloped. The IPCC confirms this view thus:

...the regions at disproportionately higher risks [to the effects of climate change] include Artic ecosystems, dry-land regions, small island developing states, disadvantaged and vulnerable populations; some indigenous peoples, and local communities dependent on Agricultural or coastal livelihood” (IPCC 2018:9).

To this end, efforts towards the reduction and possible end to atmospheric contamination and climate change is a continuous act that is expected to involve all and sundry.

Envisioned solutions involve replacing fossil fuels with renewable energy; reforestation; reducing emissions from agriculture and calls for change in industrial processes. However, Zimmermann noted that these suggested solutions are not being applied “quickly enough” to prevent catastrophic climate disruption (2016:22). Also, it should be noted that many of the proffered solutions are

sometimes designed oblivious of the indigenous or traditional lived experience of the people leaving in the community of affected areas. This is however receiving a gradual change with the call for alternative approaches in the management of and conservation of natural resources and built environments. The 2018 IPCC report clearly recognise this, with a huge section of recommendations in the report arguing for the development of alternative method and approaches. Developing alternative livelihoods and food sources as well as alternative management and adaptation strategy were identified as required options for ecosystem restoration in the quest to reducing the impacts of climate change (IPCC 2018:226). Specifically, the report argued that

Ecosystem resilience may be increased through alternative [approaches to] livelihoods, which are among a suite of options for building resilience in the ecosystem ... combined with the advantages of using indigenous knowledge to guide transitions, solutions can be more effective when taken in partnership with local communities, cultures and knowledge (2018:330).

This research work also falls into the genre of studies responding to the call for the development of alternative approaches in the quest for solutions to the perennial environmental crisis of the contemporary world.

With the overview of various human activities that engenders environmental crisis and the understanding earlier explained about conceptualising environmentalism, the next section attempts to examine how scholars engage the environmental issues from the philosophical point of view. However, the Western orientation in environmental philosophy is now considered before looking into orientations from other climes.

2.5. Perspectives on contemporary Western environmental philosophy

In this section I attempt to discuss the idea of the Western orientation in environmental philosophy.

Though this study is centred on African environmental philosophy, it is considered apt to begin by analysing the corollary of issues surrounding the development of environmental philosophy from Western perspectives. This is in recognition of the global nature of the crisis vis-à-vis the contemporary challenges being faced by the discipline of environmental philosophy. Particular attention is given to contemporary perspectives of philosophy in environmentalism. This is not to say that there have not been philosophical views in traditional Western philosophy with concern for the environment. As a matter of fact, literature abounds that considers environmental thinking in the history of philosophic traditions from classical Greece to the present day.⁷ Indeed, J. Donald Hughes, in his article “Ancient Philosophy” (2009), argues that there are rich intellectual facts that could be garnered from the ancient Greek experience which can be used as a resource and understanding for the discourse of environmental philosophy in contemporary times.

However, the choice for this study, for not presenting the environmental philosophical views of each epoch is due to the present author’s belief that such an attempt falls within the area of environmental history. As noted by Hughes, environmental history is “a subfield of history, it seeks to understand human beings as they have lived, worked, and thought in relationship with the rest of nature” (2009:384). In other words, environmental history is the study of the relationship between human culture and the rest of nonhuman nature, interpreted as the major predictor of human history. Hughes highlights the major themes of environmental history as a field of study that is: (1) investigating the history of impacts of natural changes on human societies and histories; (2) investigating human impacts on the natural environment, and the effects such impact holds on human culture and history; and (3) the studying of human thoughts about and attitudes toward

⁷ See (Carone 2001:67–80); (Coman 2006:55–62).

nature and how such systems of thoughts have influenced human-nature relationship (Hughes 2009:384–87).

This research is centred mainly on the development of a contemporaneous environmental philosophy of an African orientation, especially from the rubrics of African epistemology. Thus, it should be noted that the purpose of the research is not to give an historical overview of the human-nature relationship. The historiology of environmentalism has its advantages to knowledge enrichment in the field of environmental philosophy. Nevertheless, this study does consider some of the shortcomings of Western environmental philosophy, especially the over-reliance on ethics in the discourse of environmental philosophy. Hence, the focus of the next section is on the idea of environmental philosophy as chiefly aired from the 19th Century scholars.

2.6. Environmental philosophy: an overview

In this study, environmental philosophy is taken as an applied form of philosophy to issues of environmentalism.⁸ Although, one might question the possibility of philosophy to have practical applicability, due to its abstract nature whilst application suggests practical (Almond and Hill 1991:1). It should however be noted that applied philosophy should be understood as “the name for philosophical engagement with the many issues of practical life” Almond and Hill (1991:5).

⁸ Applied philosophy is the application of the main or core areas of philosophy: metaphysics, epistemology, ethics and logic to problems of practical life, with the objective of solving the problems. See Collins English Dictionary, 12th Edition where “applied philosophy” is marked out from philosophy in general by its focus on matters of practical concern (2014:134). It is often identified with applied ethics, but although this forms a large part of the area of applied philosophy, the broader term includes discussion of philosophical problems, some metaphysical, some epistemological, in fields such as law, education or art, that are not strictly or uniquely ethical. For Brenda Almond, applied philosophy is not a new subject as its origins and background can be traced back to the first of the early Greek philosopher, Thales (c.585 BCE) (Almond 1996:46). She, however, noted that applied philosophy as a field of study has suffered a period of neglect because of a paradigm shift from the speculative metaphysics of the nineteenth century to the materialistic scientism of the twentieth century (Almond 1996:44-48).

This also explains the motivation behind this thesis, wherein the aim is to contribute to the viable ways in which philosophy can have an impact in the world. Applied philosophy examines the questions that are most central and relevant to the ways that we live our lives. Many of these questions are epistemic in nature, as they are about what can be known, understood, and reasonably believed. Further, such questions are about how we ought to inquire and seek to understand the world around us. It should be noted that these questions are crucial to how we live our lives and forms the fulcrum of guides as to how we ought to relate to other humans and nonhuman members of the environment.

Environmental philosophy is a branch of philosophy that is concerned with the natural environment and humans' place within it. It asks crucial questions about the relationships between humans and the environment, such as: "What do we mean when we talk about nature?; What is the value of the natural, that is the nonhuman, environment to us, or in itself?; How should we respond to environmental challenges such as environmental degradation, pollution and climate change?; How can we best understand the relationship between the natural world and human technology and development? and What is our place in the natural world?" (Callicot and Frodeman 2009:576–77).

In the introductory part of the edited work, "Environmental Philosophy: From Animal Rights to Radical Ecology", Michael Zimmerman (1998:v–x) is of the view that environmental philosophy can be divided into three main fields. These fields are: radical ecophilosophy; environmental ethics; and anthropocentric reformism. Radical ecophilosophy's agenda hinges on the necessary condition of revolution or a cultural paradigm shift in the quest to save the world from

environmental destruction. This idea rests on the resultant effect of countercultural analysis of human society, which according to Zimmerman reveals “the conceptual attitudinal, and social origins of the ecological crisis” (1998:vi-vii). Examples of works in these countercultural eco-philosophical movement are deep ecology, ecofeminism and social ecology.

Environmental ethics is the second category of the genre of environmental philosophy identified by Zimmerman (1998). For him, this field of study considers extending the traditional boundaries of ethics from solely applying to humans to including the nonhuman world (1998:vii). At the heart of environmental ethics, a major component of environmental philosophy, lies the attempt to articulate a moral or ethical basis of concern for the natural world. Environmental ethics among others “maintains that progress could be made in ending [the] ecological crisis if (sic) we changed our anthropocentric ethical attitudes and granted ‘moral considerability’ to nonhuman beings” (Zimmerman 1998:viii). One major fact that could be deduced from these two areas of environmental philosophy, is the fact that they both see anthropocentric attitudes as cause for the environmental crisis. However, while the former calls strictly for a cultural paradigm shift, the other advocates for a change in anthropocentric oriented ethics. This may suggest that there is a thin line between radical ecophilosophy and environmental ethics. The reason being that, one may find environmental ethicists that are so critical of anthropocentric ethics and the underlying “dualistic categories of Western society” (Zimmerman 1998:ix) that such would easily pass for a radical eco-philosopher, as are the cases with Arne Naess and Freya Mathews among others⁹. However, a less radical position: weak anthropocentrism makes long and thick the line between

⁹ Arne Naess as a deep ecology proponent comes to mind here especially in his argument for an environmental ethics borne out of the consideration of the unity and diversity of life. This he termed: “Eco-sophy-T” (Naess 1989:163–212). Also (Mathews 2000); (Mathews 2009).

radical ecophilosophy and environmental ethics. In Zimmerman's view, weak anthropocentrism is the view that holds humans to be more intrinsically valuable than nonhumans, and also grants that some nonhumans should not be used or considered instrumentally (Zimmerman 1998:viii-ix).

In the third area of environmental philosophy, there is the intellectual call for the reformation of human tenets in the quest for the panacea to the environmental quagmire besetting the world. This third worldview, anthropocentric reformism, maintains that "the root of our environmental problems is neither anthropocentric attitudes about humanity's place in nature, nor the political-economic structures that embody those attitudes. Rather, air and water pollution, wasteful use of natural resources and the like stem from ignorance, greed and short-sightedness" (Zimmerman 1998:viii). It further shows that such factors and crises may be addressed by enacting legislation, and changing public policies, among others.

From the foregoing, it could be argued – without any form of polemic contradiction – that environmental philosophy cannot be limited or reduced to environmental ethics, environmental aesthetics, ecofeminism, environmental hermeneutics, or environmental theology. Hence the view of Zimmerman, that the idea by some scholars to reduce environmental philosophy to environmental ethics alone is misleading. Environmental ethics is only one part of environmental philosophy. The latter exerts influence on a large range of disciplines including environmental law, environmental sociology, eco-theology, ecological economics, ecology and environmental geography. Little wonder then that J. Baird Callicott categorises environmental ethics as "one among several applied philosophies" (1984:299).

2.7. Beyond the ethical perspectives in environmental philosophy

The present author is of the view that the understanding of environmental philosophy – as a field of study that engages more than just the ethical platform is – essential for an exploration of the part-whole relationship between environmental ethics and environmental philosophy. The argument here is that, the magnitude and even the recalcitrant nature of the challenges of environmental crises in our contemporary world makes it not only misleading, but conceptually fallacious to limit or reduce environmental philosophy to environmental ethics. It should be noted that, the query of overplaying ethics in the discourse of Environmental Philosophy is a pivotal point for this study. Indeed, it is one that calls for a shift in the conceptual framework, approaches, as well as methods employable in confronting the environmental challenges besetting the world today via philosophical thought-processes. As noted by Colyvan:

The central focus of environmental ethics ought to be that of how to implement ethical environmental strategies in the face of uncertainty—uncertainty both about how the world is and about the relevant values. But the proper representation of the uncertainties in question is the business of epistemology, and the proper framework for making the decisions in question is the business of decision theory (2006:98).

For Colyvan therefore, to think that “either of these later issues falls within the purview of ethics is a dangerous [category] mistake” (2007:103).

On the part of Freya Mathews, (2006:85–91) the concern of philosophy in environmentalism is purely metaphysical. She opines that, “the Environmental Crisis is a crisis of metaphysics” (2006:96), one that according to her, calls for a revision of the “metaphysical premises of our civilization.” In her view, the metaphysical approach is important as it aids our understanding of

the world, which in turn, would determine how we live in the world. She elaborates as follows: “(a) how we understand the world (our metaphysical premise) determines, to a large degree, how we treat it (b) how we treat our world constitutes our basic modality (c) our basic modality colours everything we do—our (ethics) and entire culture takes its cue from it” (2006:86). Furthermore, in her ‘Environmental Philosophy’ she avows that “the hard problem of environmental philosophy is the question of metaphysics of the nature of Nature” (Mathews 2014:169). However, scholars like Arne Naess (1973), (1989) and Warwick Fox (1989a), (1989b), (2006) in affirming the ‘beyond the ethical perspective,’ advocated for psychological or phenomenological stances in environmentalism. For these scholars, the quest for psychological identification with wider circles of nature as a source of ecological consciousness underscores the concern of environmental philosophy.

Arguing in consonance with the idea that it is a mistake to think of the philosophical issues in environmentalism as merely ethical, are scholars who opined for an epistemological approach to the question of environmentalism. Of such are Jim Cheney and Anthony Weston (1999), Christopher Preston (2003), Adam C. Scarfe (2008), Jason Kawall (2010), Akinpelu A. Oyekunle (2011) and Bunyan Bryant (2011); who all submitted that philosophical concerns in environmentalism are much more than mere extension of general ethical principles and methods to a new applied area, requiring the normative stance of epistemology. Accordingly, attempts were made, though in differing ways, to bring the concerns of environmental discourse into direct contact with epistemology. One point underlying the various epistemological approaches to environmentalism is the argument that the idea of the “frontier mentality” is built upon traditional Western epistemology (Mumford 2009:88). Thus Oyekunle (2011:23–59), in agreeing with Scarfe

(2008) that “epistemology is both descriptive as well as prescriptive,” examines the foundation of the human-centred use of nature. He argues therein that traditional Western epistemology provides the frameworks through which humans were able to experience reality as if they are isolated consciousnesses interacting with a mechanical and devalued world” (2011:56). Oyekunle opines that such traditional underpinnings are anti-environmentalist, as they project a reality where loving or respecting the natural world is almost as ludicrous as loving a photocopy machine (2011:57). Such an epistemic tradition as displayed in traditional Western philosophy requires a form of reconstruction for its applicability to environmentalism. As enunciated in Scarfe (2008), Kawall (2010), Oyekunle (2011) and (2015), and Bryant (2011), a reconstruction of traditional Western epistemology was attempted to make it conducive and applicable for environmental discourse.¹⁰ This study contributes to intellectual perspectives that the philosophical issues in environmentalism surpasses ethical framework or application.

In the next section, I highlight some of the challenges faced by environmental philosophy, especially as it relates to emergent and recent discourses in the field. While it would be practically impossible to cover all the challenges in this study for want of time and space, some of these intellectual challenges are engaged with. The aim is to emphasize, via the examination of these intellectual challenges, the beyond-ethical perspective being argued for in this thesis. Also, such an attempt is beneficial in adding to existing literature that give direction in the field of environmental philosophy.

¹⁰ Such attempted reconstruction is envisioned in the resultant effect of the synthesizing internalism and externalism theory of justification. This was referred to as “Enlightened Externalism” by Oyekunle in his “Towards an Enlightened Externalism: A Demystification of the Internalism/Externalism Debate”, *Socrates*, vol. 3, June 2015, pp. 71-79.

2.8. Contemporary challenges for environmental philosophy

The challenges to be examined in this section are: the quest for alternative methods/approaches and their integration; overcoming of the anthropocentric view of nature; and environmental politics and justice. Noted is that the first two of these intellectual challenges are pivotal to the discussion of environmental philosophy of which this research work argues for – a non-anthropocentric environmental philosophy, that is African in making. Examining these contemporary challenges is significant to this chapter, as the nature of the issues and questions each of these challenges poses reveals that they exceed only ethical answers. Obtainable from the examination of these challenges is the stance that further strengthens the ‘beyond the ethical perspective’ argument of this study.

2.8.1. The quest for alternative methods/approaches in environmental philosophy

There is an old English adage that desperate situations warrant desperate measures. In the face of the dire situation posed by the perennial environmental challenges that seems to defy solutions, and are militating against peace, good health, political stability, sustainable development, etc., in the world today; the consideration for alternative approaches as a sustainable measure in the quest for panacea to the lingering environmental crisis becomes imperative. The reason for this is not far-fetched. As noted by Louis Pojman, environmental concerns are global issues” (2001:249). This is also resonated by Bryant (2011) where Africa, as well as other low-income part of the world, were noted, as the parts of the world that bear the major brunt of the consequences of the environmental crisis. One thing to note here is the fact that these environmental challenges are largely because of the culture of use and misuse of nature characterising the developed nations’ quest for wealth. Pojman further drives this view home when he noted that:

The air we breathe may have been polluted by corporations on another continent while the air we contaminate reaches Africa and Asia. The chlorofluorocarbons (CFCs) we use, which breaks down the ozone layer, affect everyone in the world... (2001:249).

What the views above drives home is the complex nature of the environmental crisis afflicting the world today, and the fact that the issues have so far defied solutions and the need for alternative methods in the quest for solutions to this perennial challenge.

With the advent of globalisation – that sees the world operating on a platform of a holistic global framework – what happens in Europe, for instance, has a consequential effect in Asia; and the events of Africa impact, say, in the socio-economic and political context of America, and vice versa. It thus becomes important to ensure that methods or approaches to ending the contemporary environmental crisis have a global outlook. Indeed, the contemporary African states place great attention to the agenda of environmental management crisis and sustainable exploitation of natural resources (Mawere 2014:xiv). In fact, the theme of sustainable natural resource-use has been high on the international agenda since the first global environmental conference in Stockholm, Sweden in 1972 – The United Nations Conference on Human Environment (UNCHE). On this, Chand Prakash noted that:

The UN Conference on Human Environment (UNCHE) was a turning point in the evolution of humanity's relationship with the earth and global concern about the environment. While most of the conference's accomplishments were mainly rhetorical, its ultimate success was that environmental policy became a universal concern within international diplomacy, and the conference's motto of "Only one Earth" became iconic for the modern environmental movement (2019:15).

Recently also, the quest for conservation and sustainability plays a vital role in the Paris Accord of 2015 – especially through local, community participation and indigenous conservation epistemologies in less developed countries (UNFCCC 2015:1–32). Equity is one of the things that makes the quest for alternative approaches required in international environmental diplomacy. The developing nations often feel skeptical to embrace the global environmental agenda, because “they feared such accords would undermine their economic growth and prosperity” (Prakash 2019:22). Thus, solutions that are inclusive, equitable, ecologically effective; in recognising the needs, peculiarity and aspirations of the developing nations make alternative approaches imperative in international environmental diplomacy.

In the bid to present an African perspective on the global challenge of the environmental crisis, Kelbessa, in his 2015 article titled: *African Environmental Ethics, Indigenous Knowledge, and Environmental Challenges* opines that “non-Western traditions remain a fertile source for many thinkers attempting to re-conceive the culture-nature relationship and envision a theoretical foundation for sustainable living” (2015:288). This is a re-echoing of Pojman in his call for a nobler motive in the field of environmental philosophy where he noted that “we can [hopefully] learn from each other in the quest to act responsibly and lovingly toward [other] human beings and nature” (2001:13). Such a multicultural dimension to environmental philosophy, Pojman argues, is an “international environmental ethic that takes into consideration the insights and perspectives of various cultures and point of views” (2001:249). Similarly, J. Baird Callicott and Roger T. Ames, presented the Asian traditions as a conceptual resource for environmental philosophy in their 1989 co-authored book: *Nature in Asian Traditions of Thought: Essays in Environmental Philosophy* (1989). They point out that there is an “emerging [as of then] consolidated

metaphysical consensus that would necessitate a complete re-visioning of the human nature relationship in Western thought” (Callicott and Ames 1989:vii). It was further noted that “...the environmental crisis challenges rationality... it calls into question at a very fundamental level our most familiar understanding of the nature of other and relatedness” (1989:xi). As a possible resource for an alternative understanding of ‘the other’, a critical look was made to classical Taoism and its elaboration as an alternative interpretation of ‘the other’ (Callicott and Ames 1989:xix). My study falls within the genre of alternative approaches in the discourse of environmental philosophy, especially as stipulated by African environmental worldviews.

In the same vein, Mawere noted that the “exclusion of local communities in resource management and undermining alternative approaches to the western worldviews has continued to be inhibitors to success against the environmental crisis of the world” (2014:ix). Such exclusionist methods could partially account for the lack of solutions to the perennial environmental crisis which takes form in resource depletion, increasing desertification, soil erosion, ozone layer depletion, and declining biodiversity in terrestrial and aquatic resources. It is my considered opinion here, that unless there is a calculated attempt at synthesising indigenous worldviews and Western perspectives in the quest for the panacea to environmental quagmires of the world, success in the environmental enterprise will remain a mirage. In other words, there is a need for critical intellectual dialogue in which all perspectives, from diverse cultures of the world, that are relevant towards achieving sound environmental management be represented. Solutions to the global environmental crisis must be set up “...in ways that leave open clear avenues for criticism and debate” (Preston 2003:124). The avenues for the consideration of alternative points of views in such dialogue is essentially required in the field of environmental philosophy to ensure that a

diversity of perspectives are brought to bear on environmental solutions. It is thus the aim of this research work to contribute to environmental philosophical studies via the presentation of an alternative perspective from the African epistemological point of view.

2.8.2. Overcoming anthropocentrism

In this study, “anthropocentric environmentalism” is understood as the human-centred use of nature as well as all other nonhuman member of the environment. In other words, anthropocentric environmentalism characterises the promotion of unbridled and, exclusive use of the environment in general, mainly for human welfare. It could thus be held that environmentalism may not be sustainable if it hinges on anthropocentric tenets. The reasons for this are not far-fetched as the human-centred worldviews and activities have been shown to be major underlying factors for the environmental crisis in the world. For Moran, the core of the challenge to overcoming anthropocentrism is coming to terms with the idea that “human values determine what is valued in nature, even in the bid to argue for the intrinsic value of nature” (2012:3). In other words, any conceptualisation and considerability that humans could make of nature would always be coloured by human categories. Such categories place nature’s utility in perpetuity at the service to human needs. This could be seen as forming the fulcrum for narrow/strict anthropocentrism and weak anthropocentrism. The latter opening up the full range of values that nature provides and the former encapsulating value-considerability on human determinacy (Mylius 2018:159–62).

The research would want to argue in accord with John Passmore in holding anthropocentric environmentalism culpable and responsible for the environmental crisis the world is battling with today. In the words of Passmore, “...many if not all intractable problems and issues for discourse

and engagement in environmentalism are caused by the anthropocentric use of the natural environment” (1974:3). Succinctly put, the idea of human-centred use of the living and the non-living members of the environment instil humans with the values of the culture of use that is ravaging the natural environment. Right from the 17th century, the outlook and status given to science and technology from the works of great minds like Bacon, Descartes, Galileo and the like was an optimistic one. This is in sync with Nicholas Bunnin and Jiyuan Yu, who both described the “scientific enterprise as the means of liberating the human race from drudgery, famine, diseases, natural disasters and war” (2004:123).

Although there are outstanding advances and remarkable trends in the enterprise of science and technology exemplified in the success of science in putting humans on the moon, transportation, developing drugs, information technology, modern medicine, etc., on the other hand, there are failures, too. Mumford argues that the “modern man is the victim of the very instrument he values most” (2009:29). His reason for this claim is that every gain in power, every mastery of natural forces, every scientific innovation and addition to knowledge has proved potentially dangerous to humanity (2009:45). This is exemplified in contemporary reality, as humans now encounter various challenges and difficulties emanating from scientific technologisation, like: industrial pollution; misuse of nuclear weapons; plane crashes; malfunctioning artificial intelligence, to mention but a few. There is, even, the appealing view that there seems to be a great uncertainty at the frontiers of scientific knowledge and innovations. Hartshorne captures it better in his 1980 article *The Environmental Result of Technology* as he argues that:

... [I]t is now clear that not only does technological man expand at the expense of other forms of lives, but in principle, he faces limits beyond which his own expansion is possible or self-defeating (1980:70)

This in no guise leaves us with the dilemma of modernisation -- as the scientific enterprise aimed at the liberation of human beings – is leading towards the destruction and possible extinction of the world. Putting the anthropocentric mentality to check in the quest for philosophical ideas that would address the perennial environmental crisis becomes an intellectual challenge for the field of environmental philosophy. This study contributes to this challenge by bringing in a non-anthropocentric environmental view from the African epistemic process. The African epistemological process that is structured on the unification of the epistemic subject and object, as will be shown below, proffers a ground for rationalising an African environmental philosophic view that is devoid of anthropocentrism.

2.8.3. Environmental politics and justice

As argued by John Callewaert, environmental justice “is the fair treatment and involvement of all people regardless of race, colour, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies” (2011:79). Environmental justice could thus be viewed as the conceptual connections and causal relationships between environmental issues and social justice. It is an environmental discourse that is borne out of the idea that the environment plays a major role in the socio-political situations of the countries of the world. This is in consonance with Mawere’s (2014:xxiii) view that, “the natural environment is a huge contributing factor to socio-economic development and sustainability”. For Callewaert, environmental justice arose as a concern for resolution to inequalities in the distribution of environmental burdens among the nations around the world (2011:45). In other words, the concept

of environmental justice is out to challenge the fact that some communities or human groups are disproportionately subjected to higher levels of environmental risk than others. The idea of environmental justice is also out to enunciate prevalent socio-political crisis that are consequences of such environmental crisis. A vivid example is the Boko-haram insurgency in the North Eastern Zone of Nigeria which has been argued to be effects of the environmental degradation of the Lake Chad basin (Iyorchia 2014:1–55). This buttressed Munyaradzi's view that "the role and importance of the environment in sustainable development (and social order) cannot be under-estimated" (2014:xxv).

Environmental justice arose as a concern for philosophy in the illumination on the issues of responses and resolution to inequities in the distribution of environmental burdens in nations round the world. In the view of Robert Figueroa and Claudia Mills, the two dimensions of environmental justice includes: "distributive justice and participatory justice" (2001:427). For the later, concerns are focused on racial, or and economical biases in respect to democratic participation as well as representational inclusion in environmental considerations. Following this view environmental justice is seen as a social movement and a field of study put into one. On the other hand, the former is concerned with exploring every intellectual means to expose the fact that communities/countries of colour and low-income have higher disproportionate exposure to environmental risk, hazards and pollution. For Figueroa and Mills:

...distributive dimension of environmental justice begins with the observation that people of colour, the poor, and under-represented groups such as indigenous tribes and nations are faced with a disproportionate amount of environmental burdens (2001:428)

Their view coheres with Bryant's (2011) idea that "race and wealth are the two main predictor for the degradation of environment and location of hazardous waste disposal sites". Bryant further argued that countries of colour and low income, such as the developing countries are disproportionately impacted by the world's environmental crisis (2011:12).

An example of instances showing how Africa bears high impact of environmental degradation is obvious in the Late Kwame Nkrumah's complaints about the activities of the Government of France in 1960. He vehemently spoke up against the usage of the African soil – the Sahara – as a waste dump site and nuclear weapon test grounds by the French government.. In his February 13, 1960 speech titled: *French Atom Test in the Sahara*, Nkrumah argues:

My government has learnt with horror that the Government of France, in total disregard of repeated protest by Ghana and other African States, and of the Resolution of the General Assembly of the United Nations, has defied the conscience of mankind and has this morning exploded a nuclear device on African soil.

My government further noted a declaration by the French Prime minister that this explosion is only the first of a series of similar explosions to be carried out by the Government of France.

In these circumstances, my government must take immediate action to safeguard the interest of the people of Ghana and, therefore, as a first step, my government has decided to freeze, from today, the assets of all French firms in Ghana until such time as the effects on the population of Ghana of the present atomic explosion and the future experiments referred to by the French prime Minister, become known.

I appeal to the nation to remain calm. My government will take any further action which may become necessary (Nkrumah [1960] 1997:25).

Furthermore, the degrading of the developing nations' environmental spaces through the economic activities of the developed and industrialised nations is exemplified as noted by Melissa Macleod:

In March, 1988, a Norwegian shipping company dumped 15, 000 tonnes of incinerator ash from Philadelphia into a quarry on Kassa Island (Guinea). This incident was discovered when the island's vegetation began to die;

In May, 1988, 900 tonnes of toxic waste was exported from Italy to Koko, Nigeria. Of these 900 tonnes of toxic waste, 150 tonnes were PCBs. Other imported chemicals included formaldehyde and methyl melamine, both of which are suspected carcinogens...As opposed to listing the chemicals that were actually being imported, the construction company applied for a permit to import mineral wax, polishing oil, cinder ash, and other industrial chemicals;

In 2006, 17 people died... and over 80, 000 were forced to seek medical attention due to vomiting, nosebleeds, and difficulty breathing in Abidjan, Ivory Coast. This was the result of 500 tonnes of toxic waste that was dumped by Trafigura management in 14 sites around the city— primarily sites near water and agricultural sources...It is estimated that proper treatment of this waste would have cost the exporting country \$250, 000, while in Africa they were charged only \$18, 500 (2013:9).

Obtainable from these examples is the fact that, environmental degradation and hazards in Africa are largely a result of contemporaneous action in pursuit of wealth. With relentless pursuit of wealth identified as a genre of 'frontier mentality' (Mumford 2009) that accounts for the attitude of the incautious use of nature.

The distributive dimension of environmental justice beams its search lights on morally susceptible and repressible notions of inequities in the distribution of environmental burdens. Environmental justice is the fair treatment and meaningful involvement of all regardless of race, colour, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies (Callicot and Frodeman 2009:344). Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies (UNFCCC 2015:23). Thus, environmental justice could be seen as the intellectual

platform (both social and academic) upon which the unequal distribution of environmental benefits and harms are espoused, engaged and challenged.

As noted by Bryant (2011:126), “in the USA, most communities of colour and low-income (often) face a disproportionate exposure to environmental health risks such as air and water pollution, environmental hazards such as landfills, incinerators, sewage treatment plants and polluting industries”. This is also the case in many of the African countries as examples of countries of low income and of colour dissents. The state of poverty – underdevelopment, deprivation and dwindling economy in Africa– makes the continent readily open to the hazards of anthropogenic environmental misuse. In the report of a commissioned study by the United Nations Development Programme (UNDP) and the European Commission (EC) (1998), it was argued that there is a linkage between poverty and environmental degradation, especially in developing countries. The report called to question the ‘orthodox idea¹¹’ that poverty is a necessary cause of environmental degradation, which must first be taken care of to achieve sound environmental protection. This orthodox idea was identified as the poverty-environment linkage in a “downward and mutually enforcing cycle” (1998:4). Noted also is that Segun Ogungbemi (1994 and 2004) also argued along the line of the orthodox perspective of the poverty-environmental degradation linkage, where he identified poverty as the root cause of environmental degradation in Africa¹².

¹¹ The orthodox idea on a poverty-environmental damage linkage is credited to the World Commission on Environment and Development (Brundtland Commission) report that poverty is a major cause and effect of global environmental problems. See World Commission on Environment and Development, 1987.

¹² A detailed critique of this is due in the fourth chapter of this thesis, in the consideration of the African orientation in Environmental Philosophy. Unlike the orthodox position of Ogungbemi, this study identifies the quest for wealth as well as capitalistic tendencies to maximize profit at the expense of the developing African countries and their environment, as one of the main causes of environmental degradation in Africa.

It was noted in the UNDP and EC's report that the worldview of a downward and poverty enforcing cause for environmental damage is oblivious of "the macroeconomic responses that [increase] both poverty and environmental degradation" (1998:3). The position held in the report on the poverty-environmental degradation linkage is reinforced by Bryant's argument that:

... [W]ealth – not poverty – may be the problem, because the social and environmental degradation and the hazard we face today are integrally linked to the scale and intensity of our actions in the pursuit of wealth. In our relentless pursuit of wealth, we often discount the future because extreme wealth and its by-products take away opportunities for future generations (2011:7–8).

What is significant here is the idea that, rather than seeing poverty as the root cause of environmental degradation, poverty should be viewed as the enabling condition to make people of low income countries and of colour to bear more of the hazards of the environmental crisis.

This is apt in consideration of poverty as a form of deprivation of opportunities "to lead a long, healthy, creative life and enjoy a decent standard of living, freedom, dignity, self-respect and the respect of others" (United Nations Development Programme 1997:3). As a form of deprivation, poverty already places developing countries in a disadvantaged position with regards to the capacity and proficiency in responding to the perennial crisis of the environment. Akin Mabogunje drives this position home that:

Because the poor are often cut off from the decision making process of their communities, discriminated against by other stations in society, cut off from abiding roots in the community, and relegated to occupy environmentally unsafe areas of societal space, the solutions to their dilemmas require a multifaced approach based on an understanding of broader deprivation (Mabogunje 2000:10).

Instructive from the above is the fact that to identify poverty as the cause of environmental degradation, amounts to a further injustice done to the community of the poor, even in the quest for environmental justice.

In consideration of the global effect of environmental hazard, poverty as a form of human deprivation continue to provide a fertile ground for birthing the vulnerability of the developing nations to environmental degradation and hazards. This consideration synchronises with Bryant's view, that "[i]f we can solve the problem of wealth and extravagance, perhaps we can solve the problem of environmental degradation (2011:8). In other words, making people advantageous in regard to the availability of economic opportunities, ensuring an environmental check on the capitalist production spree, and the provision of enabling environment that exterminates human deprivation will stop the continual exposure of the poor as well as developing nations to environmental hazards. Thus, in the quest for environmental justice, especially in Africa, consideration of ecological and social interdependence ought to take more precedence over policies dictated by big business interests and geographical prejudices. In this vein, the attention should be placed on strengthening the concerns and institutional capacities of the developing states in responding to environmental challenges. The UNDP report (1998:3) also recognises the representation of local people's concern by arguing that "it is important to acknowledge the local rather than universal experience of [responses to] environmental degradation". Such acknowledgments will enhance the provision of enabling situations for a fair and or equitable distribution of environmental benefits and burdens.

The fact to enunciate here is that, what really makes the effect of environmental injustice to hold sway in Africa, Nigeria for instance, is the ideological and historical foundations of the

environmental justice movement *vis-a-vis* dominant environmental policy, discourse and engagement. Lacking in African countries essentially, as noted by Callewaert, are the three poles of a sound basis for environmental justice: equity (equal distribution of the development of resources rather than control by a few elites); efficiency (management of natural resources) and aesthetics (preservation of nature without development) (2011: 84). On the three poles of environmental justice, *vis-a-vis* the contemporary African state's quest for environmental justice through environmental management and policies, little or nothing could be taken as being achieved. Equity has always been a mirage; efficiency in management of resources has always been marred by ethnic or myopic political prowess; and conservationism is purely of Western and colonial orientation. A total detachment from the local people's participation and contribution mars the little or lip-service effort geared at environmental justice. This underscores the quest of this research, even from the 'beyond the ethical perspectives', to interrogate indigenous the African epistemic worldview. Such interrogation must be with the intent of bringing the potency and normativity of African epistemology to the fore in the quest for theoretical *cum* practical panacea to the salient environmental challenges bedevilling Africa and the world beyond. This would not only demonstrate the possibility and strength of the African indigenous worldview, but also reveal the viability of such ideas in a complementary task with worldviews of other climes: Asian, African, or Western in the development of frameworks for conceptualising solutions to the tapestry of environmental crisis of Africa and by extension, the whole world.

2.9. Conclusion

From the above it has been shown that the whole world is experiencing environmental crises of diverse kinds. The existential realities of the contemporary society unveil the magnitude of the environmental crisis permeating every part of the global world. The chapter has featured the

evaluation of the idea and problem of environmentalism, as well as ensuing contemporary intellectual challenges being faced in the field of environmental philosophy. These contemporary intellectual challenges for environmental philosophy have been examined in order that they might reveal the imperativeness of the 'beyond ethical perspectives' that this thesis is arguing for. It has been further noted that the human-nature relationship that is predominantly anthropocentric forms the fulcrum for the environmental crisis ruining the world. A pertinent question at this juncture is: what is the source or foundation of this anthropocentric human-nature relationship? And what has been the attempt at salvaging or solving the crisis, especially as opined in diverse climes? Hence, in the next chapter, the thesis turns to consider and critique the Western orientation to environmental philosophy. The aim is to explore the Western worldview regarding the environment in order to deconstruct the tendency that makes this orientation leads to anthropocentrism.

Chapter Three

A critique of the Western orientation in environmental philosophy

3.1. Introduction

This chapter will argue in support of the view that the environmental crisis wrecking the contemporary world is traceable to the subject/object, mind/matter dichotomy dominant in the Western traditional intellectual heritage. The chapter unveils the fact that anthropocentric environmentalism is structured upon the religious, epistemological and technological framework of traditional Western culture. A critical look at some key aspects of the Western traditional intellectual framework, the chapter posits, will reveal a long tradition of separating humans from the nonhuman environments they live in. Such a tradition, as will be further explained, engenders an uncaring attitude towards nonhuman nature as well as the misuse of the environment. The present author opines that this human-centred worldview, explored in the previous chapter, is built upon the dualistic tendencies pervading Western traditional thought.

The chapter among other things, critiques the standard epistemic standpoints provided by the Western traditional epistemological framework with its roots in Cartesian duality. To this end, the Western epistemic framework especially as institutionalised by the Cartesian intellectual project will be explored in conjunction with how such a framework dovetailed into the Enlightenment-foundation for science and technology. It will also be noted that this dualistic epistemic framework permeates the emerging and enduring intellectual thoughts of the traditional Western orientation. The plausibility of the critique offered, show traditional Western epistemology as having the tendency for being a model for anthropocentric environmentalism. Furthermore, the critique will

show that traditional Western intellectual thought seems deficient in its theoretical and conceptual framework and hence may be deemed unsuitable for the development of an attitude that enhances respect and/or love for nature, and the nonhuman environment in general.

3.2. Critiquing the cause of the environmental crisis in traditional Western thought¹³

This section interrogates the history of Western thought to ideas that are inimical to nature and its use. It will explore traditional Western thought, especially as canonized in its philosophical, religious and technological foundations, and show that they bear some marks of anthropocentrism. By traditional Western thought, the study is delineating¹⁴ the critique to the modern and enlightenment intellection that proffers the foundation for science and technology, especially from the anthropocentric prejudice. Writers in environmental philosophy have critiqued anthropocentrism as the root of the contemporary environmental crisis (White 1967); (Capra 1982); (Attfield 1983); (Bateson 1991) and (Minteer and Manning 2005). Related to anthropocentrism and following the same trajectory through traditional Western intellectual history are the dualistic and hierarchical worldviews that have been widely attributed to ancient Greece, the cradle of Western philosophical thinking. While such ideas certainly preceded ancient Greece, the works of Plato and Aristotle are often cited as pivotal in the development of Western philosophy generally and Cartesian thinking specifically. Platonic dualism and the Aristotelian ‘categories of being’ contributed to the belief that humans are superior to nonhumans, and to the

¹³ The research employs the term ‘traditional Western thought’ to conceptualize the corollary of ideas and the intellectual heritage of a Western orientation. Such intellectual positions, as will be further shown in the chapter, shape the view, position, and perspectives of various proponents of intellectual thought in the Western tradition.

¹⁴ Delineating the research’s critique of Western philosophy to the traditional and enlightenment era is in the understanding that Western philosophy often generates its query within itself. Although, one could not totally rule out the tendency by contemporary Western philosophy to lean to traditional Western intellectual thought despite some critical currents of the traditional Western views, however, traditional Western philosophy did get awoken up by other Western philosophical movements i.e. postmodernism.

rest of the natural world. As Betty Jean Craige explains in *Laying the Ladder Down*, in relation to Platonic dualism,

Plato's separation of the world into two realms—the realm of ideas and the realm of their appearances in nature—constituted a split between spirit and matter, stasis and flux, mind and body, self and world, and culture and nature (1992:76).

Aristotle expounded upon Plato's ideas, accepting the dualism between spirit or soul and matter, and ascribing greater value to those species that exhibited a greater proportion of soul or spirit (1926:C;12.z5). Regarding the human-nature dichotomy as presented in the Aristotelian categories and bifurcation, Craige further argued that, “this scale of ascent is inherently a model of domination that sees difference as distinguishing rank or value” (1992:85).

The epistemological implication of Aristotelian metaphysical duality portrays a mode of categorisation that presents things as discrete quantities, thereby handling the ontological constituents of entities as separated from each other. Such ontological thought bears the mark of epistemic defects wherein the subjects of perception are not poised to be able to grasp or intuit the object completely and comprehensively. Aristotelian ontology arbitrarily separating the essentials from the accidents, introduced polarisation and categorisation in the understanding of being (Aristotle 1926:d10). Such dichotomist worldviews – permeating traditional Western philosophical thoughts – induce minds to be discriminative and prejudiced against nature in the human-nature relationship. To this human-nature bifurcation, the African philosopher, Innocent Asouzu has this to say: “Whenever and wherever the ego or the mind is trained or indoctrinated to be bifurcating and hegemonic, it invariably also tends to lose controls on its general outlook to the world” (2007:146). The implication of Aristotle's dichotomist worldview is that it fuels negative

anthropocentrism wherein human beings are regarded and affirmed essentially as beings that are distinct and superior to nonhuman beings, which in turn are relegated to the sphere of accidental and inconsequential beings.

It must be noted that the Western intellection of Plato and Aristotle observed above has a form of rational footings into Judaeo-Christianism. In other words, traditional Western intellectual tradition forms the seedbed for Judaeo-Christian account of religion. The Judaeo-Christian biblical account of the creation narrative¹⁵ in the first two chapters of Genesis (1:1-31; 2:1-25), as well as the corollary of biblical events and records also show biases against nature. It should be noted that this research is not unaware that other thoughts could be explicated from the biblical account of creation, for instance the theological implication of the Genesis account on the plan of redemption for humanity by God. However, exploring the biblical account as will be done later in this chapter, shows that the Judaeo-Christian biblical tradition appears to fuel anthropocentrism, and thus leads to a utilitarian outlook towards nature. The dualistic and hierarchical thinking of Plato and Aristotle had an important influence on Christianity, the scientific thinking of René Descartes, and the evolution of Western science. For example, Paul the Apostle, not only adapted the dialectical argument found in the Platonic dialogues to write his epistles, but also employed Platonic dualism (Oelschlaeger 2001:64–65). By Christianising Greek philosophy, Paul further divides the world into the supernatural/natural, sacred/profane, transcendent-eternal/corporeal-evanescent, celestial/terrestrial, spiritual/natural. Paul argues:

¹⁵ The Judaeo-Christian biblical account of the creation is the story that account for creation in the tradition of the bible as held by the Christian belief. The Christian theology draws its account of creation from the old testament. The old testament scripture, on the other hand, is a product of the Jewish tradition. The term Judaeo-Christian thus exerts a synchronisation between Christianity and Judaism in the creation narrative as it shows that the intellectual categories of Christianity inhere in Judaism.

There are also celestial bodies, and bodies terrestrial: but the glory of the celestial is one, and the glory of the terrestrial is another... there is a natural body, and there is a spiritual body ... Now this is saying, brethren, that flesh and blood [natural, corporeal] cannot inherit the kingdom of God [spiritual/transcendental]; neither doth corruption [natural] inherit incorruption [spiritual] (1 Corinthians 15:40-50).

Descartes shared Plato and Paul's dualistic thinking which overemphasises the separation between body and mind. For Descartes, reality is divided into *res cogitans* and *res extensa*—a thinking human and the extended thing (1999:I 20. II 28. & VI; 79-88). The mind, according to Descartes, is indivisible and therefore greatly different from the body, which – being part of (material) nature – is divisible (1999:II; 25). What distinguished humans from the rest of the material universe was the soul, the consciousness that was not of this world (1999:II; 87). His famous maxim – “I am, I exist, is necessarily true whenever it is put forward by me or conceived in my mind” – succinctly states Descartes' belief that the mind is wholly detached from the body and the rest of the world (1999:II; 25). It must be noted here that Descartes' dualism privileged spiritual and self-conscious life over material life. In other words, the human body together with the material world are of less importance in his worldview. This shows that the problem is not only dualism, but also the hierarchisation of beings.

A point of fact to note is that Descartes built his ontology on Protagoras' (481-411 B.C.) – the father of subjectivity, as Protagoras' subjective criterion pioneers Cartesian full-fledged modern subjectivism (Lozar 2018:253). Protagoras's subjectivism was well enunciated by Laertius Diogenes in his account of the lives and saying of Greek Philosophers. Describing Protagoras as a subjectivist, Diogenes quoted him as arguing that “*man* is the measure of all things, of the things

that are that they are, and of the things that are not that they are not” (Diogenes 1925:§51). A salient fact to note here is the conceptual bias against nature that forms the fulcrum of intellectual discourse of traditional Western culture. In other words, if ‘*man*’ is the measure of all things, humans are justified to use nature to achieve their selfish and exclusive needs and wants. It is interesting to note that this anthropocentric worldview manifest itself to the extreme in the continental philosophical orientation. For instance, in the *Phenomenology of Spirit* (1977), Hegel argues likewise that nature, an ‘unconscious’ matter is ‘other’ to the human person whom s/he defines as ‘self-consciousness’. He elaborates,

Self-consciousness is to begin with, simple being-for-itself, self-equal through exclusion from itself of everything else. For it, its essence and absolute object is ‘I’; and in this immediacy, or in this [mere] being, of its being-for-self, it is an *individual*. What is ‘other’ for it is an unessential, negatively characterised object (Hegel 1977:113).

In the quote above, the human person is defined and described as a ‘self-conscious’ and a ‘being-for-itself’ entity. As such, the human person is defined as a being that is pre-occupied with itself and whose essence excludes what is around him or her, including nature. Nature is seen as ‘other’ and hence unimportant to the essential being of the human person. Even in relation to God, Hegel continues to describe nature as being of secondary importance. In his *Philosophy of Mind*, he asserts that “...God the Father (this simple universal or being-within-itself) putting aside His solitariness creates Nature [the being that is external itself, outside of itself]” (Hegel 1971:30). Implied in this is that God in him is indeterminate and as such an abstraction. He is a reality without content. Thus, he needs and uses nature to assume a determinate form. But nature on the other hand has no being of itself. It has no inwardness. It is an external manifestation of something real – God or *Geist*. Therefore, nature, according to Hegel lacks rationality because it is governed by

external necessity and hence un-freedom. Simply put, nature has no consciousness. This then brings us to Hegel's famous *dictum*, namely that "what is rational is real and what is real is rational" Hegel (1967: 10). Thus, it could be inferred from the above that nature in the Hegelian analysis has no being of its own. It is not real. It is simply one of the phases of Spirit or Mind. Nature is God's self-exteriorisation.

3.2.1. Religion and Anthropocentrism

The Judaeo-Christian biblical narrative of creation exemplifies the human-centredness of contemporary society. The story of Adam and Eve is primarily a cultural narrative in Judaeo-Christian Western society, and its influence on Western society's relationship to nonhuman nature is so pervasive that its assumptions have rarely been explored (Gabel, Wheeler, and Anthony 1996:103). According to the biblical account of the creation narrative (Genesis 1:1), the world was created by God. This creation, we further read in the biblical account was for the use and welfare of humans. From this narrative account, God (in verses 1, 26 and 28 to 30) gave the instruction and rights to humans to dominate nonhuman creatures.

1. In the Beginning God created the heaven and the earth.
26. And God said let us make man in our own image, after our likeness: and let them have dominion over the fish of the sea, and the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.
28. And God [blessed], and said unto them, be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, over every living thing that moveth upon the earth.
29. And God said, Behold, I have given you every herb bearing seed, which is upon the face of the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat.
30. And to every beast of the earth, and to every fowl of the air, and to everything that creepeth upon the earth, wherein there is life [that has life], I have given every green herb for meat: and it was so. (Genesis 1:1, 26, 28-30).

When God (in Genesis 2:19-20) instructed Adam to name all the animals, Adam established his dominance over them. Although the act of naming and thus establishing dominion over every creature, is an innocent act in itself, it has however opened the natural world for abuse and misuse by human beings. As noted by Minter and Manning, “God planned all of this explicitly for *man*’s benefit and rule: no item in the physical creation had any purpose save to serve *man*’s purposes” (2005:95). Minter and Manning’s conclusion is justified if “to subdue and have dominion over” something is to be interpreted as a negative and toxic domination rather than to exercise stewardship on something.

Furthermore, the idea that human beings are made in the image and likeness of God (Genesis 1:26) has often led human beings to underplay the significance of their material nature. Such an underplay also points to human beings’ selective reading of the bible. The Bible has a second account of the creation of the human person besides the one in Genesis 1:26. According to this second account, “the Lord God formed man out of the clay of the ground and blew into his nostrils the breath of life, and so man became a living being” (Genesis 2: 7). In this account, clearly human beings are part of the natural world and not simply spiritual beings by virtue of the breath they received from God. They are matter and spirit in their ontology. Nevertheless, the tendencies to dominate and use nature solely for human’s welfare is strengthened by the overplaying of human beings’ spiritualistic constitution at the expense of their material constitution.

To note also from the creation story is the view that Adam and Eve’s subsequent expulsion from Eden is also tacitly anthropocentric. Because of the actions of two humans, with the aid of the

serpent, this world is regarded as a fallen place designed to inflict pain, suffering, and death on humans as punishment for their disobedience to God. Nature, in essence, it would seem, is used to punish human beings for their sin of disobedience:

And to the *man* he said, “Because you have listened to the voice of your wife, and have eaten of the tree about which I commanded you, ‘You shall not eat of it,’ cursed is the ground because of you; in toil you shall eat of it all the days of your life; thorns and thistles it shall bring forth for you; and you shall eat the plants of the field” (Genesis 3:17-18).

On the quote above, Charles Ellicott has this to say:

Adam had passively followed her (Eve, his wife) lead in disobeying God’s command; and therefore, ‘the ground’ the *adamah* out of which Adam had been formed...becomes unfruitful... Left to itself, it (the ground) will no longer bring forth choice trees laden with generous fruit, but the natural tendencies will be to degenerate, till ‘thorns’ only ‘and thistles’ usurp the ground (1971:13–14).

Ellicott confirms the biblical author of (Genesis 2) that nature (the ground) was cursed by God, so it would not be able to give to humans the benefits of its beauty and productivity. However, it could subsist to hold, especially from the theological point of view, that nature – from the Genesis account – was employed by God as a punishment tool for humans. On the documentary entries on “Fall and Sin” by John L. McKenzie, God’s usage of the natural world to punish human beings has led to the triple divisions, namely, between human beings and God; between man and woman (as when Adam blamed Eve for the fall); and between human beings and nature (1965:271). Thus, in the creation account, disobedience to God was responsible for humans’ estrangement from nature, and consequently led to disharmony between nature and humans, and between humans and God (McKenzie 1965:271–273). Later in the story of the floods (Genesis 6-8) the writer describes

the destruction of the world to punish human wickedness. This also represents another narrative that reinforces the cultural worldview that humans are the most important creation on earth.

Another line of thought, from theological parlance, is to see these myriads of events as a form of cycle of salvation, aimed at reconciling humans to God. In other words, the punishment for humans could be taken as deterrence to forestall humans' continual separation from God, tacitly intended to return humanity to God. However, a critical look at the judgment pronounced by God on humans, consequent on humans' misdeeds, shows that nature is punished to withhold its benefits to humans. "And unto Adam He [God] said... cursed is the ground [nature] for thy [humans'] sake..." (Genesis 3:17)

It must be noted here that this thesis holds that, although the authors of the biblical narrative of creation neither deliberately intends to promote anthropocentrism nor advocate for the abuse or misuse of nature, the story however may easily lend itself – from choices of interpretations – to anthropocentrism. For ecological philosophers such as Naess, Callicott, the instances highlighted above in the creation account validate Lynn White's claim that "Christianity is the most anthropocentric religion the world has seen" (quoted in Minter and Manning 2005:14). White points out that one of the first tasks of the early Christian church was to vanquish the paganism of the Greco-Roman world (1967:1203-4). The pre-Christian classical Roman society has a cultural life and religion based on the belief system in which every element of nature "has its own *genius loci*, its own guardian spirit" (Harvey 2009:135). Hence, nature in this line of belief system, possesses inherent vital living force and is communicative (2009:136). Thus, in Christianity's

triumph over paganism, animism¹⁶ was destroyed and replaced by a cultural assumption that nature was “inanimate and neuter” (Sheldrake 2001:5). This “de-animation” of nature, Sheldrake argues, only exacerbated the separation between humans and nonhumans members of nature, enhancing the West’s anthropocentric orientation and leading to a mechanistic theory of nature advanced by Enlightenment-era scientists (2001:6).

On the other hand, besides its negative usage in the human-nature relationship, nature, for example, ‘wilderness’, has a paradoxical status as a place of redemption in the Judeo-Christian tradition. Throughout the Old and New Testaments, prophets, holy worshipers and religious leaders retreat to the wilderness for spiritual purification. Notably is the biblical account of Jesus’ retreating into the wilderness to be alone for spiritual engagements (Mark 1:13), (Luke 5:16). As well as the heavenly visions given in the Biblical account of ‘Revelation’ to John the Beloved¹⁷ at the island of Patmos (Rev 1:9). Nevertheless, in this more positive view of nature, nature’s value is still tacitly anthropocentric. In other words, “nature exists for the benefit of humans to renew their own connections with God” (Nash 2001:15).

Furthermore, while Bill McKibben critiqued the “institutional version of Christianity” (McKibben 2003:25), he also noted that there are traditions within Christianity that are more

¹⁶ Animism is the idea that the universe is a community of living and relating beings, but all of whom deserve respect (Nelson 2004:55). In other words, it is the widespread idea that, everything in existence (both humans and nonhuman) possesses a spirit, living force or attribute, thus, relates together. This view “enshrines the concept of a limit to human utilization and commodification of the world” (Harvey 2009:138). For more on animism, see Harvey, G. 2006. *Listening People, Speaking Earth: Contemporary Paganism*. London: C. Hurst. Also, in Harvey, G. 2009. “Paganism.” In J. B. Callicott, and R. Frodeman.(ed.) *Encyclopedia of Environmental Ethics and Philosophy*. Vol. 2, Detroit, MI: Macmillan Reference, Gale. Pp. 135–38.

¹⁷ Also referred to as John the Apostle. He was one of the Twelve Apostles of Jesus Christ in the New Testament

environmentalistic. A case in point is the life and teachings of St. Francis of Assisi (1182-1226) – a Catholic friar and mystic, whose deep connection to the environment is especially characterised in his “Canticle of Brother Sun.”¹⁸ St. Francis, showed the diversity of creatures as an expression of God’s creativity and benevolence (Armstrong and Brady 1982:38). St. Francis in the *Canticle* writes:

Most high, all-powerful, all good, Lord!
All praise is yours, all glory, all honour and all blessing...
All praise be yours, my Lord, through all that you have made,
And first my Brother Sun,
Who brings the day; and light you give us through him...
All praise be yours, my Lord, through Sister Moon and Stars;
In the heavens you have made them, bright and precious and fair...
All praise be yours, my Lord, through Brothers Wind and Air,
And fair and stormy, all the weather’s moods,
By which you cherish all that you have made...
All praise be yours, my Lord, through Sister Water,
So useful, lowly, precious and pure...
All praise be yours, my Lord, through Sister Earth, our mother,
Who feeds us in her sovereignty and produces
Various fruits with coloured flowers and herbs... (Francis of Assisi [1225]
1964:130–31).

Personifying nonhuman creatures with terms known for family relationship, St. Francis as shown above, advocate praises to be expressed not only through religious worship, but by acting in manners consistent with respect and understanding created diversity.

Obtainable from Francis of Assisi’s canticle is an ecological and environmental proposal, wherein all creatures of the world participate in a wide range network of interrelationships. Such

¹⁸ Also referred to as *The Canticle of the Creatures*. This is a poetic or hymnal arrangement written by Francis to eulogize the significance of creation, and to elicit the praise of God through His creatures. For further information of the “Canticle of Brother Sun”, see Timothy J. Johnson “Francis and Creation” (2012:143–58).

relationship is adjudged to engender interrelationship and one that unveils a mutual source of life, vitality and existence (Johnson 2012:145). As noted by Keith Warner, “The Franciscan understanding of the Incarnation emphasises continuity between humanity, creatures, and elements” (2011:2).

McKibben also acknowledges the story of Job as a lesson in respecting the sanctity of the land (2003:76). On the contrary, while McKibben recognises the possibility of reforming Western religious thought, Craige argues that the “Judeo-Christian tradition is fundamentally dualistic and predominantly an harbinger for anthropocentric environmentalism” (2001:12). This view of Craige is strengthened by recourse to the argument of Thomas Berry for ecological spiritualism, where he argues for a reconstruction of the universe [creation] story to a “new story” (1999:3-4). For Berry, the creation story needed a reconstruction to enhance ecological civilization. Giving reason for the reconstruction of the creation story, he argues:

Our modern world is not working. Christianity, in this sense, is not working. Particularly, there is the inability of the Christian world to respond in an effective way to the destruction of the planet. Religion is assuming no responsibility for the state of the earth or the fate of the earth (1999:3).

This state of event, for Berry, calls for a ‘Great Work’, which is about the “transition from a period of human devastation of the Earth to a period when humans would be present to the planet in a mutually beneficial manner” (1991:143).

In furtherance, Berry noted that such ‘great work’ requires, a collaboration between science and religion (1988:112). This collaboration is to ensure that both the scientific and religious

community functions to chart an ecological oriented approach for human-nature relationship (Berry 1988:112–13). It could thus be observable from the creation narrative and other biblical accounts explored above, that the Judeo-Christian tradition may be incapable of adopting a holistic perspective essential for sustainable environmental practice. Although the Genesis account had some other theological benefits regarding the redemptive plan for humanity, it nevertheless appears overtly anthropocentric. In short, from some scriptural passages of Judaism and Christianity it could be argued that the two religions have transformed the relationship that Western culture had with the nonhuman members of the environment to the degree that the Judaeo-Christian tradition could be adjudged as anti-environmentalist for their stance towards elevating humanity above all other members of the earth. The creation narrative in Genesis, with its emphasis upon the control and usage of nature by humans appears to provide the justification for felling trees and timber in the forests, creation of roads through the wilds, and the extermination of earth living plants, insects and animals. The above traditions have been described by Joseph Campbell as the “socially-oriented mythology” (2001:5) of a mobile people. This he opined, is in contrast with the nature-oriented mythology of an earth-cultivating society (Campbell 2001:5). To this end, one could thus adjudge Sheldrake to be right in his opinion that Judeo-Christian anthropocentrism has the onus of “an immense burden of guilt” for the ecological crisis (2001:7).

3.2.2. Cartesianism and the culture of utility

Having shown above that traditional Western intellectual orientations as well as religion are anthropocentric, the intellectual project of René Descartes will be explored here as a prototype of such anthropocentrism. The exploration is to show that Cartesianism provides, to a large extent, the framework for anthropocentrism. In other words, the idea of the culture of the use of nature

may be traceable to the epistemological theory of Descartes (1596-1650), popularly known as ‘foundationalism’.

Descartes starts-off out to launch a knowledge system purely established on the certainty of truth via elimination of doubts or errors (Williams 1999:xiii). One could hold that for Descartes, the search for certainty is the quest for knowledge. He thus sought to establish an evident truth, “the foundation” from which all other truth derives (1999:I; 18). Walter O’Briant captured this view well when he argued:

With a brashness and optimism typical of the early modern period... Descartes took upon himself the task of reconstituting philosophy so as to ensure a firm foundation upon which to erect a sound superstructure (1980:79–80).

This view of Descartes is encapsulated in his *Meditations on First Philosophy* (1999) which he wrote in 1641. In the *First Meditation*, Descartes decides to set aside previously held beliefs or any opinion opened to doubt and skeptical challenge (1999:I; 18). He further argues that the existence of an external world is open to doubt, and that the experience of the world may turn out to be part of a dream (1999:I; 19). Moreover, the entire external world may be a “... fiction induced in him by a deceiving evil demon” (1999:II; 24,25). One could therefore hold that, Cartesianism, as it were, raised the stance of modern skepticism against the reality of the external world.

In the *Second Meditation*, Descartes establishes that to be deceived in the manner expressed in the previous meditation, he must exist as a conscious thinker (1999: II; 25). In other words, the result of his methodic doubt is due to the certainty of his own existence which lies in the dictum “*ego cogito ergo sum*”: “*I am, I exist*” (1999: II; 25). In another translation, this is stipulated as: “*I*

think, therefore, I exist” (1998:107). Based on this certainty about his own conscious existence and the undoubted knowledge of the reality of who he is – ‘a thing which thinks’ – Descartes reveals the existence of a non-deceiving God who guarantees the truism of any claim that he “clearly and distinctly perceives” (1999: II; 28). God’s non-deception thus enables Descartes to re-establish that an external material world exists (1998:109). Consequent upon this phase of *The Meditations*, there are two most fundamental facts, as confirmed by O’Briant, that shape the thought processes of humans, as well as their relationships with the nonhuman environment. (1) That humans are “essentially a soul” (since only souls can think), and that (2) “the external world—which is material—is less than myself—which is spiritual” (O’Briant 1980:83). In fact, Descartes clearly stated that the external nonhuman world is a mere fiction of the mind created by the imaginations of the mind for the satisfaction of the creative thought processes of the thinking being: ‘man’.¹⁹

Furthermore, Descartes reiterates the fact that rationality, thinking, consciousness and thought-configurations are the indices of determining humans from nonhumans (1999:II;85-88). Conceptualisation existence is indeed premised on thinking; to think is to live. Thus, if the external world is the fiction of the thinking being, one could hold that the external world – in the framework of Cartesianism – is of less importance in value, magnitude and consideration. Hence, the justification is provided for the most superior thinking beings – humans – to fashion out how best to use the nonhuman, non-thinking substances or parts of the world, even if only for the benefit of humans. Of a striking note is a particular point in the conclusion of the *Second Meditations* that “...bodies ...are not perceived because they are seen and touched, but only because they are

¹⁹ “...I believe that body, figure, extension, motion, and place are merely fictions of my mind” (Descartes 1998:111).

understood or rightly comprehended by thought” (Descartes 1999:II; 34). In other words, the only justification for the existence – and if there would be, importance – of the external world is that which lies at the mercy of the thinking mind of humans. Since the existence of the external world is dependent upon the perception and imagination of the mind, any value, at all, that is ascribable to the nonhuman world would be one that serves anthropocentric ends.

These views of Descartes’ could be seen as completely antithetical to those of authors of current trends of environmental philosophy and a sound ground for anthropocentrism (Curley 2006:732). One could then hold that the thoughts of René Descartes are clearly reflected in the positions that humans are essentially unique creatures that are not a part of nature. In other words, the human has a soul – precisely ‘a rational soul’ – and a faculty which sets humanity apart from all other creatures and the entirety of nature. These philosophical views dominated Modernity, becoming the “common-sense views of succeeding centuries and have persisted relatively unchanged into the contemporary time” (Curley 2006:757).

Descartes’ basic views – as encapsulated in the *Meditations* – could be held as the idea fuelling his doctrines about nature. The external world that Descartes reintroduces toward the end of *The Meditations* is very different from the natural world of his medieval predecessors. As argued by David Bradshaw, Medieval scholars, in Aristotelian style, presented living things as “having specific sets of capacities” (2004:78). Aristotle adjudged various forms of capacities for different types or kinds of beings in existence. Thus the capacity of any being, is determined by its form of existence (Aristotle 1926:C; 2,4,,12. Z 1). Bradshaw gave a clear example on this: “blades of grass have the capacity for nutrition and growth; cats also have those of nutrition and growth and

additional capacities of movement and sensation; and so on” (2004:99). Humans on the other hand, possess the capacities of nutrition, growth, movement, and sensation, as well as the unique capacity to reason (2004:100). In contrast, Descartes was a supporter of the scientific revolution that replaced Aristotle’s views with a conception of nature as wholly mechanical in character (1999:II; 26). Thus, the external world reintroduced in his *Meditations* consists of ‘dead’ matter whose behaviour can be understood by reference to a set of mathematical laws (1999:VI; 72-3). O’Briant also pointed out that *The Meditations* is seen as privileging the conscious thinker and his or her experiences over the dead material world, which is seen as the ‘other’ that lies outside the mind (1980:81). This is a pointer to the fact that, although Descartes saw human beings as composites of mind and matter, he however ascribes moral standing to them solely on the grounds that they have minds and are capable of conscious experience (1999:VI; 86, 88).

Again, Descartes’ idea that the entire physical universe, of which animals are parts, is mere matter governed by the uniform set of mechanical laws, necessitates thoughts that enunciate nature as lacking moral standing. As such, nature is instrumental only as an object for human exploitation. As a matter of fact, Descartes’ epistemological project constructed a superstructure for knowledge, setting the foundation upon the thinking ability of humans. In other words, if humans can think, and the external world is the creation of their imagination, then humans could be said to be justified in thinking out the ways of using the external world.

The corollary of the Cartesian thought-processes recapitulate into the mentality of “use and continuous use of the environment that permeates through various ages of human development right from the modern period” (Wee 2001:34). This careless attitude towards the environment,

evident even in the contemporary time, is reinforced by the notion that virgin territory will always be open for human's expiration and exploitation whenever their surroundings are depleted of the element needed to sustain their livelihood (O'Briant 1980:85). Hence the appealed view of Lewis Mumford (2009:88) that "today's scientific and technological world operates largely with a frontier mentality". This mentality is a human-centred view characterized by three precepts: first, it sees the world as an "unlimited supply of resources for human's use with the basic premise that there is always more" (2009:86). In other words, from this worldview, nature is seen as a means of fulfilling human needs. For example, the European settlers in North America, Mumford argued, "cut down the forest and grew crops on the soil until the nutrients had been eroded away by rain. After this, they headed into new territory and begin the cycle again" (2009:86). In the industrial world of today, it is no different, as there is an unrelenting and irrational commitment to maximum material output and consumption. That commitment implies a focus mainly on the internal cost²⁰ of production and distribution of finished goods.

Secondly, the frontier mentality views humans as a being that exists apart from nature, rather than as part of it. By the tenets of this view, humans are separate from nature; our chief role, then, becomes one of domineering over nature. With such a mentality, feeling separate from nature and overseeing nature, therefore, becomes the *modus operandi* of science and technology (2009:86-87).

²⁰ "Internal costs" are directly required to effect the production of goods and services. Internal costs are price determining costs. It is used here to drive home the profit-maximization orientation undergirding the industrial and capitalistic world, where cost is effective only for production without much consideration of the social and environmental effects of production.

The third perspective of the human-centred mentality takes nature as something to overcome. As a matter of fact, this is the belief that there is always more to consume, more to control, more to use and more to destroy (2009:87-89). The nonhuman natural world, for instance, is often viewed as having no value outside of the anthropocentric ends – what they could produce for humans in the forms of food, research, or entertainment. The anthropocentric paradigm of the use of the natural environment, deems the natural world as a means to satisfying human wants and needs. Such nature-usage perceptions are often oblivious to the repercussions of the exploitative actions that characterise feats of technological inventions. It has been shown that Western intellectual culture – even as structured on the traditional foundations of Cartesianism – does not provide the framework that could create or influence the advancement of a caring, loving and symbiotic relationship with nature.

In the next section, we will explore the intellectual development of the ‘Enlightenment’ and its effect on the human-nature relationship. The reason for this is that the intellectual foundation as well as resources for conceptualising thoughts in the enlightenment were largely informed by Cartesianism. Hence in the next phase of our discussion on the epistemological foundation for the environmental crisis, we shall explore the relationship between Cartesianism and the Enlightenment. This is germane so that we might unearth the ground for the main weapon of humans against the environment: science and technology.

3.2.3. The Enlightenment foundation for science and technology

By the end of the seventeenth century, scientific knowledge, and Cartesianism had become universal properties of the educated class; and a new literature began to arise, that is encyclopaedic

in its aims, anti-authoritarian in its preconceptions and outspoken in its style (Cassirer 2009:137). The ideas of this epoch remain “decidedly clear, elegant, haughty and ironical” (2009:138). Cassirer (2009:139) further noted that the ‘*philosophies*’, as they came to be known, stand at the end of a century in which intellectual, political and moral revolutions had upset the authority of Church and State. The Cartesian philosophic method raised the stance of Modern skepticism about any concept or thought that could not be backed either by reason or experiment, thus, the *philosophies* that engender the Enlightenment were largely shaped intellectually, by Cartesianism. However, by now this skepticism, separated from the intellectual accomplishment of the metaphysics which stemmed from it, had become a literary device, a means to sustain a detached attitude of rational unbelief, and institutionalised a systematic development for science and technology (2009:139). As noted by Adorno and Horkheimer, the “*philosophies* and the figures of the literary Enlightenment, authors of literary masterpieces as diverse as Voltaire’s *Le Siècle de Louis XIV* and Diderot’s *Le Neveu de Rameau*, would not have existed but for the decades of Cartesian metaphysics which cleared the intellectual air for them” (2016: 257).

Historically, the heliocentric theory developed by Nicolaus Copernicus (1473-1543) marked the commencement of the “scientific revolution” (Cassirer 2009:145). Based on experimentation and reason, the scientific revolution questioned previously held truths, reconsidered opinion and speculations about nature and calls for new answers. The scientific revolution helped to shape the Enlightenment. As it was to be in every intellectual epoch, many people were involved in its articulation, and laid diverse emphasis on different aspects of human thoughts. For example, Galileo Galilei (1564-1642) made the first systematic studies of uniformly accelerated motion and improved astronomical observations, which helped to support Copernicanism. Edmond Halley

(1656-1742) discovered the proper motion of ‘stars’ and the periodicity of ‘comets’ (Cassirer 2009:1.38-145). Other significant “scientific advances were made by Johannes Kepler (1571-1630), Francis Bacon (1588-1679), Blaise Pascal (1623-1662), Robert Hooke (1635-1703), and Gottfried Leibniz (1646-1716)” to mention but a few (Adorno and Horkheimer 2016:92). As a matter of fact, Francis Bacon (1651-1626) was one of the prominent figures of Western Modernity at the birth of the Age of Enlightenment (science and technology) (Briggs 2013a:24).

Bacon advocated thoughtful and systematic applications of science to the natural world. Such application for Bacon must however be in the sole interest of humans; for the “love of humanity” (*philanthropia*)²¹. In the first book of His celebrated *Novum Organum*, Bacon’s anthropocentrism comes to the fore:

Aphorism I

Man, as the minister and interpreter of nature, does and understands only as much as he has observed of the order of nature in fact or by inference; he does not know and cannot do more.

III

Human knowledge and human power come to the same thing... For Nature is conquered only by obedience; and that which in thought is a cause, is like a rule in practice.

IV

All man can do to achieve results is to bring natural bodies together and take them apart; Nature does the rest internally (Bacon 2012:33).

Again, in the second book of the *Novum Organum*, Bacon averred:

²¹ Bacon’s conception of *philanthropia* is what contemporary environmental philosophers call “anthropocentrism,” pure and simple. This conception is predicated upon masculine humanity’s absolute knowledge and mastery of nature.

Directions for *the interpretation of nature* comprehend in general terms two parts: the first for drawing axioms from experience; the second on deducing or deriving new experiments from axioms (2012:109).

Bacon in the above, sets the standard for the considerability of nature's usefulness. If the only means or reasons for comprehending nature is for the sake of experimentation and deducing of axioms, then nature lacks self-enforcing inherent values and humans are justified for their interpretation and usage of nature. Descartes's perception of humans as "masters" with rationality to lord and use the material and mechanical nature syncs with Bacon's view of *philanthropia*.²² It could thus be obtainable, from the themes of these two founders of modern science and technology that anthropocentrism governed the spirit of Western science and technology. Such view sync with Briggs' (2013a:59), who observes that the intellectual and practical roots of the environmental crisis may be found in the Enlightenment.

Isaac Newton (1643-1727) in his *Philosophiae Naturalis Principia Mathematica* explores the possibility of mechanistic explanations of nature. He combined mathematics of self-evident proof with mechanics of physical observation in order to establish a coherent system of verifiable predictions of nature (Jeans 2012:110). Sir James Jeans argues that Newton's claim came from a "systematic application of algebra to geometry, which synthesised a workable calculus applicable to scientific problems" (2012:119). It should be noted here that; the arrays of innovations and

²² Francis Bacon, as noted by Hwa Yol Jung, master-minded and spearheaded an industrial civilization grounded firmly on scientific and technological advancement (2009:87). For Bacon, to create and apply technology, there must first be a knowledge of the world, obtained by what he called "the inquisition of nature" (Bacon 2012:34). Nature must be interpreted to reveal her secrets (Bacon 2012:109). And by increasing knowledge through experiment, humans extend their dominion over inert nature (Bacon 2012:33). By positing utility as the end of knowledge, Bacon laid the foundation of humans' ability to "subdue and overcome the necessities and miseries of humanity, through the use of nature". See Eiseley, Loren. 1999. *Francis Bacon and the Modern Dilemma*. Lincoln: University of Nebraska Press.

inventions of the enlightenment had significant effect on both commerce and philosophy. In the first flush of scientific confidence, scholars of the Enlightenment tried to carry over the quest for first principles into every human intellectual endeavour, which had been attended with such success in Newton's physics. This quest is engendered by a skeptical attitude towards authority, rejecting whatever it is that has no verifiable foundation in experience. Hence, the Enlightenment's project of favouring reason and rationality and the subsequent emphasis on the scientific method, as the most secure way of attaining objective knowledge, gave rise to Modern science. This sort of worldview would also be part of the fulcrum of ideas behind Logical Positivism (later Neo-Positivism) that, true thoughts are empirical and empirical verification became the criteria for knowledge justification (Carnap 1936:419–20). In other words, anything outside the use of the scientific process is deemed to be meaningless.

Subsequently, a scientific and technological worldview was instituted in the quest for Modernity. With various form of innovations and discoveries, the ground was prepared for the provision of the means to achieving a modernised, industrial world. However, the new ideas instituted by the scientists and philosophers of the seventeenth century had little direct influence on the lives of most people, as "science then [did] not really enjoy the unified, objective and widely accepted status it has now" (Achterhuis 2001: 14).

But this fact is certainly not true of the innovations that science made possible in the eighteen to nineteenth century, as I will explain. The textile industry was the first to be transformed, using water and steam to power new kinds of machinery, and also through the organisation of works in

the factories where disciplined labour were made available (2001:100). This growth had a multiplying effect. Charles Boyle and Peter Wheale pointed this out when they opined:

As cotton sales shot up, so too did the production of coal and iron. Chemical industries developed to manufacture the acids and alkalis, bleaches and dyes necessary to treat the cotton. A machine-tool industry grew to provide for the increasing demand for machinery... the period of expanding railway systems that spread out in great networks across the continents of the world, and in conjunction with the electric telegraph, revolutionised communications. Improved agricultural techniques were introduced to feed the increasing population displaced to the towns from the country sides (2001:102–3).

Indeed, it could be held that the approach to the world right from the Enlightenment era is basically technological. This is so as intellectual efforts are geared towards essentially forging an alliance between certainty of knowledge and changing the world. The commitment to scientific technological inventions gave the impetus that characterized all forms of human development right from the Modern period to the contemporary industrial and subsequent post-industrial world.

Perhaps the most striking characteristics of science and technology over the last century are the expansions of the extent of scientific and technological knowledge and the change in the economic and social-ideological contexts within which scientific work is carried out (2001:57). First, in the natural sciences, as opined by Boyle and Wheale, there has been the astonishing revolution associated with the theory of relativity and quantum theory, providing a sharp break with Newtonian mechanics and classical physics: laying sound frameworks for all future research in physics (2001:47). The growth of biological sciences, biochemistry, organic chemistry and interest in the workings of genetics have produced descriptions of phenomena associated with cells that are more chemical and molecular, and less concerned with problems such as consciousness or

mind. For instance, cloning, genetic engineering, bio-fuels, to mention but a few. More so, the development of the electron microscope and X-ray radiography, and the discovery of the structure of DNA provides a great contribution to these mechanistic tendencies, as systemic and electronic interpretation of the human anatomy and neuron cycles is made available. The triumphs of technology in the twentieth century are well known. A few important developments include: the introduction of electronics, radio, airplanes, automobiles, television electronic communications, synthetic materials such as nylon, plastic and many others, artificial fertilisers, space technology and exploration, medicines and medical transplants, developed computers, information technology, increasing automation, and many more. The growth, development and sustainability of life and progress of this contemporary world, founded upon Modern hopes in the efficacy of science and technology cannot be overestimated. Indeed, that science and technology has grown in its scope, contents, contexts and in the resources it consumes, is obvious. It needs to be stressed here, that it is this commitment to science and technology that embodies the main thrust of the human-centred usage of nature and all other forms of nonhuman natural environments

However, casting a dark shadow over the series of scientific innovations and advantages associated therewith, are the ills and adverse effects of technology. These defects of scientific and technological inventions live with us today. It becomes worrisome, as our lives are wedged around using science and technology. Many of these ills and defects are characterized by nuclear stockpiles and their threat of unparalleled destruction; challenges of other complex weapons and mass ownership of cars. Some others include; the unbridled use of nonhuman resources, and other forms of environmentally unfriendly effects of science and technology, many of which were touched on in the second chapter of this research. One can, therefore, submit that the commitment

to science and technology – along with ensuing queries regarding the problems and challenges that technology produces – gave impetus to the significance of issues in the philosophy of technology, as well as in environmental philosophy.

3.3. Western traditional epistemology

In this section, an examination of the traditional epistemology of the Western orientation will be attempted. The aim here is to show the prevalent intellectual stance of the human-nature detachment in the epistemological postulations of the traditional Western orientation. As will be rightly shown below, the various genres of the two main camps of the Western epistemic positions – rationalism and empiricism – advocate for the subject-object dichotomy. Each gives *primus* to the subject's cognitive as well as experiential position in the acquisition and justification of knowledge claims, and with little or no consideration for the object; the framework for the human-nature separation was established. In other words, the epistemological project of the Western traditional orientation, though not explicitly stated, could be seen as an intellectual framework for the understanding of nature as that which is apart or detached from humans. The external world, being treated as less essential in the epistemological process, entrenches an understanding or attitude of care-freeness or insignificance for the environment, hence, the misuse thereof.

The word 'epistemology' etymologised from conjoining two Greek words: *episteme* and *logos*: meaning 'knowledge' and 'theory' respectively. Epistemology, the theory of knowledge, is the branch of philosophy that is concerned with the nature and scope of knowledge, its presuppositions and bases, and the general reliability of claims to knowledge (Klein 1999:2493). Epistemology is concerned with the definition of knowledge and related concepts, the sources and criteria of

knowledge, the kinds of knowledge possible and the degree to which each is certain, and the exact relation between the one who knows, and the object known (1999:2494). Epistemology, as a study into the theory and idea of knowledge, includes the attempts to refute skepticism, justifying the possibility of knowledge claims; and then proceeds to clarify the nature and the scope of knowledge. The standard analysis of knowledge claims in the Platonic format, is that it is justified true belief (Rowe 2015:89). This is a definition initiated by Plato in the *Theatetus* (Plato 2008) (Rowe 2015:89), although it is challenged most recently by Gettier's problem (Gettier 2017 :69–71).²³ However, this definition has engendered a series of philosophic analyses, especially on the relation between knowledge and belief, between knowledge and truth, and between knowledge and justification. The last issue is especially central. In a sense, epistemology pays more attention to the problem of what it is to be justified in believing than to knowledge *per se*. Another main task of epistemology concerns “the origin of knowledge, that is, to assess the role of sense and reason in the acquisition of knowledge” (Bunnin and Jiyuan 2004:218).

The Platonic account of knowledge is articulated in a manner that places knowledge in a place that is far removed from the physical entities and everyday activities of human life. Knowledge for Plato is a form of ascent that is detached from the shadowy and confusing particulars of the everyday world. Hence, as shown in the *Republic*, Plato noted that arriving at knowledge requires a rational and arduous struggle to climb out of the darkness of the cave into the light of a very different kind of world (Plato 1961a:517–c). Thus, it is expected that the rational powers of the

²³ Edmund Gettier in his 1963 famous three-page article had presented some objections aimed specifically at the traditional normative accounts of epistemology, which is largely foundationalist in outlook. Thereof, he pointed out that a false belief can be supposedly justified, and its justificatory status can be transferred to another proposition through deduction or other principles of inference (Gettier 2017:70). This, he argued, would seem that the inferred proposition is true, justified and believed, but it clearly is not knowledge, since it was inferred from a false proposition that appears true by mere coincidence (Gettier 2017:71).

human mind must transcend to a different realm of existence that is different from the everyday appearances of the world. The process to acquiring knowledge is further enunciated in the *Phaedo*. To gain knowledge, it is essential that there is a “[separation of] the soul as much as possible from the body and accustoming it [the soul/mind] to withdraw from all contact with the body and concentrate itself by itself, and to have its dwelling, so far as it can, both now and in the future, alone by itself, freed from the shackles of the body” (Plato 1961b:67c-d). As noted by Preston, what is needed for knowledge, from the platonic base of traditional Western thought, is to “disengage from everything about us that is human and physical, and using reason – a gift from the gods – as a conduit back up towards truths located somewhere else entirely” (2003:6). Preston’s observation is significant if one considers Plato’s idea of a person who holds claim to knowledge. Such a person in the words of Plato is one who “grows wings... [and] stands outside human concerns and draws close to the divine; ordinary people think he is disturbed and rebuke him for this, unaware that he is possessed by the god” (Plato 1995:249b). Thus, it could be held that epistemology, fashioned along the Platonic thoughts, presented a state of detachment between epistemic subject and epistemic object of the external world. With true knowledge residing in the *forms*, Plato makes knowledge acquisition a pure subject-oriented function, without consideration for, and thus detachment from the physical world (Preston 2003:6-7).

Aristotle, in his denial of the coherence and usefulness of the Platonic separation of the worlds of forms and of the physical could be adjudged to have removed the dualistic dichotomy characterizing knowledge acquisition. However, the Aristotelian reintroduction of the *forms* also made his epistemic postulation unfit for extrapolation to environmentalism. For Aristotle, to have knowledge claims of any object whatsoever, the rational part of the soul must be “capable of

receiving the form of an object” (Aristotle 1941:429a15). In other words, though Aristotle seems to underline the significance of the material concrete object of the world, he seems to be over-privileging the grasping of the *form* over and above the material object that the forms is about. As noted by Preston, the *form* in the Aristotelian schema “still had a universality to it that it had to be something distinct from the physical object itself” (2003:7). For Aristotle, knowing an object means knowing its *form*, hence the process to know does not have anything to do with the body. In other words, knowing “cannot reasonably be regarded as blended with any part of the physical body” (1941:429a25). Underlying this epistemic conception of Aristotle, as with Plato, though to a different degree, is the privileging of the soul/mind over the body/matter. This is a dichotomy that fuels, as will be shown below, the subject-object detachment, as well as the ill consideration of the external world as something not only apart from the human, but has no input in the process of knowledge acquisition.

In the Modern era, the grasping of the *forms* is still retained as the goal of epistemology. Modern epistemologists being divided into rationalists and empiricists with respect to this issue, transliterated the ‘Forms’ of Plato into ‘Ideas’ (Preston 2003:8). René Descartes in his exposition of rationalism argued that “whatever is immediately perceived by the mind” is ‘idea’ (Descartes 1998a:132). In the same vein, for John Locke, an Empiricist, idea is “Whatsoever is the Object of understanding when a *Man* thinks” (Locke 1975:552). Obtainable from the Moderns is the continual privileging of ‘idea’ over the physical object. ‘Idea’ thus becomes the main road the human mind must travel in the journey of knowledge acquisition. To the rationalist, reason – an act of the mind – alone is the process of acquiring knowledge, while for the empiricists, the grasping of the ‘idea’ through sense experience is the source of knowledge. Either way, the

mind/subject still play a sole and privileged role in the acquisition of knowledge over the external world/object. In other words, the subject-object distinction gets significantly grounded. Regarding this subject/object; mind/body distinction, Preston argues:

The modern picture assumed that the mind possessed something like an inner eye of its own that operated separately from the eyes of the body. This inner eye could look upon the different simple and complex ideas that appeared in front of it and make knowledge claims about them... Knowledge occurred when the mind has made a correct judgment that the idea it saw with its inner eye accurately represented something in the world outside (2003:9).

The mind/body; subject/object; human/nature detachment theme ran through the intellectual heritage of traditional Western philosophy. This dichotomy got more driven home in the epistemological postulations of traditional Western scholars. However, this study is focused mainly on the traditional epistemological project of the Modern period, and how it set forth a grand-totalising base for anthropocentrism. This focus is further narrowed down to Cartesian epistemology, especially as it unveils the subject/object distinction.

3.3.1. Cartesian dualism re-examined

The dualism and mechanism of Descartes' philosophy, from his lifetime to the contemporary time, has continued to provoke a series of objections and discussions. In this section, our focus will be on a response to Cartesianism that is somewhat less well-known than others (Ryle 2009:1–12).²⁴

The response and critique of Anne Conway (1631-1679) to Descartes's philosophy will be the

²⁴ There are other well-known critiques of Cartesianism, chief of which is Gilbert Ryle's "Dogma of the Ghost in the Machine" and all other form on non-dualistic conception of reality (Ryle 2009).

primary focus here (Coudert, Allison. and Corse 2003).²⁵ Conway's reaction to Descartes is interesting because she speaks out of an intellectual tradition different from those of many other philosophers who discussed Descartes' ideas. In addition, she makes use of a pre-modern, non-abstract idea of spirit, a conceptualisation which has been lost or side-lined in the philosophical tradition after Descartes (White 2008:34). Conway, questioning the assumptions underlying dualism and Descartes view of spiritual substance, presented an ontological perspective of matter and spirit in a form that is alien to Cartesianism.

For Conway, there is no distinction of substances, as there is only one substance. Arguing for the component of this single substance to be both matter and spirit, Conway posits:

From what hath been lately said, and from diverse reasons alleged, that Spirit and Body are originally in their first Substance but one and the same thing. It evidently appears that the philosophers (so called) which have thought otherwise...have generally erred and laid an ill Foundation in the very beginning (Conway 1982:221).

She expressly directed her critique at Descartes as she notes further:

And none can object that all this philosophy is no other than of *Descartes*, or *Hobbes* under a new Mask. For first, as touching the Cartesian philosophy, this said that every Body is a dead Mass, not only void of all kind of Life and Sense, but utterly (unable) thereof to all Eternity; this grand (Error) also is to be imputed to all those who affirm Body and Spirit to be contrary Things (1982:221–22).

²⁵ For a short biography of Anne Conway by Lopton as well as contemporary and later accounts, see: P. Lopton, 1982. "Introduction" to *Anne Conway, Principles of the Most Ancient and Modern Philosophy*. The Hague/Boston/London/Martinus Nijhoff, Pp. 5-8. In addition, a good source of information on Conway is M. H. Nicolson 1992. *The Conway Letters. The Correspondence of Anne, Viscountess Conway, Henry More, and their Friends 1642-1684*. Oxford: Clarendon Press.

In her analysis of Conway's philosophy, Carol Wayne (White 2008:78) argues against the inconsistency of dualism. For her, dualism is self-defeating as it erroneously assumes a particular location for soul or spirit, while at the same time denying spiritual substance of having the status of divisibility and extension. She further argues:

Dualism results in mechanism because it makes too sharp a distinction between body and soul, thus regarding the body as a mechanical machine and the soul as something which is not integrally related to the body... Dualism cannot account for the interaction between mind and body. The two substances of which a dualist speaks are defined on the basis of the exclusion of characteristics. But the two things which have nothing in common cannot influence each other causally (2008:79–80).

A striking anti-anthropocentric point to note in Conway's idea is that she was able to put forth a philosophy that engenders an interrelationship between humans and other creatures. In other words, there was no sort of demarcation between human and nonhuman beings. For her, "...all Kinds of Creatures may be changed into another...[because] the nature of a Creature is to be changeable" (1982:224). The essential point of Conway's anti-Cartesianism is better shown in Sarah Hutton's article. Hutton noted that Conway's opinion is that matter and spirit are not two totally different entities, but that they share the characteristic of having extension, penetrability, and divisibility (1995:380)

There seems to be little doubt that this is true of matter, at least down to the smallest particle levels, but what of spirit? It may seem that Conway's ether-like – or particle – view of spirit is outdated, not fitting into the Modernity of Descartes' conceptualisation of the soul as completely immaterial. Yet, contemporary philosophers have not gotten much further in answering the ontological question "what is spirit?" (Heidegger 1959); (Bennington 1993); (Derrida 1995); (Ross 2008);

(Nuzzo 2013). This could well be partly due to the fact that we are encouraged by the Cartesian tradition to see spirit strictly – from the dualistic perspective – in a non-concrete way. As a matter of fact, this strict duality at the core of Cartesian thinking, introduced by Plato and developed by St Paul and Descartes, dichotomised reality “between self and world, between spirit and matter, between mind and body” (Craig 2001:22).

We have seen the importance of traditional Western epistemology in proffering foundations for anthropocentric environmentalism. Further, it has been shown how the thought-process of the Modern era, dovetailing into the preoccupations of the Enlightenment Age, gave impetus to the establishment of science and technology as the main instrument of dominating the environment. We shall next critique Western anthropocentric environmentalism and the epistemological framework establishing it.

3.4. The effects of Western epistemology on environmentalism

This section examines the fact that the intractable environmental crisis we have today is the product of various assumptions buried deep within Western epistemology. The purpose here is to question traditional Western epistemology, especially as stipulated in the epistemic project of Descartes, as well as subsequent intellectual feats of the Enlightenment. The plausibility of the critique is to show that traditional Western epistemology lacks the theoretical and conceptual framework suitable for the development of attitudes that enhance respect or love for nature and the nonhuman environment in general. Karen Warren in her *Ecofeminist Philosophy*, (2000), clearly noted that “the three streams of ‘radical environmental philosophy’—deep ecology, social ecology and eco-feminism, though of different philosophical perspectives share in common a critique of Western

traditional philosophy's role in the contemporary environmental crisis" (2000: 86). A critical view into the rubrics of traditional Western epistemology, even as shown above, reveals facts and ideas that indict traditional Western epistemology, and the subsequent contemporary society for their destruction of both human and nonhuman communities. Western philosophy – or what Freya Mathews called “the dominant worldview” (2005:197) – is the basic belief that informs contemporary society and its institutions. No single term adequately describes this “worldview”. While Fritjof Capra identified such a philosophical perspective as “Enlightenment in the Cartesian, and Newtonian forms of thinking” (1982:57), Betty Jean Craige has described it as “hierarchical, atomistic, and dualistic” (1992:15).

The reason why this ‘worldview’ is sometimes called ‘Enlightenment thinking’, is because this set of beliefs reached a level of stability during the late eighteenth century. More specifically, the evolution of the mechanistic view of the world became the dominant metaphor of Modernity. Many of the accomplishments of this era are due to the culmination of the writings of Copernicus, Galileo, Newton, Bacon, and René Descartes. However, because Descartes developed the “analytic method of reasoning” implicit in mechanistic thinking (Capra 1982:54), many eco-philosophers call this dominant Western philosophy “Cartesianism” (Naess 1989:39); (Sheldrake 2001:49) and (Oelschlaeger 2001: 85).

Perhaps the oldest and most fundamental characterisation of Cartesian thinking is that it is anthropocentric. As noted in the second chapter of this thesis, anthropocentrism is a worldview that assumes the superiority to and separation of humans from nature. From this viewpoint, a world without humans would cease to have a reason to be. Hence, humans in all ages live with the

mentality that justifies the use of nature to an abusive level. This view is aired by Robert Sheldrake in his *The Rebirth of Nature: The Greening of Science and God*. He averred that the effect of the human alteration of the environment was significant even in the Palaeolithic era (2001:12). Though Palaeolithic societies “seem to have lived in greater harmony with nature than agricultural societies or urban civilisations, they still appear to have wrought major changes in their environments” (2001: 36). Among the changes were species extinctions through overhunting and habitat alteration by intentional burning (Sheldrake 2001:37). Most surprisingly, “much of the world’s desertification may have been aggravated by the activities of prehistoric man” (2001:38). The difference between then and now, however, is the vast increase in human power, fuelled by the development of technology.

However, there have been contrary positions from various environmentalist scholars, emphasising the fact that humans are not very significant to the existence of the world. Christopher Manes points out:

[If] fungus, one of the ‘lowliest’ of forms on a humanistic scale of values, were to go extinct tomorrow, the effect on the rest of the biosphere would be catastrophic, since the health of forests depend on Mycorrhizal fungus, and the disappearance of forests would upset the hydrology, atmosphere, and temperature of the entire globe. In contrast, if *Homo sapiens* disappeared, the event would go virtually unnoticed by the vast majority of Earth’s life forms (Manes 1996:15–16).

The above quotation calls for the need to query the philosophical framework justifying anthropocentric environmentalism—the worldview that espouses the continuous use of the nonhuman world for the benefit of humans alone. The reason is that the traditional epistemological framework underlies the outlook which enhances the reasoning that the earth’s resources, both

organic and inorganic, are meant for human consumption. In fact, traditional Western epistemology proffers the epistemic realities that do not give room for the extension of ethical consideration even to nonhuman members of the whole earth.

Historically, anthropocentrism originates in ancient Greece and develops through the rest of recorded history. A profound articulation of the culture of the misuse of nature in the Western tradition can be found in Aristotle's *Politics*, where he argues:

It is also from natural causes that some being commands and others obey, that each may obtain their mutual safety; for a being who is endowed with a mind capable of reflection and forethought is by nature the superior and governor, whereas, he whose excellence is mere corporeal is formed to be a slave.
...plants exist for the sake of animals and animals for the sake of man, the tame for use and for, the wild, if not all, at least the great part of them, for food, and for the provision of clothing and various instruments (1928:14–16)

Inextricably bound to the ideas of dualism and the hierarchisation of being that developed throughout antiquity, is the idea that the universe is a machine – a concept that originated in the sixteenth-century (Henry 2002:161). In Descartes' time, there was a general fascination with the mechanical functioning of clocks (Craigie 1992:98). Clocks' design quickly became a dominant metaphor for how the world functioned—as an enormous timepiece that continued to spin through the movements of individual parts (1992:100). The effect of this metaphor, however, was the de-animation of the natural world: “the living cosmos [was] replaced by the universe as a machine” (Sheldrake 2001:49). Along with his ideas that the soul was separate from the rest of material existence, Descartes' mechanical model of the world exacerbated the anthropocentrism and hierarchical thinking he inherited from the Western philosophical tradition. Like Newton, Descartes was a mathematician who devoted his career to explaining that “everything in the

material universe worked entirely mechanically according to mathematical necessities” (2001:49). Thus, in his *Principles of Philosophy* (1998b), Descartes applied this new mechanical way of thinking to everything, including plants, animals, and humans. Animals had only a shell of a body without the spirit. As such they were *automata* like clocks, capable of complex behaviours but lacking souls that enabled them to think. Such a view of animals as mere machines “furthered his explicit aim of making men ‘lord’ and possessors of nature” (Sheldrake 2001:53).

As such, Descartes’ view was that “animals were not only incapable of thought but unable to feel pain” (Descartes 1999:III; 134)²⁶. As Tom Regan puts it, animals were subjected to a derogatory testing that “their screams during laboratory testing were considered simply the noise of a little spring that had been touched” (2004:29). Though the *vitalists* of his day objected to Descartes’s view of animals as mere machines, his mechanistic theory achieved supremacy within academic biology (Sheldrake 2001:53). And this led to the attitude of delineating and detaching humans from nature. This detachment of the mind from the body or from emotions, led to the notion of “scientific detachment” (2001:56) that has become pervasive and privileged in contemporary Western thinking. The myth of scientific detachment or objectivity remains strong both inside and outside of the academy. As a matter of emphasis, Sheldrake holds:

[Scientific detachment] is not confined to the ranks of professional scientists and technocrats; it has an all-pervasive influence on modern society, deepening the divisions between man and nature, mind and body, head and heart, objectivity and subjectivity, quantity and quality (2001:56).

²⁶ See also Daniel Garber, “René Descartes.” Routledge Encyclopaedia of Philosophy. 1998. Pg. 16

This mechanism – found in Newtonian physics and advanced by Cartesian philosophy and the scientific method – has become so widespread in Western society that to question it is to question the very foundation of modern civilization. Sheldrake opines further that, “[t]he mechanistic theory of nature has acquired such prestige through the successes of science and technology that it now seems less like a theory than a proven fact” (2001:74).

Another ill of Cartesian philosophical thinking is atomism. As defined in the English Oxford Dictionary (EOD), “atomism” is the theory in modern philosophy “that all statements, propositions, situations, and phenomena, are composed of mutually independent, simple, primary, and irreducible elements” (2006). For Epicurus, an ancient Greek philosopher, atoms are principles (*archai*) in the sense that they constitute the nature of bodies: the invisible principles are necessarily the nature of bodies (Taylor 1999:D5). In other words, atoms are changeless principles of nature. It is through the indivisible, unchanging corpuscles of reality that concrete things arise from. In his letter to Herodotus, an ancient Greek historian, Epicurus made an outline of what an atom is:

Nothing comes from what is not nor disappear into what is not. The all is made of bodies and void, which are the only complete nature/ *per se existents*; Amongst bodies, some are composites, other are those from which composites are made; the all in unlimited or infinite both in the number of atoms and the extent of void; the number of different atomic shape cannot be conceived; the atoms move constantly and endlessly because of the existence of voids (1999: *Ep. Hdt.* 38-44)

Though pre-Socratic Greeks are credited for the idea that “the world is composed of homogeneous particles” (Oelschlaeger 2001:55), Enlightenment philosophers and scientists used the idea of the atom to decode the mysteries of the natural world. The term, atom, was consequently employed

by Modern scientists to describe what came first to be theorised over and secondly to be observed. Bacon employs atomistic thinking when describing his utopian view of a research university in *The New Atlantis*.²⁷

However, Descartes is the philosopher who developed a new scientific method based upon dividing “each of the difficulties” he examined “into as many parts as possible” and reducing them to their “simplest and most easily known” elements (1994). Viewing nature as a machine with singular function component parts, the atomistic thinker studies phenomena in isolation, unaware of the multiple functions each element plays within a complex system.

Combined with anthropocentrism, dualism, and hierarchical thinking, the power of atomistic thinking cannot be underestimated. While this study is not unaware of the contemporary anti-scientism position like that of Jan C. Smuts (1926) and Fritjof Capra (1982) among others, it however notes that the belief in the scientific method as the only valid approach to knowledge pervades various streams of the traditional Western intellectual paradigm. As noted by Capra, “during the past decades all these ideas and values have been found severely limited and in need of radical revision” (1982:31). The shortcoming of atomistic thinking, as opposed to holistic

²⁷ In *The New Atlantis*, Bacon describes the centrepiece of a technocratic utopia, Salomon’s House—“the noblest foundation . . . that ever was upon the earth . . . dedicated to the study of the works and creatures of God” (1964:20). Salomon’s House included “in-closures of all sorts, of beasts and birds; which we use not only for view or rareness, but likewise for dissections and trials, that thereby may take light what may be wrought upon the body of man” (1964:33). Besides vivisection, the scientists of Salomon’s house try all poisons, and other medicines upon them. Dividing the study of nature into discrete and separate departments, Salomon’s House is Bacon’s vision of the modern research university, which until very recently, was structured around strict division between departments for the purpose of accurately studying nature (1964:33-34). Such a view that separates humans from the rest of nature is characteristic of the mechanistic and atomistic perspectives of Cartesian thinking. See Farrington, Benjamin. *The Philosophy of Francis Bacon: An Essay on Its Development from 1603 to 1609*, with New Translations of Fundamental Texts. (Chicago: University of Chicago 1964).

environmental thinking, is that it fails to appreciate fully the interrelationship between discrete elements. By viewing the environment as a system of elements that function only as a whole, the ecosystem environmentalist more accurately identifies and understands the characteristics of individual phenomenon. This holistic, ecological model unifies the myriad of environmental philosophical theories. Though the holistic model finds the roots of our environmental crisis in Cartesian thinking, it is important to remember that such criticism does not view Cartesian thinking as sinister or invalid (Capra 1982:40).

To a certain extent, the traits of Cartesian thinking are responsible for important scientific and technological discoveries. Certainly, Cartesian thinking considers the interactions between objects in nature.²⁸ However, by trying to understand a phenomenon by isolating its simplest and most easily-known elements, Cartesianism often fails to recognise that identity and character are determined by all of the relationships that that phenomenon has in its natural environment. In addition, though useful in many ways, atomistic thinking is counter to ecological understanding that the identity and function can only be understood in context.

In fact, while appreciating the scientific discoveries made possible through Cartesian thinking, I argue that strict atomism has led to an inability to think more holistically. Further, atomism has contributed to the failure of valuing relationships between phenomena that define identity and character. Such inability to comprehend nature holistically has had catastrophic environmental implications. It is little wonder, therefore, that Fritjof Capra argues that Modern society has

²⁸ This is evidenced via a consideration of Cartesian interactionism. Although, it is not without its flaws, interactionism still buttresses the point that there is an interrelationship among various substances of existence. See Daniel Garber, "René Descartes." *Routledge Encyclopaedia of Philosophy*. 1998. Pp. 16-22

“disproportionately favoured Cartesian thinking almost to the exclusion of holistic thinking” (1982: 33). Consequently, the predominant view in the field of environmental philosophy is that a holistic framework is more consistent with how nature functions and can serve as a guide for environmental sustainability of the widest possible biodiversity (Naess 1973:97). Writers like Capra (1982) and Craige (2001) who also acknowledged such environmentalist views have argued that Cartesian thinking is slowly being supplanted by a scientifically-based, holistic paradigm. Such a holistic framework is envisioned as one that balances competition and cooperation, thus, stressing the importance of sustainability for the health of humans and nonhumans alike (Craige 1992:12).

Intellectual frameworks are being developed to emphasise and advance ideas underlying the interconnectedness of all nature; and this study is a contribution to the philosophic advancement of such frameworks from the epistemic viewpoint. This holistic worldview holds humans to be a part of, and inseparable from, nature. Hence, humanity is conceived not to be isolated from nature and viewed as such, humanity would not annihilate or destroy nature, and further would not use nature adversely; rather, humanity is constantly engaged with the rest of the environment and constantly interacting with nature.

3.5. Conclusion

In this chapter, it has been demonstrated that the history and philosophy of the traditional Western intellectual culture appears not to give attention or adequate interest to a holistic environmental philosophy because its epistemological-cum-ontological foundation places primacy on human reason. To wit, the external world is placed as secondary in the acquisition of knowledge. The

second chapter of this research corroborates this, as it was shown therein that the need for environmental discourse was due essentially to the advent of the environmental crisis that was largely a consequence of self-interested human actions. In other words, the fear of a ‘global holocaust’ arising from the desecration of the environment was what forced the attention to the environmental crisis. Traditional Western philosophy’s conceptualisation of the environment, wherein objects are understood as changing, pliable, and not essential to knowledge, could not have given birth to any major interest in ecological appreciation for the environment. Conversely, the epistemological attitude of the West is significantly prejudiced in favour of the permanent, eternal and indestructible eidetic objects of knowledge and reason. The human mind that rationalises epistemic thoughts, is placed above nature. This line of thought permeates the philosophy and history of traditional Western scholarship, which is particularly influenced by the Cartesian worldview.

In contrast to environmentalists’ thinking, “anthropocentric environmentalism” – as influenced by Cartesian thought – inhibits the understanding of the holistic and complete interconnectedness of the human with all other nonhuman members of the earth. It is, therefore, not incorrect to interpret traditional Western epistemology as having set forth the intellectual framework that enhances the isolation and annihilation of nature from the human. This explains Capra’s (1982:102) and Craige’s (2001:45) optimism that, in contemporary times, there is a shift away from Cartesian thinking, towards holism. The plausibility of their optimism inheres in the fact that the Cartesian worldview, as a prototype of the Western traditional intellectual thought process, can be held ideologically responsible for the destruction of the natural environment and all nonhuman forms

of existence. To this end, this study opines that the current environmental crisis has epistemological foundations.

Further, this study identifies traditional Western epistemology as the root of the pervasive environmental crisis and its un-reformable human cause. One should, therefore, be cognisant of the place of humans within the environment and of the rapaciousness of the Cartesian worldview: consuming, alienating, annihilating, and destroying of natural resources. At the source of this alienation is an anthropocentric and mechanistic mode of thinking that is the product of traditional Western epistemology. The need therefore arises to lay out an alternative epistemological framework, within which knowledge concerning nature (the external world) and the human subject is symbiotic. Noted is the fact that such an epistemological framework would provide a clear motivation for critiquing traditional Western epistemology. It will further provide a background for contemporary thinking with regards to issues surrounding environmentalism.

However, before the alternative framework that is conducive for environmentalism is articulated, attempts will be made to examine the African orientation in environmental philosophy, *vis-à-vis* environmental ethics and philosophy, as well as some contemporaneous challenges facing the development of African environmental philosophy. This includes a review of some works by scholars who question the dominant dichotomised epistemic view in their various bids to advance an African environmental philosophy. Consequently, we will be able to develop an alternative epistemic sketch, fashioned in the indigenous African epistemic thought.

Chapter Four

A critique of the current African orientation in environmental philosophy

4.1. Introduction

This chapter attempts to critique the current African orientation in environmental Philosophy. Whilst considering the distinction raised in the second chapter of this study, between environmental ethics and philosophy, the chapter presupposes that African environmental philosophy is a genre of African Philosophy. Also, it will be argued that current attempts at constructing an African environmental philosophy have approached the subject from an ethical perspective. It should be noted that this thesis is not oblivious of the significance of the ethical perspectives in the discourse of environmental philosophy. However, the study argues that ethical perspectives are not enough. While the ethical perspective may be necessary for construing an African orientation in environmental philosophy, the ethical perspective is insufficient. Hence, the adoption of an ‘epistemologico-ontological’²⁹ approach which seeks to rediscover the ontological human-nature relationship from an epistemological perspective.

Beginning with discourse on the concept of African Philosophy, we then explore the current African orientations in environmental philosophy. Recognising the limitation of this research work, we do not claim to exhaust all views of current African orientations in environmental philosophy. However, from the arrays of examined current opinions on African orientations in environmental philosophy, the chapter aims to arrive at an understanding that proffers a motivation

²⁹ This is a synthesis of the ontological and epistemological understanding of the human place in nature as well as that of the human-nature relationship.

for an alternative approach to current African orientations in environmental philosophy; namely, an epistemologically oriented perspective of African environmental philosophy.

4.2. Conceptualising “African Philosophy”

Conceptualising African Philosophy is apt for the discourse on African Environmental philosophy. This is in sync with the earlier held position of this research work (in chapter two), that environmental philosophy is a genre of applied philosophy. We take African Philosophy here as a genus class (broader category) of African environmental philosophy. This study thus identifies African environmental philosophy as a specie of African Philosophy, simply put, an application of African Philosophy to environmentalism. It is therefore imperative that the discussion on environmental philosophy be within the broader perspectives of African Philosophy. Seeing African Environmental Philosophy as the engagement with the subject of environmentalism from the philosophical opinions of African philosophers, the focus in this section will be on the conceptualisation of African Philosophy.

However, the attempt at conceptualising African Philosophy is not an *apologia* for the existence of African Philosophy. Rather, it gives a justification for explaining the part-whole relationship between environmental philosophy and philosophy from an African perspective. Given that this study has considered the Western, Modern denigration of the environment, the impact of such environmental denigration on the global world, and the present environmental catastrophe that we find ourselves in, conceptualisation. African Philosophy here permits us to explore the African lens with which to evaluate the environmental crisis.

A caveat here is that we do not aim this study at proffering solutions to the environmental challenges faced by Africans alone, but we are offering an environmental philosophy that may contribute solutions to the global problems of the environment. In other words, the research is not parochial; instead, it offers solutions that may apply and be useful for the discourse on environmentalism in any part of the world. The study suggests an epistemic *cum* ontological understanding of the human relationship with mother nature. Such epistemologico-ontological perspectives, the study opines, will allow for an apt understanding of human beings' position in relation to nature. Thus, the study will contribute insight into how humans ought to relate to nature, and how we ought to treat it.

4.2.1. Background

The attempt here is to conceptualise a theoretical working definition of 'African Philosophy' for this thesis. However, this will be done without going into the old debate of the existence or otherwise of African Philosophy.³⁰ Thus, conceptualisation African Philosophy from the old debate will amount to an effort in the mere repetition of past studies, a debate that has been dealt with justifiably (Uduigwomen 2002:3).

The point of entry for this chapter—in conceptualisation African Philosophy—is on the question of 'what is the nature of African Philosophy?' To answer the question on the nature of African

³⁰ By old debate, I mean the debate that centres mainly on the question of existence or otherwise of African Philosophy, as well its nature. This debate has been extensively engaged with by revered African Philosophers, such as Kwasi Wiredu (1980), (1998a); Paul O. Bodunrin (1981), (1985); Odera Oruka (1987); Kwame Gyekye (1987), (1997); Sophie B. Oluwole (1989), (1999), (2015); Mogobe Ramose (2002); Andrew Uduigwomen (2002); Moses A. Makinde (2007); Olusegun Oladipo (2008); Doyo Guyo (2011); Emmanuel Chukwudo-Eze (2017) among others, have held – though from diverse point of view– that African Philosophy exists. One fact deducible from their intellectual grappling with the debate is the consensus of an affirmative response to the question “Is there African Philosophy?”

Philosophy, we begin with a consideration of the intellectual directions or approaches that the development of African Philosophy is taking, i.e. trends in African Philosophy.

4.2.2. The three trends in African Philosophy

The three discernible senses of African Philosophy as argued for by Samuel Imbo (1998) will be the focus here. Imbo highlighted three discernible senses of extant African Philosophy as “ethnophilosophical, universalist and hermeneutical approaches” (1998:14). It must be noted that our study is not unaware of the many trends in African Philosophy as for example, those outlined by Oruka (1978) (1990b): Ethnophilosophy; Philosophic Sagacity; Nationalist-Ideological Philosophy; Professional African Philosophy; Literary-artistic Philosophy and Hermeneutical theory in African Philosophy and later by Wiredu’s (1980): Traditional African Philosophy and Contemporary African Philosophy. One of the significant authors to give a commentary and interpretation of these trends is Imbo (1998:14-45). The position of Imbo, though summative, is apt and comprehensive for this study. Imbo’s scheme is adopted because his three discernible senses of African Philosophy cover all the trends identified by both Oruka and Wiredu, although with modifications that appear fitting for this study. It is more rational to think that within the class of the Universalist, for instance, it is not unlikely to have some Nationalist-ideologists as well as Professional philosophers. Also, ethnophilosophy and professional philosophy would well feature in the hermeneutical sense of African Philosophy. Imbo, recognising the possibility of the interplays and overlapping nature of these individual trends, thus, aptly represents the various trends of African Philosophy with the three discernible senses: ‘ethnophilosophical’, ‘universalist’ and ‘hermeneutical’ approaches (1998:38). We will now consider these three discernible senses.

4.2.2.1.1. The ethnophilosophical approach to African Philosophy

The Ethnophilosophical approach refers to philosophical opinions that are entrenched in mythical, religious, linguistic, anthropological as well as poetical worldviews of different African cultures. With this view, African Philosophy is to be known by the nuances of the unique belief system and ethnocentric concepts such as language, mysticism, magic, fables, and myths. The ethnophilosophical approach is best seen in the works of Alexis Kagame (1951), Leopold Senghor (1964), Placide Tempels (1969), John Mbiti (1969), among others.

To a great extent, ethno-African Philosophy is found in traditional cultures, proverbs, fables, folklore, and mythological conceptions. While one would understand the attempts of the ethnophilosophical scholars in situating African Philosophy in culturally specific views, their attempt is owed essentially to the urgency of proving the Eurocentric denial of rationality in Africa wrong. Chief among these being the Hegelian description of Africa as a continent of savages whose thought and life hinges on primitivity, and as such without history or proper philosophy (Hegel 1956. For Hegel, Africa as a continent “is unhistorical, undeveloped Spirit, still involved in the conditions of nature” (1956:47). In furthering his Eurocentric prejudice against Africans as culturally defective, Hegel opines:

We shall therefore leave Africa at this point, and it not need to be mentioned again.
For it is an unhistorical continent, with no movement or development of its own
(1975:37)

The denial of African Philosophy is entrenched in the subtlety of racism, for the basis for the deniability of African Philosophy is upon the supposed lack of rationality by anyone under the classification or specie, “African”. This has also recently been noted as “a denial of humanity to

Africans” (Etieyibo 2018:15). The intellectual reactions against such views as that of Hegel culminated into the great debate. However, efforts by some African philosophers in this debate, argues Isaac Ukpokolo, only present the continent’s cultural homogeneity in a poor light as it shows African Philosophy as being incapable “of its own unique and consistent logic” (2017:2). In other words, the great debate presupposes that without the need for the intellectual reactions to Eurocentric-denial of African’s rationality, African Philosophy may not have been developed.

4.2.2.2. The Universalist approach to African Philosophy

The Universalist worldview begins with the definition of philosophy as an objective and universal principle-laden enterprise. This means that the universalist worldview or approach is a stance opposed to the culture-specific method. To the pioneer proponents of this view: Innocent Onyewuenyi (1976); Kwasi Wiredu (1980), (1991); Peter Bodunrin (1981), and Paulin Hountondji (1996), philosophy is not culture-dependent. Rather, philosophy is a “systemic and methodological inquiry that should not be altered by its geographical application” (Imbo 1998:22).

For the Universalists, therefore, intellectual skepticism should be cast upon any philosophy that is not written down (Hountondji 1996:118). To the Universalist, the ability to develop a tradition of debate and sustained inquiry cannot be developed or sustained by non-written philosophy (Imbo 1998:9). There are Universalists who give room for oral philosophy, like Henry Odera Oruka, who developed the idea of Sagacity wherein he presents a Socratic-like person referred to as the African Sage in the African parlance (1990a:22). Such people are believed to be philosophic about various traditional worldviews, despite their level of literacy. So, contention between the Universalists and Ethnophilosophers is evident in the idea that a proper African Philosophical text

should be limited only to written words or the canonisation of oral experiences. In Kwasi Wiredu (1998b:19-21), the Universalist ideation of African Philosophy is that of a “proper” philosophy of the African orientation that includes a critical reconstruction of African traditional thoughts, to reveal philosophical elements thereof. This includes the use of literary and scientific resources of the West, which Wiredu argues “does not make the constructed text any less African” (1998b:20).

4.2.2.3. The hermeneutical approach to African Philosophy

The hermeneutical approach challenges both the Ethnophilosophical and Universalist perspectives. As argued by Imbo (1998:12), the hermeneutical philosophers take African traditions as their starting point, as they seek to escape the enslavement of the past by critically using the past to open-up the future. It is the understanding of these scholars that Philosophy – suitably construed – must move beyond a preoccupation with ethnological considerations and universalist abstraction, by calling into question actual relations of power in Africa (Imbo 1998:11). The works of Theophilus Okere (1971), (1983), (2004); Tsenay Serequeberhan (1991), (1994); Marcien Towa (1991); and Okonda Okolo (1991) exemplify this hermeneutical orientation in African Philosophy. The hermeneutic approach inheres in the application of tools of philosophy to issues regarding the existential realities of the continents, even in the face of globalisation. This is in contrast to the Ethnophilosophical worldview, which subsist in holding “culture specific views” (Imbo 1998:9).

Observable in the aforementioned approaches to African Philosophy, is the fact that the approaches aimed at grappling with the social, political, economic, and intellectual challenges emanating from the lived experiences of African people. The three discernible senses – Ethnophilosophical, Universalist, and hermeneutical approaches, used different reasonings in addressing existential

challenges in Africa. Certain factors could be seen to be playing through each of the approaches. Thus, in the next session, attempts will be made to look at the factors that characterized each of the approaches in African Philosophy discussed above.

4.2.3. The tripartite factors for defining African Philosophy-

The three factors to discuss in this section are identity; method and relevance. One of the facts apparent in the consideration of the tripartite factors is that the varying approaches or trends in African Philosophy are informed or necessitated by the tripartite factors. The tripartite factors provide a unifying ground of operation to the varying approaches. It will, thus, be held here that the characterisation of trends of African Philosophy can be identified by the attempt at dealing with the intellectual challenges of identity, method, and relevance. To put it in another form: every trend follows a particular method to unearth the African identity and drives home the relevance of such a method for addressing the everyday challenges of the people. Hence, the quantum of efforts by scholars to opine for a philosophy that is classified as ‘African’ is informed by the tripartite factor of identity, method, and relevance.

On identity: Much of the debate that starts the discussion about African Philosophy like: Wiredu (1980); Bodunrin (1981) Oruka (1987); etc. is focused upon the quest for African identity. The identity challenge is set at countering the deniability of African Philosophy. The quest for identity is given preference more in the need to deal with the challenge of refuting the colonial cultural denigration of Africans and African societies. Such denigration of colonised cultures came with the establishment of Western-centric evaluative parameters for engaging with African belief

systems. In the face of such Eurocentric engagements, the crisis of identity ensued. Thus, the factor of identity became germane in the canonisation of various trends of African Philosophy.

On method: The factor of designating a functional method that would be employable for the discipline of African Philosophy is another deciding factor for defining African Philosophy. Method sets at answering the question of what to include as the subject of discussion? What process of enquiry would be adjudged to be suitable for an intellectual engagement? What research questions would be essential for determining salient discourse that could pass for African Philosophy?.

On relevance: The quest for relevance is the third deciding factor to be considered by this study for characterizing philosophy as an authentic African Philosophy. How relevant is the idea put forward in addressing the existential challenges of Africa? How relevant are the philosophic postulations to the socio-cultural experience of Africans even in the search for sustainable development and in the face of globalization? The African continent is not only peculiar because of its predicaments, since there is no segment of humanity without its predicaments. However, the African predicament generates conceptual dynamism that ensures that any concept and idea to be applied to the continent must have a unique trajectory that facilitates the twin task of self-definition and development. This informs, to a large extent, the imperativeness of the 'relevance' factor. The relevance of an idea, theory, or concept towards addressing the existential challenges of Africa is not only significant for defining African Philosophy; but also informs the positions of the varying trends or approaches to African Philosophy.

Our view here is that the discipline and practice of African Philosophy is better advocated for by engendering factors of identity, method, and relevance. This position is argued from the position that defining African Philosophy based on the oral/written contention between the Ethnophilosophical or Particularist and Universalist approaches, appears to be a disservice to the discipline of African Philosophy, as it undermines the significance of the tripartite factors. Thus, while it may not necessarily be the social context or the written text that confers the label 'philosophy', it is not out of place to argue that the three factors of identity, method, and relevance appear to be essential in the quest for an authentic African Philosophy. This view, I want to believe, holds regardless of place, person, or time. Furthermore, the three factors discussed above serves as rallying-points for the various positions argued for by the different discernible senses of categorising African Philosophy. Be it through the forward-looking and the backward-looking approach to the conception of African Philosophy (as noted by Safro Kwame (2017:99–100)), or through the Particularist/Universalist distinction (Adeshina Afolayan (2006:21–28)); we could explain African Philosophy by these three factors.

Conceptualisation African Philosophy in light of the tripartite factors is to see it as a critical exploration of the social constructions of the answers to the existential questions on the continent. The existential questions that these factors make viable in the discourse on African issues make such philosophical expositions qualify for African Philosophy. Answering such questions accurately requires a reflection that transcends social or cultural boundaries and still being able to hold ties to cultural orientations. Engaging in African questions especially along the line of the three factors of identity, method, and relevance also shows forth the continental consciousness required for the generation of philosophy. This is against the background of Eurocentric

worldviews of late Enlightenment and early 19th century scholars, who proposed that Africans and Africa lack the required quality for philosophising, namely reasoning: e.g., Hume (1963); Kant ([1775] 1902), (1997) and Hegel (1956), (1975). This deniability and the response thereof hold sway in the early philosophical discourse for Africa. However, the legitimacy or quality of African Philosophy should not be consequent upon the denial of its existence. This is because to argue for the non-justification of African-oriented reflective and critical thoughts – because of the phenomenon of colonialism and the deniability of rationality – is to beg the question of the rational ability of the people of the African continent.³¹

Although we cannot pretend that the effects and challenges of the European incursion in Africa do not have consequences, we should not consider this interaction as casting the shadow of non-existence upon indigenous thought processes. This is because indigenous thought processes, be they Asian; African; Australasian, or Occidental, with sound merit and ingenuity, have an existence outside the interaction with other cultures of the world. Wiredu noted this in his celebrated essay: “*Are there Cultural Universals?*”, wherein he argued for the existence of inter-cultural communication (1998a). The logicity of the possibility of such genuine and functional indigenous ideas do not only subsist for the existence of reflective thought-making processes in African culture. They also give credence to the fact that intercultural communication³² between indigenous African thought and the rest of the world is possible.

³¹ Kwame Gyekye noted this when he argued that “to deny African peoples philosophical thought is to imply that they are unable to reflect on or conceptualize their experience” (1987:8).

³² Communication between different cultures. The possibility of inter-cultural interaction gives credence to the existence and functionality of indigenous ideas, as without it the bases for communication is non-existence.

Observable at this juncture is that having an adequate grasp of the existential questions from the intellectual stance of the tripartite factors will inform answers that will and must reflect the ability to transcend while holding ties to cultural orientations. The debate on ethnophilosophy and professional philosophy on the purpose of African Philosophy comes to light here. The contention is over whether philosophy must be solely of personal presentation, i.e. textual, or if it should include oral, communal, and cultural worldviews. While cultural worldviews may be the raw material for intellectual or philosophical engagements, they remain a particularist cultural orientation, until they are made to pass through the crucible of rational enquiry and critical reflection. This attitude is open to humanity by virtue of the ability to reason, holding for any set of persons or culture. Thus, African Philosophy in the attempt to grapple with the nuances of the three factors can be definable on a part-whole relationship between operating in a particular context-oriented form (subjective); and grounding such operations on a general feature of life realities (objective). The part-whole relationship ensuing between the subjective and objective stance of philosophising, will be the focus of the next section in this chapter.

4.2.4. The objective and subjective dimensions of philosophy

It is the position of the present author that there is a part-whole relationship entrenched within the subjective and objective dimensions of philosophy, respectively. By the subjective dimension, I mean the contextual components of intellectual resources that inform one's particular philosophic view and which are products of one's cultural lived experiences. The objective dimension on the other hand holds for the basic components of life realities that are not peculiar to any section of humanity but apply to the experience of all cultures. This would be the global character of

philosophy. To get this done, this section will engage in an examination of these dimensions of philosophy to reveal the nature of philosophy and, by extension, African Philosophy.

Kwasi Wiredu (2004) rightly notes the perplexity involved in the bid to define ‘philosophy’. For him, “there is hardly a single question to which there can be said to be an established answer. Here not even on the question of what philosophy is” (2004:139). To this end, it is pertinent to note that philosophy has been defined from diverse points of view. One thing derivable from various definitions of ‘philosophy’ – which would also be instructive to note in my conceptualisation of African Philosophy – is the relationship between the objective nature of philosophical questions and the varying subjective approaches to them. The question here should be: is the subjective approach to defining philosophy or addressing any philosophical issue enough to legitimise the discipline of philosophy? Or does it play down the merit and authenticity of the discipline? To hold a positive answer to the question above will be to give in to extreme relativism, which often informs the popular view that nobody has said the last word in philosophy. But this study does not subscribe to such relativism. However, this does not mean that I wish to overthrow every form of subjectivism. Some measure of subjectivism is necessary, provided that one can argue for one’s subjective viewpoint. On the significance of putting forward one’s thoughts with clarity, Peter Bodunrin argues:

When one is putting forward a philosophical thesis, we expect him to state the issues at stake as clearly as possible so that we know what we are being invited to accept. We expect him to argue for his case – [to] show us why we must accept his case (1981:173).

Whatever the various positions and opinions are and whatever importance such views may carry, they have to display lucidity, rationality, clearness, and critical analysis to be acceptable and to be worthy of the name “philosophy”.

It is, therefore, essential that focus is placed on the creative analysis of any system of thoughts before we canonise them as “philosophy”. Thus, despite the open-ended nature of philosophy, it is possible to identify some ideas that befit the characterisation of philosophy. Efforts will thus be made to consider in this regard, ideas of two of the foremost African Philosophers; Odera Henry Oruka and Kwasi Wiredu. In choosing these two scholars or philosophers amongst others, I intend to bring home their understanding of philosophy to bear on the case for African Philosophy. Although their points of view vary, they are essential for my conceptualisation of what ‘philosophy’ in general is and what ‘African Philosophy’ in particular, should be.

Odera Henry Oruka conceptualised “philosophy” as “... an art of reasoning... [that] provides a critical intellectual weapon and methodology for analysing and synthesising the basic problems of man, society and nature” (1997:140). In other words, philosophy is a critical intellectual engagement with the conditions in which people live. For him, therefore, philosophy cannot exist *ex nihilo* but should be seen and understood as the creative effort of thought processes in response to the prevailing social conditions (1997:143). From Oruka’s description of philosophy, it can be said that philosophy is the intellectual effort that is exerted in applying concepts and theoretical tools to the advantage and promotion of a community’s progress (Graness and Kresse 1997:254).

The second definition of “philosophy” considered is that of Kwasi Wiredu. For him, “philosophy” is systematic reflective thinking on life (2004:1). Earlier, in his *Philosophy and an African Culture*, he had noted that “philosophy is a rational and critical reflection on the most fundamental ideas and principles underlying our thought about human life and its environment, natural and supernatural” (1980:91). This, for him, is the intellectual orientation that any activity must meet to be regarded as “philosophy”. Wiredu (1980:32) also believes that philosophy thrives on criticism, and hence the evaluative aspect of the discipline. Without argument and clarification, there is strictly no philosophy as philosophers are expected to argue for their theses by clarifying meaning and answering known and anticipated objections (1980:47).

I infer, from the input of Oruka and Wiredu, that philosophy is an activity that is based on reasoning. As a rational discourse, philosophy thrives on the practitioners’ ability to engage critically with issues, making such engagements worthwhile. Another fact deducible from the definitions above, is that philosophy has two dimensions to itself, namely, the objective and the subjective dimensions. Oruka’s view on philosophy is subjective, in the sense that the reflective thinking on a particular life – be it Asian, African, or European – in relation with other numerous life forms of humanity as a whole, could be considered as “philosophy” from the subjective point of view. For him, philosophy is an engagement with and a response to social conditions, for the expressed purpose of finding meaning in life. It is a rational weapon to examine and deal with the societal problems experienced around and in a particular locale.

On the other hand, Wiredu’s view can be categorized as philosophy from the objective stance, because his perception of what philosophy is, is a consequence of the universal and global

character of philosophy. A look at Wiredu's description of philosophy shows that it resonates with the non-peculiarity of philosophy as a system of thought and that its methods or the problems it engages with transcend a particular segment of humanity. Philosophy, from the words of Wiredu above, is encapsulated as ideas and principles underlying human thoughts, that is present in every human being irrespective of culture. The position of Wiredu underscores the fact that intellectual thought that is of rational and critical reflection is not a particular attribute of any segment of people, rather it is a character that is expected to be seen in all cultures. The characteristics of systematic reflections, criticism, and evaluative clarification of ideas epitomises that which is expected to be taken as philosophy, and any intellectual thought from any part of the world that exhibits these traits necessarily passes as philosophic. Thus, in this objective line of thought, there are no African, Asian, or Western truths, instead what exists is 'truths' (Kwame 1992:104). The global applicability, as it were, of the philosophic system informs the objective dimension of philosophy. A point to note here is the fact that both Wiredu and Oruka are classified into the Universalists African philosophic tradition. However, the distinctive line of universalist/particularist divide has been shown above to have been overshadowed by the tripartite factors inherent in attempts by various schools to conceptualise African Philosophy. In other words, engaging with the tripartite factors in the cloak of the objective/subjective dimension of philosophy does not conform to a specific distinctive line of philosophic categorisation. This is because whatever classification of 'philosophic' of any school that one may want to be committed to, such presentation will be less of 'philosophy' if it lacks the two elements of objective and subjective dimensions.

The present author, however, sees philosophy from the complementary relationships of these two equal dimensions. In other words, it is possible to conceptualise philosophy from the objective dimension as a critical reflection on any life forms that exist. Applying such reflective thinking to a particular form of life is doing philosophy from the subjective stance. The complementary nature of philosophy is corroborated by Gyekye's argument that philosophy, being an intellectual activity is of a universal [objective dimension] practice, which cannot be confined to a geographical location [subjective dimension] (1987:9). Recognising the importance of the subjective dimension of philosophy, Gyekye noted that "answers to philosophical questions provided by thinkers from different cultures may differ in quality sophistication and persuasiveness" (1987:9–10). On the relationship between the two distinct but related dimensions of philosophy, Gyekye writes:

When I claim that philosophical activity is universal, I mean simply that thinkers from different cultures or philosophical traditions ask similar philosophical questions and think deeply about them. It is in terms of the philosophical attitude, of the propensity to raise questions relating to the fundamental principles underlying human experience and conduct and not in terms of the uniformity of doctrinal positions, that philosophy can be said to be universal. This approach to certain fundamental questions about human experience is, in my view, the common denominator of all philosophical activities and doctrines (1987:10).

While it is necessary to undertake or consider philosophy from the objective prism, it is desirable for the sake of completeness to also see it as a strand of subjective application. Thus, I agree with Guyo that the objective dimension of philosophy "is the proper dimension upon which we should ground any particular [subjective] philosophy regardless of its origin" (2011:59).

Philosophy from the objective view would accord meaning to any activity in line with its intellectual orientation as 'philosophy', regardless of geographical locations, socio-economic

capacities or, the ethnicity of the people engaging in such intellectual activity. Thus, this study sees both the Eurocentric conception of rationality with its deniability of African rationality and the ensuing ‘response debates’, as intellectually prejudiced, unnecessary, and conceptually deficient. This is because any human being may engage in a systematic reflection on life. To hold thus that the “philosophical epoch of humanity began first among the Europeans is to undermine the vastness of reflective thinking and nothing but sheer intellectual chauvinism” (Guyo 2011:62). As Oruka (1987:66) opined, “reason is a universal trait, and that the greatest disservice to African Philosophy is to deny it reason”. Indeed, the denial of reason to Africa and her people is fallible (M B Ramose 2002:20).

We posit that applying or making objective conceptions of philosophy to bear upon one’s way of life is itself a subjective move. It is for this reason that Wiredu noted that “philosophy is practical, it is also theoretical, and it is theoretical before it is practical” (2007:78). While it would be apt to note that a theory will have objective or universal status, the application of such theory to different clime and cultures requires some particular orientations. What this points to is the fact that it is “our objective understanding of philosophy that enables us to claim for subjective and particular philosophy [of any culture]” (Guyo 2011:59). Without any form of contradiction, one could thus hold that rational and systematic reflection, thus, become a ground upon which particular philosophy – i.e. Asian, Western, or in the case of our discourse, African – will stand. Such a reflection also enables intercultural communication. As noted by Bruce Janz, questions relating to the geographical location of philosophy do not diminish the stance and quality of philosophy (2009:5). Being geographically located also does not suggest that philosophy should only – though it could be part of its immediate forms of reasoning – be reducible to ethnophilosophy. Janz stated

that “placing philosophy in a geography suggests that it has contingent (depending, commission, liable) but not arbitrary interest and that it responds to and shapes particular sets of the condition of reflection” (2009:2). It follows, then, that any worthwhile philosophy is consequent upon certain questions emanating from the quest to make such philosophy viable for its answers. However, this does not necessarily reduce such a philosophy to its subjective or particular dimensions. This caveat is further noted by Janz when he argued that “philosophy must attend to the conditions in which its questions arise... this attention does not diminish philosophy’s traditional (although never completely fulfilled) striving for universals” (2009:2). It, thus, becomes instructive to hold that a suitable view of philosophy must be one that would be based upon the objective stance of rationality, critical reflection, and also be able to transcend particularities of its subjective dimensions. This study thus holds that philosophy is a critical, rational reflection about life from the objective dimension without underplaying the subjective dimensions of life. Philosophy in this view becomes something that is expressed subjectively by its practitioners.

It is, thus, my considered view that African Philosophy should be seen as a nodal point from which hang the two complementary and equally objective and subjective dimensions of philosophy. To reduce philosophy to either of the philosophical strands is to nullify the dynamic part-whole relationship between the two dimensions. For instance, while it would be right to agree that philosophy cannot be done in a vacuum and as such will be made to bear on the existential realities of the practitioners, to reduce philosophy to such subjective engagements is to create an intellectual hegemony for philosophy itself. This appears to be the challenge that are facing the debate in African Philosophy today. The debate, good as it may seem to be, engages in the reduction of the objective dimension of philosophy to a particular dimension. This, I argue, is a reductive exercise

that is coloured with ethnocentrism of all sorts. I believe that cultural orientations, social conditions, and particular traditional dispositions are important in the creative thought processes of philosophising. However, not to allow such subjective considerations to transcend themselves into the objective ground is a distortion and negation of philosophy as a critical engagement. It must also be noted that caution must be taken in the process of transcending subjectivity so as not to universalise a particular conceptual idea. This is perceivable in the European discourses of exclusive models of rationality. For Guyo, such a worldview is nothing but a “subjective denial of objective ground, that struggles to globalise a particular ethnocentric view” (2011:58).

Thus, African Philosophy will be seen as a rational and critical activity done on the objective ground without negating its subjective dimensions. All practitioners of philosophy regardless of race or group must embrace the objective ground of philosophy. To also reduce philosophy to the particularistic view of any culture without the rigours of the objective dimension is to deny that culture the intrinsic value or trait of rationality. Thus, the philosophy of any cultural orientation is essentially expected to be enshrined upon the tenets of objectivity – critical, rational, and systematic – while still holding ties to its particular forms of life.

What this suggests is that it is impossible to detach any philosophy from the ‘*life-process*’ of its practitioners. By *life-process*, I mean the critical apprehension of encountering or engaging with one’s immediate environment and the universe as a whole. *Life-process* should be seen to be beyond a people’s worldview or opinion. It is the experience of life by people (Masolo 1995:248). Also, *life-process* should be seen as the vivid canonisation of human’s confrontation with the complexity of life. Such a confrontation may be in the form of spiritual, ethical, scientific, or the

mere expression of bewilderment. Yet it sparks of a process that is not particular to any race, colour, or form; it is a process that is universally experienced by all. However, such confrontations with the complexity of life, are borne out of the various correlating factors like geographical location, cultural or social inclinations. Such factors particularise our experience of life.

It would, thus, suffice to note that particular philosophies – i.e. Asian philosophy, African Philosophy, German philosophy, etc. – could be named as such following their confrontation, engagement, and experience of *life-process*. This reveals *life-process* as the medium of philosophical reflections on every aspect of human existence. Such reflections are born out of confrontations with everyday human life. Thus, to do philosophy without the consideration of *life-process* would amount to doing philosophy *ex nihilo*. Philosophy cannot be detached from the *life-processes* of its practitioners. Theophilus Okere corroborates this in his remark that “for philosophy to be African, it must have some expressions of the African life” (2004:22). This also syncs with the Wireduan view that philosophy is a symbiotic function of theory and practice, albeit his view that it is theoretical before it is practical (2007:78).

Therefore, this study conceptualises ‘African Philosophy’ as a subjective presentation of any practitioner’s intellectual endeavour to grapple with the African oriented *life-process*, situated on the objective ground of philosophy. This definition suggests that while any philosophy is expected to be subjectively written and based upon the *life-process* of the author, such philosophies must be grounded upon the objective dimension of philosophy. In other words, this study presents African Philosophy as one to be understood from the particular African *life-process* through the objective nature of philosophy. To do African Philosophy is to deal with essential challenges of African’s

life-process on the precepts of objective factors like rationality, critical reflection, and ethical standards. As we deal with the particularities of the African *life-process*, such engagements would only be philosophy if done in recognition of the fundamental nature of philosophy. Hence, Hountondji's view that "the universality of philosophy does not negate its particularity" (1983:57). It is, thus, in the conception of African Philosophy as a resultant of the complementary relationship between objective and subjective dimensions of philosophy that this study will be looking at the orientation of African discourses on the perennial challenges of the environmental crisis in the next section. This aptly informs the reasons for the attempt thus far in this chapter to conceptualise a working definition of African Philosophy.

4.3. Towards an African Environmental Philosophy

In chapters two and three of this study, attempts were made to explore Western orientations in environmental philosophy, and a critique therein, respectively. In this section, consideration will be given to current African perspectives in the environmental discourse. Here, concerns for the environmental crisis will be taken as a form of *life-process*, especially in the ways Africans encounter the enormous environmental challenges of contemporary African societies. African environmental philosophy is thus taken as a component of African Philosophy. As noted in the second chapter, this research work sees the philosophical discourse of environmentalism as that which surpasses the thresholds of ethics and its underlying metaphysical/ontological considerations. It was shown in chapter two that such reduction is intellectually erroneous and grossly underplays the vastness of environmental issues. Thus, from the stance of 'beyond the ethical perspectives', this study is aimed at developing an effective theoretical and pragmatic philosophic response to the global challenge of the environmental crisis from the parlance of

African epistemology. In other words, in locating environmental philosophy in African philosophical discourse, I will examine how an African epistemic-based environmental outlook would address the environmental crisis.

The scholarly assumption of this thesis is that an epistemic-based environmental philosophy will enormously assist to reconstruct and elicit an effective theoretical and pragmatic philosophic response to the global challenge of the environmental crisis from the African parlance. This approach is within the purview of the earlier understanding of African Philosophy from the complementary relationship between the objective and subjective dimensions of philosophy. As a genre of an applied African Philosophy, African Environmental Philosophy (AEP) will be presented as a rational and critical discourse on environmentalism from the African parlance. I am of the view that environmental concerns are global; hence, attempts to address those concerns need to go beyond the Western horizon. The global nature of the problem also requires a global, multi-modal response. To this end, it could be argued that AEP – although local as is all knowledge of other cultures (Okere (2004:22) – has a contribution to make to global Environmental Philosophy.

4.3.1. Considering current African Environmental Philosophy (AEP)

African Environmental Philosophy is an intellectual exploration of the relationship between African Philosophy and environmentalism. It is an application of the fundamental principles and theories of philosophy to the human-nature relationship based on African worldviews. Yes, environmental problems, ranging from resource depletion, increasing desertification, soil erosion, ozone layer depletion, and declining biodiversity in terrestrial and aquatic, global warming, are of

global concern as they affect everyone regardless of place and time. However, as noted by Chigbo Joseph Ekwealo, “responses, reactions and attitudes [to ecological problems] are at times affected or influenced by people’s special ideologies, philosophies, and worldviews” (2011:8). In other words, despite the universal nature of the environmental crisis, some specificities make it felt more particularly in some parts of the world than in others. For instance, Bunyan Bryant was of the view that “countries of colour and low income [Africa] are disproportionately impacted by the environmental crisis of the world” (2011:12). These specificities inform the idea of Ojomo that the construction of environmental ethics that is African in its making for the environmental challenges of Africa is “most fundamental for contemporary African Philosophy because of the importance of the African Environmental experiences” (2010:62).

Furthermore, to drive home the point of the viability of the subjective dimension of AEP, even in its objective outlook, Ekwealo argues:

...[A]lthough every group of people are faced with environmental problems as is contained in this work, in Africa, in addition to these problems... we are experiencing poverty which is a specific background to pollution for it affects the populace and at times forces the hand of governments in making concessions which ordinarily ought not to because they will have a long term negative implication of effect to the generality of the nationals. These include oil spillage, poisoning of waters, rivers, and streams with its attendant death of the aquatic kingdom, dumping of industrial wastes in the name of second-hand goods, militarism leading to wars with attendant diseases and death, et cetera” (2011:8–9).

The above puts forward the peculiarities of environmental crises in Africa. The peculiarity clause in the existential encounter with environmental crises from different parts of the world necessitates the diversity of philosophies that will be cognisant of the peculiarity of environmental challenges

inherent in each culture (Ifeakor 2019:180). Also called for is a panacea that would bring about the uniqueness of African ideologies and philosophies on the issues raised. In other words, the African orientation in environmental philosophy is justified not just because Africa is part of the global world, but essentially because Africa has indigenous worldviews that are significant to mitigating the environmental crisis. It, thus, becomes clear that African Philosophers must employ all their intellectual tools to “fight both ignorance and poverty and diffuse the dilemma of survival and conservation even in the battle against the environmental crisis bedevilling the continent as well as the quest for survival” (Chimakonam 2018:4).

The aim here is to examine the various attempts by African scholars in Environmental Philosophy, especially from the African perspective. Such an examination is purposed to appraise their efforts as worthy of consideration in the quest for a panacea to the perennial crisis of the environment in Africa and other parts of the world. Also, I hope to demonstrate the weaknesses of over-relying on ethics in African environmental discourse. This study put forward an epistemic framework for African environmental discourse. Ekwealo (2011:10-11) demonstrates insight into this view when he notes that AEP has a global effect as it projects a platform that is consistent with universal ethics and value. He further pointed out that such a consistent platform for ethics and values is achievable through its “epistemology and metaphysics [as] rooted in the ontology of complementary dualism”. I will show that while much has been done in the presentation of the metaphysical aspect of this platform, the epistemological aspect has not been given the required attention. As noted and duly argued for in chapter two, I will not be engaging in a historical mapping of philosophical orientations in environmental discourse. However, I will look through the efforts of some African scholars in the presentation of an African orientation in environmental philosophy. The earliest

attempts to construct an AEP could be seen in the work of Kwasi Wiredu's "Philosophy, Humankind and the Environment" and that of Henry Odera Oruka and Calestous Juma's "Ecophilosophy and the Parental Earth Ethics." Both works, published in *Philosophy, Humanity, and Ecology: Philosophy of Nature and Environmental Ethics* (1994), were previously presented at the World Conference of Philosophy held between 21st and 25th July 1991 at the Kenyatta International Conference Centre, Nairobi, Kenya. In the 1991 conference's opening address, Oruka noted that the nature of the environmental crisis facing the world destined the world to a common future (1991:3). Showing that the ecological crisis is a global phenomenon, Oruka argued that "the pollution of water or air in some parts of the world will not only affect life in that region alone, but it will also affect life all over the Earth" (1991:3). This proffers a ground for an African orientation into the perennial ecological crisis. As a global crisis, Africa shares her portion of the environmental challenges, thus, the need for an African reflection in the quest for solutions to the crisis.

4.3.1.1. The Wireduan contribution: Communalist Environmental Ethics

In his work, *Philosophy, Humankind and the Environment*, Wiredu enunciates a communalist environmental ethics. He notes that:

[T]he external world that the traditional African, as far as I know, recognises includes other human beings and living and non-living beings as well as extra human beings of various grades of power and intelligence, ranging from the superhuman to the sub-human. All these are regarded as regular parts of the world order (1994:45).

Wiredu's African orientation in environmental philosophy is premised upon the traditional African practice of communally-based life. This communal *life-process* is a consequence of the African

perception of reality as one whole system³³. Wiredu noted that with the understanding of this one system of reality, the idea of controlling nature, or of exploiting the nonhuman environment does not arise. Such an idea “does not make sense... in any African language” (1994:45). For instance, the knowledge of unitary ontological reflection will inform ethical agents of the imperativeness of being cautious while relating to the environment – which in this understanding, the human subject is part of the environment.

What is enlightening from this is that the Western dualistic perception of reality, which was highlighted as the foundational framework for the misuse of nature in chapter three of this study, does not hold in the traditional African understanding of nature. For Africans, Wiredu (1994:46) opined, “we do not set any domain of objects and processes aside from human beings and give it a designation comparable to the Western concept of nature”. As such, the question of domination or control of nature does not arise at all in the African idea of the human-nature relationship. The unifying account of reality is conducive for environmental discourse that respects the natural environment:

[F]irst, any object, living or non-living, maybe within the immediate province of a super-human force or power, and one has to avoid reckless and, in some cases un-suppliated use of it. Second, in any case, the land, the most fundamental means of livelihood, belongs not to individuals but to whole clans, and individuals only have rights of use that they are obligated to exercise considerately so as not to render nugatory the similar rights of future members of the clan (Wiredu 1994:48).

³³ This will be further enunciated in the sixth chapter of this study to drive home the unitary ontology underscoring African intellectual thoughts.

From the above, it is clear that the environment is of common benefit for all. This view of nature calls for an ethical attitude toward nature which can easily lead to harmonious relationships towards the environment.

To this end, Wiredu proposed the “Communalist ethics of Traditional Africa” (1994:47) as an environmental outlook to the problems of the environment in contemporary African society. For him, the communalist ethos is a presupposition of all morality as it engenders the readiness of the individual to “empathise with demands of the communal welfare over an expanding field of interest” (1994:47). This ecologically considerate ethics is a by-product of the traditional system of perceiving reality as one harmonious whole. In this worldview, all are duty-bound to cater for the environment, because such actions carry a two-fold obligation towards those in the past and in posterity, which for Wiredu is “obligations to both ancestors and descendants” (1994:46), respectively. The observance of this two-fold obligation will ensure that the environment is kept in shape for the continual sustenance of society.

To this end, it is a common practice in traditional African societies, to make some kinds of libation (spiritual appeasement to the ancestors) before the plucking of leaves as herbs, felling of trees, games hunting, etc. This shows that traditional Africans in their conception of reality understood the intricacies of the interrelationships between the human and nonhuman. Also, such understanding breeds a moral scheme that makes duties to the ancestors and the unborn imperative. What communalist ethics, as envisioned by Wiredu project, is a motivation for “environmental carefulness” (1994:46). Communalist environmental ethics promotes carefulness or caution in the process of the usage of nature by human beings.

The outline of environmental carefulness that is entrenched in the communalists' ethics has a practical implication and application for contemporary African society. It reiterates the importance and viability of indigenous African ideas as essential heritage that can benefit the contemporary African world. It also serves as a call for an African consideration for solutions to some of the environmental challenges in the continent. As Wiredu notes, the idea of communalist ethics "retains appreciable vitality" even in the face of globalisation and industrialism (1994:46). This is because communalist ethics proffer a practical motivation for a harmonious relationship with nature. Wiredu further called for the application of this ethical worldview as it will "prevent us [Africa] from mindlessly imitating the industrialism of the West, pollution and all" (Wiredu 1994:47). The African orientation in environmental philosophy as opined by Wiredu could be seen to be purely an ethically oriented discourse on environmentalism.

While Wiredu is commendable for fashioning out this AEP on the consideration of the 'unitary ontology' of the African conception of reality, his idea however is reducible to environmental ethics. I now discuss Odera Oruka's and Calestous Juma's contribution to AEP.

4.3.1.2. Oruka and Juma's contribution: Eco-philosophy and the Parental Debts

Principle (PDP)

In their work, "Ecophilosophy and the Parental Ethics," Oruka and Juma, give a holistic outlook on reality where they show that "everything is related to everything else" (Oruka and Juma 1994:117). For them, *ecophilosophy* (or ecological philosophy) represents the corresponding philosophical approach wherein reality is viewed as being characterized by interrelationships. In

other words, human beings are seen as being one with the natural environment. Ecophilosophy, studies “the totality of the philosophy of nature” (1994:119). Thus, they distinguished the idea of ecophilosophy from environmental ethics and environmental studies. For them, environmental ethics is the attempt to consider the possibility of extending ethics from human beings to the nonhuman creatures of the earth. At the same time, they confine environmental studies to the study of the earth and the atmosphere (1994:119). The position of Oruka and Juma on ecophilosophy is supported by this research work, especially in the view that Environmental Philosophy stretches beyond the demands of ethics in environmental discourse. Thus, in a bid to elicit an ethic that stems from a holistic view of reality, Oruka and Juma developed and explored the idea of ‘Parental Earth Ethics’ (PEE).

PEE is the idea employed by Oruka and Juma to enunciate the mental and physical attitudes as well as the obligations required of members of the earth community – both individually and collectively – towards nature. According to Oruka and Juma, PEE is “not simply a product of intellectual inquiry. It is the basis upon which different cultures around the world [including African culture] base their environmental perceptions” (1994:123). Figuratively speaking, as members and children of one mother –mother earth – all cultures of the world are expected to be guided by an ‘earth protecting’ ethical code that is meant to guide the treatment of other members of the earth family: nature and humans. In elucidating further the idea of PEE, the authors invented two related principles and rules, namely, the ‘Parent Debt Principle’ and the ‘Individual Luck Principle’ (1994:123). Both principles are for Oruka and Juma, “unwritten ethical laws that guide lives and relationships of the family” (1994:123). According to them, the PEE should be a template on which to advance ideas that drive the point home that the world has enabled us to share a

common past and thus in it, we face a common future especially in the need to handle ecological crises that are of global magnitude. I now continue to explain the two related principles.

4.3.1.2.1. Parental Debt Principle (PDP)

The 'Parental Debt Principle' is a concept adopted to explain the familial nature of the different cultures of the world, who must understand themselves as members of one earth family. It is expected that this principle will elicit an intellectual base for discussing environmental issues in a manner that seeks the survival of every member of the earth community. This principle, Oruka and Juma noted, comprises four related rules: (1) The family security rules, (2) The kinship shame rule. (3) The parental debt rule and (4) The individual and family survival rule (1994:123-125).

I. The Family Security Rules:

The family security rules state that the fate and security (Physical or welfare) of each member of a family is ultimately bound up with the existential reality of the family, as a whole. Presenting a hypothetical family of six members, the authors note that any one of the six members may, for example, be arrogant and have enough to claim self-sufficiency and independence from the rest. However, eventually, the person and the person's progeny may experience a turn of events which could make them desperately in need of protection from the family (Oruka and Juma 1994:123-124).

This shows that, though there are different cultures in various parts of the world, there remain certain common factors that bind all together as members of the same earth family. Oruka and Juma, taking a look at the world's historical facts, noted that following this rule, when one part of the world needs to seek protection, assistance, and rescue from the other, on the principle of reciprocity, each will be obliged to assist (1994:124). This points to the fact that the world is bound together by one common future.

II. The Kinship Shame Rule

The kinship shame rule explicitly underlies the subjective dimension of addressing the perennial challenges of the common world. Although the fact of the common grounds suggests that what is done in one part of the world, necessarily has effects in distant other parts, it appears that the closer kinship of the family relationship determines rates of response. On this, it was argued that “the life condition of any member of the family affects all the other’s materially and emotionally, as no member can be proud of his or her situation nor be however happy if any member of the family tree lives in squalor” (Oruka and Juma 1994:124). This explains the reason why for example, issues concerning the countries of Germany and the United Kingdom will be of greater concern to the West than to Africa or Asia.

III. The Parental Debt Rule:

By the parental debt rule, the authors argued that the success of any members of a family is a direct corresponding effect of the historical, as well as familial relationships in the family. For the authors, this explains the “organic relationship and debt between the family members” (1994:124). It was further averred that “[w]hichever member is affluent or destitute owes his or her fortune or misfortune to the parental and historical factors inherent in the development of the family. Hence within the family, no one is fully responsible for his or her affluence nor for his or her misfortune” (Oruka and Juma 1994:124).

IV. The Individual and Family Survival Rule:

The individual and family survival rule is the last under the PDP. For Oruka and Juma, this rule is focused on the collective survival of the earth family as a whole, where a member of the family could overtake – in the interest of the larger family – the control of another member's resources who are perceived to be lacking in observing any of the previous three rules of the PDP. Thus, the individual and family survival rule allows members to interfere with the possession of any brother or sister who ignores their duty to live by the dictates of all the family ethics (Oruka and Juma 1994:124). Giving the justification for the rule, the authors argue:

This rule allows the disadvantaged to demand assistance from the affluent, but it also allows the creation and the hardworking members of the family to repossess underdeveloped possessions of the idle relatives and develop them for the general welfare and use of the community (1994:124).

This rule sets out to guarantee the obedience of individual members of the family to the family ethics guides, and in the advent of any member's inability to comply with the family ethics guides, the rule allows other members to act instead of the defaulting member for the interest of the family. Hence the sustainability of the earth family is seen as a collective effort that is guaranteed even in the event of the inability of any member to perform their duty.

It should be noted that Oruka and Juma's exploration of the interrelatedness of various cultures of the world, especially on how activities of one area have a direct or indirect effect on the activities of the other area is worthy of attention and is also commendable (1994:127-128). Of note are the explication of the family relationships and the usage of such an analogy to the human-nature relationship. The authors further note that the PEE is a form of earth insurance policy where the

appealed idea of “one good turn deserves another” – receiving benefits is guaranteed by being benevolent or giving the same or some other benefits to others – guides the actions and responses of the privileged and developed members of the earth family (1994:127).

4.3.1.2.2. Individual Luck Principle (ILP)

We have already alluded to the fact that there are two guiding principles in the PEE. The ‘Individual luck principle’ is the second principle and focuses on the welfare, progress, and viability of the individual members of the family. This makes it different from the Parental Debt Principle that focuses its concerns on the earth family as a whole. According to the authors, ILP comprises of three related rules, namely: (1) The Personal Achievement Rule, (2) The Personal Supererogation Rule, and (3) The Family Public law rule. Oruka and Juma explain these rules as follows:

The personal achievement rule’ states that what a member possesses is due mainly to the person’s special talents. This is a kind of family individualism which disregards historical experience and the organic constitution of the family.

The personal supererogation rule’ provides that every member has a right to do whatever he or she wishes with his or her possession. While;

The family public laws rule’ states that any member of the family who contravenes the right of another member as given by the second principle will be subject to the family public law, and would be punished or reprimanded and ordered to restore justice (1994:125).

These rules have a relationship that builds on the intellectual considerability of the PEE.

On the issue of practical ethical guidelines, the authors opined that on the instance of a point of conflict between the Parental Debt Principle and Individual Luck Principles, the former takes precedence over the latter. In giving a rationale for this, the two authors argued that:

The ethics of common sense shows that when in any given family or community matters of commonwealth, and common security conflict with matters of the personal possession; lack or achievements, the former must prevail over the latter. There is no country in which, for example, an individual institution would be safeguarded if it endangers the security or the economy of all the nations (1994:125)

This brings home the authors' argument that the earth is a common good to all of humanity in which the members thereof have kith and kin relationships with one another.

Oruka and Juma's proposed PEE is an orientation towards Environmental Philosophy. Although it might be argued that they did not expressly air a predominantly African-centred view, their ethical postulations on environmental concerns were structured upon a holistic system of reality similar to that of Wiredu (1994:45). Indeed, they both alluded to the traditional African practice of communally based life that is guided by a unified ontology. A unified ontology in the traditional African culture presents reality as an entity that is devoid of dichotomy. Such a system of thought provides a basis for an intersubjectivity that does not allow for misuse of nature. The unitary system of thought process discussed by Oruka and Juma "influences the thoughts, feelings, behaviour, decisions, and relationships in the [earth] community (1994:122). One of the facts obtainable from their environmental philosophic view is expressed in the idea of PEE which can be seen as a "basic ethic that would offer motivation for both a global environmental concern and a global redistribution of the wealth of nations" (Oruka & Juma 1994:128). This could also, I

argue, be put forward as the contribution, though not expressly alluded to by the authors, of traditional African worldviews to the perennial challenges of the environment.

4.3.1.3. Segun Ogungbemi and the Ethics of Nature-relatedness

It would seem that both Wiredu and Oruka and Juma, indirectly present an African-oriented environmental philosophy. However, perhaps the direct African perspective could be seen in Segun Ogungbemi's contribution (2001). Ogungbemi enunciated an African environmental discourse, which also aimed at bridging the gap between theory and practice. He made this loud entry into environmentalism through his pioneering article, *An African Perspective on the Environmental Crisis* (2001:265–71)³⁴. He argued that for the understanding of the environmental crisis in Africa, a consideration of “both traditional and Modern societies to the environmental hazards” of the world is essential (2001:265). For Ogungbemi, as with the other scholars explored so far, the environmental crisis is a global concern (2001:265). For him, contemporary environmental crises can be classified into two categories, namely, crises resulting from natural causes (such as earthquakes, plagues, volcanic eruptions, and storms); and those consequent upon human activities (2001:266). Anthropogenic activities relating to exploration and excessive use of the natural environment has, for Ogungbemi, exacerbated the situation (2001:265).

For Ogungbemi, to talk of the African orientation in environmental philosophy is to be cognisant of three major dimensions of such activities, namely: ignorance and poverty; modern science and technology; political conflicts; and international economies (2001:265). Thus, to comprehend the

³⁴ This is a republication from the first edition of the work of Ogungbemi (1994). “An African Perspective on the Environmental Crisis.” In L. P. Pojman (ed.) *Environmental Ethics: Readings in Theory and Application*, Boston: Jones and Bartlett Publishers. Pp. 203–9.

gravity of the ecological crisis in Africa is to have a full grasp of the “traditional and modern societies and their contributions to the environmental hazards” of our world” (2001:266).

The consideration of ignorance and poverty, for Ogungbemi, is pivotal in the understanding of the environmental crisis in Africa (2001:265). From this view, Ogungbemi thought that the environmental crisis in African countries is mainly a consequence of poverty and ignorance, among other things (2001:265). For him, “[t]he majority of African peoples live in rural areas where traditional modes of living lack some basic amenities, namely good water supplies, adequate lavatories, and the likes” (2001:265). As noted by Ojomo (2010:55), the peculiarity of African society being ravaged by poverty and ignorance influences to a large extent how contemporary African societies relate with the environment.

In the same vein, Ogungbemi does not exonerate the Africans from their contributions to environmental degradation. On this view, Jonathan Chimakonam (2018:2), justifying African Philosophical concerns for environmentalism, notes the peculiar nature of situations in contemporary African societies, with alarming states of poverty wherein the people’s survival often depends on environmental resources. The economic situation coupled with the reality of depravity in contemporary African society, forces people to depend on the environment for some basic amenities. Thus, Chimakonam notes that such situations present a dilemma in the bid to counsel the people against the exploitation of the environment—which serves as a means of livelihood or survival—and the care for the same environment (2018:1–3). For him then, it is the “burden of the African philosopher to convince Cross Riverian³⁵ [a type of an African society in

³⁵ Cross River is a place located in the Southern South of Nigeria. The people originating from the place are referred to as Cross Riverian.

consideration here], for example, that we owe moral obligations to the future generations with regards to the use of their environments” (2018:2).

Making a comparative analogy between the traditional and modern African society, Ogungbemi (2001:266) noted the ecological consciousness of the traditional society and found it more applaudable than those of Modern African states. He argues that “in our traditional [African] relationship with nature, men and women recognise the importance of water, land and air management” (2001:266). However, modern African society is marked by a careless disposal of waste and the wanton pollution of waterways with both domestic and industrial pollutants. Also, the land has witnessed turbidity, erosion, desertification, and flooding, all of which are the consequences of the drive for unethical development. Ogungbemi (2001:267) noted that “in the bid to catch up with the developed nations, modern African states have exploited the land to the effect that the one-time valuable lands are no longer of any agricultural or life sustenance value”. To this, he concludes that though the exploration industry has provided jobs, the benefit derivable from such job production is minimal to the gravity of the environmental crisis ensuing from such industrial activities (2001:267). According to Ogungbemi, contemporary African society contributed to the environmental crisis due to their quest to industrially and technologically develop (2001:265). Furthermore, on the culpability of the African society for the prevalence of environmental crisis in the continent, Ogungbemi argues:

... [T]he drive to catch up with the developmental pace of the western world by African states government is responsible for the mass destruction of our ecosystem through unguided explorative engagements with African natural resources... (2001:266).

However, the traditional African society, he noted is culpable in the cause of the environmental crisis. For Ogungbemi, traditional societies erred in the excessive use of fuelwood and constant bush burning, which in turn increases air pollution, affects air quality, and depletes the forest and other natural habitats (2001:266).

Still on this issue of air pollution, and to corroborate Ogungbemi, the United Nations' Secretary-General, Antonio Guterres, noted in his 2019 World Environment Day's Message that "all around the world – from megacities to small villages – people are breathing dirty air. He further painted a gory picture of the present earth situation with the statistics that "nine out of ten people worldwide are exposed to air pollutants that exceed World Health Organization air quality guidelines" (2019:1). Such a deplorable health situation, Guterres acknowledges, lowers life expectancy and is also responsible for the dwindling economies across the globe. On the source of this deadly enemy of life on earth, Guterres pointed at tiny particles from the "burning of fossil fuels for power and transport, emission from chemical and mining industries, burning of forest and fields and the use of dirty indoor cooking and heating fuels" (2019:2).

However, Ogungbemi recognises the availability of traditional environmental management schemes in Africa (2001:266-268). He argues that "[i]n our traditional relationship with nature, men and women recognise the importance of water and air management to our traditional communities" (2001:267). This cultural practice for him enunciates the ethical habit of not taking more than you need from nature. This he argued, "is a moral code" which he went further to diffuse from any form of religion or spiritism (Ogungbemi 2001:267). For Ogungbemi, such procedures are products of "natural means by which the human environment can be preserved by the ethics of

care” (2001:268). The cultural practice envisioned by Ogungbemi here is a kind of universal moral code that ensures one is not taking more than one needs from nature. In seeking panacea to the myriad of environmental crises in Africa, Ogungbemi posits an African environmental ethic born out of an “ethic of care”, which he termed the *ethics of nature-relatedness* (2001:268). According to him,

... [The] ethics of nature relatedness asserts that our natural resources do not need [humans] for their existence and function. The ethics of nature relatedness can be succinctly stated as an ethic that leads human beings to seek to co-exist peacefully with nature and treat it with some reasonable concern for its worth, survival, and sustainability (2001:268).

For him, the ‘ethics of nature relatedness’ is functional on the interjections of three basic elements: reason, experience, and the will (2001:269-270). Thus, with rationality informed by strands of experiences, we would have the will to adhere to the moral codes of ethics of care in our relationship with the environment.

I think, on the whole, Ogungbemi’s work falls short of his intended presentation in the essay. His quest therein was to explore the traditional African society’s attitude to nature, and he emphasised this fact at a point in his essay wherein he held that “[i]n my discussion of the traditional African attitude to nature, I promise to show its credibility” (2001:265). However, it is observable that what Ogungbemi was able to show from the article, was the attitude of *contemporary* African society to nature; instead of that of the *traditional* African society that he had intended to show. In the introductory part of the essay, he had noted the importance of exploring the traditional as well as a contemporary understanding of nature in the discourse of the environmental crisis. His claim

that the quest to industrially and technologically develop Africa causes the continent's ecological crisis, however, exonerates the traditional society.

Furthermore, Ogungbemi's claims applaud the views of some scholars like Bunyan Bryant (2011) and Munyaradzi Mawere (2014). For Bryant (2011:32), environmental degradation is a function of two factors, namely, the quest for wealth and race. Mawere noted that "... many of the ecological ills in the communal areas of Africa today [is] attributed to poor management of natural resources" (2014:x). An uncritical look at his view may push one to conclude with the factors raised by Ogungbemi. But, further consideration of Mawere's arguments inform one that the attributes of the poor management of natural resources "are rooted in the context of political and socio-economic policies that were enforced in all sectors during colonialism" (2014:ix). This will resonate better if one considers the fact that Ogungbemi (2001:270-271), alluded to this idea of poor socio-political management on the part of contemporary African political leaders and international economic supervening via science and technology in the cause of the ecological crisis in Africa. I think that such a position corroborates Mawere's view that "in order to undertake an analysis of the causes of environmental crisis in Africa as well as the methodologies and strategies that can be put in place to deal with the crisis, we must know its generic and historical roots" (2014:ix). It is the historical root of the crisis that I think Ogungbemi glossed over or overlooked. His neglect of the historical roots of the African environmental crisis is revealed more clearly in Jimoh Omo-Fadaka's (1990: 180) view that "poverty, as it is known today, was almost unknown in pre-colonial Africa".

4.3.1.4. Godfrey B. Tangwa and Eco-Bio-communitarianism

Godfrey B. Tangwa (2004) has also made an important contribution to the current orientations in African environmental philosophy. Tangwa's African orientation to environmental philosophy hinges on the ethical ideas that are receivable from traditional African metaphysics (2004:387-389). The metaphysical outlook explored by Tangwa is akin to that of Wiredu which was reviewed above. While Wiredu's view is "Communalist ethics" (1994:47), Tangwa named his, "eco-bio-communitarianism" (2004:389). For Tangwa, this pre-colonial, traditional metaphysical outlook implies "recognition and acceptance of interdependence and peaceful coexistence between earth, plants, animals and the human" (2004:389). This also is a view derived from the foundation of unitary ontology, wherein reality is perceived from a holistic lens and all beings exist in a perpetual state of interrelationship. Following the same path of reasoning as Wiredu – on the peculiarity of traditional African perceptions of reality in comparison to the Western worldview – Tangwa sees a form of an unbroken chain of relatedness between all forms of beings, and as such dispels any form of dualistic distinctions in perceiving and understanding reality, as well as forming any opinion thereof (2004:389). Arguing further, Tangwa opines that:

This [African metaphysical outlook] contrasts with the Western outlook, which might be described as anthropocentric and individualistic. Within the African traditional outlook, human beings tend to be more cosmically humble and therefore not only more respectful of other people but also more cautious in their attitude to plants, animals, and inanimate things, and to the various invisible forces of the world. One might say, in short, that they are more disposed toward an attitude of 'live and let live.' African philosophies provide intellectual support for this worldview. Within such a worldview, the distinction between plants, animals, and inanimate things, between the sacred and the profane, matter and spirit, the communal and the individual, is a slim and flexible one. For instance, the belief that humans, in certain circumstances, can transform into animals and plants or into forces, such as the wind, is very prevalent within this system and has very significant implications for the way nature is approached (2004:389).

The above shows among other things that the traditional African metaphysical outlook, upon which Tangwa's orientation in AEP is based, is in contradistinction to the Western metaphysical worldview.

The notion or idea of "live-and-let-live" (2004:394) inherent in traditional African culture, as noted by Tangwa, engenders a form of respect for the environment, which, in turn, forms the basis for the conserving attitude to nature and all other nonhuman parts of the earth. With his presentation of African socio-cultural practices as communitarian, Tangwa argues that this communitarianism forms the fulcrum of African relations to the environment. What is environmentally obtainable from this view is that an attitude of respectful coexistence, conciliation, and containment in relationship with the environment is naturally attained. As argued by Kayode Fayemi, Tangwa's "eco-bio-communitarian African environmental ethics serves as the basis for contemporary Africans' interaction with the natural world by virtue of its live-and-let-live attitude yet also a 'sacred mission' for the restoration of the African environment" (2017:371). The practical applicability of Tangwa's eco-bio-communitarianism is further seen in his concluding argument that:

[T]he standpoint of these reflections [i.e. the idea of the traditional African metaphysical worldview] is that a more humble motivation for the pursuit of science and technology based on the eco-bio-centric attitude of *live and let live* can be substituted for the aggressive motivation of domination [characterising motivation for the development of Western technology] to the immeasurable advantage of the whole humankind (2004:394).

One may thus applaud Tangwa for the envisioned role he gave traditional African metaphysical thought to play in proffering panacea to some of the challenges of the contemporary African society.

However, Tangwa has been questioned by various scholars, chief of which is Ojomo (2010 and 2011). For Ojomo, Tangwa's perspective is an idealised ethnophilosophical defence of the indigenous African management of the environment (2010:60). This is because, argues Ojomo, Tangwa neither critiques nor questions the practices or lifestyles of traditional Africans which contribute to the degradation of the environment through ignorance and poverty among other things. Also, Tangwa's endeavour to situate the ethical worldview of the African environmental orientation on the socio-cultural viability of African communalism seems unfounded. This is in consideration of Fayemi's (2017:372) view that "recent literature has suggested that [an] ostensibly communalistic conception of traditional African life is questionable". While Tangwa is worthy of some credit for envisioning an indigenous African perspective to the perennial crisis of the environment, his postulations may be characterised as an overreliance on ethics.

4.3.1.5. Relational ethics and ontology

In this section, I explore the idea of relational holism prevalent in African ethical theory and moral practices as well as the ontological underpinning of such ethical practices. The African orientation in Environmental Philosophy – via the relational ethics and ontology framework – seeks to answer the question of the relevance of indigenous African ethical systems, envisioned on the stance of relational ontology to addressing the environmental crisis. The idea of 'relational ethics' is equivalent to what was described as 'family relationships' by Oruka and Juma (1994). The

relational ethics and ontological frameworks are explored to unearth the holistic view of reality underpinned in them.

As enunciated by Thaddeus Metz (2007, 2010, 2011a & 2011b, 2012, 2017), exploring such intellectual frameworks for explaining holism engenders a view that makes African ethical theories morally appropriate to show the significance of community over individualism. For Metz, the African “places relationality at the core of morality” (2012:388). Thus, according to Metz, a being has moral status in so far as such a being has the capacity for an intentional connection with other moral beings in the community. In other words, “the greater a being’s capacity to be part of a communal relationship with us, the greater its moral status” (2012:387).

Perhaps the best intellectual articulation of applying the African relational ethical idea to environmental philosophy is seen in Kevin Behrens(2010); (2012); (2014); and Munamoto Chemhuru (2016); (2017b). I begin with Behrens who addresses the question of what the African moral thought and practice – entrenched in the relational philosophy by Metz – could offer to environmental ethics? (2011:ii-iii) For him, this is African environmental relationalism (Behrens 2014). The beauty of environmental relationalism for Behrens lies in a refusal to firmly prioritise either the interests of individuals or communities and in the understanding that individuals are fully realised only through community relationships (2010:467). He, therefore, posited that the idea of interrelatedness or interconnectedness of human beings with the rest of nature is evident in African thought (Behrens 2014:65). This is because an intellectual thought that recognises the interrelatedness of all beings as members of a unified nature appears poised for sound environmentalism.

Chemhuru, in exploring the environmental ethical import of the African relational idea, however, took an ontological turn (2016:1). He is of the view that an African ontology-based and teleologically-oriented environmental ethics would be a veritable tool in “unpacking and understanding environmental ethics in Africa” (2017:41). He notes the understanding of the hierarchical existence of beings in African ontology, however, not without recognising the fact of varying degrees of potency in these various levels of existence (2017:42). Within this hierarchy of existence, Chemhuru (2017:42-43) argues that all beings are ultimately inclined towards some fundamental purpose for existence that are contained in the various appeals to environmental ethics. Such environmental ethical appeal includes appeals to life, vitality, sentience, and well-being (2017:43). While Chemhuru should be credited for infusing the African ontological thought in his application of relational African ethical principles to environmentalism, his efforts, as will be further enunciated in the sixth chapter of this study, are nonetheless faulted with an overreliance on ethics. His employment of ethics is more glaring because ontology and epistemology are two sides of the same coin in African intellectual thought. Thus, to use one without the other is to distort the African intellectual heritage.

4.4. On the call for an alternative framework in African Environmental Philosophy (AEP)

One common fact obtainable from the examination of various contributions of scholars to the issue of Environmental Philosophy from African perspectives, is, that their ideas were anchored mainly on the ethical reflections of Africans in their relationship with the environment. Those not employing ethics directly have gone ahead to explicate the ontological understanding of African

society, especially the idea of interrelations of all beings prevalent in African metaphysics. Their attempts had been structured either through the examination of the communalistic nature of the African society and its effect on human/nature relationships or by considering the ontological underpinning of such communalistic worldview of the African culture. The scholars examined above have underscored the African orientation in environmental philosophy mainly through ethics, or ontology-based ethical framework. These observations are in line with Ojomo's argument that "[g]lobal concerns about the current environmental crisis have culminated in some controversial environmental ethical theories... one of the underlying features connecting these environmental ethical theories is their grounding in Western perspectives, ethical and cultural experiences" (2010:49).

As earlier noted in the second chapter of this study, there is a part-whole conceptual stance between environmental ethics and environmental philosophy. It was noted then that the vastness of issues to grapple with using philosophic tools on environmentalism surpasses just the employment of ethics as a framework. Hence, the position that the idea of overreliance on ethics in various philosophical orientations in environmentalism (in African studies and beyond) is unhelpful to deal with environmental problems. The views of both Zimmerman (1998:vi-ix) and Colyvan (2006:97-99) earlier noted in chapters one and two of this work comes to mind here. As their views reiterate the idea that environmental philosophy cannot be made an appendage of environmental ethics and that to do so is to commit a dangerous mistake of thinking that philosophical concerns in environmentalism only falls within the purview of ethics. Also, the employment of the African ontological view in some studies in African orientation in environmental philosophy sampled in this study, shows either a misrepresentation or undermining

of the intellectual utility of African ontology. This is because these studies neglect the fact that a full grasp of African ontological viewpoints requires an understanding of the African epistemic process. Thus, not exploring the African epistemic process in their ontological based account of AEP unearths an intellectual gap demanding urgent and sound attention. Our study, therefore, posits that in investigating the African understanding of the contemporary environmental crisis, such investigations should be geared toward an epistemologically enabled reconstruction of the African orientation in Environmental Philosophy.

While the schematic arrangement of this study places the exploration of the African epistemic process and its application to environmentalism in the subsequent chapters five and six of this study respectively, the need for this alternative framework in AEP is only revealed here. This study in the first chapter has noted some scholars like Ekwealo (2011:10-11), Badru (2018:198-202), and Kelbessa (2018:309-323) who all highlighted the need to consider epistemology as a veritable philosophical tool in addressing environmental challenges from the African viewpoints. However, the fact that these studies did not commit to the exploration of Indigenous African Epistemic Order for environmental engagement makes their attempt passive, thus, a rationale for the advancement of an African epistemic process as an alternative framework for AEP. In other words, the need to fill the intellectual gaps created by the examined studies gave credence to proffering an alternative framework for addressing the global phenomenon of the environmental crisis from African parlance. Furthermore, the epistemic perspective to environmentalism will also add to the intellectual voice of the Africans among the nations of the world, even in the quest for Sustainable environmental growth and development.

As noted above in the introductory chapter of this study, epistemology has a conceptual stance to provide the basis for cultural worldviews; these worldviews to a large extent determine the cognitive and affective tools to understanding reality, hence, epistemology could be seen to have a conceptual base to incite epistemic virtue that could enhance humans' understanding of the place of humans in the scheme of existence. Thus, this study argues that the radical paradigm needed for a proper AEP is an Environmental Ethics borne out of the indigenous epistemic order of the Africans. To this end, the research in subsequent chapters will seek to address the need for alternative approaches that are firmly rooted in the African epistemic process. The envisioned understanding of the human-nature relationship that the African epistemic process engenders can influence the perception of humans as part of nature, enhance an attitude of cautious use of nature, guides our habits, and informs environmental oriented duties that will be essential for the development of an African epistemic outlook in environmental philosophy. It should be noted that this study, will show how the epistemic approach is both participatory and interdisciplinary. The participatory and interdisciplinary virtue of the African epistemic outlook for environmental philosophy is essential because of the vastness of issues inherent in the discourse of environmentalism.

This study opines that an African environmental postulation that has its bedrock on the value-laden stance (normative) and social constructivity (descriptive) of Indigenous African epistemic order would give a viable reconstruction of environmental philosophy that is in coherence with 'African ontology' as noted by Tangwa. It will also give ground for the indigenous knowledge system needed to entrench "reason, experiences and will for the practicability of Ogungbemi's 'ethic of nature relatedness'. In response to the earlier observed challenge posed by Ojomo, I want to aver

that, without an appropriate Indigenous African Epistemic framework for an environmental philosophy that is of African orientation, the quest for an environmental ethical theory compliant with the cultural existential realities of the Africans would be a mirage. Owing to the above justification for the call for an alternative approach in AEP, this study posits that the epistemic platform of intellectual consideration of environmental challenges is required for a complete environmental philosophical discourse. This is if one takes cognisance of Bryant's view that "epistemology provides the foundation for a culture's worldview, which in turn determines the mental constructs the people use in understanding reality" (2011:7). Hence, our constructs of reality determine to a large extent the modalities for adjudging moral considerability as well as an ethical point of view.

4.5. Conclusion

In this chapter, the possibility of the idea of African environmental philosophy as a variant of African Philosophy has been examined. While conceptualising African Philosophy on the complementary relationship ensuing between the objective and subjective dimension of philosophy, it has been argued that only upon the interrelation of such distinctive but related dimensions would a proper understanding of African Philosophy be arrived at. This is because seeing African Philosophy in this format will give a stance of engaging the existential challenges of Africa from an objective point of view. The chapter has thus been able to come up with a working definition of African Philosophy as a subjective presentation of any practitioner's intellectual endeavour to grapple with the *life-process*, situated on the objective ground of philosophy. Thus, considering the environmental crisis of our time as one of the examples of life-processes requiring intellectual engagement, the chapter made a case for an African orientation in

environmental philosophy. The African orientation argued for is a practical application of the complementary perspectives of the idea of objective and subjective dimensions of philosophy. AEP is, thus, considered and explored as a rational and critical discourse on environmentalism from the African parlance. Thus, the chapter examined a series of attempts at providing sustainable solutions to the environmental crisis from the standpoint of African Philosophy.

Examining the current philosophical discourse on the environmental crisis from the African point of view, revealed that they fall short because of their over-reliance on ethics, as is the case in the Western orientation in Environmental Philosophy. It is the imperativeness of addressing their shortcoming that gave impetus to this research work with its epistemological approach to environmentalism.

Chapter Five

The nature of the “African Epistemic Order”

5.1. Introduction

This chapter deals with conceptualising the idea of an indigenous ‘Epistemic Order’ of an African orientation. In the previous chapter, the need for an alternative framework in African environmental philosophy was enunciated. The justification and need for such a framework is argued to be largely due to the deficit created by an overreliance on ethics in the existing viewpoints on African orientations in environmental philosophy. Such deficiencies directed this research work to address the environmental crisis of our contemporary world from the threshold of African epistemology. This study is hinged on the understanding that indigenous African epistemic worldviews, if explored, would enable us to unearth ecologically oriented ethical values that will be fit for better comprehension of the environment, and which will also enable a harmonious human-nature relationship.

The goal, then, is to present an intellectual standpoint that would underscore the contribution of African epistemology to environmental philosophy. However, for a proper articulation of this environmental epistemic orientation, it is essential to examine the idea of African epistemology, upon which the environmental discourse is expected to rest. Two reasons make this examination imperative for this research work. One, is the observation that there is an unfair superimposition of the Western knowledge system over the Indigenous Knowledge systems (IKS), through the disruption and fracturing of the African Indigenous Knowledge Systems (AIKS). Two, are the methodic errors that characterise attempts by scholars to combat the denigration of African

Indigenous Knowledge Systems. These errors, we will argue, undermine the intellectual efforts at advancing AIKS. While this chapter champions and supports the attempts at advancing the potential of AIKS, it, however, cautions against some methodic errors in such efforts.

Thus, the chapter begins by examining the idea of African Indigenous Knowledge systems (AIKS). Indigenous knowledge systems will be explored here as a way of knowing of the African indigenous people. While the present author recognises the content or praxis framework of ideating IKS, focus will be on the process frameworks³⁶ of IKS and its viability for effective solutions to complex contemporary challenges. Thereafter, consideration of the idea of epistemic injustice in Africa will follow in which it will be shown that the reality of epistemic injustice engenders the quest for epistemic freedom by the people whose indigenous epistemic processes had been crushed or fractured. In the explication of an African indigenous epistemic order, efforts will be made to obviate two methodic errors that most authors fall victim to in their attempt to discuss theories that are African-oriented. The first is the usage of Western paradigms as a yardstick for rational intellectualism and authenticating tool for theories drawn from African paradigms. The second, is the tendency to canonise indigenous ideas as sacrosanct thought processes that are necessarily true and meant to be deified and employed without question.

Thus, examining the African epistemological idea that is devoid of these methodic errors becomes crucial. Such an examination commences from the exposition of the concept of '*knowing*' as a human activity, which reveals the defects of universalising the ethnocentric presentation of any

³⁶ Ideating IKS from the content or praxis perspectives focuses on the instances of good practices from the lived experiences of the indigenous people. While the process perspectives of IKS focuses on the exploration of the conceptual or theoretical framework of indigenous ways of knowing.

culture's epistemology. In addition, exploring the concept of knowing calls into question the legitimacy of referring to 'others' epistemic processes as inferior or lacking in intellectual substance. To this end, this chapter avers for an African oriented epistemic order that is devoid of ethnocentric tendencies and uncritical nativism. Thus, in this light, an appropriate epistemic system of any culture would be one that envisions the *life-process*³⁷ of that culture.

5.2. African Indigenous Knowledge Systems (AIKS)

The focus in this section is to examine the idea of the Indigenous knowledge Systems (IKS). Examining IKS is apt to unearthing its suitability for the discourse of environmental philosophy. It should be noted that focus is given to the process framework of the IKS rather than the content framework, as enunciated below. Conceptualising IKS from the process formation unveils the structural, logical and the intellectual stance of IKS as a viable platform to engage any contemporary issue, i.e., environmental crisis. IKS here is taken as the series of knowledge practices of indigenous cultures. In focusing on these it goes to show that the research is not oblivious of the existence of various indigenous systems of knowledge acquisition and justification such as African, Australasian, Amerindian, etc. In doing so I acknowledge the fact that there are different approaches and outlooks to comprehend the world around us (Jimoh and Thomas 2015:117). However, my focus in the exploration of the IKS in this study will be mainly on the African Indigenous Knowledge Systems (AIKS). This is to ensure academic focus, and that room is not given for unwarranted comparative analysis of epistemic worldviews of diverse geographical locations.

³⁷ Please, refer to the fourth chapter of this study for an in-depth explanation of the term, *Life-process*.

“African Indigenous Knowledge Systems” will be employed in the plural form, in order that we might acknowledge the diversity of indigenous knowledge forms in Africa arising from the fact that although African people have many cultural practises and experiences in common, their varied cultures cannot be homogenised or reduced into one culture. Scholars like: Osman (2009); Owusu-Ansah, F.E. & Mji (2013); Kaya, Hassan O. & Seleti (2013), (2014); Mubangizi, John and Kaya (2015); Kaya (2016); Jimoh (2018); and Velthuisen (2019), to mention but a few, have affirmed the plurality of AIKS with the justification that such plurality gives room for diversity of knowledge systems on the African continent. This implies that there are diverse epistemologies in Africa.

The present author allies himself with Bunyan Bryant’s (2011:39) view that “epistemology is value laden”, i.e. that epistemic ideas are universally socially constructed. This view has also been corroborated by Owusu-Ansah and Mji (2013:2) as they argue that knowledge systems are valuative in nature as they are the lens through which cultural perception and interpretation of reality are made possible. In the same vein, Theophilus Okere as noted in the fourth chapter of this research work alluded to the value-laden stance of knowledge as a function of any local epistemic process. For him, all scientific knowledge is first local knowledge and accordingly it is justifiable to assume that for philosophy to be African, it must have some expressions of African life (2004:22). The value-laden stance of epistemology permits its consideration as that which is context driven and culturally based. This view is also in sync with the argument of Lesiba Teffo (2013:191) that, knowledge is best conceived as a social construct reflecting the culture of the proponent’s communities. In other words, cultural values and interests of a particular society inform how that society codifies its worldviews into knowledge. Thus, one could hold with

Owusu-Ansah and Mji (2013:1) that “knowledge or science, and its methods of investigation, cannot be divorced from a people’s history, cultural content and worldview”. Thus, social valuation and worldviews, could be termed as factors shaping that society’s consciousness. These factors would also form the bases for the theoretical framework within which knowledge is sought, critiqued and or understood.

Indigenous knowledges are knowledges from particular cultural settings and are accumulated through a long series of observations transmitted from generation to generation (Gadgil, Berkes, and Folke 1993:151). These knowledges include perceptions of reality, making sense of reality, understanding of day to day lived experiences and codification of these into epistemic models. IKS could be exemplified in traditional food and medicinal plants, archaeological and associated styles and systems, traditional activities like folklores, plays, arts, music, proverbs, traditional rural administrative centres, etc. (Teffo 2013:194). IKS would better be appreciated if viewed as material and non-material values that form the traditional resources that are essential for the cultural survival of the indigenous people (Mauro and Hardison 2000:1263). The indigenous people are identified by frameworks that highlight the following elements:

Self-identification as indigenous; descent from the occupants of a territory prior to an act of conquest; possession of a common history, language, and culture regulated by customary laws that are distinct from national cultures; possession of a common land; exclusion or marginalisation from political decision-making; and claims for collective and sovereign rights that are unrecognised by the dominating and governing group(s) of the state (2000:1264).

It is clear that there are diverse elements that characterise a person as indigenous. The diversification of cultural practices that ensure survival of indigenous people allow for plurality of

knowledge systems (2002:1267). In such knowledge systems, superimposition of a particular cultural worldview is jettisoned, and complementary or integrated knowledge forms are allowed for growth and sustainable development.

In the conception of Dennis Warren (1991:8), indigenous knowledge is “the local knowledge – knowledge that is unique to a given culture or society”. IKS could, thus, be seen as “the cumulative body of strategies, practices, techniques, tools, intellectual resources, explanations, beliefs and values accumulated over time in a particular locality, without the interference and impositions of external hegemonic forces” (Emeagwali 2014:2). This coheres with the position of Gadgil, Berkes, and Folke (1993:152) that IKS is the aggregate of the body of knowledge and belief systems that are transmitted through cultural practices from one generation to another in a particular society. Implicit in Emeagwali’s conception of IKS is the recognition of the possibility of indigenous societies’ contacts with hegemonic forces, especially the Eurocentric worldview of objectifying other non-Western conceptual schemes and rendering them as illogical (2014:3-4). Her opinion is, therefore, that what will count as IKS are those epistemic processes of a society that are exclusively known and which belong to the society, without the overbearing interference of other cultural inclinations (2014:4).

Additionally, IKS should not be reduced to a particularist opinion about reality. They transcend particularism as many of them are based on an objective understanding and experience of reality by a community of epistemic agents. In his presentation of the idea of IKS, Jimoh (2018:7) argues that:

IKS is an appraisal of the sense of rationality by which a people make meaning out of reality and thereby foster a harmonious interaction among themselves. In this context, IK can be said to be the refusal to devalue or marginalise indigenous ways of acquiring, preserving, and transmitting knowledge.

This is also evident in Emeagwali's view of the social and practical utility of IKS for African societies. For her, in the context of the Africans, IKS is a "dynamic engagement with a people's rationality that intends to decolonise the hegemony of colonialism and indoctrination" (2014:1).

A caveat to be made here is that Emeagwali employs the term IKS as a tool for decolonisation projects, that is, the intellectual exercise of divesting Africa (or other colonised peoples) from all forms of colonialism vestiges. Therefore, the study of AIKS is one of the means at developing a platform for the epistemic panacea to the denigration of the African knowledge system by the Europeans. This explains why IKS would be viewed as a social phenomenon. As such, IKS becomes part of the everyday reality of indigenous peoples. The dynamism of AIKS as noted by Jimoh is that it is passed from one generation to another as tradition and heritage, and people in each era adapt and add to it. This dynamic nature makes AIKS understandable as the "totality of that which is meaningful, which provides the rational basis that undergirds the life of the natives [sic] of a particular place" (Jimoh 2018:8).

On the part of Velthuisen (2019:190), the "[i]ndigenous knowledge system is embedded in an African knowledge system (AKS) as part of African culture". African indigenous knowledge systems, thus, are a mode of understanding the values, ways of knowing and perception of events by the African people. In the words of Catherine Hoppers, AIKS is

... [T]he totality of all knowledge and practices, whether explicit or implicit, used in the management of socio-economic, spiritual and ecological facets of life...it includes definition, classifications and concepts of the physical, natural, social, economic and ideational environments (2005:2–3).

The emphasis upon practices, also enunciates the communitarian³⁸ perspectives of the African society, as the communal nature of the people's lives are exhibited in their understanding of reality, as well as in the epistemic process. The communal nature undergirds the humanistic values that are embedded in the rich traditional practices that form the indigenous knowledge systems of Africa (Velthuisen 2019:193). The communal nature of the African cultural orientations engenders humanistic values that serve as essential ingredients of IKS needed for the survival of African societies.

As the humanistic values emerge from communal efforts, AIKS enhances healthy competition in the quest for innovation and development in society. A quick look at the etymology of the concept of 'competition' brings this to light. The word 'competition' in its original Latin derivation can be phrased as *com-petĕre*, which means to seek or strive for something (*petĕre*) together (*com*) (Donald 1874). Competing does not imply isolating, excluding or dominating others, rather it unearths unique peculiarities of the constituent members of the community for complementary engagement. Thus, even at the level of epistemology, Africans are able to forge partnerships of seeking together knowledge that will enable the survival of their societies. These partnerships are aided by the fact that African societies are essentially communalistic. Owusu-Ansah and Mji

³⁸ The discussion of the communitarian nature of African societies has been a major preoccupation of many scholars, i.e. (Mbiti 1969); (Menkiti 1984:171–81), (Menkiti 2004:311–24); (Gyekye 1992:101–22), to mention but a few. The communitarian nature of the African society informs the ways and manner in which African peoples understand, explain and communicate reality. Some examples of such worldviews were presented in the previous chapter of this work, on the idea of "African Environmental Orientations" (which forms part of Chapter Four of this study). There it was noted that the communitarian nature of African existence also informs the traditional African conceptions about the human-nature relationship.

captures the communalist characteristics of AIKS as that which is structured on the relational worldview of Africans (2013:1-2). This relational worldview includes the harmonised wholeness of the community – comprised of both humans and nonhumans. The communalist nature of African societies shows a sense of interrelatedness and interdependency of all beings in the domain of existence.³⁹ This underscores the holistic nature of IKS, as it includes all aspects of life. IKS, therefore, involves the combination of practical knowledge, arts, technological innovation, natural cognition, spiritual considerations and religion, social history, agricultural endeavours, governance and socio-cultural appropriations, etc., of the indigenous people. The combination of these features of IKS provides the epistemic basis for understanding reality, adjudging between wrong and right and functional for the everyday living of a people.

From the discussion above, it is clear that the conceptualisation of IKS involves the unveiling of good practices from the lived experiences of the indigenous people. In other words, case studies of the material depicting the ethical, social, technological, architectural, educational and economic practices at the local level are often put forward in the conceptualisation of what indigenous knowledge is. Put in another way, attempts at conceptualising IKS often focus on practise, and, thus, assume the theoretical formation of the epistemic process (Briggs 2013b:231).

Obtainable from conceptualising IKS from the practical contents is the method of prioritising the praxis of IKS over its exploration as an epistemological theory. The dependence on the praxis framework at the exclusion of theory thereof is identified by this study as a major gap in the

³⁹ Although the theory and practice of communalism refer to relationships between and among human beings and has nothing to do with nonhuman beings, however, scholars like Kevin Behrens (2010), (2014); and Chemhuru (2017b) construe this term to include relations with nonhuman beings.

ideation of IKS. It should however be noted that while the praxis consideration of IKS helps in the utilitarian codification of the indigenous peoples' cultural practices (Nadubere 2006:7–9), (Teffo 2013:189), nevertheless, exclusively focus on the practical contents of the cultural materials in the ideation of IKS which can easily compromise the exploration of the theoretical framework of indigenous ways of knowing. Thus, the content formation of ideating IKS could be identified as one of the major reasons why the potentialities of IKS is yet to be fully matched with development theories in addressing contemporary issues in Africa. This is in consideration of the views of Mcfarlane (2006); Sillitoe (2010); and Briggs (2005), Briggs (2013b); that the utilitarian projections of indigenous practices in comprehending IKS have resulted in an intellectual impasse having little help on development practice. The principal reason for this impasse is the possibility that exploring the practical content or unveiling the utilitarian stance of local content of IKS can easily lead to a glossing over of the theoretical formation for the development and deployment of IKS.

Expanding IKS beyond local application and geographic specificity is, however, a challenge, as the content framework for conceiving IKS makes it remain at the periphery of local practice and not functional in the integration with knowledge formations in other regions of the world in addressing contemporary challenges. For instance, if the call of Lado (2004:281) for a synergy between IK and modern knowledge systems – to produce a more realistic and sensitive understanding and management of natural resources for sustainable development – will be of any help, a theoretical analysis and understanding of the formations and development of IKS remains imperative. The advantage of the theoretical formation approach is that it “reduces or dilutes, the location-specific nature of IK by drawing on the greater universality of formal scientific

knowledge” (Briggs 2013b:234). Reducing the location-specifics of IKS is essential for the development of IKS, as it makes IKS more acceptable both locally and internationally in building up solutions to contemporary challenges. This approach to IKS, wherein a synchronisation of the subjective (contextual stance of IKS) with the objective (general understanding of knowing) is effected, coheres with the complementarity perspectives employed in this thesis. John Briggs (2013b:237) notes the importance of employing IKS in a theory or process format, rather than a content format, when he argues that the process format becomes necessary as it is “essential that it [IKS] extends beyond the culturally and spatially bound restriction of geographical thinking”. Briggs’ viewpoint ties in with that of Fikret Berkes (2009:152–53) that IK should focus on process rather than on content. This is because ‘process’ emphasises the understanding of methods for analysing, questioning, observing, comprehending and rationalising, that is embedded in IKS. In other words, indigenous methods of knowing should be emphasised above the contents of indigenous knowledge. What this means is that attempts at comprehending IKS from the process stance, makes ideating IKS an “epistemology of indigenous knowledge systems” (Briggs 2013b:237).

Taking IKS as an epistemic study of the indigenous ways of knowing breaks the content constraints, as it extends the study of IKS beyond the spatial bound associated with the particular cultural context of local practices. While the content approach has helped in showcasing the value, significance and viability of IK as an alternative way of knowing, Berkes (2009:154) notes that “not taking knowledge out of its cultural context is one of the biggest challenges of indigenous knowledge research”. It is a challenge for widening the universal applicability of IKS in the age of globalisation. Overcoming the content limitation for IKS informs the approach of this study to

explore AIKS as an epistemic process of the African people. Thus, IKS in the process framework is seen as a way of knowing from within particular cultural context, with a wider applicability beyond the local context. Justification for the process sense will include the idea that, if IKS will be viable to make contributions to understanding and addressing contemporary challenges, its comprehension in the stance of process is imperative. The imperativeness inheres in perspectives that the process approach helps to unveil the contents for possible intercultural dialogue, international recognition and removes the esoteric nature that often characterises IKS. Thus, IKS could be made viable in providing possibilities for “new ways of knowing, new ways of thinking and new ways of making development intervention” (Briggs 2013b:238).

The focus on the contents of IKS has essentially helped in demonstrating the significance of the repertoire and genre of IK that has been functional towards the sustenance of the local people. To this end, the content framework could be said to have been instrumental in establishing the legitimacy and authenticity of the IKS. However advantageous the content-focus might have been, it still limits the development of IKS by geographical and cultural bounds. Hence, this study’s focus on the process framework. Focusing on the process format in ideating IKS informs the unfettered grasp of IKS and allows for a wider impact in its applicability to contemporary existential challenges like poverty, political instability, pandemics, and particularly environmental crisis – the focus of this study. The imperativeness of the focus on process in ideating IKS is further argued for by Briggs. For him, the process format:

... [O]ffer us a way forward, to develop our own knowledge about indigenous ways of knowing, to understand better the complex power relation associated with knowledge at the local level, to think about ways in which the power which currently exists, both implicitly and explicitly, in formal science and technology

knowledge [are] and how these can be negotiated, and how individuals at the community level can be involved in the process, where the emphasis is on empowerment without the naiveties of the participation era (2013b:240).

It is, thus, the aim in this chapter to explore IKS as a way of knowing. The focus here is to show its significance, through the process frameworks, how it may be viable for effective solutions to complex ecological challenges, and, thus, be able to proffer frameworks for valuable management and sustainability of ecological sustenance practices.

5.3. Epistemic injustice on African knowledge forms

In this subsection, I critique the tendency of Western epistemology to superimpose itself over African Indigenous knowledge systems. I will show that the hegemony of the Eurocentric epistemic position is illogical, inaccurate and hence unjust to the IKS. Before that, I will discuss the Eurocentric epistemic position. Eurocentrism is the hierarchical worldview describing the practice and intellectual heritage of the Western orientation as superior to other segments of humanity. The Western intellectual heritage was examined in the third chapter of this study and the abasement of its attempts to universalise its ethnocentric views was highlighted. This hierarchical worldview as argued by Tsenay Serequeberhan (2002:64) is grounded in the metaphysical belief or idea that European existence is qualitatively superior to other forms of human life. Thus, for life to be adjudged meaningful or real, it must conform to the reality of European modernity.

Emboldened by the idea of European superiority is the epistemic project of universalising the Western worldview as the yardstick for determining the viability, authenticity or validity of other cultural worldviews. In this light, the Eurocentric epistemic process can be seen as the epistemic

method that promotes Western epistemological systems as essential to be ascribed to by non-European people. In other words, the Eurocentric epistemic process forcefully pushes Western thought as ‘the given’ epistemic heritage to which all other cultures must be validated by. Informed by the ethos of Eurocentrism, for instance, is the idea that the exclusive rights to justify, validate or screen the knowledge process, experience and truth about African Philosophy can only be held by Europeans (Ramosé 2002b:2). The illogicality of such a line of reason undergirding Western thoughts has been argued by Boaventura de Sousa Santos (2007:45) and (2014:238), as “Western-centric abyssal thinking”.

This Western-centric epistemic position is described by De Sousa Santos (2014:6) as the epistemicide of indigenous knowledge – the killing or massive destruction of indigenous people’s knowledge. Isaac Ehaleoye Ukpokolo (2018:3) describes the same position as the “fracturing [of] African indigenous knowledge system[s]”. For Ndlovu-Gatsheni, the superimposition and suppression of African epistemology is a “long-term consequence of modernity, enslavement and colonialism, [which has made] African people [to] have been reproduced as [instruments⁴⁰] in an Eurocentric history” (2018:1). This is largely in the bid to fit African conceptual schemes and intellectual engagements into the hegemonic and supposedly unitary episteme of the Western thought system. Such biased epistemic reasoning was further described by Anselm Jimoh as a “situation of distortion, which has broken and dismembered African IKS through systematic degradation and epistemological silencing” (2018:10).

⁴⁰ Ndlovu-Gatsheni (2018:1) here employs the term ‘agents’ in denoting Africans. However, it should be noted that, the treatment of Africans through slavery and colonialism is such that Africans were not be regarded as agents of any history including their own.

On the whole the Eurocentric epistemic process, which is accompanied by the repression of IKS, brought about a systematic and systemic *othering* of non-Western epistemologies. The operation of this epistemic process rests on the denial of the rationality of Africans. The depiction of Africa, as a continent of persons without rational abilities for engaging with their existential realities is a “denial of humanity [that] automatically disqualified [Africa] from epistemic virtue” (Ndlovu-Gatsheni 2018:3). To show the Western prejudicial thought that Africans are incapable of epistemic productions – which, it follows, is a direct denial of the Africans’ humanity – Ramose argues:

The question whether or not African Philosophy is possible or exists... pertains more to the capability of the African to philosophise. In other words, it is doubtful that Africans can philosophise. If Africans were exposed to philosophy, they could not cope with its requirements. This is because by their nature, their very being what they are, it is impossible for Africans to do philosophy. In this way, the question assumes an ontological character: it calls into question the humanity of the Africans. The question is thus another way of saying that it is doubtful if Africans are wholly and truly human beings (2002b:4)

The systematic othering of non-Western epistemologies, structured on the indefensible bias that European existence is the true human existence, became the legitimate right for the global conquest and colonisation of non-European indigenous cultures, including Africans (Ramose 2002b:1–3; Serequeberhan 2002:64–67). As such, Africans were subjugated and degraded to a sub-human group that lacks epistemic capability and, thus, requires the tutelage of the ‘Western intellect’ to function. De Sousa Santos clearly captured this when he noted that “it is during the heydays of colonialism that Africa was re-invented as a site of darkness bereft of any knowledge beyond superstitions” (2014:19). Furthermore, the Eurocentric epistemic process also ensued as a systemic othering of IKS because – as an ideological system – it sets out to deform IKS through colonial

genocides, the theft of history, “epistemicide” (De Sousa Santos 2014:238), and linguicides (i.e. the killing of indigenous people’s languages) (Ndlovu-Gatsheni 2018:3). This resulted into a systemic annihilation of IKS. In addition, the annihilation of AIKS could be seen as the death of the significant development of knowledge in the African continent.

The theme of the rupturing of knowledge systems of cultures that are different to the Western conceptual scheme is also shared by Kwasi Wiredu when he noted that “Africans were not just colonised, [but that] colonialism made deep inroads into the psychology of most of us and formidably distorted our African identity” (2000:185). The identity distortion creates a colonial mentality in the African that eventually makes the African overvalue anything that originates from the colonial masters. The precarious state of Africa under the continuous suppression of its epistemic order which culminated in her colonisation, and subjected her to power and knowledge control, eventually placed the West at an advantage. In the view of the fact that power and knowledge are intertwined in the political-cum-economic control of the contemporary world, Ndlovu-Gatsheni further notes that “the control of the domain of knowledge generation and knowledge cultivation remain[s] very important for the maintenance of asymmetrical global power structures since the dawn of Euro-North American-centric modernity” (2018:8).

Modernity, seen in Bhambra’s view, is “the dominant frame for social and political thought, not just in the West, but across the world” (2007:1). Modernity carries two essential notions: *rupture* (a temporal rupture that distinguishes a traditional, agrarian past from the modern, industrial present) and *difference* (a fundamental difference that distinguishes Europe from the rest of the world) (2007:1). Eurocentric epistemic processes can thus be seen to take root in the attempt to

globalise Eurocentric modernity through differentiating it from the rest, and through the rupturing of IKS.

The assumption of difference and rupture creates a stance for the imperial reasoning of the West, wherein Europe is empowered with epistemic capabilities and is, thus, justified to rupture the ‘other’ so-called sub-human category cultures of the world that are assumed to lack conceptual epistemic schemes. Thus, even in the so-called post-colonial era, a series of attempts are being made to brand the indigenous cultures of African as uncivilised, irrational, undemocratic, illogical and erroneous (Biakolo 2002:10–18). While it could be said of the African colonised population that their AIKS – which existed before the advent of colonialism – was forcefully suppressed by the colonial masters imposing their way of life over the locals, the same cannot be completely said of contemporary post-colonial African societies. This is because the forceful distortion has been replaced by subtle and psychological processes that erode off the indigenous knowledge systems almost unnoticeably.

Jimoh, making a historical assertion, notes that, “the people [contemporary African society] were socialised into believing that their indigenous practices and ways of doing things were wrong” (2018:16). The gradual process of distortion, suppression and breaking of AIKS started seamlessly by a series of veiled methods undervaluing Africans’ cultural heritages. The devaluation of African intellectual heritages is further promoted through globalisation and the universalisation of the Western way of ‘being’ and ‘doing’ as the ideal. Shizha (2013:4) accounts that the progressive technological changes in communication, political and economic power, institutionalisation of Western knowledge, skills and cultural values – as the idyllic – are the tools of globalisation. The

resultant effect of this subtle devaluation of the African indigenous heritage, is for Africans to see nothing worthwhile in their IKS.

One of the reasons the expositions and exploring of AIKS is important, is the understanding that most developments in science and technology have their roots in indigenous knowledge (Maweu 2011:35). Following on this view – that science and technology have their roots in indigenous knowledge – it will be very apt in considering Bryant (2011:39), Owusu-Ansah and Mji (2013:2), and Okere (2004:22) who concur that, cultural valuation of the knowing process enhances ‘knowledge’ as that which originates from culturally domesticated thoughts. One may, thus, be inclined to argue that all knowledge is ‘indigenous’. Maweu (2011:41-44) sustains the same position when she justifies the viability of AIKS as authentic knowledge forms. With the understanding that all forms of knowledge have roots in an indigenous knowledge system, and the consideration of the universal nature of knowing⁴¹, it is logically conclusive to hold that non-Western epistemic worldviews are as essential to the peoples that hold them as the Westerners’ own is to the West. What is being reinforced here, is the fact that the art of knowing, or the knowledge forming capability is not unique to any society or segment of humanity, as knowing is a by-product of rationality, which is one of the essential features of being human. Hence, the superimposition of the Eurocentric epistemic process, and/or the destruction of indigenous ways of knowing is not only illogical, but needless. It will, thus, be correct to hold that every society has its conceptual schemes, cognitive categories, as well as affective domains of understanding reality. It is, therefore, proper to have an IKS of a particular society, and the validity or authenticity of such would not be subjected to the intellectual culture or conceptual frameworks outside that

⁴¹ The universal nature of knowing as an epistemic function of all humanity regardless of race, colour and location is enunciated further in this chapter.

culture. On this, Jimoh argues:

African indigenous epistemology is a distinctively African epistemic system; a social and communitarian epistemology that espouses a cultural and situated notion of knowledge, firmly established on the ontological notion of a continuum. It encompasses the experiential, rational, religious, intuitive, symbolic, mythical and emotional aspects of reality (Jimoh 2018:14).

In the light of the epistemic injustice explored above, and the illogicality that attends the Eurocentric epistemic process, presentation of the indigenous African epistemic process becomes essential.

One of the consequences of the hegemonic Eurocentric epistemic process is making the quest for African epistemic freedom a necessity. Thus, the bid to combat the Eurocentric epistemic process led to the struggle against the gradual and continual suppression of African knowledge systems. In other words, the need for epistemic freedom in Africa is a reaction to the existence of an unpleasant situation of epistemic suppression, characterised by a clampdown, an overpowering or a repression of AIKS. This situation was captured by Ndlovu-Gatsheni (2018:3) as the politics of knowledge in the world, that is marked with “continuous gauging, and limiting the growth of knowledge in Africa through research management to which Africa is struggling for epistemic expression, liberty self-determination and independence”. The quest for epistemic justice entails a state of struggle against the gradual and continual suppression of African knowledge systems. The “Western-centric abyssal thinking”, identified by Boaventura de Sousa Santos (2014:238) as a consequence of the hegemonic Eurocentric epistemic process, makes the African struggle for epistemic freedom imperative. The chief aim of this struggle is to combat the distortion of African IKS at the hands of Eurocentric epistemic process.

As a people encumbered with the pains of Eurocentrism, wherein a continual re-emergence of colonialism is buried in the present idea of globalisation, Africans struggle to exercise the fundamental right to think, theorise, interpret the world, develop and write its own epistemic methodologies. Put in another way, the quest for epistemic justice is entrenched in the “reality of [the] continued entrapment of knowledge production in Africa within Euro-North American colonial matrices of power” (Ndlovu-Gatsheni 2018:8). Epistemic freedom is for Africans, thus, an epistemological necessity that requires no special pleading (Ramose 2002:7). Thus, in justifying the African struggle for epistemic freedom, Ndlovu-Gatsheni is of the view that:

Epistemic freedom is about democratising ‘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 decolonisation struggle because it enables the emergence of the necessary critical decolonial consciousness...In the constitution of political, economic, cultural and epistemological decolonisation, epistemic freedom should form the base because it deals with the fundamental issues of critical consciousness building, which are essential pre-requisite for both political and economic freedom (2018:4–5).

The need for epistemic freedom in Africa is thus evident in the need to combat ideological deformations resultant from the systemic and epistemic horror of colonialism.

Such need also carries an epistemological concern that is essential for the repositioning of Africa as an independent and rational actor in the intellectual scheme of the world. The repositioning exercise is required to combat what Ndlovu-Gatsheni refers to as the “coloniality of knowledge”, which is “the invasion of the mental universe of the colonised world” (2018:3). As a panacea to the coloniality of knowledge, various forms of ideas advocating epistemic freedom for Africa have

been adduced: “Conceptual Decolonisation” Wiredu (1995), (2004); “Decolonisation of the Mind” and “Globalectics” Ngugi Wa Thiong’o (1993), (2007), (2012); “Grammaticality of Language” Adeshina Afolayan (2006); “Conversational Philosophy” Jonathan Chimakonam (2015a), (2017); “Epistemological Decolonisation” Ndlovu-Gatsheni (2018) and “Struggle for Reason in Africa” and “*Ubuntu*” Mogobe Ramose (2002a), (2002b), (2009), (2020), to mention but a few. These scholars are on the frontline, battling the politics of epistemology by attempting to deal with the challenges and ensuing consequences of the epistemicides, linguicides, cultural imperialism, subjugation and alienation of AIKS.

A fact to note here, is the importance and weight of burden required to combat the coloniality of knowledge and to air the epistemic voice of Africa in the intellectual conversation of the world. This often makes scholars polemic and aggressive in combating epistemic injustice in their response to the fracturing and suppression of IKS, because of the alienation emanating from the colonial experience.⁴² Considering the alienating process, Ngugi Wa Thiong’o was of the view that:

The colonial process dislocates the traveller’s mind from the place he or she already knows to a foreign land. It is a process of continuous alienation from the base, a continuous process of looking at oneself from the outside of self or with the lenses of a stranger... this colonisation of the cognitive process was the everyday experience in a colonial classroom everywhere (2012:39).

⁴² A popular example that comes to mind here on the Language Question in African literature and philosophy is ideological essentialism inherent in the rejectionist approach of Ngugi Wa Thiong’o. In the *Decolonization of the Mind* Ngugi wa Thiong’o was of the opinion that decolonization can only be meaningful if European languages are rejected in the African’s modes of intellectual engagement. See *Decolonization of the Mind: The Politics of Language in African Literature* (Thiong’o 1986) and *Moving the centre: The struggle for cultural freedoms* (Thiong’o 1993) for more information.

What such alienation carries is a form of intellectual-cum-social detachment from the self and a forceful confinement to the pseudo reality of a ‘given’ self. Also, this alienation is made more worrisome for African scholars in the quest for epistemic freedom, due to the ensuing intellectual tension that is associated with it. This tension is founded in the ‘politics of knowledge’ ushered in by the West. As a result, the African academy became “a site of inculcation of Western knowledge, values, ways of knowing and worldviews that are often thought as universal values and scientific knowledge” (Ndlovu-Gatsheni, 2018:14). Thus, in the bid to combat epistemic injustice against AIKS, African scholars, by reason of epistemic alienation are challenged for the lack of independent construction of indigenous knowledge forms. This challenge poses a dilemma for Africans in the maintenance of indigenous epistemological paradigms in the quest for epistemic justice. In the next section, I explore the methodic crisis that this dilemma creates for AIKS. It is essential to make this exploration because doing so gives justification for the consideration of the African knowledge process that is free of the methodic crisis.

5.4. The “Methodic Crisis” in conceptualising African Epistemology

In this section I will discuss some of the ensuing challenges experienced by African philosophers in the attempt to conceptualise African Philosophy. These challenges will be referred to as the “Methodic Crisis”. Two methodic crises to be identified here are: (1) the validation of indigenous experience with the Western epistemological paradigm; and (2) the over-protection of the indigenous knowledge system from critical queries. These two methodic errors will be shown to be inimical to the success of conceptualising any African epistemic activity. It becomes important to enunciate these methodic challenges to lay the analytic platform that will avoid same in conceiving a working definition of African epistemology for this study. Since the crux of the

argument in this study is structured on the African epistemic process, conceptualising African epistemology without the burden of the Methodic Crisis becomes imperative.

5.4.1. Methodic crisis one: Validating AIKS with Western paradigm

The African scholar faces the dilemma of using the Western paradigm as the measurement for rationality and authenticity of African knowledge systems. In the bid to combat the intellectual denigration of African indigenous knowledge systems by the Eurocentric epistemic position, Western paradigms often get to be employed as gauge for such exercises. One of the reasons for this methodic challenge is the erroneous view that the African epistemic process can only be validated and seen as meaningful by being presented as being approximations to Western categories and thoughts (Jimoh 2018:6). The stance behind this method inheres in the idea that, to demonstrate the existence of rationality and the possibility of a functional knowledge system in Africa, is to display conceptual categorisations in similar schemes to Western ones. Ramose notes the apparent injustice that this type of methodic crisis promotes, when he argues that:

[T]here is no moral basis nor pedagogical justification for the Western epistemological paradigm to retain primacy and dominance in decolonised Africa. The independent review and construction of knowledge in the light of the unfolding African experience is not only a vital goal – it is also an act of liberation (2002:4).

This methodic crisis, traceable to the need to combat epistemic alienation and intellectual tension characterising the struggle for epistemic freedom, creates a dilemma for African scholars of speaking or writing from the defensive trajectory. In other words, arising from the struggle is an entailment of defensiveness, dissipation of bitterness or aggression in the responses and ideas put

forward to combat epistemic injustice. On the reasons for such emotional outpouring in African-oriented researches, Toyin Falola is of the view that:

Scholarship in Africa has been conditioned to respond to a reality and epistemology created for it by outsiders, a confrontation with imperialism, the power of capitalism and the knowledge that others have constructed for Africa. The African intelligentsia does not write in a vacuum but in a world saturated with others' statements, usually negative about its members and their continent. Even when this intelligentsia seeks the means to intrude itself into the modern world, modernity has been defined for it and presented to it in a fragmented manner (2001:17).

The entailment of defensive trajectories in African epistemic thought, Ndlovu-Gatsheni (2018:25) notes, accounts for the contextualising of Africa's quest for the epistemic freedom in the sense of struggle. A struggle that seeks to break and put an end to model of the world that the coloniser creates as well as the ensuing epistemology from such models.

Unfortunately for the African scholar, the coloniser's epistemic model has become such a 'given', that not to employ it renders his or her works as lacking in substance. Thus, the African scholar is ironically burdened with the methodological error of the employment of Western analytical categories in the epistemic decolonisation process. Oyeronke Oyewumi (1997:x) places this crisis in clearer perspective by noting that "Western conceptual schemes have become so widespread that almost all scholarship, even by Africans, utilises them unquestioningly." The dominant Western experience has been turned into an intellectual paradigm with a necessarily functional foundation that must be a basis for all meaningful research. To this end, Oyewumi further argued that "historically and currently, the creation, constitution and production of knowledge have remained the privilege of the west" (1997:87). According to her observation this is the case even

in African studies. Thus, Ramose (2002:4) calls for a radical overhaul of the whole epistemological paradigm underlying the current educational system in Africa.

The method of validating African worldviews through or with Western paradigm is erroneous for several reasons. One, is the fact that it re-enforces the deniability of reason in Africa. If the authenticity of African rationality will have to be predicated upon Western perceptual modes and concepts, then it subsists to hold that the ability to form or come-up with genuine ideas and concepts that would be entrenched in the indigenous conceptual scheme of the people is outrightly lacking. Secondly, rationality has been as enunciated in the previous chapter of this research work⁴³ as one of the essential feature or expression of humanity – regardless of race, colour or geography. Thus, to make the viability and authenticity of African epistemology dependent on its proximity to Western epistemic processes is not only to deny rationality to Africans, but also to take away their humanity from Africans.

Thirdly, validating AIKS by its measurement to the Western paradigm is a product of unequal comparison between Western and African epistemic processes, which amounts to a distortion of AIKS. One of the characteristics of such distortions is the denial of indigenously African logical reasoning. The errors of this lopsided comparison, wherein the present reality of existence in Europe is used as a yardstick in comparison with the contemporary life-situation of Africans, has been unravelled by a series of intellectual works, among which is *Socrates and Orunmila: A comparative analysis* (Oluwole 2015) and *Ezumelu: A theory of African logic* (Chimakonam 2019).

⁴³ See chapter four of this research work.

Fourthly, to impose the Western framework on the African indigenous knowledge system, in whatever manner or form, is to deny that African epistemic processes have their own distinctly African methodologies of inquiry. The possibility of inquiry methods that employ peculiar modes of African conceptual schemes in the validation of indigenous epistemic claims – as seen in various texts explored above – further enunciates the error of using the Western paradigm as a gauge for rational authenticity.

Lastly, a Western-justified epistemic method for an African thought process is an attempt to reinforce the Eurocentric efforts at universalising Western thought processes unquestioningly. This researcher will thus opine that an unquestioned employment of foreign i.e. Western, Asian, etc, analytical categories or methods in the presentation of African conceptual schemes may be intellectually counterproductive. As such uncritical employment would inhibit the production of genuine ideas that are rooted in African intellectual heritage.

5.4.2. Methodic crisis two: Treating AIKS as necessarily true

A second methodic crisis is more worrisome. This crisis is dilemmatic, because it is committed in the bid to avoid the employment of Western conceptual schemes. In other words, the attempt to avoid the usage of Western categories or conceptual scheme in the presentation of the African epistemic processes often can result in the over-defence of the indigenous knowledge system from critical queries. The dilemma associated with this method is in its subtle nature of snaring credulous or unsuspecting theorists into its trap. This trap is the tendency to treat AIKS as that which is infallible, necessarily true and sufficient in logic. Consequently, the idea of indigenous

knowledge systems is often regarded as that which is esoteric and un-opened to evaluation (Oluwole 2015:45-7).

The reason this research is treating this method as a crisis is because AIKS – taken as necessarily true – could end up as a frontier for nativism and ethnocentrism, thereby making all efforts towards decolonising epistemology futile. In addition, this method can make AIKS lack the self-critical process for evaluation, improvement and sustainability. Furthermore, it may not only make AIKS unintelligible as an envisioned and appropriate epistemic process fit for engaging with contemporary issues, but could also render AIKS unattractive to outsiders. For this reason, the present author adopts the ‘process view’ of AIKS.

Obtainable from the idea of AIKS is that for its uniqueness and also because of the familiarisation of the people with them as products of their culture, there is a danger that a state of undue attachment often takes place. With such a state of attachment with cultural realities, AIKS may be taken or seen as sacrosanct. Such an attachment is the reinvention of a hegemonic thought that is structured on the imaginary and weak scaffoldings of ethnocentric assumptions. Paulin J. Hountondji cautioned against this attachment when he argued that:

To learn anew to be free intellectually and politically, that to me was the current requirement. This liberty presupposes the reassessment of the status that had been worked out, the paradigms that had been established, and the canons of thought that had been developed for us. Shutting ourselves up in our cultural past – a purely apologetic relation to our heritage – would respond exactly to what is expected of us. In this regard, nothing will be more Euro-centred than a feeble nationalism that would be content to hold up the treasures of African culture to the face of the world by congealing them, mummifying them, freezing them in their muggy eternity (2002:190).

Exceptionally noted here is the caution to be able ‘to learn anew’. That is, one ought to learn to be critical of known indigenous facts, so as to relearn new ideas about the culture for contemporaneous intellectual engagement and sustainable development. Implicit herein, is the warning not to get carried away with the frenzies of showcasing the epistemic worth of the Indigenous African epistemic order, thus, becoming uncritical and irrationally accommodating of all native thoughts as sacred and inviolable. Taking indigenous thought as untouchable would thus be a prelude to an ethnocentric orientation.

What is instructive from the consideration of ethnocentrism in the postulations or presentations of AIKS, is the idea of intellectual caution. It must be noted that what Oyewumi queries was the ‘unquestioned’ use of Western analytical categories (1997:45). Additionally, on the call for caution against the uncritical assimilation of Western categories into indigenous knowledge forms, Ndlovu-Gatsheni asserts that:

What is needed is to take the struggle for decolonisation to a higher level, informed by a decolonial epistemology focused on unpacking the constitutive negative aspects of Western modernity as the broader terrain within which coloniality and Euro-American epistemologies were generated (2018:26).

It is clear here that while it is required to be critical of indigenous ideas so as to divest them of undue deification and ethnocentric tendencies, the same must be done for Western epistemology. Informed from the consideration of epistemic injustice, i.e. the superimposition of Eurocentric epistemology on AIKS, is the need for intellectual caution in the struggle for epistemic freedom. Such caution, as will be shown in the next section of this chapter, is reinforced with the idea that knowing is a universal human activity. However, as shown above, the efforts at putting forward

an African epistemic system that would deconstruct Eurocentric ideology must not be grounded on ethnocentric hegemony, which is a recurrent intellectual challenge in combating epistemic injustice against AIKS. This challenge is observable in the call for critical consideration of indigenous epistemic worldviews as well as cautious application of Western categories in describing the former. This call is, however, informed and made rational by the “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).

Suggestive herein, is that an appropriate epistemic process should be one that is not encumbered with the burden of native hegemony or ethnocentrism, as the Europeanisation of others’ epistemic thoughts is laden with. Neither would such appropriate epistemic processes for knowledge production be formed and validated through the prism of other cultures, as not even the quest for globalisation would make such validation appropriate. The idea for an appropriate epistemic process is well-driven home by Oyewumi, on her call for Africa in the quest for epistemic freedom, to be conscious that “all concepts come with their own cultural and philosophical baggage” (1997:78).

Thus, the next section will attempt a conceptualisation of the African epistemic process that would be fit for the struggle of epistemic freedom. Ideating African epistemology is required to present an epistemic framework that will obviate the methodological dilemma identified above. The overall aim is to unearth the intellectual utility of African epistemic processes for grappling with the perennial environmental crisis.

5.5. On the idea of “African Epistemology”

I commence the attempt at defining “African Epistemology” by an exposition of the concept of ‘knowing.’ This exposition takes as its foundation Aristotle’s famous quote in Book I of the *Metaphysics*, that “all [humans] by nature desire to know” (1926). I place the accent on ‘all humans’ in this quotation. This implies that the quest for knowledge is open to every human being irrespective of race, colour, gender, religion or creed. But what is *knowing*? Ioanna Kucuradi (1995:xxvi) conceptualises *knowing* as a complex human activity. She further advises that:

An inquiry into and analysis of the complex human activity of knowing [is] a prerequisite for framing a concept of knowledge more suitable to base ourselves on in dealing with problems in other disciplines, as well as with global and other practical problems (1995:xxvii).

For an event of knowing to take place, there must be that which knows – a knower or a knowing subject, and that which is known – the object of knowing (Cauchy 1995:49). This is a necessary condition for knowledge. In other words, *knowing* is seen here as an attribute of every human species without prejudice to race, colour, economic development or location. Construing *knowing* as such, resonates with Kaphagawani and Malherbe (2003:261) that “to the extent that all human beings have the capacity to know, epistemology is universal regardless of culture, tribe or race” It is thus right to aver that Africans, just like any rational persons from any culture of the world, seek to know that something is the case, and why that thing is the way they perceive it (Guyo 2011:73). In addition, as a human activity, *knowing* underscores the relationship between the subject and the object, hence, Cauchy’s view that knowing “is essentially a relational act” (1995:49). Explaining further on the importance of the relationality between the knower and the known – subject and object, Cauchy argues:

If knowing did not reach out to things and events distinct from or other than the subject as the knower, or more precisely if the things and events were not present as known to the subject, there would be no coherent sense in which knowledge could be said to occur...in order to know oneself as a functioning subject [knower], one has to be able to stand apart from oneself... to relate to oneself as an object of one's own knowledge (1995:49–50).

This relationship could be seen as an epistemic transaction between two independent entities: the knower and the known, the subject and the object, respectively. It thus reveals knowing as a by-product of the relational activities established between the knower and object known. The independence of the object of knowledge from the knowing subject helps among other things to distinguish the activity of knowing, as a relational activity, from other human activities.

Knowing, an essential art of humanity is, thus, a means to acquire, justify, understand, and communicate human encounters with and grasping of existential reality. As such, the tendency to know what is the case or what is not, is a part of the *life-process* of any person regardless of colour, race, wealth and location. What accounts for difference in the art of knowing among the various people of the world is the process or method employable to acquire knowledge. As noted by Kuçuradi (1995:xxvii), "...skeptical and some other epistemological attitudes, have to do with given 'acts of knowing' of given individuals in given conditions, not with *knowing* as a human activity in general". Put in another way, despite the acknowledged universality of *knowing*, the ways or methods of knowledge acquisition vary according to the *life-process* of a particular culture from which the epistemic claims are made.

To these ends, *knowing* is taken by this study as an epistemic ground that is universal, but its processes are conveyed via different particularities. The different processes or methods of investigating and acquiring knowledge are the ‘knowledge systems’; ‘knowledge forms’; or ‘knowledge modes’, which are distinctive of every culture and locality. While *knowing* is a feature displayable, or an attribute of all humans and of all ages, the methods or processes of knowing are a function of cultural inclinations and existential experiences. This suggests that an appropriate epistemic process should be one that is not encumbered with the burden of ethnocentrism, as the Europeanisation of others’ epistemic thoughts is laden with. The reason for this is because the idea of a globalised knowledge is nothing but a sum of various cultures’ knowledges abstracted to the platform of the universal.

The question possibly arising from this is: does the knowing process happen only through a particular (cultural) way (for instance, through European, Asian or African way of life)? Is epistemology an exclusive possession of a particular culture? Here, a negation is offered. This is because such an idea would not only be a product of hegemonic ethnocentrism but would also negate the functionality of an important human faculty: reason. This also further subsists into the confluence of both the objective and subjective dimensions of philosophy, as enunciated in the fourth chapter of this research work.⁴⁴ Thus, an epistemic order could be viewed from an objective or universal prism, and at the same time from a particular cultural position. Succinctly put, the objective or universal nature of epistemology does not negate its particularities. It would thus be a sheer error to conceive of epistemology as uniquely exclusive to a certain culture and not to other cultures. This calls for caution in the presentation of an African idea of epistemology, as that which

⁴⁴ The idea of the objective and subjective dimension of philosophy examined in the fourth chapter of this research work, is explored here with respect to the epistemic conceptualisation in Africa.

is uniquely different from the epistemologies of other peoples. Such a worldview will automatically negate the universal nature of *knowing*. Furthermore, exclusivist epistemic attributes will foreclose intercultural communication between African and other world cultures. Moreover, such a view will be a function of ethnocentric ideology aimed at reproducing or imitating Eurocentric hegemony. As examined in the third chapter of this study, the idea of an epistemic process being an exclusive possession of a particular culture is the foundation of the Eurocentric epistemic position. To this end, I hold, alongside Guyo (2011:75), that the “Europeans must give up their historical and longstanding claims for universality which is nothing more than negation of philosophy and denial of others as well”. What is being enunciated here is the fact that it would be wrong to hold that there is a unique way through which Africans, or any other culture of the world, come to know.

One may, thus, wonder wherein lies the ground to put forward a particular epistemological position as African, Asian or Western? The justification for such a description is in the *life-process* of the culture or people under consideration. As noted earlier in this study, *life-process* means the critical apprehension or grasp of encountering with one’s immediate environment and the universe as a whole. As a universal phenomenon that rests on rationality, *life-process* allows for the conceivability of epistemological conceptualisations that rest on the confluence of philosophy’s objective and subjective dimensions. To this end, one may describe an epistemology as “African”, based on the fact that the process of knowing inheres in the African *life-process*. An epistemic view described by a particular culture is not unique because that culture has a philosophical nature that is uniquely different from other cultures, rather because the process of knowing deals with and is foundationally grounded in the *life-process* of the people in the considered recognisable

geographical location. The epistemic system of any culture, while operational on a *life-process* which enhances the vivid canonisation of humanity's confrontation with the existential realities, also bears the mark of the nature of *knowing*. Put in another way, construing epistemology in the objective-subjective dimension allows for contextualisation through particular processes, as well as for the non-contextual and objective construal of reality, i.e. *knowing* (Guyo 2011:74).

One of the facts obtainable from the discussion so far, is that while epistemology as the study of knowledge is universal, knowledge acquisition varies from one culture to another. This observation syncs with Bryant (2011:8) that "epistemology is a value laden-social construct". In other words, although there may be differences in the socio-cultural contexts within which knowledge claims are envisioned and formulated, *knowing* is an act of all humanity. However, a caveat must be noted here not to confuse the social-cultural contexts of the knowing process enunciated above as grounds for relativism. The epistemic order envisioned here is a critical structuring of philosophical thoughts that is grounded in the complementary relationship of the subjective and objective dimensions of philosophy.

African epistemology can, thus, be viewed as the people's constructs of their understanding of reality through their life-process. It is a rational system of grappling with existential realities of circumstantial and geographical situations from a universal ground. The argument here, is that the universal nature of knowing is a human activity devoid of any form of ethnocentric nuances, while the ways, methods or order of knowing is largely informed by the *life-process* that a particular culture subscribes to. This will make the culture in question validate knowledge production within their historical, cultural and social context. Dani Nabudere, however, is critical of the need for

such validation to be consistent with the abstraction from the particular to the universal, this is in the bid to ensure that validating knowledge production even within a particular cultural context does not preclude exporting such knowledge forms for application to issues outside the proponent's culture (2011:105-112). The argument is basically that if epistemology is not an exclusive trait of a particular segment of humanity, then African epistemology qualifies to be an epistemology that should be taken seriously. Thus, African epistemology is the study of the knowledge process/system/order of the lived experience of the Africans, instituted on the objective ground of knowing without negating the *life-process* of the Africans. It should be noted that, African epistemology construed along this line, would separate the understanding of the African epistemic order from any form of subjective tendency that could result into an ethnocentric description of the African epistemic order.

African epistemology, employed in this thesis as "African Epistemic Order" is thus believed to be structured on the universal nature of knowing while expressing the *life-process* of the Africans. The Indigenous African Epistemic Order thus describes the way of perceiving and reacting to the world in a manner that is grounded in the universal epistemic stance of knowing and is indigenous to the African cultural worldview as informed by African people's *life-processes*. As such, the term 'epistemic order' will represent a people's doctrine concerning the nature of knowledge. It is employed to denote the process or manner by which "an African comes to know or claims to know that something is the case" (Kaphagawani and Malherbe 2003:260). This includes what it means to know something, the justification of knowledge claims, the how's of knowledge acquisition and the determinants of knowledge validity in a cultural setting. The indigenous African epistemic order, while enunciating the universal/objective dimension of epistemology however, is not

oblivious to the fact that “there are different approaches and perspectives [that cultures employ] to understand the world around us” (Jimoh and Thomas 2015:117) However, such particularistic approaches must be grounded on the objective and universal epistemic nuances of *knowing*.

With the ground laid for an African epistemic understanding divested of the methodic dilemmas of ethnocentric tendencies or undue reliance on Western epistemic schemes, the table is set to espouse the potency of African epistemology for combating not just epistemic injustice, but also the environmental crisis, environmental injustice, as well as for the formulation of environmental policies that would be fit to deal with the perennial environmental challenges of the contemporary world. However, a further exploration into the depth of the African Epistemic Order is required to enunciate the significance of epistemology in the quest for panacea to various existential challenges of life, and in particular, of the environmental nature. Hence, in the next section, efforts will be geared toward the examination of the conceptual framework that undergirds the African Epistemic Order.

5.6. The conceptual framework for the African Epistemic Order (AEO)

This section focuses on exploring the conceptual tool for conceiving the African Epistemic Order as intellectual thought. “Conceptual frameworks” here is taken as an intellectual path through which the vehicle of idea formation drives. This study argues that conceptual frameworks mark the fulcrum of rationalising the intellectual thoughts of a culture. Thus, examining conceptual frameworks is essential for the understanding of the method of forming indigenous epistemic thought processes. The essentiality of such an examination inheres in its viability to enunciate for clearer grasp, the cognitive modes, nature and value of knowledge formation and dissemination in

the African context. Having a grasp of the frameworks for knowledge formation from the African parlance, will enhance systematic explanation of how Africans articulate and evaluate knowledge (Nkulu-N'Sengha 2005:40). Hence, the imperativeness of examining the conceptual framework for African epistemic process to unearth the potentiality of African epistemology for addressing contemporary challenges of the environment.

It must be noted, however, that the conceptual frameworks employable in a particular culture are consequent upon certain basic assumptions that inform the understanding of the people. In every culture there exists a basic assumption which holds for the design of the conceptual framework needed for intellectual thought engagement. The basic assumption thus serves as the gauge for validating a particular culture's systemic process as rational. The basic assumption for the formation of the cultural intellectual stance could thus be seen as the received or given belief system that undergirds the creation of ideas in a culture. While there may be various paths available – in line with the metaphorical view of vehicular mobility employed above – for navigating the culture's system of idea formation, the paths are structured in line with the basic principle of construction.

Identifying the basic assumption of an African conceptual framework, within which African ideas, beliefs, principles and views hang together in a rational and intellectually sound continuum is pivotal to understanding how knowledge and logic are defined and accommodated within a particular cultural setting (Oluwole, 2015:128-134).

This is because various philosophical traditions are traceable to the creation of different conceptual framework(s).

The conceptual framework actually constitutes a fundamental idea which pervades all other intellectual activities; it gives thought its internal consistency, its wholeness, its originality, in such a way that to understand a thought is to grasp that unspoken principle which unifies and illuminates it... [W]e may conclude that our African Philosophy becomes truly African when this philosophy is finally thought through in a conceptual framework properly African, adapted to African realities (Maurier, 1984:30–31).

Basic assumptions inform the understanding of a people's engagement with their *life-process*. This strengthens the earlier caution raised about the methodic crisis in African epistemology; namely, the employment of Western conceptual schemes in articulating and validating the African epistemic process.

To impress an alien cultural framework upon other cultural realities is to place “an iron collar” on the worldviews emanating from such a culture, to which explaining reality will lose the savour of the existential realities of the culture in consideration which give it grounding (Maurier 1984:31). Kwasi Wiredu's conceptual decolonisation agenda, is of importance here. Although Wiredu's argument on the essence of conceptual frameworks towards articulating indigenous philosophy for contemporary concerns dovetails on language, his view nevertheless emphasises the danger of the uncritical usage or application of foreign framework for indigenous thought process. He thus argues:

...I mean avoiding or reversing through a critical conceptual self-awareness the unexamined assimilation in our thought of the conceptual frameworks embedded in the foreign philosophical traditions that have an impact on African life and thought (1995:22).

Indeed, the superimposition of foreign conceptual frameworks on existing African ones is intellectual fraud, whereby African traditions are judged through Western perceptions (Oluwole

2015:125). The essential point for guarding African philosophical postulations within the platform of Africa's conceptual framework is that it helps to avoid the uncritical assimilations that are embedded in foreign cultures. Failure to be circumspect of this would inhibit clear understanding of the intellectual foundations of African cultures (Oladipo 1995:7). A caveat is that the acceptance of African philosophical postulations must not be of a blind reception or the emergence of a kind of cultural nationalism; for that would result in the methodological crises of ethnocentrism (Wiredu 1995:22; Oladipo 1995:8; Oluwole 2015:125). Rather, examining African traditional thoughts through African conceptual frameworks and logic must be entrenched upon critical and rational human experiences.

The conceptual framework is intellectually significant as without the rational demonstration thereof, conceiving a culture's worldview as critical philosophy may become logically impossible. This is because the conceptual framework is informed by a basic assumption that holds together the belief system, intellectual principles and socio-cultural worldviews in a rational continuum. Hence, the conceptual framework must be rationalised by the verdict of the basic assumption that informs such conceptual frameworks. For Oluwole, this basic assumption – characterised by spoken and unexpressed conceptions of reality – includes:

[V]iews about the constituents of reality and the relationship between the apparently distinctive features (if the constituents are more than one) and the type of knowledge human beings can have of all these. It is a basic assumption presumably induced – not logically induced – from human experience. This is what makes a particular system of thought, scientific and rational. [Thus], it is only when... the basic assumption of a specific conceptual framework is defined, analysed and characterised that ideas, beliefs and propositions made within them can be critically examined as to whether or not they pass the scrutiny of logical consistency and the verdict of human sensual experience (2015:126).

Instructive herein, is the fact that the basic assumption that informs conceptual frameworks of any culture, is about the culture's received understanding of features of reality – that is, the functional implications and the nature of knowledge that such culture makes out of its conceptions of reality.

Does only one conceptual framework exist in a particular socio-cultural setting? No, as there may be more than one conceptual framework existing in the same socio-cultural setting, though these frameworks are engendered by the basic assumptions of that culture. The reason for the multiplicity of conceptual frameworks is because of the dynamic patterns of human response to societal dictates, which further explains that different individuals, even within the same socio-cultural environment perceive, understand and explain the basic features of reality, diversely. The reasonableness of a fundamental assumption behind the conceptual framework of a culture is appropriately analysed by Segun Gbadegesin:

If there are such general ideas commonly or generally presupposed in a given culture, they would constitute the philosophy of the nation or culture... when criticising the philosophy of an epoch, do not chiefly direct attention to those intellectual positions which its exponents feel it necessary to defend. There will be some fundamental assumptions which adherents of all the variant systems within the epoch unconsciously presuppose... These assumptions, beliefs and sentiments do not always rise to the level of consciousness and they may not be formulated explicitly but, they nevertheless, exercise considerable influence in a culture. For they make it possible for the members of that society to communicate and exchange ideas and, to live in some agreed and common expectation of what is good and right or bad or wrong... With these assumptions, a certain limited number of types of philosophical systems are possible, and this group of systems constitutes their philosophy (1991:24–25).

Herein, a difference between the philosophical ideas emanating from a culture and the basic assumptions engendering these philosophies is alluded to. The critical test is in recognising, for critical enunciation and employment, the distinction between ideas and basic assumptions. Ideas

or worldviews “are important landmarks in the history of the development of a particular cultural tradition of philosophy” (Oluwole 2015:129). On the other hand, a basic assumption “is the very thin thread that runs, through the thought of several positions held by thinkers who work within the same tradition of thought” (2015:136). Therefore, it is possible to have a multiplicity of conceptual frameworks in the same socio-cultural setting.

The significance of multiple conceptual frameworks in a culture is that multiplicity of conceptual frameworks could engender cross fertilisation of ideas for the emergence of novel and dynamic thoughts fit for the cultural needs. As such needs are expected to be growing, even in the advent of globalisation. Multiplicity of rationalising paths in a culture opens up such a culture to sustainable knowledge that are expected to birth rational innovations for growth and development (Bryant 2011:15). However, the various conceptual outlines in a cultural setting are expected to be informed by the fundamental assumptions of the particular culture about the nature of reality. Obtainable thereof is the idea that every conception of a culture’s postulation of what is and what is not, is structured on various conceptual frameworks employed by adherent thinkers in that culture. However, these intellectual postulations are engendered by the basic assumption of that particular culture. An exemplar of the basic assumption is the idea of the fundamental features of reality, their existence, interrelationships and functionality. To this, Oluwole argues:

A philosophical worldview is appropriately defined as a conceptual framework, with a basic assumption about the nature of the existence and the relationship between the apparently opposite features of reality, namely, matter and mind... (2015:137).

It could, thus, be held that identifying and defining, for rational reflection, the relationship between the features of reality, is the crux of intellectual engagement. This is a critical preoccupation for all rational human beings regardless of culture, race, colour or location. An essential preoccupation of critical reflection in all cultures of the world is formed or structured at grappling with the relationships existing between the oftentimes perceived features of reality: matter and mind. The conceptual framework is, therefore, identifiable by the position of its adherents based on their explanations of reality. In other words, various conceptual frameworks arose based on defining or identifying the interrelationship or the denial of such, between identified features of reality.

Consequently, four conceptual frameworks were identified by Oluwole as products of the basic assumption of corresponding cultures perceptions of reality. Materialistic, Idealistic, Oppositional dualism and Complementary dualistic conceptual frameworks, respectively. While the first two are situated under monism, the last two are structured on a dualist scheme (2015:128). The basic assumption in the monistic scheme is that while matter and mind appear as two distinct features of reality, only one is fundamental. The other is just a phenomenon of the actual reality and is characterised by the main one. Thus, the materialistic conceptual framework would identify ‘matter’ as the real feature of reality and thus Idea (mind) as a phenomenal reflection of matter. On the other hand, still under the monistic scheme, the Idealists’ conceptual framework identified Idea as the fundamental feature of reality with matter as its phenomenal reflection. For idealists like Gottfried Wilhelm Leibniz ([1714] 2007); George Berkeley ([1710] 2007); Immanuel Kant ([1770 2012]), (1965) and many more, the only essential substance of reality is idea which is the foundation and composition of reality, and is taken to be ultimately immaterial. Each fundamental

feature, in the monistic assumption of reality, is all that is, both necessary and sufficient for the establishment and rational explanation of all existence (Oluwole 2015:128-130).

The dualistic conceptual framework is of the philosophical conception that reality comprises two features, which exist independently and distinctively from each other. However, the two varying dualistic conceptual frameworks identified by Oluwole, differ with respect to how the two features of reality (matter and Idea) interrelate and function together. While the oppositional dualistic conceptual framework argues for the exclusiveness of Idea and matter despite their assumed interrelatedness in the lived experiences of humans, the complementary dualistic conceptual framework posits the interrelated functionality, as well as interdependency of these two distinctive features of reality (Oluwole 2015:131-133). Oluwole employs the term 'Binary Complementarity' to explain this framework which is operational in thought and philosophy of the Yoruba, Igbo, and several African cultures. For her, the predominant worldview which undergirds the Yoruba intellectual thought process, like any other African culture, is one that understands reality as containing unified fundamental elements and principles, that are functional as pairs of interplaying complementary parts (2015:134). According to this view everything, everybody, however apparently independent, depend upon something or/and somebody else. In addition, interdependency functions as reciprocity in the sustenance of life for the binary complementarity framework. This is in contrast to the Western worldview, which is identified and formulated within the oppositional dualistic conceptual framework, which is equivalent to Oluwole's 'Binary Opposition' framework (Oluwole 2015:132).

According to ‘binary complementarity’ framework, everything is intrinsically connected with one another in the environment. Thus, the Yoruba epistemic system being operational with binary complementarity conceptual framework of thoughts is, poised for environmental understanding of the mutual dependency among the different beings of the ecosphere. This is because, when beings of nature are viewed in this manner, chances of objectifying and abusing different elements of nature (environment) are lessened or obviated.

In emphasising the entrenchment of conceptual frameworks on the fundamental assumption pervading a particular culture and the possibility of diverse frameworks within a particular assumption, Oluwole argues that:

Fundamental differences among the four conceptual frameworks analysed above show the sense in which particular traditions of philosophy differs from one another. It also shows how religion, philosophy, science and principles of the social sciences as well as knowledge and logic are defined and accumulated within different conceptual schemes.

Difficulty in understanding the logic and rationality of philosophical expressions rendered in different cultural traditions, do not arise from differences of language... several traditions of philosophy may arise from different intuitive basic assumptions about the nature and relationship between matter and anti-matter [idea].

The world exemplar is that the same Greek language used to formulate Democritus’ Materialism and Platonic Idealism was also used in formulating the so-called Mysticism of Pythagoras. Common experience shows that one particular conceptual framework (scheme) often predominates others that also exist in the same language culture of people. But they are either denied or treated as subservient (2015:134).

Instructive from the foregoing is that the African Epistemic Order is defined and explainable within the conceptual framework as informed by the basic assumption of Africans on the features of reality.

It thus appears rational to posit that critiquing a particular philosophical worldview dovetails much into reflecting on the consistency, logical and systematic coherence of such a worldview with the basic assumptions on the conception of reality that permeates the people's understanding of reality. This shows, to a great extent, that a particular basic assumption underlies and defines the intellectual status of different systems of thought, each of which is referred to as a tradition of philosophy (Oluwole 2015:137). Pervading the African intellectual trajectories is the basic assumption that the two features of reality in the 'Complimentary dualistic conceptual framework' are "inseparable and complementary in nature and function" (Oluwole 2015:144). In other words, the Yoruba, and ditto other African cultures' conception of reality is structured on the intuitive fundamental assumption that (1) acknowledges the existence of two distinctive features of reality (i.e. matter/idea, physical/non-physical, material/immaterial, corporeal/incorporeal), (2) the two distinctive features of reality are inseparably inter-dependent of another, and (3) the two features of reality function in a complementary mode and not in opposition to one another.

Enunciating the process formation of the Yoruba indigenous knowledge system, Oluwole posits "complementary dualism" or "binary complementarity" (2015:123) as the basic assumption undergirding the conceptual framework that marks traditional African intellectual thought. Here, she employed the example of Yoruba culture, of the Western part of Nigeria, in West Africa, as a genre of African intellectual thought. This study also shares such presentation of particular cultural facts as a genus and common currency of intellectual phenomena among several cultures of Africans.⁴⁵ According to Oluwole, complementary dualism as an indigenous conceptual

⁴⁵ This view has been presented in the introductory section on this study.

framework, has a logical and viable ontological scheme with which the Yoruba “formulate rational epistemic paradigms for understanding reality” (2015:146). This has also been given credence by Oyeronke Olademo in her argument regarding the explanatory mode of reality in the traditional Yoruba culture. She argues for a “binary element, whose existence is inseparable, and the functions are interdependent” as the basic axiom of conceptualisation behind the traditional Yoruba’s view of reality (2009:25). More so, it is noted that this binary element is the fundamental principle that guides and informs the Yoruba’s practice of philosophy, mathematics, science and their social construct of lived reality (2009:37–45).

Furthermore, Innocent Asouzu exemplifies the complementary reflection beneath the African philosophic conception of reality through the Igbo traditional intellectual heritage as *Ibuanyidanda*. *Ibuanyidanda*, a concept that is structured on the traditional Igbo system of thought, where reality is explainable via the mutual interrelations of entities (2011:40). Inherent in the basic assumption of Africans on reality, are the methods and principles for coalescing subject and object, the essential and accidental, the absolute and relative, consequential and inconsequential, the physical and spiritual into a system of mutual complementing units. For clarity on the concept: *Ibuanyidanda*, Asouzu argues:

The concept *Ibuanyidanda* draws its inspiration from the teachings of traditional Igbo philosophers of the complementary system of thoughts... *Danda* are ants that have the capacity, in mutual dependence and interdependence, to carry loads that appears bigger and heavier than themselves. What this implies is that they can surmount very difficult challenges when they are mutually dependent on each other in the complementation of their efforts. Hence, traditional Igbo philosophers insist that : *ibu anyi danda* (no task is insurmountable for *danda*). It is from this synthetic idea “*ibu anyi danda*” that served a heuristic pre-scientific function within the context of traditional Igbo experience that the

synthetic-analytic concept “*Ibuanyidanda*” is derived through abstraction (2007:11)

The idea of *Ibuanyidanda* is an exemplar of the conceptual framework that gives birth to epistemic postulations from African perspectives. This is because *Ibuanyidanda* philosophy encapsulates the complementary relations between the mutual dependence between the subject and object of knowledge.

Reality in the African conception from the indigenous Igbo point of view is thus seen as jointed, unified and integrative to the tune that such conceptions are evident in the non-polarisation of the practical, supernatural and paranormal in the quest for rational enquiry (Asouzou 2011:18). The complementarity framework of *Ibuanyidanda* philosophy explains the essence of knowledge acquisition from the African parlance, where neither the epistemic object nor epistemic subject of knowledge could singly account for knowledge claims without the other. Thus, within this framework, there is no epistemic tension between the subject and object, as the basic assumption of unified forms of reality necessarily hinders any form of polarisation or authenticating the subject’s autonomy outside the foundation of its unity (Asouzou 2011:38). Epistemologically, the subject in the African conceptual framework of thoughts could interact, communicate, and relate with the epistemic object in a mutually harmonised non-absolutistic mode (2011:38). A basic assumption of harmonised and unified reality informs the conceptual framework of complementarity, thus, obviating any form of bifurcation and polarity.

For Oluwole, identifying this basic assumption, informs the conceptual framework, to give the explanatory stance for African epistemic worldviews as a rational and scientific system of thoughts

(2015:123). The rational and explanatory perspective of the African knowledge system, for instance, is measurable by its coherence with the people's basic assumption on reality (2015:137). This assumption, as explored from the Yoruba and Igbo's intellectual thought process examined above, forms the fulcrum of intellectual dispositions, socio-cultural orientations, economic and political inclinations, logical commitment as well as knowledge articulation and justification within African cultural settings. It also informs the unitary ontological conception of reality at the root of the epistemic order of indigenous African societies.

With a clear understanding of the basic assumption of unified form of reality that informs the conceptual framework of African epistemology, it is logical to hold that this basic assumption engenders the African epistemic process. As argued by Nkulu-N'Sengha:

African epistemology is grounded in the fundamental belief that reality is one, that is, everything is interconnected in a web of relationships. There is a fundamental connection between the male and female, the living and dead, the visible and invisible realms, the spiritual and material spheres, the human and divine realms, humanity and the natural world, and so on. In this worldview, to understand or to know is to grasp the interconnectedness of all things (2005:43).

The conceptual framework that operationalises the African indigenous knowing process is one that obviates any form of dichotomisation between the subject and object of knowledge. Rather, it ensues an interconnected relationship between the subject and object in the knowing process. Thus, as a relational act, the knowing process is complementary in nature. Knowledge is not solely a function of the subject or knower, rather, the subject and the object of knowledge play complementary roles in knowledge making.

5.7. Conclusion

From the foregoing, the African Epistemic Order was explored. This was in the understanding that for an appropriate articulation of an African environmental epistemic discourse, examining the idea of African epistemology – which forms the basis for such articulation – is imperative. The chapter, thus, considered issues of epistemic injustice in Africa, where the rupturing or suppression of the African Indigenous Knowledge System (AIKS) was examined. Consequent upon the idea of epistemic injustice is the struggle to combat the distortion of African IKS via various intellectual engagements. This was recognised as the quest for epistemic freedom by the people whose indigenous epistemic processes had been crushed or fractured. However, it was observed that some methodic dilemmas make examining the idea of African epistemology necessary for this research work. Two methodic crises were identified, namely: (1) using the Western paradigm as the measurement for rational intellectualism and authenticity of indigenous knowledge forms; and (2) the tendency to canonise indigenous ideas as sacrosanct thought processes that are true and meant to be deified and employed automatically. While the former is the uncritical employment of Western epistemic categories within the indigenous thoughts, the latter is the tendency to condemn African IKS to the schemes of nativism and ethnocentric colouration. This informs the research's attempt to put forward an African epistemic system that would not only de-epistemicide Eurocentric epistemological ideology, but would also not be grounded on ethnocentric hegemony.

One major concern for such an epistemic stream of inquiry into environmental discourse is in the bid to move towards considering how human beings ought to conceive of knowledge. Such attempts for epistemic freedom in Africa are best thought out in a form that is divested of all undue influences emanating from colonial knowledge impositions and nativism or ethnocentrism. This

has been recognised by Bryant (2011:17) as “sustainable Knowledge”. For him, an epistemological process that is void of the methodic crisis is imperative for the growth and development of any society, as it has the potency to move the society collectively beyond the need to self-actualisation, beyond materialism and the over-exploitation of our resources (2011:17-18). Such sustainable knowledge is taken as a prototype of the African Epistemic Order.

It is indeed an epistemic relational approach that would move us beyond the social and environmental crisis peculiar to post-colonial Africa. To this end the view is that the African Epistemic Order has the viability for the production of marginalised knowledge systems that would be apt for rationalisation, in the quest for panacea to the perennial challenges of the environment in Africa. The African Epistemic Order could engender an environmental philosophy of an African orientation that would offer a reconceptualisation of humanity: an AEE. The argument being put forward is that the idea of AEE has the intellectual viability to readjust humanity’s perceptual mode in the quest for a sound and symbiotic human-nature interrelationship.

Chapter Six

Towards an African Environmental Epistemology (AEE)

6.1. Introduction

I have argued for the imperativeness of an alternative environmental perspective and have identified such an alternative perspective from the African epistemic process in chapters two and four of this study. In chapter five I have laid bare the major pillars of the African Epistemic Order, which I now seek to use to develop some key features of ‘African Environmental Epistemology (AEE). The purpose of this chapter is therefore an attempt to construct an African environmental philosophy that is hinged on the African Epistemic Order (AEO): African Environmental Epistemology (AEE). With this philosophy, I hope we will be able to address the contemporary environmental challenges of Africa, and the world at large. This chapter will show that African environmental epistemology is consistent with the ontology and relational holism inherent in African intellectual thought. Efforts will thus be made to explain the complementary stance of the African perception of reality. By employing the analytical stance of particular cultural epistemic views, i.e. Yoruba and Igbo of Nigeria, the chapter will present a model of epistemic understanding of reality that is common to most African societies. On the whole this chapter seeks to do two things: 1) to show that African indigenous epistemology is adequate for the discourse of environmental philosophy; 2) and accordingly, to fill-in the lacuna in the current studies of AEP, created by an overreliance on ethics as the theoretical framework for interrogating environmentalism within the African parlance, as well as by the under-exploration of the African epistemic process in environmentalism. Although this study recognises the significant role of

ethics in environmental discourse, however, such a role would be better understood in the context of African Environmental Epistemology.

6.2. An African conception of reality from the platform of the African Epistemic Order (AEO)

This section advances an African conception of reality from the lens of the envisioned African Epistemic Order. Having explored the nature of AEO in the fifth chapter of this study, this section aims at showing how AEO can influence our perception of reality, and by extension, nature (the natural environment). In this section an attempt will therefore be made to appraise (1) the ontological and (2) the complementary *cum* logical perspectives that support such an African understanding of reality from an African epistemic stance, thereby providing us with the building blocks of an African environmental discourse. While the former perspective explains the underlying factors that inform the socio-cultural commitment to the communitarian worldview that is prevalent in African culture, the latter informs us of the logical system guiding the socio-cultural commitment of people. A synthesis of the two perspectives is, however, envisioned for the viability of African epistemology for understanding reality, and by extension, environmentalism. The synthesis is believed to strengthen the rationale to deconstruct traditional Western intellectual thought with its intellectual postulations for conceiving reality from a divide between body/soul, matter/spirit, nature/human, object/subject and natural/supernatural. It also makes AEO suitable for environmental discourse as it does not assimilate the other (nature) or reduce it into the space or identity of the subject. Lastly, the merger allows for the rationalisation of the normative *cum* descriptive stance of knowledge conceptualisation in Africa. The envisioned

normativity and prescriptive nature of the epistemic process, the present author argues, makes it a veritable tool for addressing the environmental crisis.

6.2.1. African ontological perspectives

Given that the African epistemic order, as envisioned in the last chapter of this research work, can be understood as the “way the African conceptualises, interprets and apprehends reality within the context of African cultural or collective experience” (Anyanwu 1983: 60), there is clearly then a close interconnection between African epistemology and ontology. According to Udefi (2014:108), African epistemology or knowing process flows from African ontology.⁴⁶ One cannot fully understand one without the other.

This way of conceptualising the interrelation between epistemology and ontology in the African parlance is credited to Fr Placide Tempels’ ingenious work, *Bantu Philosophy* of 1959. True knowledge for the Africans, Tempels argues, is in the ontological grasps of forces or beings (1959:45). The interconnectedness of the forces of existence is best enunciated through the epistemic grasps of the intelligence of forces that are in the hierarchical order, in perpetual cohesion and interaction (Tempels 1969:35). The ontological perspective of Tempels is also shared by Senghor in the idea of *negritude* as the total of the values of the civilisation of the African world (Senghor 1994:72). This idea was noted by Kwasi Wiredu (1998:98) as a combination of “a

⁴⁶ “Ontology” is the study or understanding of the composite nature of reality in all spheres of existence. In other words, the term is used to refer to the philosophical investigation of existence, or being. See Edward Craig 2005. *The shorter Routledge encyclopaedia of philosophy* (eds.) Routledge: NY 10016. Alternatively, Donald M. Borchert. 2005. *Encyclopaedia of Philosophy*, 2nd Edition, Macmillan Reference, USA. Different beings from the African ontological perspectives include: God, spirits, the ancestors, humans, animals, inanimate objects (Etieyibo 2017:153).

metaphysics of black identity, an African personality and a black soul with a kind of epistemological, anthropology, and political philosophy. Senghor further enunciated his notion of the African method of knowing as distinct from the Western, as that which carries both a deep-seated sensibility and emotional disposition (1994:90). This knowing mode is structured on an affective and cognitive domain of understanding, wherein synthesis of the subject and object of knowing is necessarily entailed. In the knowing process, the African “does not hold it [the object] at a distance, nor does he merely look at it and analyse it as the European would do; rather he touches it, feels it, smells it” (Senghor 1964:72). This allows for a process of knowledge acquisition that recognises a symbiosis between the subject and the object, which culminates in the conscious apprehension of reality which Senghor refers to as African sensual participation in the object (1964:72).

The Senghorian approach to the African epistemic order syncs with our earlier argued position in chapter five of this thesis regarding the universal nature of knowing and the subjective nature of the ways, or method of knowing. For Senghor, the epistemic process for Africans does not rely exclusively on their analytical powers with the exclusion of intuition, rather a holistic knowing method wherein the intuitive, analytical, and heuristic are made to complementarily demonstrate rational cogency for understanding reality (Lamola 2016:60–61). On the epistemic mode of Africans, Senghor famously argues:

The life-surge of the African, his self-abandonment to the other is thus actuated by reason. But here, reason is not the eye-reason of the European, it is the reason by embrace which partakes more of the nature of logos than ratio... [whereas] classical European reason is analytical and makes use of the object, African reason is intuitive and participates in the object... In truth, every ethnic group possesses different aspects of reason and all virtues of man [sic] but each has

stressed only one aspect of reason, only certain virtues. No civilisation can be built without techniques. Negro African civilization is no exception to this rule (1965:33-34, 75).

Senghor's remarks above are often misunderstood to imply that Africans are incapable of analytical and discursive thought. While he laid emphasis on the intuitive nature of African reason, he did not claim that Africans lack analytical reason. His views reiterate the distinctive holistic nature of the African view of reality and the cultural stance that is dependent on the methods or modes of knowing in the African parlance.

Emphasising the distinctive nature and inherent holism in African thought, Amaechi Udefi (2014:112) posits that "the dichotomy or lacuna that is said to exist between the epistemic subject and the object in the Western philosophy is absent in African thought". Indeed, the inherent holism permits the existence of a relational act between the knower and the known⁴⁷ and explains the interconnectivity between the two 'independent' agents of knowledge, i.e. the subject and the object. Recognising this relational act between the knower and the known as the foundation for the AEO, Ruch and Anyanwu elaborates that:

The self vivifies or animates the world or mind so that the soul, spirits, or mind of the self is also that of the world. The order of the world and that of the self are identical. What happens to the world, happens to the self (1981:87).

Participation of the active, independent, yet relational entities is at play here. This relation is essential and deliberate for the understanding of the AEO because there is no division between the epistemic subject and epistemic object.

⁴⁷ The relational act which explains knowing as a universal process has been explored in the fifth chapter of this study.

As Anyanwu further explains, Africans hold a holistic view of knowledge, which presupposes a unity of experience in tune with African cultural assumptions (1983:60). This African way of viewing knowledge about everything including the natural environment, syncs well with the African view of reality, wherein the latter is seen as being integrated. This view of reality is referred to as ‘unitary ontology’.⁴⁸ Unitary ontology denotes the ontological commitments of the African traditional worldview, where the composite nature of reality is treated holistically. For Africans, as noted by Jimoh and Thomas (2015:117), “existence is sacredly united”. African epistemology in consonance with African ontology conceives the world as a basic unitary system where reality is taken as holistic, interwoven, and connected. In this unitary epistemic prism, humans and nature (environment) operate, participate, and function in the same locus with no room for polarisation (Asouzou 2005:113). The holistic nature of the African ontology obviates bifurcation, as existential entities in the cosmos operate interdependently. Thus, the epistemic structure of Africans’ cognition signifies oneness with that which is to be known. Such ontological underpinnings reveal that all beings are independent, hierarchical, yet interdependent, as succinctly captured by Ruch and Anyanwu:

... [B]ecause everything is a vital force or shares in this force, the African feels and thinks that all things are similar, share the same qualities and nature. [However] it does not mean that the African does not know the distinction between a tree and a goat, a bird, and a man (1984:90).

⁴⁸ For more on unitary ontology, see Jimoh, A. K. and Thomas, J. 2015. “An African Epistemological Approach to Epistemic Certitude and Scepticism”. In M. Igbafen and B. L. Agidigbi (ed.) *Exploration in African Philosophy: Essays in Honour of Anthony O. Echekwube*, Ibadan: BWright Integrated Publishers Limited. Pp. 113-124.

The idea-interdependency of all beings in the African ontological conception of reality carries the notions of equality and mutuality as important principle that underscore the African act of knowing. These notions allow for the complementary relationship between the epistemic subject and the epistemic object of knowledge in the knowing process.

A caveat to be noted here, however, is that the exploration geared towards revealing the viability of African epistemology should not be confused for an epistemology uniquely for Africans. This is because such perception is informed, as noted in the last chapter, by nativism and ethnocentric colouration. In addition, such a position disallows room for intercultural communications and interaction with the rest of the world. Indeed,

... [I]n every epistemological system or study, one is bound to find such core notions as knowledge, justification, truth, belief, ideas, intention, explanation, understanding, experience, and human action... [This] presupposes that certain values, experiences and characteristic features are common to all human beings, [and accordingly] a unique African epistemology [is] unattractive and unilluminating (Udefi 2014:114).

The nature of knowing is illuminative of the rational and self-reflective attribute of humans, which is not bound to any race, geography, biological make-up, or economic development. It should, however, be noted that a naïve universalism is not advocated for, as we recognise that the ways, methods or processes of knowing differ from one culture to another and are informed by the *life-process* of each culture or segment of humanity. From the African epistemic worldview, there is no dichotomy between the two epistemic agents – i.e. the subject and object – of perception. As noted by Udefi, “there is some kind of interdependence and interpenetration of the self (human)

and the external world [object of knowledge], such that what happens to one, happens to the other” (2009:82). However, the independent nature of epistemic agents is still recognised.

The interconnection of a human being with their natural environment in the African ontological perspective defines who a human being is. Ifeanyi Menkiti (1984) captures this succinctly when he argues that “the African view of man denies that persons can be defined by focusing on this or that physical or psychological characteristics of the lone individual. Rather, man [sic] is defined by reference to the environing community” (1984:174). In other words, African philosophical anthropology (who or what a human being is) goes beyond the psychological or cognitive configuration of the epistemic subject (the human person), it must include the interplay of other entities in the environing community outside the human subject. While the human person is part and parcel of the ontological community around him/herself, he or she is at the same time an epistemic agent by virtue of his/her intellectual or rational prowess. In him or her, ontology and epistemology have a meeting point.

We must however distinguish between the social and ontological conceptions of reality in African societies. While the sociality of a human being relates him or her with other human beings without which he or she cannot live, the ontological conception of reality broadens that sociality to include nonhuman entities. It is, thus, rational to hold then that understanding the ontology of the African informs the socio-cultural settings that encapsulate the idea of the AEO – the method, ways, and modes of knowing of African peoples. As Jimoh argues. “[a] theory of knowledge is about the way we come to understand [know] reality [which in the African context] rests on the African ontological notion of reality” (2017:121). Unlike the Western conception of reality, where reality

is explainable with recourse to empirical inquiry and mechanistic analysis, in their notion of what is real, Africans take cognisance of both the non-empirical factors and the empirical in the quest to have a full grasp of reality.

[A] fundamental tenet of traditional [African] culture is that there is more to reality and to the realm of experience than that which is readily accessible through empirical inquiry and that one can acquire an understanding of natural phenomena by appealing to experiences whose characterisations are not empirically confirmable but are nonetheless warrantably assertible (Brown 2004:160).

For Jimoh, what constitutes this ‘more to reality’ is the idea of the “spiritual component of nature”, i.e., components of nature that are both incorporeal and of conscious status (2017:123). In the African conception of reality, the ‘natural’ world is beyond the empirical components which are usually explainable by the study of the physical configurations of nature. Thus, the phenomena that are unexplainable by empirical verification are subjected to the prism of the causal efficacy of nature’s spiritual component, which can still be meaningfully explained (2017:123). This is in contradistinction with the Western explanation of reality where, as shown in the third chapter of this study, what is meaningful or could be adjudged real is subject to the scientific method of inquiry alone. The explanatory modes of Africans are explainable through an interrelated system:

[T]here are several elements in the mind of Africa that govern how humans behave with regard to reality: the practicability of wholism, the prevalence of poly-consciousness, the idea of inclusiveness, the unity of the worlds, and the value of personal relationships (Asante 2000:2).

Herein is a recognition of the existence of various strata of being, the existence of which are both “independently real [and] intrinsically linked to form a whole” (Imafidon 2014:38). To perceive

reality in this unified ontological system is not to recognise any dichotomy in the epistemic process of justifying knowledge claims. From the understanding of the ontological commitments pervading African *life-processes*, an epistemic order that factors-in the synthesis of the epistemic subject and object in acquiring, articulating, and justifying knowledge claims is imperative. This explains how African epistemology operates within the rational framework of the African cultural context (Jimoh 2017:124). (Jimoh 2017)

One of the essential facts notable here is the idea that there is a non-severing correlation between ontology and epistemology in the African context. For Africans, ontology and epistemology are like the two wings of the same bird. To employ one without the other is to distort the intellectual heritage of African cultural settings. To this end, it would be rational to submit that African epistemology is ontologically driven. As Placide Tempels (1959:45) explained, "... [t]rue knowledge is to be found in ontological knowledge of forces or beings". The interconnectedness of the forces of existence as one whole web in functionality and applicability makes African ontology a unitary one. Thus, African epistemology is better understood within the broader framework of African ontology. Ramose (2002a:40) corroborates this very point as he notes that African ontology and epistemology must be understood as two aspects of the same reality. This means that African reality is a knowable reality. Accordingly, an African Philosophy of the environment must be rooted primarily in the epistemology of the environment of the human subject, more than in the ethics of the same human subject. This is because to structure such environmentalist views without the epistemic stance of the African ontological commitment, is to distort and undermine the viability of the African intellectual heritage.

The epistemic implication of the commitment to unitary ontology in the African culture is the devolution of complementarity between the epistemic subject and object in their relational act of knowing. In other words, the AEO enunciates a unitary ontology in which the different entities of the entire universe live harmoniously.

In classical African Philosophy, there is a concrete existence of man and nature. African tradition talks about the two entities only in terms of conceptual numericality and not in terms of separate ontological existence. It is impossible for the Africans to separate man from nature. They are sacredly united. In this unity, they both participate in the same locus without being opposites (Jimoh 2017:126).

Functioning in a unitary world where all beings operate and relate in “one inseparable continuum of hierarchical order, African ontology does not allow dichotomy between the epistemic subject [human being] and the epistemic object [nonhuman environment]” (Ruch and Anyanwu 1984:87). This echoes Tempels’ view regarding the independent existence and interrelationship of the forces of beings within the ontological system, where there is an intelligence begging for articulation in the cohesion and interaction of these ontological beings that exist in various hierarchical strata (1969:73).

The epistemic thought process of Africans bears an understanding that no knowledge claim of reality of any sort could be made from the detached position of the perceiving subject (the human perceiver) from the perceived object (the nonhuman aspect of nature). This is because “[t]he self of the subject and the objective world outside the self are united as one in a relationship in which the self of the subject vivifies and animates the objective world” (Jimoh 2017:127). This forms the basis for the distinctive nature of African epistemology and informs of the kinds of epistemic

challenges African people will have to grapple with. For instance, the internalism/externalism debate prevalent in the Western epistemic order is of no credence within the AEO. Thus, in the African epistemic model, a base for the internalism/externalism dichotomy collapses, and the stance of knowledge justification goes beyond the sole capability of the human thought process, to require the import of the external world. The non-consideration of the internalism/externalism debate in the African epistemic context is hinged upon the unitary conception of reality wherein neither the internal perspective of the subject nor the external world is given credence over the other, because both are considered—metaphorically—as two sides of a coin or the two wings of a flying bird, needed to complement each other in the enterprise of knowledge acquisition, justification, and dissemination.

6.2.2. Complementarity and logical perspectives

To the extent that the ontological perspective is necessary for presenting the African conception of reality, it is, however, insufficient in the explanation or justification of the proposed African Environmental Epistemology. This study explores a fusion of the ontological with complementary and logical viewpoints to give a robust encapsulation of African Environmental Epistemology. To that effect, this section will focus on the complementarity and logical perspectives. A fusion of the ontological with the complementarity and logical perspectives will enable a systematic and complementary interrelation between the epistemic subject and object. The insufficiency of the ontological perspectives is also created by what Jonathan Chimakonam (2015b) refers to as supernaturalism. According to him, while noting the import of ontology in the African perception of reality, he cautions against the tendency of African ontological systems to allude the source of knowledge to supernatural beings (ancestors and the gods). For him, undergirding the knowledge

process in African thought, entails “the belief, practice or perspective that the senses and the mind are means through which the gods reveal their wisdom to [humans]” (2015b:73). The gross implication of this is that the responsibility of an agent’s action or the reliability of her knowledge claim, rests solely on the endorsement of the supernatural. In other words, from such spiritistic-imbued perceptions, humans are not just rendered “incapable of something on [their] own” (2015b:73), the practice of recognising individual feats is reduced to the minimal. This is so much that “heroic endeavours [or]... any individual accomplishment of the sort is readily credited to the community or simply as is always the case, to the people” (2015b:68). Such worldviews are inimical to growth, innovation, and development that could meet the contemporary challenges facing Africa.

Munamoto Chemhuru (2019) also notes the shortcomings of supernaturalism in African knowledge systems. While focusing mainly on epistemic responsibility in the worldview of the African spiritistic-laden ontological framework, Chemhuru (2019:9–10) notes that within the African ontological conception, it is almost impossible to leave epistemic responsibility to the person without also taking into consideration other metaphysical beings such as the ancestors and the Supreme Being. This is because of the exalted position that the ancestors take in the scheme and order of things in the African system of thought. Additionally, the wrong implication of such spirit-laden ontological reflection is the inability to hold people accountable for their actions or knowledge claims. Thus:

... [I]ndividuals may be spared from blame and responsibility from actions which they might have done consciously and under their control. According to the African [ontological] view of responsibility rather, other metaphysical forces like

familial and ancestral spirits could be held accountable and responsible for such actions and not necessarily the person (Chemhuru 2015: 98-99).

In line with such thought, it would seem as though individual epistemic responsibility is impossible.

This study thus argues that, while the ontological commitment may be necessary for the presentation of African epistemic worldviews, it is not sufficient to explain the epistemic process that would be adjudged fit for socio-cultural, economic, political, and scientific technology needed to meet the existential challenges of contemporary African society. To rely only on the ontological explanations will, thus, only lead to the methodological crisis of nativism. Also embarking on such an explanatory path would amount to over-pricing indigenous conceptions and result in unfavourable excavations of traditional heritage, all in the name of showcasing what is indigenous to Africans (Chimakonam 2015b:70). However, this does not do away with the indigenous traditions of Africans, as doing that will make the whole project of exploring the indigenous African Epistemic Order for the environmental crisis, a futile effort. The researcher's view, on the other hand, is that what must be explored from the indigenous heritage should fit the present-day challenges. This is in coherence with Paulin Hountondji's call for the transformative renewal of the African traditional system of thought into modern systems that are viable, sustainable, and well structured philosophically (1996:178). It is, thus, the quest for the value of an African Epistemic Order towards addressing the environmental crisis facing Africans in particular – and by extension the world – that gives this research work an essential footing. While it will not be rational to do away entirely with indigenous views – as that would deny any research of a viable starting point – there is the need to engage in critical and pragmatic terms with the past that will be deemed relevant

to meet contemporaneous challenges. In the advice of Chimakonam, "... in constructing an authentic and modern African philosophy, a momentary backward glance is inevitable. But it is a simple look behind only so we can effectively surge forward" (2015b:69-70).

With the necessary condition of the indigenous African Epistemic Order, the need for a sufficient conceptualisation of an African knowledge system is dire. Such conceptualisation, as shown in the chapter five of this study, must aim to rationalise the African epistemic postulation wherein there is no room for the dichotomy between the object and the subject of perception. Jonathan Chimakonam effort at such ideation of African epistemic process comes to mind here, with his idea of "*cogno-normative* epistemology" (2015b:67–81). This term is employed by Chimakonam to capture the epistemic order of the African people in a manner that shows that AEO with its indigenous roots is fitting for the sustainability of growth and development in Africa. Expressing the fact that knowledge is pivotal to the survival of any community, he notes that the idea of *cogno-normative* is not just about holding uncritically to the indigenous epistemic heritages of Africa, but that we should sieve things that are or will be of positive worth to the development of the continent from the past (2015b:73). Arguing for the idea of *cogno-normative* epistemology, he posits:

In building the theory of *cogno-normative* epistemology, we adopt the idea of complementarity because, in Africa's precarious position, our knowledge needs cannot be assuaged by a lopsided perspective. Put differently, Africa does not need an episteme that is solely empirical or solely rational; or an episteme that is solely cognitive... As a result, we attempt to construct an episteme that is both cognitive and normative (2015b:74).

The idea of *cogno-normative* is employed to describe the rational view of an African epistemic process where the empirical and the rational are united in a mutually interdependent and

complementary relationship. Cogno-normative epistemology thus stipulates the synthesis of the cognitive and normative as a functional epistemological tool.

Observable from Chimakonam's view is the underlying functionality of one of the essential ingredients that make indigenous African heritage fit for epistemic consideration: the ingredient in referent is "the idea of complementarity".⁴⁹ The concept of complementarity is significant to the analysis of the African epistemic view because it dovetails on the synthesis of the rational and the empirical (2015b:74). This is employed in the bid to take care of the intellectual divide that pervades Western epistemic thought. The Western epistemic heritage is a "charade of divided lines between two groups and opponents, characteristics of Aristotelian traditions which unequally halved ontology into essential substance and ephemeral accident" (2015b:80). This has been explored in the third chapter of this work under the consideration of traditional Western intellectual thoughts. It had also been noted then that the ontological divide thereof engenders a dichotomy between the subject and object of perception, which consequently provides the foundation for the entrenchment of the frontier mentality. The significance of African epistemic thought is unveiled as it rests on the interconnectedness and inter-relatedness of realities.

The cogno-normative follows a method of critical sifting of the traditional African ideas to unearth the logical structure inherent in African system of thoughts. The logical structure, for Chimakonam, inheres in the complementarity stance of the cognitive and empirical perspectives of knowledge (2015b:71-75). On the perception of the knowing process or knowledge acquisition

⁴⁹ The idea of complementarity has been explored in the fifth chapter of this study as the prevalent framework of thought in African intellectual postulations wherein every entity in existence functions in a reciprocity of interdependency for the sustenance of life. See Oluwole (2015) and Asouzu (2007).

processes, Chimakonam argues that it has been of a dual nature: “one is sensual [experiential, externalist, empirical] while another is rational [cognitive, internalist]” (2015b:73). The merit of the complementary nature of the African epistemic logical structure is that, to overlook or jettison it, is to reduce indigenous epistemic thought to a lopsided perspective. As such, neither does the African epistemic system allow for a solely empirical nor a completely rational theory of knowledge. Hence, his quest for a theory of knowledge that is both cognitive and normative:

Cogno-normative epistemology seeks to prescribe both sensual and rational tools clearly divorced from spiritism as veritable sources of knowledge for the modern African philosopher. The complementarity of the two, call it “ratio-empiricism” is also prescribed (2015b:76).

This cogno-normative epistemology could thus be seen as a by-product of the synthesis between rationalist and empiricist perceptions of knowledge that is inherent in the unitary thoughts that undergirds AEO. There is a clear divide between the rationalist and empiricist view of knowledge acquisition and justification. For the rationalists, knowledge acquisition and justification are bifurcated on the point of internal, mental, or rational cognition of the subject. While for the empiricists, the points for justifying knowledge claims are the external or empirical factors in the determinant of reliable conditions for knowledge. This synthesis thus allows for the presentation of the epistemic process of the Africans as a “complementary epistemology” (2015b:79).

Implicit, therefore, in cogno-normative epistemology is the removal of the apparent divide between empiricist and rationalist’s mode of inquiry that is akin to the Kantian Copernicus revolution in his celebrated *Critique to Pure Reason* (Kant [1787]1998). Kant synthesises the empirical and the rational under his idea of synthetic *a priori* in his bid to show that the mind and the world, the

subject and object, are never alienated from one another but contribute simultaneously in the framing of our knowledge claims (Preston 2003:17). Chimakonam notes the efforts of Kant in forging a simultaneous functionality between reason and experience. However, Kant's synthesis is seen as reconciliatory; but the cogno-normative epistemology goes beyond reconciling the rational and empirical. It brings out the normative stance of the synthesis. The normative outlook of the cogno-normative accounts for the applicability of the complementarity protocols of the empirical and rational inform other areas of human lives such as morality. Preston also notes the shortcoming of the Kantian synthesis. For him, Kant views the interaction between the subject and object, mind and the world, rational and empirical, from a limited lens of logical structure (2003:17). As such, the synthesis that would be adjudged necessary for knowledge, from the Kantian view is structured only on the logical laws determined by the knowing agents; thus, the epistemic object is of no significance in the account of knowledge.

Concerning the underlying logic of the African epistemic view, this study opines that the relationship between the subject and object of perception is a matter analogous to logical subcontraries⁵⁰, which is based on the unitary ontology, as well as the complementary reflection underlying the basic assumption to understanding reality in the African society. The opinion here is that the logical theory of subcontraries best explains the logical expression undergirding the epistemic order of Africans, as multiple features of reality are not seen as being in opposition. The logical relation that exists between the epistemic subject and epistemic object is not of contradictories, but subcontraries. Had it been as contradictories, the entities will have to be in “denial or negation of one another – that is, they cannot both be true and cannot both be false”

⁵⁰ Subcontraries are logical relations, wherein two entities cannot both be false, although they may both be true (Copi 2014:181).

(Copi 2014:180). Neither could the logical relations undergirding the principles of entailment within the African perception of reality pass for contraries; wherein two entities cannot both be true – the truth of one entails the falsity of the other – but both can be false. Rather, the complementary stance of the African intellectual thought process – and by extension – the African Epistemic Order could be explained by the dictates of logical subcontraries – wherein two entities cannot both be false in the interrelationship strata. By a stance of application, the African Epistemic Order wherein the fusion of both the subject and object is required on the platform of complementarity to achieve knowledge, is logically strengthened by the idea of logical subcontraries. Thus, both the object and subject of experience are taken as essential for knowledge claims. Thus, the natural environment, which is the object of our knowledge, and resides outside of the subject's (i.e. the human being's) internal faculties is essential and necessary for knowledge-making. This understanding is explicated by my study to elicit a habit of respect and care for the external world – the environment.

Oluwole, unearthing the logical basis for the African conception of reality and its ensuing knowledge process, observed that any basic assumption undergirding a culture's perspectives or opinion necessarily comes with an inherent logic in its thought system. (2015:158). This explains why it is erroneous to validate or evaluate one's perspective from the prism of another's worldview. The conceptual framework for explaining reality and the epistemic process in Africa – i.e., the binary Complementary Conceptual Framework – is structured on the “either/or logic in the inclusive Sense” (2015:133). This conceptual framework is by its very nature inclusive. In the same vein, Chimakonam's elucidation of the logical system undergirding the African thought processes corroborates that of Oluwole especially on the point of the inclusiveness of the

seemingly opposing ends. He identifies the principle of *Sub-contrary Valuations* as one of the defining structures of the African system of logic, which he termed “*Ezumezu*” (2019:97).

The principle of sub-contrary valuation is a system wherein “two standard variables can complement each other without... contradiction in the simplest form” (2019:98).

[This logic] does not keep two opposed systems from being true [simultaneously] at the same time, their fundamental presuppositions being different. These presuppositions point to the sub-contrary valuations of the two standard values (2019: 98).

The principle of sub-contrary valuation is noted to be functional in the reasoning thought processes undergirding the basic assumption that informs the idea of unitary ontology in the African worldview. Thus, as a means of analysing experiences in the African worldview, sub-contrary valuation allows for an epistemic worldview that recognises the complementarity reflection on the interrelatedness of both the subject and object of perception. In the parlance of this principle, both subject and object, though of different value in the system and seemingly opposing to each other, function as two sides of a coin in the system of thought for the understanding of reality in the African perspective. Hence, the present researcher believes that African epistemology is a complementary epistemology. As a complementary epistemology, it presupposes that the rational must align with the empirical and that both must correspond to the normative. This is to ensure that the African epistemic process is essentially moralised. With a syllogistic argument in a hypothetical form, Chimakonam argues alongside Kwasi Wiredu that: “knowledge with positive moral content is necessary for action. Action with positive moral content is necessary for survival. Therefore, knowledge with positive moral content is necessary for survival” (Chimakonam

2015b:74 cf. Wiredu 2000:181). Complementarity of the rational and empirical tools of investigation, thus, appear to account for a sufficient paradigm of epistemic inquiry for African thought. Put in another way, for an epistemic paradigm to be complete, it is essential for both the empirical and the rational to be fully integrated into a mutually interdependent, complementary, and symbiotic relationship. This epistemic view expresses itself as the satisfactory angle of the ontological perspective as it recognises diversities of reality which may not all be captured or be given at the empirical or rational cognition. Hence, the need for the two tools of epistemic enquiry to be essentially complementary in acquisition, articulation, investigation, justification, and dissemination of knowledge.

It must be noted that this study found a fusion of the ontological perception and the complementarity idea of the epistemological orientation in African intellectual thought appealing. It is believed that the quest for the usefulness and value of indigenous African knowledge systems that would be fit for growth, improvement, innovation, creativity, and development in Africa is achievable in this synergy. The reason is in the noted fact of the insufficiency of the ontological worldview, despite its necessity. The synergy resonates with the views of scholars like Keita (1991:139), Oruka (1983:392), Graness (1996:206), and Chimakonam (2015b:69), who argue for the relevance of traditional African thought in the construction of contemporary ideas and their application to modern challenges, albeit with caution on what to and what not to take. Thus, putting together the ontological, complementary, and logical perspectives of conceiving reality in the African parlance informs of a viable epistemic alternative to Western epistemology which is also fit to address contemporary issues, e.g. the environmental crisis.

An African Epistemic Order envisioned in the necessity of ontological reflection and the sufficiency of complementary epistemology proffers a ground for a philosophical query to the age-long conflict of an intellectual divide between the empiricist and rationalist. It unveils the divide as artificial and uncalled-for in the quest for holistic perceptions of reality. The African Epistemic Order – which is rooted in the indigenous knowledge system – is one wherein the mode, method, process, or way of epistemic inquiry is unified, holistic, and normative, thus, its fitness for the discourse of environmentalism. This aligns with Scarfe (2008:98), who opines that epistemology is “both descriptive as well as prescriptive”. It is descriptive in engaging streams of inquiry into our knowledge system to determine the process that is or would be apt for sustainable development. For instance, in the instance of environmentalism, epistemology as a descriptive inquiry and a unified system would be able to identify what is problematic with the present assumptions concerning how humans and the natural world interrelate epistemologically. In addition, at the prescriptive stance, a complementary epistemic conception would be able to move towards considering how human beings ought to conceive of such knowledge, especially as it relates to the perennial environmental crisis of the contemporary world.

Furthermore, the indigenous African Epistemic Order, couched in the stance of the ontologised complementarity framework, is seen not as an account of mere human cognition, nor as an empirical or rational conception of epistemology, but is also normative. To talk of just the synergy of the empirical and the rational without the normative aspect is to have the African epistemic process couched in the conceptual scheme of a West attempting to synthesise internalism and

externalism.⁵¹ The internalism/externalism synthesis is a logical consideration void of the normative consideration for epistemology. The consideration of the normative aspect of knowledge gave more credence to the AEO as a tool for addressing existential issues of epistemic communities. Little wonder then, that “knowledge is not just a given of the human cognition, it is also a given of the normative... What is knowledge is necessarily moralizable” (Chimakonam 2015b:81). African Epistemology adjudged moralised is taken as an intellectual engagement about how people grapple with the realities in the circumference of their *life-process*. Hence, the strength of epistemology to serve as a framework for providing the foundation and the mental constructs used in experiencing and understanding reality in each culture (Bryant 2011:14). The African Epistemic Order is a value-laden prescriptive venture that provides the stance for knowledge to play a normative role in environmental discourse. Bryant captured this well, as he posits that “the value and social construction of epistemology inform our pedagogy, our scientific inquiry and our truth (2011:14). It could thus be argued alongside Bryant here, that epistemology – as a tool for constructing an understanding of reality – has a social inquiry ability and valuation to inform our ethics, morality, and modality for adjudging right and wrong. Hence, the African knowledge

⁵¹ Scholars who have recognised the errors of the internalism/externalism dichotomy pervading the Western intellectual tradition, have suggested various forms of hybrid-notions: Alston, W. P. 1988. “An Internalist Externalism”, *Synthese* 74, 265-283; Sennett, J. F. 1992, in his “Toward a Compatibility Theory for Internalist and Externalist Epistemologies” *Philosophy and Phenomenological Research*, Vol. 52, No. 3, pp. 641-655 refers to such a hybrid notion as IEC (“Internalist/Externalist Compatibility”). As a matter of fact, Gerhard Schurz, in his 2009 article “Meliorative Reliabilist Epistemology: Where Externalism and Internalism meet”, *Acta Analytica* 23, 9-28 employed the term: *Meliorative Externalism*: for an externalist-internalist hybrid conception of justification. For him, it produces an inevitably true value for the social spread of knowledge. Additionally, in Akinpelu A. Oyekunle 2015, “Towards an Enlightened Externalism: A Demystification of the Internalism/Externalism Debate”, *Socrates*, vol. 3, June, pp. 71-79, the author posits the idea of “enlightened externalism” as that which explicates better the import of synthesising the internalist and externalist concerns for epistemology. Enlightened externalism, it was argued, sets forth the ground for externalist theories of knowledge that permit some internalist constraints on the justification of knowledge claims and vice versa. In other words, enlightened externalism points out that the externalist position about knowledge need not rule out all internalist input in a theory of knowledge. And an internalist position would not be singly sufficed for the enterprise of justification. All that is needed therefore is to understand that every case of knowledge has some necessary externalist condition, combined with sound internal reflection to make way for the achievability of the epistemic goal of truth maximisation in the quest for certainty.

system constructed on the indigenous epistemic order has with it both the descriptive and prescriptive outlook for an environmental philosophy that is African in orientation. We have enunciated the African conception of reality and the epistemic stance that engenders such a conception. To put the discourse of environmental epistemology in clearer perspective, there is a need to explore conceptions of nature from the African worldview. This will be the focus of discussion in the next section.

6.3. Nature from the African parlance

At the base of the African conception of nature is the basic assumption regarding understanding reality. Just as argued for in the previous section of this chapter, the African conception of reality undergirds the unitary ontological perception of life. This perception informs the conceptual frameworks that explain the African conception of nature. From the unitary ontological understanding of reality, stems the idea of the interconnectedness of all entities in reality. One basic fact from the interconnectivity of all beings for the African conception of nature is that it engenders the understanding that humans are not different or special, and thus not superior to other nonhuman members of the environment (Behrens 2014a:70). Thus, from the African view of nature, the sense of alienation and detachment from nature does not come into play, as all beings are taken as interconnected. One could, thus, be able to hold that with the idea of the interconnections of all entities as being part of one single whole, a basis is provided for understanding the human being's place in the universe. Such an idea, thus, engenders respect and considerability for the natural environment. Obtainable from the African conception of nature is the idea that nature has its own independent existence. It is not simply the 'the other' of the human being with no essence of its own, as is the case in Western scientific thought wherein nature is

understood mainly as mechanical, linear, predictable, and thus controllable by humans (Berkes, *et al.* 1998:412–13). The Western perspective, which is informed by Cartesianism, is imbued with the philosophical assumption of a solipsist separation of the subject (the human being) from the object (the natural environment). With this assumption, humans are taken to be separate, and thus privileged above nature (Irwin 2015:116). On the other hand, from the unitary ontological perspective that informs the African conception of nature, it is deducible that nature has its own rules, order, and needs (Kanyfke 2018:1).

Furthermore, implicit in the African conception of nature is the idea that all entities in the universe are one. Hence, nature could be seen as “comprising both the living and non-living things, the natural phenomena, land, rivers, bushes visible and invisible powers, forests, jungles, animals, birds, insects, minerals and whatever they knew had not originated from humans” (Kanyfke 2018:2). Nature, thus, is seen as a partner in the quest for human survival, rather than as an object for usage. This conception informs how we should interact with nature, and more specifically it instructs us to see ourselves as being in a symbiotic relationship of mother-child with nature.

This symbiotic relation, points to the fact that we have a complementary participation in the survival of all the living and non-living species of the universe. A knowledge of this relation ensures guidance towards understanding the fact that mis-using nature and its ensuing destruction necessarily creates the devastation of life. Further, viewing nature and human beings as being in a symbiotic relationship obviates any form of destructive alteration to nature. But instead it engenders the attitude of respect and conservationism to nature. In doing so, every member of the earth community will be protected. It could, thus, be concluded that the conception of nature from

the African parlance drives a vision of the universe as a constellation in which all elements' survival relies on one another.

Arguing against the destructive othering of nature, Ramose (2004:203) asserts that the earth is more than just inorganic matter. As matter (material) it is in its entirety, inclusive of all of its inhabitants, and as such constitutes a common element in all the entities of the earth. Employing the metaphor of 'mother' to refer to the earth, Ramose argues that the earth, not only gives life, but it also preserves the life of all beings in the universe.

The earth is regarded as the preserver of life. Like the mother and her immediate relationship with the baby, the earth is seen as the direct and immediate resource from which to draw all the necessities of biological life (2004:205).

Ramose's reference to the earth as 'mother' is supported by the etymological considerations of the word 'mother.' According to Chambers's Etymological Dictionary, 'mother' originated in the Latin word '*mater*' which is the root word for '*materia*' – matter, i.e., *materia* is rooted in *mater* – mother. In other words, *materia* which is translatable to 'matter' in English – signifying that out of which anything is made – originates from mother. If the earth is the 'mother' of everything, then all entities of the universe are intimately interrelated. Obtainable from this metaphor, we can infer that the earth is sacred because the earth metaphorically, births the inhabitants. Thus, its inhabitants are expected to engage with her with respect and caution, so as not to injure mother-earth. Irwin (2015:119) notes that, unlike the dichotomisation inherent in the Western scientific conception of nature-human relationship, the Indigenous people abhor the separation of the subject (human) from the object (nature). Such separation is viewed as alienation, and is deemed to be dangerously

unnecessary. This study proposes that the complementary perspectives better encapsulate the interrelationship of the subject and the object as envisioned by the AEO.

Observable from the African conception of nature is the common currency of such thought processes from other indigenous people's ideas about nature and human relationships. For instance, the earth-mother metaphor is also entrenched in the understanding of the Pacific people in New Zealand regarding the human-nature relationship (Irwin 2015). Their conceptualisation of nature is captured through the term *Whenua*. *Whenua* is a concept used to reinforce the explanation of the relational process and life sustenance between the various existential individual entities in the web of existence, and by extension, humans and nonhuman parts of nature (Irwin 2015:119-122).

Explaining the concept of *Whenua*, Irwin argues:

People are always talked about in conjunction with the land. *Tangata*, the people, are rarely mentioned without *Whenua*: *tangata whenua*. *Whenua* means both the land and also the placenta. The metaphor is significant, for the placenta enables the mother and foetus [the earth and its inhabitants], two separate beings to cohabit one body. It is a metaphor for nurture, connection, and difference... Traditionally, *whenua* has rich connotations of place, connectedness, and community. It is about people protecting and nurturing the land and the land protecting and nurturing people [a complementary and symbiotic relationship] (2015:120).

The quote above reinforces the idea that one cannot refer to people without mention of the land. The two are connected together by an unbreakable umbilical cord. The valuation of the interrelation between nature and humans is better encapsulated via the complementary perspective. Implicit in the Indigenous peoples' conceptions of nature is the entrenchment of the complementary and symbiotic relationship between human and nature, respectively. This view is also captured by the

Anchorage Declaration, a product of the 2009 Indigenous Peoples' Global Summit on Climate Change held in Alaska. The declaration states:

We express our solidarity as Indigenous peoples living in the area that are the most vulnerable to the impact and root causes of climate change. We reaffirm the unbreakable and sacred connection between land, air, water, oceans, forests, sea ice, plants, animal, and our human communities as the material and spiritual basis for our existence... Mother Earth is no longer in a period of climate change, but in the climate crisis. We, therefore, insist on an immediate end to destruction and desecration of the elements of life (2009:1)

Obtainable from the above is that the African conception of nature shares something in common with other Indigenous paradigms on nature. Furthermore, it could be adduced that the preservation of the elements of life is made possible via the African conception of nature as that which is alive, self-sustaining, self-evolving, and on whom human existence is dependent. This is in coherence with the epistemic order of Africans as informed by the unitary ontological-*cum*-complementary perception of reality entrenched in African intellectual thought. The concept of *Whenua* as well as the earth-mother metaphor examined above, thus, support the idea of the unity of humans and nature. This idea informs the epistemic outlook of Africans about nature. Consequently, human actions are moderated in maintaining a healthy relationship with nature.

The interconnectedness between human beings and physical nature is also affirmed in the philosophical concept of *Ubuntu*. *Ubuntu* reflects African indigenous thought processes that encapsulate a collective responsibility among humans to distribute the life force for the common benefit (Museka and Madondo 2012:259). In this sense, *Ubuntu* can be seen as a way of living that contributes meaningfully to the preservation of the life and well-being of all members of the

ecosphere. In other words, *Ubuntu* is not confined to relations between and among human beings.

Ramose expresses this succinctly:

The principle of wholeness [*Ubuntu*] applies also with regard to the relation between human beings and physical or objective nature. To care for one another, therefore, implies caring for physical nature as well. Without such care, the interdependence between human beings and physical nature would be undermined. Moreover, human beings are indeed part and parcel of physical nature, even though they might be a privileged part at that. Accordingly, caring for one another is the fulfilment of the natural duty to care for physical nature as well. It is thus the constant strife to strike and then maintain a balance between human beings and physical nature. The concept of balance in African thought is comprehensive in the sense that it conceives of balance in terms of the totality of the relations that can be maintained between human beings amongst themselves as well as between human beings and physical nature (2002a:124).

The African conception of nature instils harmonious coexistence of all members of the earth community. In this conception, human beings are decentred from the destructive role of being masters and manipulators of the nonhuman part of nature (Museka and Madondo 2012:262). Eliciting adaptive attitudes towards nature and other nonhuman entities in the universe is possible from the broad sense of *Ubuntu* as a cosmological consideration. Such consideration is fitting for the environmental discourse. This is because the African conception of nature could engenders an attitude or mentality of stewardship towards nature, and thus obviates the frontier mentality of consumerism.

It has been shown that one rational way to understanding reality from the African perspective is to grasp the unitary ontological outlook through the epistemic complementarity frameworks it operates with. Conceiving reality in this manner enhances a rational explanation of the indigenous

African Epistemic Order. The next section of this chapter shall be engaging with the potency of the explored Indigenous epistemic order for the environmental crises.

6.4. The epistemic implication for African Environmental Philosophy (AEP)

Having enunciated the stance of the indigenous epistemic order as a normative and prescriptive tool for engaging existential issues, the ground is set for its direct application to environmentalism. The aim of this section is thus, to explore the African epistemic process as a framework for addressing environmental crisis. Thereafter, the ethical entailment of the African epistemic order will be examined. This is aimed at presenting the moral outlook of the envisioned AEO for environmental philosophy.

6.4.1. Imperatives for an African Environmental Epistemology (AEE)

The indigenous epistemic order, in the manner it was construed in this study especially in the fifth chapter while enunciating the conceptual framework for the epistemic stance of the Yoruba, Igbo, and ditto other African cultures, has implications for the discourse of environmentalism in Africa. Presenting the significance of the African epistemic worldview, Sophie Oluwole alluded to the ontological-cum-logical assumptions pervading Africans' (but more particularly, the Yoruba's) conception of reality, its articulation, and dissemination (2015:156-159). She recognises the intellectual assumption wherein reality is perceived as one whole web of interrelationships that are operative in a unitary and complementary ontology. Making the worldview of *Orunmila*, a Pantheon ancestor of the Yoruba race as an archetype of indigenous African thought, especially concerning their view of reality, Oluwole notes that:

Orunmila held the view that matter and idea constitute an inseparable pair – both in nature and in functioning. He was neither a materialist nor an idealist, but held a complementary dualistic view of reality (2015:80-81).

This view is also echoed by Innocent Asouzu in presenting the Igbo's view of reality. He averred that the complementarity framework is essential to understanding and explaining reality systematically and scientifically, in a comprehensive manner (2007:15). It appears that for Asouzu, the complementarity view is out to aid critical understanding and practical outlooks towards issues relating to contemporary African life.

The practical standpoint of the interconnectedness within which African epistemic worldviews operate is further enunciated by Oluwole as she argues that “development based on the African world view of ‘binary complementarity’ is what most scholars now see as the solution to the various forms of intellectual and social upheavals across the world” (2015:181). In addition, this is by extension the epochal challenge in environmentalism. The epistemological framework that operates in the African parlance would best be appreciated in Asouzu's view as one wherein every notion requiring understanding is grasped from the preceding condition of its intrinsic interrelatedness devoid of polarisation and exclusiveness (2007:10). This shows that the conceptual analysis of knowledge is meaningless outside the unitary ontologico-epistemological framework. In this unitary ontologised epistemic thought, there is an entailment of complementarity between the epistemic subject and the epistemic object. As noted by Jimoh and Thomas:

The epistemic subject which experiences the epistemic object and the epistemic object which is experienced are joined together, such that the epistemic subject

experiences the epistemic object in a sensuous, emotive, intuitive, and abstractive understanding (2015:120).

I note the term ‘epistemic’ in the above, is used for both the subject and the object, as both are seen as agents of epistemic reality in the parlance of African epistemic thought. The researcher thus opines that an epistemological view, as enunciated above, is one that helps us to “know *in* nature rather than know *of* nature” (Bryant 2011:26). As an epistemology that aids our knowing *in* nature, the African epistemic worldview underscores enlightenment to respect and have reverence for nature and its laws. It also serves as a framework to reflect or work out a sustainable attitude or ethical principle, in the quest for survival and understanding of reality.

One begins to wonder how intelligible the fusion of the subject and object of epistemic agencies could be without distortion of the existential status of each agent? To this question, it should be noted that the unitary ontological nature of African conception of reality, though, grants the independent existence of the constituent entities of existence, yet such existence is recognizable in the complementary stance of interrelatedness of these entities as one whole web of reality. This is because all forces of being, to which the human is part, are subsumed in the wholeness of ontological existence. There is no room for any sort of detachment between any of the forces of existence; the subject is subsumed in the object and vice versa. Consequently, it is inferable that humans are subsumed in nature. In the same vein, the African epistemological worldview, entrenched in the African conception of reality, regards both the subject and object of epistemic experience as essential in the interconnectedness of the life web. To this end, there is neither sharp distinction nor detachment between the self or ego that is engaged in theorising and the world wherein the theory takes place. Put differently, both the subject and the object are bound together

in a unitary ontological worldview. The epistemic implication of this is that justification of knowledge claims in the context of African holistic and unified ontological thought presupposes the synergy of the subject and the object. In this epistemic order, neither the subject nor the object could singly be sufficient for the justification of knowledge claim.

Thus, from the perspective of Indigenous African epistemic thought processes, a motivation to preserve the environment naturally emerges. Moreover, the environmentalist's urge to reach out and protect the environment becomes another way of reaching out to entities that humans are part of – the environment. The research, indeed, holds that the African orientation in environmental philosophy offers a re-conceptualisation of humanity that has the potential to change human knowledge and the perceptual mode in the quest for a sound, harmonious, and symbiotic interrelationship between humans and the environment. Obtainable thereof, is the existence of a kind of nature-people transaction that ensures that how we think about the world has a way of affecting the way we relate and live with nature. Put in another way, the understanding of ourselves as being a part of the gamut of the nature-human whole, has a coefficient of correlation with how we relate with every other part of this whole. When we see ourselves as eco-cognitive beings – beings who are cognitively grounded in the world wherein they are situated (Preston 2003:xi) – the nature-human transaction is seamless, sustainable, and of high economic importance. With the operability of the African Epistemic Order, the universe is perceived and conceived with a unitary lens that does not promote any form of dichotomisation, and, as such, enhances this nature-human transaction. As rightly noted by Emeife Ikenga-Metu,

The main objective of an African is to live a life of harmony with humanity and with nature... [the African] feels [the] self in intimate rapports and tries to

maintain a harmonious relationship with the animal, vegetation, and other elements and phenomenon in the universe. For [the African], the first evil is disintegration, [dichotomy], for this would spell disaster for [humans] and [their] immediate world. The ideal thing is integration, communion, and harmony (1985:51).

It could thus be noted that, despite the apparent diversity of various forms of beings and entities making up the universe, the operability of AEO ensures the conceivability of such, as one reality with inter-relationality or complementarity linkages between the seemingly diverse forms. To this extent, human lives could be seen to be inseparably bound to that of nature. Thus, objectifying nature as an insignificant ‘other’ is a farce in the African epistemic operation. Objectifying nature as ‘the other’ with only instrumental value, therefore, does not come into play on any angle in the stance of AEO, because it does not permit a dichotomy in the perception of reality or mechanistic of nature. The synergistic recognition of matter and non-matter, physical and nonphysical, body and mind, the visible and invisible parts of reality as one, is thus unveiled herein to be fit for an eco-critical⁵² analysis of the human-nature relationship.

Beyond its relevance to human-nature relations, though beyond the scope of this present research work, AEO also informs sound humanistic understanding for the ethical consideration of ‘the others’. Thus, it would be fit for a conceptual framework in the discourse of gender-based violence, racism, consideration of distant people and future generation, inter-continental migration, to mention but a few. These areas of discourses are presently not the focus of our study; however, it points to the intellectual utility of the AEO as a conceptual framework to deal with contemporary

⁵² That which is related to analysis on how literary texts and other works of arts portrays or projects environmental concerns. Thus, to be eco-critical is to involve in the “scrutiny of ecological implications in any literary text” (Slovic 1999:1102) For more on ecocriticism, see S. Slovic, 2009. “Ecocriticism” In J. B. Callicott and R. Frodeman.(eds.) *Encyclopedia of Environmental Ethics and Philosophy*. Vol. 2, Farmington Hills, MI: Macmillan Reference, Gale. Pp. 225-227.

existential issues. The crux of the discussion here, with regard to environmentalism, is that people that are endowed with the knowledge of their environment, are ecologically placed in a vantage point to relate well with the natural environment. This is because the epistemic embeddedness of their existential experiences affords them the understanding and application of such knowledge towards the sustainable use of nature. A healthy conception of the human-nature relation is, thus, engendered from the epistemic unification of object and subject, nature and humans, body and mind.

The pertinent question at this point is: what will the role of ethics in the envisioned African environmental philosophy be? In other words, granted that the research attempts to ground the African orientation in environmental discourse on epistemology, does this mean that such an epistemic perspective is devoid of ethical and/or moral injunctions? We opine that there is a role for ethics in the idea of Environmental epistemology. However, such a role is informed by the cognitive and affective grounding of the epistemic agents. Put differently, ethical perspectives and moral dispositions to physical nature – this research posits – is largely informed by the epistemic realities of the agents in question. The AEO, as enunciated above, allows for the ethical agent to act in environmentally friendly ways. This position is strengthened by Preston’s view that “organisms that know things about the world are situated beings, beings cognitively grounded in the world from which they speak” (2003:xi). The African epistemic order, thus, offers a framework for understanding the place of humans in the scheme of existence, recognising the environment as an integral part of life to which humans also belong, and thus engenders sustainable relationship with the environment. With its epistemic process devoid of dichotomisation of the subject and object of perception, the AEO casts light upon the importance of the physical

environment to human activities and also its effect in decision making. Thus, AEO necessarily has ethical implications; as it informs a more environmentally inclined way of considering humans as part of the broader environment. The next section will, thus, be focused on the ethical positions as well as moral outlooks that are informed by the African Epistemic Order.

6.4.2. The ethical scheme in African Environmental Epistemology (AEE)

This section explores the role of ethics, as principles of moral dictates guiding actions in the envisioned African epistemic driven environmentalism. This research views the ethical considerability of any being as being the consequence of the African conception of reality, which contains two differing and yet interrelated entities: the material and immaterial. Thus, the envisioned African orientation in Environmental Philosophy remains the basis for ethical consideration. The ethical perspective for which we argue is termed ‘Complementarity Ethics’ (CE) or Complementarity Environmental Ethics (CEE). This is in line with the complementarity reflection espoused earlier in this chapter. The present researcher opines that the ontological and logical perspectives to understanding reality in an African worldview requires an ethical conceptualisation that considers the interrelation of the various units of existents.

It is thus expected that this ethical idea will, among other things, recognise the independence of the various entities, incorporates the interdependency of these various beings in the existential space of the society, and foster the development as well as the sustenance of harmonious relationships between the varying independent and interdependent units of existence. What the ethical consideration that would be appropriate for the African environmental epistemology also holds is that each existing entity, in line with the African epistemic order, is seen as an important

agent that has its individuality – which is authenticated by its interrelationship with others – and as such serves as a connecting link for the complementarity process in the unitary ontology of Africans. While critics could argue that the CEE is akin to ethical perspectives that are based on African communitarian philosophy, this study argues that there are significant differences between CEE and communitarian ethical perspective. The differences, which will be highlighted below, are significant in the application of these two perspectives to environmental discourse.

As opined by various African philosophers, communitarian philosophy focuses on conceiving a person in reference to the community. This is proposed by Mbiti (1969:106), Menkiti (1984:171–81), (2004:324–311), and Gyekye (1992:101–22). Even with the distinction of moderate and radical stance as the two shades of African communitarianism, the crux of their arguments is that the human person exists in consideration of its relations with the community. For Mbiti, “I am because we are” (169:106) is the guiding principle for thinking about the status of a person. Menkiti’s popular view on the idea of communitarianism is that “...man is defined by reference to the environing community” (1984:171). Gyekye considers:

Communitarianism sees the human person as an inherently communal being, embedded in a context of social relationships and interdependence, never isolated atomic individuals. Consequently, it sees the community not as a mere association of individual persons whose interest and ends are contingently congruent, but as a group of a person linked by interpersonal bonds, biological and or non-biological, who consider themselves primarily as members of the group and who have common interest, goals, and values (1992:104)

The socio-cultural setting of the African community negates the atomic existence of the individual person. As noted earlier in this chapter, the ontological perspective of the African culture explains the conceptual framework informing this socio-cultural understanding of a person. For the

essentiality of the communitarian view for ethics, Gyekye posits that “the communal or communitarian aspects of African socio-ethical thought are reflected in the communitarian features of the African societies” (1992:102). Communitarian thinking, thus, could be taken as a defining element of the social, ethical, and cultural setting of African society.

Some scholars also employed this communitarian thinking to enunciate ethical principles or features of African society, among them are Thaddeus Metz (2007a), (2007b), (2007c), (2011), (2012a), (2012b), (2013), and (2017a). In his interpretation, Metz opines:

... Sub-Saharan ethical thought at least as philosophically interpreted maintains that self-realisation is exhausted through other persons, that is through community alone. It is typical for African theorists to maintain, or at least suggest, that the only comprehensive way of life is by communing, or sometimes being in harmony with the other people (2012b:102).

From Metz’s perspectives, it is obvious that the defining elements of communitarianism underscore the African ethical principles. Hence, the Metzian ethical view that “the greater a being’s capacity to be part of a communal relationship... the greater its moral status” (2012a:387). Put in another form, beings are morally considerable and adjudged appropriate or otherwise by virtue of their capability for causal or intentional connection with other beings in the community (Metz 2011:537–39. This study takes an exception to the Metzian ethical view because of its presupposed assumption that moral status follows on from “capacity” to belong to a community and engage in a relationship. The limitation of the capacity stance of Metzian ethical view has also been noted by Samuel and Fayemi (2020:40), as they question its adequacy in determining relationship proprieties of mentally incapacitated human beings. A person who suffers from autism, for instance, is not able to communicate, and cannot establish relationships, particularly in

the physical sense. Does that mean that the moral status of that person is less because of an inability to form meaningful bonds within the context of community? The communitarian ethical perspective has also been explored in the discourse of environmentalism by focusing on how communitarian thinking can engender African environmental ethics. Such applications are apparent in the works of Murove (2004:195–215) and Behrens (2010:465–84), (2012:140–45) (2014a:63–82), and (2018:42–57). These scholars enlarge the relational idea, engendered by communitarian thinking to posit relational environmental ethics. For Behrens, “the African relational environmentalism is a promising African environmentalism that [is] found in a belief in fundamental interrelatedness between natural object” (2014a:63). Furthermore, Munyaradzi Felix Murove, exploring the Shona cultural communitarianism for environmental ethics notes that communitarian thinking “provides the ethical anchorage for human social, spiritual and ecological togetherness” (2004:197).

A critique of the exploration of communitarian thinking for environmentalism, especially on the relational idea, has however been done by Munamoto Chemhuru (2016:41–51), (2017a:505–14), and (2017b:1–272). Chemhuru, recognising the import of communitarian thinking to environmentalism, argues for an “African Communitarian Environmental Ethics” (2017b:211–31). He argues that “the African understanding of the community and the individual could positively inform environmental ethical thinking” (2017b:211). For Chemhuru, previous communitarian environmental ethics anchored on relational ideas are inadequate because the relational view rests on the biological interconnection between human beings and does not explore the teleological and ontological dimensions inherent in the communitarian view (2017b:223).

Chemhuru attempts to fill this gap by examining the ontological and teleological interconnection between various beings in the natural environment (2017b:224-229). He argues:

The teleological dimension which I interpret from this communitarian dictum is that, if all living and inanimate objects are related to human beings, then it is reasonable to admit that there must be some common ontological connections between them. At the same time... there must be some teleological *ends* for which all these things exist” (Chemhuru 2017b:224).

Thus, Chemhuru rests the position for his African environmental thinking on the ontological stance of African communitarian thinking.

I note some issues against Chemhuru’s ontological reflection for African environmentalism. The first is the overreliance on ethics in the discourse. Needless to repeat the adverse effect of such an approach at undermining the graveness of the crisis of environmentalism, especially in Africa as it has been espoused in chapters two, four, and early parts of chapter six of this study. Furthermore, in his African communitarian environmental ethics, Chemhuru advanced an argument for extending moral consideration to nature through communitarian thinking. He employs an expansionary process to the idea of community by arguing that:

The notion of the community ought to be conceptualised as having an expandable view in African Philosophy such that the community must be understood to include human persons, and their surrounding environment that constitutes other being with vital force (2017b:220).

Chemhuru’s method of expanding the idea of community to include nonhuman nature not only subsumes the human category on nature but is also suggestive of the dichotomisation undergirding the communitarian thinking. Kai Horsthemke has argued that communitarianism entrenches

“alliance and proximity to questionable anthropocentric practices and traditions” (2015:25). Horsthemke’s observation appears germane here because the idea of communitarianism enunciates the socio-cultural relationship between humans in the human community. Communitarian environmental ethics, in the expandable method of Chemhuru, justifies or gives moral considerability to nature, not as something nature inherently has, but as that which was thought out as good for nature from the human perspective. Again, subtle anthropocentrism raises its head here. The expandable view of communitarian thinking for environmentalism reinforces the Western conceptual framework of “oppositional dualism”; as it engenders detaching humans from nature. This Western framework operates with the “Either/Or Logic in the Exclusive Sense” (Oluwole 2015:132), as a strengthened paradigm of disembodiment, de-contextualisation, and isolation of ideas and entities. Imposing dichotomisation on the environment via the expansionary view is a reduction of the holistic complexity that the AEO would of necessity be opposed to. Thus, by opting for the expansion of the human category of communal relations to nonhumans, the expansionary view necessarily smacks of bivalent dichotomisation and individuation of varying components of reality.

The unitary ontological commitment of the African thought process is one wherein the various entities of existence function as one. Here, an argument for expanding the categories of one segment of reality/existence to the other does not arise. To propose an idea that is contrary to the unitary ontological commitment is to adjudicate from a standpoint of subtle anthropocentrism, where there is a dichotomy between nature and humans. Lastly, the communitarian environmental ethics, as well as other relational ethical views for environmentalism rest on the ontological strength of the African worldview. To advance this ontological perspective of Africans without its

corresponding epistemic perspective, is to distort the African intellectual thought process. As noted by some scholars, like Tempels (1969) and Ramose (2002a), it is illogical, in African thought, to talk of an ontology without epistemology and vice versa. In the same vein, this study has shown earlier that African epistemology and ontology are like the two wings of a flying bird, it will be impracticable for a bird to fly with one wing. In addition, both epistemology and ontology in the African perspectives are like two sides of a coin, one cannot be spent without the other.

Although the communitarian or relational environmental ethicists may argue that their view, being structured upon African ethical principles, encapsulates the orientation of African perspectives in the discourse of environmentalism, such views appear inadequate for an environmental project. In other words, granted that the communitarian or relational perspectives are adequate for a human-to-human interrelationship, its adequacy for human-nature relationship is questionable. At best, it can be expanded to apply to the environment. Olusegun Samuel and Ademola Fayemi (2020:38-40) also noted this limitation by querying how relational views frame the obligations of beings based on the hierarchical ranking stance that undergirds the idea of relationship capacity. The moral considerability of beings that is placed upon relationship capacity introduces a hierarchical prioritisation of some beings above the other. This cannot be sustainable enough for a sound human-nature relationship, as it has a high tendency to lead to the denigrations of nonhumans as objects of human usage. It should however be noted that, the ranking of beings and entities, as well as the obligation-framing strategy of the communitarian/relational environmental view, could be argued to be akin to the hierarchical recognition of beings permeating the African ontology. Nevertheless, the insufficiency of such supernatural presentations of African ontology has been identified as it were by the logical and complementarity conception of reality.

Obtainable from the foregoing is the identification of two major errors in the arrays of the argument put forward for the orientation of African perspectives in environmental philosophy. One is the overreliance on ethics in the discourse of environmentalism, and the other is the neglect or under-exploration of epistemology in conceptualising African environmental philosophy. There are other scholars who noted the significance of epistemology to environmental philosophy. For instance, Chigbo J. Ekwealo (2011:10–11) passively notes the need for an epistemological consideration as he argued that functionality of African Environmental Philosophy as a consistent and coherent global ethical platform is mainly achievable through the consideration of African epistemology which is rooted in the ontology of complementary dualism. Ronald O. Badru (2018:198–202) also notes that African epistemology proffers a coherent framework for advancing sustainable environmental democracy. Arguing for the development of a functional environmental policy in Africa, Workineh Kelbessa (2018:309, 312, 323) advises that we pay attention to epistemological dimensions of African intellectual thought to get a grasp of attitudes, values, and emergent environmental concerns. However, these scholars did not commit to the exploration of Indigenous African epistemic processes for advancing their African environmental positions. My study fills these gaps as it attempts to make-up for the shortcomings of communitarian or relational environmental ethics.

This study adopts an ethical view that is engendered by the epistemic process of Africans, i.e. ‘Complementary Environmental Ethics’ (CEE). The CEE, resting on the epistemic order of Africans, acknowledges the complementary and ontological stance of African culture wherein every entity functions as one in the one-whole web of existence. As such, the interrelationship

between varying units or members in the web of existence would not be a matter of communing. Rather, it will be through a complementary process. As complementary to one another in the relatedness of the whole web of existence, each differing part, while maintaining its ontological status, exists and operates interdependently with one another.

As an epistemologically induced ethical view, the CEE understands the individuality of each member of the environment. Thus, the varying individual entity is not subsumed or overshadowed in the relationship. Rather, each exists as a complement to the other. Furthermore, as complementing variables, each varying member of the whole web of existence is recognised to have intrinsic value, hence the interrelationship does not require expanding the category of one segment of existence to another. Also, the present researcher observes that the idea of CEE better proffers guides to respect the right of each member of the existing web of life. Doing this, on the other hand, necessitates an ethics of duty to keep the complementarity flow. Under the complementary nature among ontological beings of this relation, no part loses its quality, viability, vital-force, and individuality. Hence, innovation, discovery, and development can flourish. This is a variant of sustainable knowledge advocated by Bryant (2011) and noted earlier in this chapter. Unlike communitarian environmental ethics that regresses into subtle anthropocentrism, CEE excludes anthropocentrism in the moral considerability of nature and is structured on the interrelation of the two features of reality: the physical and the non-physical, material and immaterial, mind and body, human and nature.

This research concedes that communitarian environmental ethics and its relational ethical thinking are appealing concepts and theories that function well as human concepts, to the extent that these

ethical ideas, aim at the continual socio-cultural wellbeing of the human person in the community. This explains the charge of anthropocentrism against the idea of communitarianism. However, to attempt to extend communitarian African ethical thinking to the discourse of environmentalism is to present African environmental philosophy as largely or subtly anthropocentric. Furthermore, relating to something outside oneself requires an epistemic awareness of ‘others’ existence. Such awareness, I argue, is engendered by the epistemic embeddedness of AEO where the subject and object of experience are unified in the account of reality or knowledge justification. The communitarian/relational environmental perspective – with its inherent hierarchical prioritisation of the human being – thus, opens-up grounds for subtle partiality or dichotomy. This is obviated by the epistemic-induced CEE. The necessity of all beings and entities of existence to have value inherently in them is consistent with the African epistemic process of a unified subject and object. Thus, the epistemic process at the core of CEE necessarily permits the independent existence and valuation of all beings, while acknowledging the operational interdependency of all entities in the schema of things. It should, however, be noted on the contrary, that the necessity of inherent value in all beings is limitedly granted in the hierarchical prioritisation of the relational approach; as seen in the expansionary perspectives underlying the communitarian environmental view observed above. The CEE on the other hand avoids this limitation, as the complementarity operations of both the subject and object of perception – humans and nonhumans – are imperative for not just understanding reality but engaging with the other members of the earth community.

A possible query, especially from the views of (Horsthemke 2015), (Hsiao 2015), (Etieyibo 2017), etc., that could be levelled against the CEE is that it neglects the importance of the human agency in the quest for environmental solution. It should however be noted that the CEE does not

discounts the significance of the human activities in the achievement of possible solutions to the perennial environmental challenges of the contemporary world. Rather, the CEE argues for an epistemic orientation in environmental philosophy that is in line with the African intellectual thought. The African conception of reality as shown in the study recognises the independent existence of each entity of life. At the same time, the CEE accounts logically for the operability of these entities through the complementarity stance undergirding the interdependency and interrelatedness of these entities. As such a human agent armed with the epistemic reality of their place in life, as a part of nature, is better placed to respect nature, protect nature, and will strive to engage in activities that would engender ecosystem restoration. This further shows the plausibility of the African environmental epistemology as an approach that is not only aligns with the intellectual heritage of African culture, but also obviates the subtle anthropocentrism limiting other African environmental philosophic positions examined.

Furthermore, against the possible query that the proposed African environmental epistemology is mere ideated, I argue that the African epistemic order proffers a basis which AEE as a viable framework for environmentalism is built upon. The operational practicability of the AEE as enunciated in this study is capable of inciting meaningful solutions, at different level of human-nature engagements, to the contemporaneous environmental challenges. For instance, the individual persons that has the knowledge of her/his place in nature will be able to form an environmentally friendly habits, thus preventing hurting nature. This is exemplified in Willa Boezak (2017) presentation of the indigenous people of Khoisan of Southern African environmental outlook as a product of their knowledge of a green cosmology that is established on harmonious and complementary interrelatedness between all beings (2017:255). Also, the

enlightenment inherent in the AEO also has an insightful ability to better equip government and policy makers at the local, national and international level to make, and be committed to nature protecting and restoration laws. The practicability of the AEE enhances the sound understanding about living in proximity to nature. This is because, such enlightenment enhances our understanding that protecting nature from damages, is also protecting the welfare of humans. Thus, the AEE could facilitate clear goals around nature restoration, tree replanting for biodiversity, protection of endangered species, enacting of gratification policies to encourage mass environmental protection acts, etc. In essence, the AEE becomes a key ingredient in mapping out proper action towards being a steward of nature, rather than a consumer.

The Complementary Environmental Ethics that this research argues for is suitable for the sustenance of harmonic relationships between the varying independent and yet interdependent beings/entities in society. This is because it allows for each differing unit to hold to its individuality – which is authenticated by their interrelation with the other – and at the same time being complementary to one another. The CEE is also put forward as a framework for intergenerational ethical guidance and justice for interrogating the past, adjudicating the present, and prescribing for future events as well as future generations. With the epistemic knowledge of one's place in society, humans are more equipped to live and act ethically in the relational existence. As such, in relation to human-nature relationship, the human as one of the interrelating agents is better positioned to make peace with nature. Making peace with nature is essential in the establishment of human defining relationship with nature. A human agent, that recognises the epistemic significance of 'the other' parts of nature, which s/he is just a part of, will not ignore protecting nature, but will see nature restoration as an essential action for solution to the myriads of ecological crisis of the

world. This is because the African epistemic order gives a robust capturing of the human person as a part of the two features of reality, whose existence is authenticated and strengthened by its complementary relationship with other members of the environment. Thus, a natural motivation to protect nature and positively live in a complementary manner with other independent members of the environment/society – humans, nonhuman; animate and inanimate objects – is sustained. Such motivation, the research suggests, will not only enlarge the conservatory attitude but also be able to engender practical and systematic policies for enhancing environmental justice for the present, and future generation of the African society and world at large.

6.5. Conclusion

This chapter presented African Environmental Epistemology. As such, the exploration of the potency of the Indigenous African Epistemic Order to reveal its adequacy for environmental discourse was undertaken. Exploring the conceptual formation of the AEO, wherein “to know” reveals a relationship between the known and the knower; brought about examining the ontological, complementary, and logical perspectives to conceptualising reality in African terms. Hence, the examination of the African conception of nature. It was further noted that neither the African ontologised nor the African complementary-cum-logical conceptions of reality would be singly enough for conceptualising reality, thus the argument was made for conceiving nature from an African epistemic viewpoint. It was further nuanced in this chapter’s argument for a fusion of the two modes. This is to put forward a rational explanation for an epistemic process wherein the mode, method, process, or way of epistemic inquiry is unified, holistic, and normative. The fusion, it has been observed, allows for the rationalisation of the normative and descriptive stance of the AEO. It was submitted that the normativity and prescriptivism of the Indigenous epistemic process

make it desirable as a framework for addressing salient existential issues, especially the environmental crisis. Hence, “Complementary Environmental Ethics” became our standard.

The CEE, it was argued, rests on the complementarity stance that is best captured in the epistemic embeddedness inherent in African intellectual thought. This argument showed that the AEO has a significant insight to inform sound moral relativity between all beings and entities of existence without prioritising one being above the other. It should be noted that for coherency and viability, an African environmental philosophical view must capture the necessity of all beings to have value inherently in them.

This necessity is consistently catered for in the African epistemic process of a unified subject and object. Also, looking from a practical angle, conservatory actions and good environmental value decisions are essential for maintaining a viable environmental process. Such actions require agents’ responsibility and a responsive relationship with nature. The AEO, via its normative and descriptive nature, has the capacity to incite the relationship and responsibility needed for good actions that can engender viable environmental practices.

One could, thus, hold that the death of progress, as well as poverty of effectiveness of African environmental theories, is essentially due to the neglect of the epistemic approach. An epistemic-enabled African environmental view better encapsulates the understanding of the human’s place in the scheme of existence as a part of nature. Such understanding is essential for relating with oneself and others as it guides, motivates, and instils the necessity of solidarity in interrelation with other members of the earth community.

Thus, IAEO has the potential to incite an ecological understanding that forms the basis for our habits, informs our ethics, prescribes our moral adjudications, and generally ensures the maintenance of a healthy environmental practice for all inhabitants of the earth community.

Chapter Seven

Summary and conclusion

7.1. Summary

The study started with an examination of the concept of environmental philosophy (EP). It conceptualises EP from the ‘beyond the ethical perspectives’ stance. I noted in the second chapter that to reduce environmental concerns to ethics in the philosophic orientation is to undermine the vastness and peculiarities of issues in environmental discourse. Thus, to enunciate the part-whole relationship existing between environmental ethics and environmental philosophy, the thesis identified some contemporary challenges to environmental philosophy. The intellectual challenges examined include: the quest for alternative approaches, overcoming anthropocentrism, and environmental politics and justice. I also highlighted that the ‘frontier mentality’ that characterises the development of science and technology engendered anthropogenic causes of environmental degradation. This mentality entrenches the idea that nature is abundantly available for the endless use and satisfaction of humans, and that there are always more resources to consume regardless of the consumption rate of the existing ones. Exploring the root of the mentality that embolden anthropogenic cause of environmental destruction, the traditional Western epistemology and the ensuing enlightenment stance for the establishment of science and technology was identified. Hence, the study critiqued traditional Western intellectual thought to show that it tends to facilitate the “frontier mentality”. It noted that traditional Western epistemology engenders a perceptual mode that dichotomises nature from humans through the subject/object division in the epistemic account of reality. Thus, the study showed that the dogma of detaching the epistemic subject from the object in the epistemic process is at the root of the tendency to misuse nature – a tendency that

has led to the anthropogenic causes of environmental crises. This necessitated the need for an alternative framework that recognised the operational complementarity of the epistemic subject and epistemic object in understanding reality.

I further examined the current African orientation in environmental philosophy. I argued that the arrays of studies examined fall short as they over rely on ethics and do not take cognisance of the “beyond the ethical” perspectives that best characterises environmental philosophy. Also, many of the studies hinge on the unitary African ontological perception of reality to argue for their environmental philosophical view, so neglecting an important aspect of the traditional intellectual heritage of African culture: the Epistemic Process. I argued that African epistemology and ontology are two sides of the same coin, hence, we cannot use either and neglect the other. Many of the African environmental philosophical studies neglect or under-explore African epistemic processes in their employment of African ontology for environmental discussions. I argued that it is imperative to fill this gap as it distorts the African intellectual heritage.

Accordingly, this thesis explored the ‘African Indigenous Knowledge Systems’ (AIKS) which represents the African Epistemic Order (AEO) rooted in AIKS. AEO is the process within which Africans understand reality. Since, for Africans, reality is perceived in a unitary ontological form, AEO becomes the systematic codification of knowledge forms for understanding reality. This emphasises the view that African ontology and epistemology are like two wings of a flying bird. In the epistemological stance of the African view, the epistemic subject and epistemic object are important for achieving epistemic justice, as they complement each other in the epistemic quest for truth.

With the understanding garnered from the exploration of AEO, I argued that AEO is poised for contemporary environmental philosophy. This is because AEO unearths the significance of physical nature by yielding the knowledge forms that are engaged with it. Also, AEO enhances the understanding that human beings' place is intrinsically intertwined with nature. Thus, the epistemic framework of AEO grounds an ethical agent in an ecologically enhanced position to relate amicably with the natural environment. The study argued that the AEO can incite the attitude of care, respect for nature, and thus, engenders environmental conservationism, and eco-critical habits. This argument emphasises the understanding that AEO obviates the polarisation or dichotomisation that characterises the basis for the misuse of nature. This is because in the operational stance of AEO, both the subject and object of perception are complementary ingredients or elements of sound epistemic justification. The research noted that the complementarity stance inherent in AEO makes the recognition of the 'other' very essential in the epistemic scheme of understanding reality. Thus, the AEO enhances the view that sees nature as significant in the process of knowledge justification. The complementary relations of the subject and the object of perception reveal the importance attached to nature inherent in the African intellectual heritage. The understanding of this complementarity stance can change our perception of nature and engenders respect for nature. Thus, making AEO suitable for environmentalism.

Understanding the importance of nature in the epistemic process informs an ecological conscious relationship with nature, as it opens up the stance for a harmonious interrelationship between humans and nature. My study hinges such interrelationship on the symbiotic engagement inherent in the complementary operability of the epistemic subject and epistemic object of perception.

Knowing how to relate with nature engenders ethical proprieties needed for a human-nature relationship that is environmentally informed. Thus, the exploration of the indigenous African epistemic worldview allows the study to unearth the intellectual and practical utility of the African epistemic process to addressing contemporary issues that have led to environmental crises. This also shows the relevance and contribution of the African intellectual heritage to addressing environmental challenges of a global magnitude. Although environmental challenges are the focus of this study, the intellectual and practical utility of AEO opens the vista of study in applying African epistemology to other areas beyond the focus of this study.

7.2. Conclusion

This study has explored the indigenous African Epistemic process for the discourse of environmental philosophy. The research work had been able to enunciate an African orientation in environmental philosophy that is hinged on epistemology. The study has shown that the discourse of environmentalism requires the intervention of something more than ethics. The researcher observed – in agreement with Bryant (2011) – that Africa, and countries of colour, as well as those of low-income regions of the world, bear a higher impact of the ecological crisis in the world. The researcher further observed many of the attempts by scholars towards advancing an African perspective upon the environmental crisis have been of little success. This is owing, largely to the fact that these theories are either fashioned out in the cloak of Western perspectives, or overreliance on ethics, or neglect of the people's epistemic orientation. The study granted that the need for an African perspective is strengthened by the quest for solutions that are equitable, inclusive, and in line with the need and peculiarities of the African society. The research highlighted the fact that some attempts at putting forward an African orientation in environmental

philosophy have been undermined by the weight of Western-centric methods and an overreliance on ethics. These observable deficits inform the quest for an alternative framework that would be both prescriptive and descriptive in its employment for the discourse of environmentalism, especially in Africa. This alternative framework was pinpointed out from the exploration of the Indigenous knowing process of the African people.

One of the benefits of exploring the indigenous epistemic order for environmental discourse is that such a method allows for a deep-seated comprehension of the pre-colonial environmental culture in many African societies. This helps to appreciate the interjection of indigenous thought in the current approaches to an environmentally conscious society for present and future generations. The exploration strengthened the position of this study for the intellectual viability of alternative approaches to Western-centric perspectives in environmentalism. Furthermore, the idea of African environmental epistemology contributes another perspective to the studies on the nexus between the epistemic process of African origin and how it informs how Africans understand, engage with, live, and think about their environment. How this epistemic process informed conservation strategies in African societies even before the importation and imposition of colonial ideas and subsequent adoption of the Western ideas by post-colonial governments in Africa, however, remains a subject of further discourse for this study. It must be noted that the employment of the word “Africa”, while particularly speaking of one or two specific cultures, is because the situation which different African countries encountered before, during colonialism and afterward are somehow similar, though different in degrees (Mawere 2014:xviii). What the indigenous approach, especially the epistemic alternative as opined by the present researcher also put forward, is that the low effectiveness or failure of environmental policies and conservation methods in post-colonial

Africa is largely due to the neglect of indigenous strategies used in pre-colonial periods. This syncs with Mawere's idea that "the relegation of traditional conservation strategies as unscientific and backward has betrayed studies and in particular conservation projects in Africa as a whole" (2014:xix). Thus, exploring the epistemic conundrums of the African people for environmentalism allows for an ample platform to examine the environmental, cultural, and knowledge systems that engender norms, values, and traditions attached to the natural environment.

What is obtainable from such exploration, as the focus of this study is, is that local environmental methods and strategies that are informed by the indigenous knowledge systems can be unearthed for contemporary deployment in the face of the perennial environmental challenges. Thus, post-colonial African States, through their governments, could focus or give credence to traditional conservation strategies and epistemologies in addressing environmental degradation. This will largely follow the paths of looking inward for solutions to African problems, as solutions that are African based will be put forward for addressing African environmental problems. Another essential fact that is revealed by the exploration of an indigenous knowledge system for environmentalism is the understanding that contact with Western ideas and civilization in Africa, especially through colonialism brought about significant transformation to the daily practices, needs, prism of perception, value, and epistemic relationship with the environment. How significant either to the right or left – that is – for good or bad, as well as remedies to leftist-significant transformations to indigenous knowledge systems, is what this study had been able to enunciate.

This study affirms that, beyond the institutionalisation of the frontier mentality (as shown in the third chapter of this study that Western intellectual heritage engenders), the impact of Western-centric ideas on environmental issues in non-Western countries and in particular, Africa, cannot be underestimated. The mentality of use and misuse of the environment that traditional Western intellectual thought proffers for its germination, growth, and sustainability, was extended to non-Western countries of colour and low income through colonialism and globalisation. These countries were subjected to Western-oriented rule, distortion of the indigenous knowledge system, and the imposition of policies, methods, and strategies for environmental management that are Western biased. As such, ways in which the people live at peace, with every other being in the environment that is indigenous to the African people's culture were replaced with Western environmental conservation methods that are based on epistemological thoughts alien to the African culture.

Furthermore, with hindsight into the exploration of the indigenous epistemic order as discussed in the fifth chapter and the environmental utility of AEO in the sixth chapter of this study, it has been established that the basic assumption that undergirds the epistemic process of Africans is one wherein natural affinity with nature is imperative. In this conceptual perception of reality – wherein everything in existence co-exists in a complementary fashion – there is no ground open for dichotomous or dualistic views of reality. Thus, humans are able to give appropriate care to the environment as something that is part of their being. Although not explicitly highlighted by Ogungbemi (2001:268) and Tangwa (2004:389) in their discussion of the “ethics of nature-relatedness” and “eco-bio-communitarianism,” respectively, the research notes that the presentation of environment-human relations that is Indigenous to African culture, that is guided

by a unified ontological perception of reality supports their view. One would thus be able to hold here that one of the reasons that the continent of Africa seems to be bearing the pangs of environmental degradation is largely due to the distortion, relegation, and classification as unscientific and illogical by colonial practices of indigenous environmental protection strategies. Worst still, the despising of Indigenous knowledge systems has continued in the post-colonial African states, as post-independent African leaders followed the path and method laid down by the colonial masters.

It should however be noted here that, while it may not be wrong for contemporary African states to employ Western environmental policies and strategies – where such may be applicable – it would be inappropriate to reject Indigenous African environmental protection strategies due to their origin. In other words, to the extent that this research work recognises the positive effect of Western environmental conservation methods, for better and sustainable results, there is a need to complement these strategies with environmental protection models that are informed by Indigenous Knowledge Systems. This resonates well with the position of the UNCF 2015 Paris Agreement on Climate Change examined in chapter two, that there is a need for the application of alternative methods in the quest to combat the environmental degradation facing the universe. By alternative approaches, it means non-Western and/or so-called ‘unscientific’ strategies. There abounds, in this vein, examinations of such complementary reflection on the discourse of Environmental philosophy. An example of such reasoning seeking a complementary approach between two or more cultural perspectives as shown in the introductory chapter of this study, is Callicott and Ames’ presentation of Asian traditions as a conceptual resource for environmental philosophy (1989). A call for the complete revision of the human-nature relationship in Western

thought was made based on the metaphysical realities that the exploration of the Asian intellectual Tradition made available. Here, classical Taoism was put forward as an alternative understanding of the human-nature relationship that would engender order, protection for the environment, and possible reduction in the environmental crisis of the world (Callicott and Ames 1989:vii-xix). This study, thus, contributes to the employment of the African worldview as an alternative perspective on the environmental issues. It has been shown that the justification for the exploration of African orientation in epistemology is not just because Africa is part of the global world that experiences environmental challenges, but essentially because Africa has “important theories that will help man [sic] conserve the environment” (Ifeakor 2019:169). It has also been shown that the call for alternative approaches is justified because different philosophies will enrich the world’s environmental attitude from diverse contexts, thus, enhancing sound and functional perspectives for environmental thinking and the human-nature relationship.

This study contributes to the advancement of evolving alternative approaches to environmentalism from the parlance of African epistemology. The study has examined past African efforts in environmental philosophy and the inherent gap in these approaches has been highlighted. However, the difference this study contributes to studies in the genre of the discourse of environmental philosophy, is the employment of the African epistemological process. This difference may be regarded as a wake-up call for scholars, environmental policymakers, protectionists and advocates/activists to examine our perceptual mode of reality and thus get informed on the viability, intellectual utility, and significance of the environment to sustaining life on the earth community. It has also been shown in the fifth and sixth chapters of this study that by understanding the complex process of knowing, and its subject-object relational dictates, an

appreciation of nature from the informed stance of epistemology, is obtained. Such epistemic understanding has a way of provoking ideas that would practically and/or naturally guide our actions, dispositions, considerability, and ethics of nature-human relationship. The epistemic-oriented position for environmentalism is, thus, one that is fit for a “nature-focused virtue” (Mawere 2014:8).

Furthermore, arguing for the Indigenous African Epistemic Order as an alternative approach in the discourse of environmentalism, would serve as a means towards achieving continual development and sustenance of IKS in post-colonial Africa. Continuous sustenance of IKS is a welcomed development for intellectualism in Africa, as it serves a significant purpose in the quest for epistemic justice against the superimposition and suppression of African epistemology. This situation of epistemic injustice, as highlighted in the fifth chapter of this study, is a long-term and continual phenomenon. A phenomenon that accounts for the reduction of non-Western cultures as participating agents in the episteme of Western thoughts and Eurocentric history. Thus, in addition to being an intellectual platform for addressing environmental crisis/degradation, exploring the idea of AEO envisioned in this study stands as a call for epistemic justice against situations of dismembering the IKS of the Africans through different forms of epistemological injustices as shown in the fifth chapter.

Against the background of traditional Western intellectual thought as envisioned in traditional Western epistemology, the ensuing Enlightenment and scientific development examined in the third chapter of this study, the environmental philosophic orientation that is informed by AEO necessarily becomes a critique. In other words, this study also serves as the decolonial point of

deconstructing the Western modernistic division of nature and society, or what Mawere (2014:8) calls “unequal relationship between nature and culture”. The contribution of this research however goes beyond mere deconstructionism by attempting to reconstruct the conceptualisation of AEO to fit into the goal of decoloniality. The goal of decoloniality as envisioned by this research work is formed in light of Kwasi Wiredu’s idea of conceptual decolonisation (1995:22). One benefit, among others, of the Wireduan decolonial goal to this study, is that it not only helps to guard against the uncritical acceptance and inculcation of foreign culture and perspectives, but is also instructive on the carefulness of reductionism to cultural nationalism, nativism, or ethnocentrism. This view was exhaustively explored in the fifth chapter of this study and well captioned as the Methodic Crisis in African epistemology.

Getting one’s thought guided by the decolonial goal is essential in the face of multicultural and multidisciplinary approaches that contemporary issues now require. With the perennial nature of global challenges like poverty, war, gender-based violence, environmental degradation, psychological endemics, insurgency, political instability, the decolonial goal appears more imperative for African emancipation. For Latour, getting out of these myriads of global challenges requires striving for a common world that is devoid of nature/culture or modern/premodern distinction (2007:12). The effectual thought process or worldview for such a common world would be one that permits alternative, multiple and divergent worldviews. In this kind of reasoning, there is no room for hegemonic tendencies or superimposition of ideas, as each converging culture is recognised as a locus of existence on its own. Furthermore, the enormous stance of issues to grapple with makes the complementarity stance a desideratum in this epistemic meeting-point. As such, interrelations between divergent views, ideas, culture, and being – humans and nature – is

encouraged. Indeed, the minimal success recorded so far in the quest for peace, cohesion and environmental sustainability that had hitherto been sought on Western-centric paradigm makes African Environmental Epistemology an imperative. Again, the significance of the study to contemporary issues is revealing here.

By exploring the African Indigenous Epistemic Order for environmental philosophy, the study fits in through apt contribution to studies “promoting holistic sustainable productive system” (Mawere 2014:10). In this holistic sustainable productive system, dichotomising knowledge production and application is jettisoned; and a platform for interfacing various culture’s intellectual systems to enhance sustainable results, is attained. With this understanding, the study averred that the African Epistemic Order could be made applicable to contemporary life situations in Africa and beyond. In other words, in the view of the synthesis of the objective and subjective dimension of philosophy that AEO commits to, though the idea may be culturally specific in conceptualisation, it is however cross-boundary in application. This is because AEO reflects and applies to contemporary environmental challenges, as well as the models or approaches in addressing these challenges. It was, thus, argued in the fourth and sixth chapters that my study will be undermining the nature of environmental crises if it limits its focus on Africa alone. The cross-boundary applicability of AEO for environmentalism, thus, opens these frontiers of intellectual communications of values for sound environmental practices and conservation. It also allows for further research engagement where one may opine for a complementary approach between Indigenous African environmental thought-processes and foreign ones. Doing this will once again unveil the viability and praxis of the African epistemic system in environmental discourses as well as the sensibility of integrating diverse intellectual positions for sustainable results. The complementary reflection that AEO

unearths has been demonstrated in the sixth chapter to be germane in the quest for a panacea to contemporaneous challenges facing the world, and in particular, Africa.

Consequently, it should be noted that the position of this research work, especially in the area of applying indigenous intellectual heritage to contemporary issues, takes an integrative stance on the intellectual utility and viability of African indigenous knowledge systems. In other words, the study has elicited the complementary functionality of revivalist positions – which argues for a total reawakening and embrace of Africa’s indigenous past heritages. Notwithstanding the revivalist position, the study also adopts a critical approach to Africa’s indigenous past – which places a question mark on the relevance of some indigenous past to contemporary African states, thus, calling for an abandonment of such past heritage. For the former, the work of Kwame Gyekye (1997) resonates here. He argues for “cultural revivalism” (1997:233) as an imperative for addressing contemporary challenges, dilemmas, and paradoxes bedeviling the post-colonial African states. Thus, it is expected of contemporary African philosophers to look back into the culture, and revive those values, ideas, ethos, and principles that the advent of colonialism had hitherto fractured, destroyed, marginalised, and suppressed. On the latter position, the earlier view of Hountondji and other Universalists come to bear here. In their view, it is unnecessary to return to some aspects of the past for a panacea to contemporary challenges in Africa, especially if such past aspects are no longer relevant and useful to be able to grapple with urgent demands and peculiarities of modernisation which requires commensurate intellectual capabilities.

These two positions and other distinctive orientations have been shown in the fourth chapter, to be exclusive and mutually unaccommodating. Thus, I have argued alongside Chimakonam

(2015b:76) that it would amount to intellectual arrogance to reject the past, and close eyes to any benefits thereof, because of the alluringness of the present. In the same vein, it has been argued in this study that emerging realities of the contemporary world call for the inter-cultural exchange of ideas. This is because “a person who does not consult others is regarded as a sage only in a city of fools” (Oluwole 2015:55). However, caution was advised explicitly in the fifth chapter for indigenous scholars to be wary of what to take from other cultures. The act of not recognising the past and the uncritical importation of foreign views has thus been concluded to be unintelligent and an intellectual effort in futility to hold on to in the face of glaring and superior realities in the present time. The view here is that since culture is an ongoing phenomenon, that exists contemporaneously, it is wrong to either relegate its employment to the past, and wrong to reject its applicability for the present. Thus, the study recognises the viability and intellectual utility of Indigenous Knowledge Systems in addressing contemporary issues. However, it argues for a critical and analytic approach to explore African IKS before its employment. This approach along the Wireduan line of thought shown above also syncs with Ramose (2009:414), that African tradition and culture should serve as a fountain from which essential elements that are required for constructing authentic and emancipative paradigms, commensurate to present African historical conditions, will be extracted. In other words, in the attempt to effect epistemic emancipation of African IKS against all forms of Eurocentrism, effort must be made to ensure engaging culture or tradition rationally, critically, and systematically to elicit sound epistemological paradigms fit for contemporary African conditions. This approach informs the complementarity reflection of this research work. Exploring indigenous epistemic order for environmentalism, gives grounds for the integral participation of the local communities in the research process that seeks solutions to contemporary challenges. As noted earlier in the study, the environmental crisis in the world today

could be seen as a crisis of epistemology. This is because the chunk of anthropogenic environmental degradations ravaging the world today are consequences of the epistemic process that detaches the epistemic subject from the epistemic objects. Hence, AEO thus comes as a means to fashion out a framework of an epistemic process that recognises the complementarity stance of the subject and object of epistemology.

As noted by Preston (2003:2), “[t]hought, knowledge, and belief are not products of mind alone but expressions of its integration and participation with the physical world that lies around the mind”. Preston’s argument syncs with the Indigenous African epistemic order that is structured on the ontological fusion of the subject and the object of knowledge in this study. In this African epistemic worldview, the physical world holds a significant position in enabling knowledge claims. Hence the position in chapters four, five, and six of the study that in the complementarity framework of AEO, the detachment of an abstract subject from a concrete object is done away with, as the complementary relationship of the twain in achieving sustainable knowledge is attained. Achieving sustainable knowledge via the complementarity relationship of the subject and object of knowledge is essential to “bring human knowledge firmly back down to earth” (Preston 2003:2). That is to make epistemic processes touch on existential issues as structured by our lived experiences. On the imperativeness of such complementarity relations between the subject and object Bryant (2011:217) notes that: the world could be plunged into a future plagued with high level of crime and delinquency, sub-standard housing, unhealthy and polluted environments, if the crisis of epistemology is not addressed.

Thus, as a philosophical framework fit for contemporary environmental philosophy, addressing environmental crises from the standpoint of the African Epistemic Order bridges the gap between theory and praxis; and also seek the application of the envisioned African Epistemic order to challenges in Africa and other parts of the world. The viability of AEO to bridge the theory – gap lacunae was argued in the sixth chapter to rest of the idea that epistemology is both descriptive and prescriptive Scarfe (2008:98). Thus, AEO has the intellectual utility of questioning the present epistemic assumptions regarding the nature-human relationship, and at the same time to be able to prescribe the best means we ought to conceive such knowledge.

The intellectual advantage and contribution to knowledge by the epistemic order of an African orientation are also that, it would be able to create “sustainable knowledge” (Bryant 2011:15). This is the knowledge system that is required for meeting the contemporaneous and perennial challenges facing Africa. These challenges range from political instability, environmental degradation, economic meltdown, migration crises, educational deficiency, etc. Having a knowledge forming process that informs our pedagogy, ethics, and adjudications of right and wrongs will have a positive impact in ameliorating the environmental crisis as it would engender enlightened decisions in choosing a social-economic, political and cultural path for environmentally concerned activities. The indigenous African Epistemic Order would thus operate as a sustainable knowledge aimed at addressing existential African environmental challenges.

The complementarity framework is thus strengthened by the logical entailment that the unitary ontological conception of reality and by extension, nature, carries. It also, as argued above, makes the African epistemic order operational as sustainable knowledge forms for engaging perennial

environmental challenges. Although the envisioned African Epistemic Order could be employed to address other existential challenges, this study focus, even as a form of intellectual limitation of this work, on the environmental crisis bedeviling Africa and how or what role epistemology of African context could play in addressing these crises. This limitation however is overshadowed by the thought of the applicability of the AEO to other existential challenges in future planned research after this study. The crux of the practicability of AEO with regards to environmentalism is that people that are epistemically endowed with the knowledge of their environment, are ecologically placed in a vantage point of the nature-human transaction. This is because the epistemic embeddedness of their existential experiences would afford them the understanding and application of such knowledge towards the sustainable use of nature. A healthy concept of the human-nature relation is, thus, engendered from the epistemic unification of object and subject, nature and humans, body and mind. This epistemic understanding of nature has been argued in the sixth chapter to engenders the ‘Complementary Environmental Ethics’. We argued therein that the CEE is suitable for the sustenance of harmonic relationships between the varying independent and yet, interdependent beings/entities in the society. This is because it allows for each differing unit to hold to its individuality – which is authenticated by their interrelation with the other – and at the same time be complementary to one another.

Thus, AEO becomes a veritable platform for intergenerational ethical guidance and justice for interrogating the past, adjudicating for the present, and prescribing for future events as well as the future generations. With the epistemic knowledge of one’s place in society, humans are more equipped to live and act ethically in the relational existence. This is because the African epistemic order gives a robust capturing of the human person as a part of the two features of reality, whose

existence is authenticated and strengthened by its complementary relationship with other members of the environment. Thus, a natural motivation to protect, and positively live in a complementary manner with other independent members of the environment/society – humans, nonhumans; animate and inanimate objects – is sustained. Such motivation, this study concludes, will not only enlarge the conservatory attitude but also be able to engender practical and systematic policies for enhancing environmental justice for the present and future generation of the contemporary society.

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