

**ANTHROPOCENTRIC - ECOCENTRIC CONTROVERSY: FINDING A
COMMON GROUND**

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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DEDICATION

I dedicate this work to my beloved wife Loise Vaati and to my sons Benedict Mumo and Reinhard Mshindi. Their love, concern and encouragement gave me the impetus to continue with the study.

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ABBREVIATIONS AND ACRONYMS

B.C.E	:	Before Common Era
C.E	:	Common Era
GVA	:	Great Value Assumption
i.e.	:	id est (Translated into English as ‘that is’)
M.o.E	:	Ministry of Education
SVA	:	Sole Value Assumption
Vs	:	versus

DEFINITION OF TERMS

These are operational definitions as used in this thesis:

Animism: - This belief that the world and its contents are alive by the virtue of being inhabited by souls or spirits. The term is derived from Latin term ‘anima’ which means soul as the principle of life.

Bio-centrism: version of ecocentric moral theory which seeks to extend intrinsic value and therefore moral concern to all life. It includes what is considered inanimate in strictly biological sense.

Biotic Egalitarianism: this is a moral principle according to which all natural entities should be given equal treatment in the event of competing claims between the needs of human and nonhuman beings .It is mainly held by ecocentrists.

Deep Ecology: a moral theory in environmental ethics which attempts to extend moral concern to the whole world and all its contents, both animate and inanimate beings, individuals as well as the wholes.

Eco-centrism: stand for theories of environmental ethics that seeks to extend intrinsic Value to all nonhuman beings and their classes. It is an umbrella term for all nonanthropocentric moral theories which seek to extend moral concern to all life. It includes deep ecology, bio-centrism and animism

Environmental /ecological problem: anthropogenically induced anomaly in the functioning of natural system, solvable through human intervention. It is opposed to naturally occurring phenomena

Environmental ethics: - philosophical discipline concerned with the study of moral relationship of human beings to, and also the value and moral status of, the environment and its nonhuman contents.

Environmentalism: - a concern that the environment should be protected particularly

Environmentalist: - a person or a group of people concerned with protection and preservation of natural environment and resources through changes in public policy or individual behavior from harmful aspect of human activities.

Indigenous worldviews: - the basic beliefs found among indigenous cultures which are not influenced by Judeo-Christianity and modern western science and technology.

Instrumental Value: the worthiness of something as a means to further some other ends. It is the main attitude towards nonhuman nature in anthropocentric moral theory. Nonhuman exists solely as the means to human ends/welfare

New environmentalism/ contemporary environmentalism: - both terms refer to a 20th century movement seeking to limit or even to halt human activities destructive to natural environment. Its newness consists in the fact that it is wide in scope both in geographical coverage (global) and the range of its activities. This is contrasted with the previous environmental movements which were regional and addressed quite few issues.

Preferentialism: the moral principle according to which human beings should be given priority in the event of competing claims between the needs of human and nonhuman. It is mainly held by anthropocentrists.

Social critique: - an approach to environmental problems that conceives such problems as components of large social and political issues rather than moral problems.

Strong Anthropocentrism: - a theory of environmental ethics that considers human beings as the only intrinsically valuable and morally considerable entities. It interprets the basis of value in terms of human concern/interests.

Strong ecocentrism: a version of ecocentric moral theory according to which nonhuman beings have intrinsic value independent of consciousness of a valuing subject.

Vital population: the number of individuals of any given species sufficient enough to enable it (the species) to fulfill its special duty in the ecosystem most efficiently and effectively,

Weak Anthropocentrism: a version of human-centered ethics which extends intrinsic value to some nonhuman beings. This value is however lesser than that of man. Like Strong Anthropocentrism it interprets the basis of value in terms of human concern/interests.

Weak ecocentrism: a version of ecocentric moral theory according to which the intrinsic value nonhuman beings have intrinsic value independent of consciousness of a valuing subject.

Worldview: - a system of beliefs expressive of our general understanding of ourselves and the world. It includes both basic (primary) and secondary beliefs. The former are beliefs upon which our lives as well as secondary beliefs are based. They include metaphysical, epistemological and ethical beliefs. Secondary beliefs are those upon which the various aspects of our social life are based. They include social and political philosophy, to mention a few.

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ABSTRACT

This study is an attempt to resolve anthropocentric – ecocentric controversy over whether a new, nonanthropocentric, ethic as opposed to the dominant anthropocentric one is necessary. Ultimately, anthropocentrists and ecocentrists differ on whether intrinsic value, a prerequisite for moral concern, can be extended to nonhuman beings. Opposed to the quest for new ethic, anthropocentrists limit intrinsic value to human beings. They hold to preferential treatment of man in the event of competing claims between human and nonhuman beings' needs. On their part, ecocentrists seek to extend intrinsic value to nonhuman beings thereby supporting nonanthropocentrism. They hold to the principle of biotic egalitarianism. The conflict is understood as dialectical conflict with anthropocentrism and egocentrism as thesis and antithesis respectively moving towards an objective common moral ground (synthesis). The resolution to the controversy presupposes a critical analysis of both the notion of intrinsic value and the metaphysical assumption of both anthropocentric and ecocentric moral theories. Upon analysis, it is discovered that neither the concept of intrinsic value nor the metaphysical assumptions of either anthropocentric or ecocentric moral theory fully meets the objective criteria for acceptability of philosophical theories. The concept of intrinsic value is negatively and subjective defined and identified respectively. As such, it does not provide objective criteria for determining the intrinsically valuable entities. The inadequacy of the metaphysical assumptions of anthropocentric and ecocentric moral theory implies indefensibility of either preferential treatment of man or biotic egalitarianism respectively. Upon further analysis however, both theories are found to share a lot in common. It is demonstrated that nature, man included, has both intrinsic value and instrumental value. Between the two values however, instrumental value is most objective and practical. It is modified in a way that it motivates wider preservation of environment. Lastly, a pragmaecocentric moral theory is suggested as an anthropocentric – ecocentric synthesis is proposed. Adherence to environmental justice is emphasized as way to resolve the conflicts between human and nonhuman needs.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Environmental ethics as a branch of professional philosophy started in late 1970s and early 1980s with the debate over whether a new ethics, non-anthropocentric, was necessary (Dallmayr: 2001, 11). This followed from the need for a philosophical foundation upon which the aims, policies and practices of new environmentalism in its various forms, could be theorized and legitimated (Kortenkamp: 2001, 1-2; Hargove: 1992). The new environmentalism aimed at limiting or even halting human activities responsible for contemporary environmental problems (Heidi: 2008,219 – 226; Easton: 2004, xix; Carson: 1962). This study is an attempt to resolve the controversial quest for new ethics.

Eventually, the new environmentalism had grown wide in size and scope. Environmentalist had broader preservation goals which went beyond narrow human needs (Norton: 1992; Shrader-Frechette: 2003; Carson: 1962). Having read Aldo Leopold's essay, "The Land Ethic,"(1949), many of them (environmentalists) were convinced that the foundations of environmental problems were philosophical (Hargrove: 1992; Leopold: 1949, 209-10). Precisely, it was understood that the way people deal with environmental problems largely depends on their perception of their relationship with the nonhuman nature, either as merely means to human ends or subjects with their own rights (Kortenkamp: 2001, 2).

In order to justify their activities and goals in a climate dominated by anthropocentric instrumentalism, environmentalists invoked 'rights' of nonhuman beings (Hargove: 1992). Stone (1972: 73-87) for instance proposed that trees and other natural objects should have at least the same standing in law as corporations. Singer (1975) championed Rights for animals.

In 1975, a U.S.-based theologian and environmental philosopher, Holmes Rolston III argued that species protection was a moral duty (Stanford: online). In fact, the talk of the rights of nonhuman beings was so common among environmentalists by the mid-seventies that John Passmore considered it to be the basic preservationist position (Passmore: 1974, 115-17).

The environmentalists' wide concerns and rights arguments however, required a theoretical justification. Nash (1989), reports the rights for nature were among the first subjects to be debated in detail when professional environmental ethics came into its own in the early 1980s. Meanwhile, many environmentalist and philosophers had become dissatisfied by anthropocentric theory. This owed to its narrow instrumentalism and its contribution to the very environmental problems the new environmentalism sought to address (Shrader-Frechette: 2003; Norton: 1992; Lynn: 1967). Against this backdrop of dissatisfaction, an Australian philosopher Richard Routley raises the question whether new ethics is necessary (Stanford: online; Dallmayr: 2001).

Implicit in Routley's question is a call to extend moral concern to all nonhuman beings. This is comprehensible given Aldo Leopold's 'A Sand County Almanac (1949), from which he (Routley) draws much of his inspiration. Leopold (1949: 224-5) advocates for the adoption of a land ethic". This ethic seeks to extend moral concern to cover the natural environment and its nonhuman as a justification for the preservation of integrity, stability and beauty of the biosphere (ibid). This extension of moral concern presupposes intrinsic value of nonhuman beings. Intrinsic value has been taken to be the grounds for moral considerability and for human obligations to non-human nature (Hargrove: 1992; Cheney: 1992).

The quest for a new ethics has enlisted diverse responses from philosophers. While some, notably anthropocentrists, are opposed to the idea, some other philosophers agree with the suggestion. Consequently, various moral theories have ensued: anthropocentric, zoocentric/pathocentric, biocentric and ecocentric theories. Generally, these theories are categorized according to their proponents' understanding of the boundaries of moral standing or rather moral considerability (Njeru: 1997, 13). A critical analysis however, reveals two main antagonistic theories at the extremes: anthropocentric and ecocentric moral theories. The rest of theories, tend towards either of these two extremes.

Opposed to the idea of new ethics, anthropocentrists limited intrinsic value solely (SVA) or greatly to GVA to human beings (Vaughn: 2008, 340). Representing the SVA position, Passmore (1974, 111) deplores the call for new ethics, arguing that intrinsic value solely belongs to human beings. According to this strong nonhuman beings only have instrumental value in that their value consists in their usefulness to human beings (Baxter in Vaughn: 2008; Stanford: online; Aristotle: Politics, Bk. 1, Ch. 8). In other words, environmental values are merely human preferences or that one ought to put human considerations ahead of those of nature and environment (Shrader-Frechette: 2003)

Weak anthropocentrism however, extend intrinsic value to some nonhuman beings, though in lesser degree compared to human beings. As such they subscribe to GVA. This position is held by such philosophers as Attfield (1994) and Hargove (1992). According to them however, the intrinsic value of nonhuman beings is dependent on human consciousness (Hargove: 1992). Both strong and weak anthropocentrists advocate for preferential treatment of human beings in that human needs are given priority in the case of competing claims.

According to Passmore (1974), western anthropocentric ethic was adequate basis for the concern of solving environmental problems, provided people recognized that what harms environment also harms humans.

On the other hand, eco-centrists such as Taylor (1986), Naess (1989), argue for massive transformation of ethics in the sense of extending moral boundaries to cover natural environment and its nonhuman content. According to them, this is a prerequisite for addressing contemporary environmental problems (Shrader-Frechette: 2003). Eco-centrists generally agree that a satisfactory environmental ethic can only be grounded on intrinsic value in nature (Cheney: 1992). For ecocentrists, such environmental value is not merely a product of human preferences (Hargove: 1982; Cheney: 1992)

The theoretical controversy has persisted to a point of giving up the theoretical pursuit on part of some philosophers. These philosophers adopt alternative approaches to environmental problems which do not subscribe to anthropocentrism vs. non-anthropocentrism debate (Zimmerman: 2001, 5). As such, they eschew meta-ethical questions and their metaphysical foundations (Shrader-Frechette: 2003). Norton (1982) for instance turns to pragmatic resolution of anthropocentric - eco-centric antagonism basing the rationale for their position on practical consequences. The debate has led to a stalemate in environmental ethics (Kortenkamp: 2001, 1; Thompson: 1983). This study is a contribution towards a resolution of anthropocentric-ecocentric theoretical antagonism.

Analytic philosophers have pointed out that most of difficulties and disagreements in philosophy result from linguistic confusions (Miller: 1984, 13, Hamlyn: 1967). Once analysis is done, according to these philosophers, many of traditional problems of philosophy would

turn out to be pseudo-problems; problems not of reality but of language (Miller: 1984, 13). In her response to anthropocentric – ecocentric controversy, Thompson (1983) observes that the notion of intrinsic value has long been taken for granted by both anthropocentrists and ecocentrists. According to her, the concept is among several moral categories which have been used as if they do not change.

In order to determine the intrinsically and instrumentally valuable entities Thompson (1983) suggests a meta analysis of such values on the basis of worldviews and scientific discoveries as sources of moral attitudes. She envisions possible outcomes of such analysis. First; the once intrinsically valuable entities may turn out to be instrumentally valuable and vice-versa. Secondly, the notion of intrinsic value may be unnecessary for effective environmentalism. While she does not carry out such a meta-analysis, her views are an invaluable hint on how anthropocentric – ecocentric conflict should be resolved. This is the direction taken by this study.

Constitutive of a worldview are such basic beliefs as metaphysics, epistemology and moral (Wall: 2011, 5 – 8). The three beliefs are related in such a way that a change in any of them implies a change in the rest (ibid). While ethics is founded on metaphysics epistemological beliefs have much impact on the latter (Bernstein: 2008, 8). Our moral beliefs and attitudes towards nature are founded on metaphysics or rather rational cosmology. Worldviews and their constitutive beliefs are dynamic in that they change. New scientific discoveries and experiences are major catalysts of this change. Lawhead (2009, 309 – 313), Frank (1951. 58), and Harold (1964) have demonstrated this kind of interplay.

Ecocentrists criticize Judeo-Christianity for promoting anthropocentrism (Taylor: 1986; Vaughn: 2008, 394). Historian white Lynn (1967) also traces the origin of contemporary ecological crisis on Judeo-Christian metaphysics. The respect for nature and eventual remedy to our ecological crisis, according to them, presupposes abandonment of such a metaphysics and its consequent anthropocentric moral theory (Vaughn: 2008, 394; Taylor: 1986; Lynn (1967). According to Taylor (1986) and Naess (1989), such abandonment presupposes people's respect for especially the findings of the science of ecology. According to them, this scientific data offers objective evidence that there is nothing special with human beings which warrants their preferential treatment (ibid).

Implicit in the critics of anthropocentrism is a suggestion to turn to scientifically informed metaphysics (especially metaphysics informed by the science of ecology) as well as to metaphysical beliefs embedded in pre-ecological worldviews. The biocentric theory of Taylor (1986) and the deep ecology of Naess (1989) as constituent parts of ecocentrism are explicitly founded on ecologically informed metaphysics. A turn into pre-ecological and indigenous cosmologies is implicit in white Lynn's criticism of Christianity's destruction of indigenous worldviews and animistic beliefs therein. With reference to American indigenous worldviews, Callicott (1993) is explicitly points at the superiority of indigenous worldviews as pertains to provision of appropriate environmental ethics.

Both anthropocentrists and ecocentrists accuse one another of irrationality. Passmore (1974, 173) for instance terms the call for a new ethics as 'mystical rubbish'. He argues that people, especially the heirs the west, cannot afford to go back to what they painfully shook off. On their part, ecocentrists accuse anthropocentrists of irrationality for holding to beliefs which have been scientifically challenged (Vaughn: 2008, 394). The value of empirical data in

applied ethics cannot be overemphasized: it gives content moral principles as well as guard people against blind adoption of the moral status quo (Lafollette: 2003, 6; Moore & Bruder: 2005, 363).

However, it is not easy to pass immediate judgment on which position, anthropocentric or ecocentric is correct or false given that even anthropocentrists employ the same scientific data in defense of their position (Vaughn: 2008, 370). Nevertheless, the foregoing discussion is quite informative that some of anthropocentric and ecocentric moral attitudes towards might have been formed in a climate of little scientific understanding of nature. In addition to analysis of the concept of intrinsic value, this study critically examines the metaphysical foundations of anthropocentric and ecocentric moral theories to determine the degree of their adequacy. They must at least pass the compatibility test.

Given the dynamic nature of worldviews and catalytic role of the incremental nature of human knowledge it may not be sufficient to be satisfied with the application of intrinsic or instrumental value to the 'traditional entities'. While our moral attitudes towards nature may be consistent with 'traditional moral principles', they can only be accepted if there is no good reason to doubt such traditional moral principles (Vaughn: 2008, 70). This implies a further analysis of the metaphysical foundations of such moral principles.

In the light of the foregoing discussion, this study seeks to resolve anthropocentric – ecocentric controversy through impartial analysis of its conceptual foundations namely: notion of intrinsic value and the metaphysical foundations of each theory. Precisely, the study seeks to understand (i) the sense in which the notion of intrinsic value is used (ii) whether the definition and characterization of the value provides objective criteria for determining

intrinsically valuable entities, and (iii) whether there are exclusively human distinctive qualities which warrant preferential treatment of man as opposed to similarities which warrant biotic egalitarianism. Such a critical analysis is done on the basis of objective criteria for acceptability of philosophical theories.

Lawhead (2009, 38 – 40), Taylor (1986: 159 – 160) and Vaughn (2008, 70 – 71) have outlined some of the most important criteria for evaluating philosophical theories. They include: (i) conceptual clarity of terms or concepts in which the philosophy is exposed; (ii) Internal consistency /rational coherence of all elements making up a worldview; (iii) comprehensive / complete consideration of all relevant data; (iv) compatibility/external consistency with most current scientific data and theories; (v) having the support of compelling arguments or rather psychological acceptability; (vi) Reliability test as the capacity to solve problems and (vii) Consistency with considered moral judgments and moral experience and background.

1.2 Statement of the Problem

The preceding background information shows the persistence of anthropocentric- ecocentric theoretical controversy. Anthropocentrists and ecocentrists disagree on whether a new ethic, as opposed to the dominant anthropocentric one, is necessary. However, they differ ultimately on whether intrinsic value, a prerequisite for moral considerability, can be extended to nonhuman beings. Opposed to the idea of new ethics, anthropocentrists limit intrinsic value solely or greatly to human beings. On their part, eco-centrists advocate for new ethics arguing that all natural entities have intrinsic value and therefore morally considerable. This controversy impedes contemporary environmentalism both theoretically and practically. As such a resolution is urgently needed.

There are two possible causes of this conflict namely: ambiguity of the concept of intrinsic value as the central concept in the controversy and or discrepancy in metaphysical assumptions of each moral theory. A critical analysis would aid in establishing (i) whether the concept of intrinsic value, as employed in both theories, provides objective criteria upon which intrinsically valuable entities can be identified, and (ii) the degree of soundness of the metaphysical assumptions of both anthropocentric and ecocentric moral theories as to warrant preferential treatment of man or biotic egalitarianism respectively. This study undertakes this critical analysis, the end towards which no adequate effort has been made.

Precisely, the study seeks a resolution to anthropocentric - ecocentric controversy through critical analysis of the concept of intrinsic value and the metaphysical assumptions of each theory upon the objective criteria for acceptability of philosophical theories. On the basis of the results of this analysis, attempt is made to work out a rationally justified anthropocentric – ecocentric common moral ground.

1.3 Objectives of the Study

General objective

The general objective of the study is to settle the anthropocentric – ecocentric theoretical controversy through critical assessment of its conceptual foundations namely intrinsic value and metaphysical assumptions of each theory.

Specific objectives of the study

The above general objective is achieved through the following specific objectives:

1. To establish whether the sense in which the notion of intrinsic value is used can provide objective criteria for determining intrinsically valuable entities;

2. To determine the adequacy of metaphysical foundations of both anthropocentric and ecocentric moral theories
3. To formulate common moral ground in which anthropocentric and ecocentric moral theories are reconciled.

1.4 Research questions

The study is guided by the following questions:

1. Does the way the concept of intrinsic value used provide objective criteria for arbitrating anthropocentric – ecocentric controversy?
2. Do the metaphysical assumptions of either anthropocentric and ecocentric moral theories adequately meet the objective criteria for acceptability of philosophical theories?
3. Do anthropocentric and ecocentric moral theories share anything in common or they are totally incompatible?

1.5 Research assumptions

The study is carried out on the following assumptions:

1. The concept of intrinsic value is either ambiguously used or subjectively defined and identified.
2. Neither the metaphysical assumptions of anthropocentric moral theory nor those of ecocentric moral theory fully meet the objective test for adequacy of philosophical theories

3. Anthropocentric and ecocentric moral theories have some common elements which are rationally justified.

1.6 Justification and significance of study

There are several reasons why this study is justified and important.

First: The anthropocentric – ecocentric controversy has persisted for several decades since the beginning of environmental ethics as a branch of professional philosophy. The solution to this theoretical conflict has proved itself so difficult that it has prompted some philosophers to abandon the theoretical pursuit (Zimmerman: 2013; Shrader-Frechette: 2003). The efforts to resolve this controversy have been characterized by partisanship. Both anthropocentrists and eco-centrists dwell much on defending their respective moral views while discrediting opposing ones (Zimmerman: 2013). No adequate effort has been made to evaluate the conceptual foundations of the conflict impartially and comprehensively.

Second: The study is a respond to the calls by environmentalists, policy makers and the general public in different parts of the world for a revisit into the issue of intrinsic value of nature. Probably, this call owes to the failure of sustainable development to address environmental problems. Despite all the emphasis on this development model and pragmatism of Norton, (1992), environmental problems abound. These problems include: biodiversity extinction, global warming, air and water pollution, wilderness destruction, water scarcity, massive soil erosion, increased human population and new diseases (Kortenkamp: 2001, 1; Lester: 2005; Heidi: 2008. 219).

Third: Persistency of anthropocentric – ecocentric controversy in environmental ethics discourse has denied contemporary environmentalism a common theoretical foundation upon which its practices, policies and aims could be theorized, guided and legitimated (Kortenkamp:2001, 2). This has led to different takings in environmental policies, thus impeding environmentalism (Attfield: 1994, 12, 240; Boss: 2008, 734). The anthropocentric - ecocentrism common moral ground attempted in this study is an important contribution towards the much needed objective theoretical foundation for contemporary environmentalism. It also promotes efforts of globalization of environmental ethics (Shrader-Frechette: 2003).

Fifth: Once published, the study will be an important addition to the existing literature on environmental philosophy. This way, it would be an important source for students of environmental philosophy and subsequent researchers.

1.7 Scope and limitations of the study

In its analysis of the conceptual foundations of anthropocentric – ecocentric controversy, this study relies on data obtained from library. As such the information necessary for meeting the objectives of this study is gathered from texts and internet sources. By implication, only the recorded views on intrinsic value as well metaphysical beliefs imbedded in recorded indigenous worldviews are considered. A variety of textbooks and internet sources are consulted for the purposes of collaboration, accuracy and precision in interpretation of relevant data. The study ensures that information sufficient enough to necessitate general conclusions made is collected.

The study only evaluates metaphysical foundations of the two moral theories at extreme opposites: anthropocentrism and ecocentrism. As previously indicated in this section, other theories of environmental ethics lean towards either of the two extremes. It is assumed that the resolution of anthropocentric – ecocentric controversy implies a resolution of any conflict among the intermediate theories.

While indigenous worldviews are numerous, this study focuses only on recorded indigenous worldviews and writings of ecocentrists for metaphysical assumptions of ecocentrism. The assumption is that the indigenous worldviews, though numerous, have a lot in common. However, effort is made to reconstruct a representative summary of indigenous metaphysics by considering a variety of indigenous worldviews spread all over the world where such Metaphysical beliefs are embedded as part of basic beliefs of worldviews. The study also relies mainly on Judeo-Christian cosmology as metaphysical foundations of anthropocentrism.

1.8 LITERATURE REVIEW, THEORETICAL AND CONCEPTUAL FRAMEWORK

1.8.1 Introduction

This section explores the philosophers' response to the anthropocentric – ecocentric controversy in environmental ethics discourse. Particularly, it explores philosophers' response to the notion of intrinsic value and metaphysical assumptions, as the conceptual foundations of the controversy. In the process of literature review, knowledge gaps are identified and effort made to show how the study intends to fill them in subsequent chapters. Following from the literature review, a theoretical and conceptual framework which guides the study in subsequent chapters is described.

1.8.2 Literature Review

Philosophers have variously and to varied degree attempted to resolve the anthropocentric – eco-centric theoretical controversy. However, no adequate effort has been made to resolve the conflict through critical analysis of the controversy’s conceptual foundations namely: the notion of intrinsic value and metaphysical foundations of both theories in conflict. Nevertheless the exploration of their efforts forms the background of this study.

Analytic philosophers have observed that most of disagreements, difficulties and dead ends in philosophy result from linguistic confusions. Precisely, such disagreements emanate the attempt to answer questions without first discovering precisely the question one desires to answer (Miller: 1984, 13; Hamlyn: 1967, 97 – 103). This view seems correct given that the first test which any acceptable philosophy must pass is conceptual clarity (Lawhead: 2009, 38). Once analysis is done, according to analytic philosophers, it would be discovered that the problems in philosophy are pseudo-problems (ibid).

Thomson (1983) seems to agree with the foregoing discussion in relation to anthropocentric – ecocentric controversy. She attributes the controversy to the failure by ethicists to analyze its conceptual foundations. Particularly, she blames both anthropocentrists and ecocentrists for taking the notion of intrinsic value for granted. In her observation, intrinsic value is one among the categories which had been applied as if they do not change (ibid). She points at possible outcomes once the concept of intrinsic value I critically analyzed (i) the once initially intrinsically valuable entities may turn out to be instrumentally valuable and vice versa or have both values, and (ii) the notion of intrinsic value may be unnecessary in the endeavor to preserve environment..

Determination of intrinsically or instrumentally valuable entities, according to Thompson (1983), presupposes meta analysis of intrinsic and instrumental values on basis of worldviews and scientific discoveries. The latter are some of the sources of moral attitudes. By implication, Thompson (1983) points at the interplay of the three basis beliefs constitutive of a worldview: moral, metaphysical and epistemological. The three beliefs are related in such a way that a change in any of them implies a change in the others. Scientific discoveries improve people's knowledge of the world. This in turn improves their general conception of the world which helps in determining man's moral relation with the rest of the nature.

Implicit in the foregoing exposition is the dynamic nature of worldview and its constitutive basic beliefs: they change with new discoveries and experiences. Frank (1951, 58) has demonstrated this fact. Lawhead (2009, 309 - 313) also shows the impact of scientific discoveries on metaphysics. Hoppe (1964, 12) explains conflicts in moral beliefs in terms of discrepancies in worldviews. Such conflicts occur as some people try to apply to the present world the moral principle which though practical in ancient world cannot work in the contemporary world characterized by new experiences (ibid).

Arising from the foregoing exposition are two tasks namely: to clarify the meaning of intrinsic and determine whether there are qualities which justify intrinsic or instrumental valuation of nature. Philosophers have not put adequate effort this task as it relates to environmental ethics. Despite pointing at the need a meta analysis, Thompson (1983) does not perform either of these tasks. Norton (1992) has spend a considerable amount of time in the attempt to understand how intrinsic values can be located in nature. However, he eschews the metaphysical beliefs which would otherwise reveal the qualities which make an entity intrinsically valuable.

Berry (1993, 247) states explicitly that anthropocentric – eco-centric moral controversy emanates from divergence in people’s conception of universe and place of man in it. In his attempt to resolve anthropocentric – ecocentric antagonism, he creates an aphorism that man both part and apart from nature. However, he does not provide argument for his position. Additionally, it he does not make it unclear whether humans and nonhuman entities are both intrinsically and instrumentally valuable. This study seeks to overcome Berry’s weakness by looking at whether there can be rational grounds for such a maxim and moral implications therein.

In his recent unpublished writings, John Passmore expresses the need for revision in the areas of ethics and metaphysics (Attfield: 1994, 23) .this is notwithstanding his overall published anthropocentric position expressed in his book ‘Man’s responsibility to nature’ (1974). Boss (2008, 10) observes that the metaphysical assumptions of anthropocentrism have been taken for granted. He calls for examination of the assumptions underlying anthropocentric moral theory in order to ascertain whether they are justifiable or they embody false views. He seems to fault the widespread identification of person with human beings. Personhood is pre-requisite for intrinsic value used in defining a moral community (ibid, 10).

The foregoing argument points at the shortcomings of anthropocentrism. Zimmerman (2013, 13) is dissatisfied with anthropocentrism. However, no one has systematically and comprehensively examined anthropocentrism. At best, Passmore (1993) applauds ecocentrists’ acknowledgment of empirical scientific facts. His expression for the need of revision of ethics and metaphysics and his praise for scientific elements in ecocentrism are indicative of new discoveries. Yet, he does not show the final outlook of anthropocentric

position after those new discoveries are critically incorporated into the existing anthropocentric outlook. Does it come closer to ecocentrism?

Given numerous scientific discoveries, especially in animal psychology in the recent times, it is possible that in defining the concept 'person' for instance, some important data was unavailable. That way, the concept may not be compatible with some empirical data. Given the cultural biasness in the definition of the concept implied in Boss (2008, 10), there could be selective use of data. By implication, the metaphysical assumptions of anthropocentrism not have met the criteria of external consistency, comprehensiveness and or internal consistency.

Eco-centrists have attempted to defend their theory on basis of its reliability in antiquity. Comparing aboriginal American cultural worldviews and those among western Europeans, Callicott (1993) argued that the former contains and are supportive of environmental ethical ideal. According to him, this ideal is superior to any implicit in dominant western traditions as far as promoting balanced relationship between human and nonhuman beings is concerned. On the contrary, the dominant western European civilization encourages human alienation from natural environment and an exploitative practical relationship with it. Implicit in this argument is that the eco-centric moral theory imbedded in indigenous worldviews can be an adequate foundation of new environmentalism.

The claim that the moral attitudes embedded in indigenous worldviews promoted preservationist and conservationist behavior in antiquity is less indubitable. It is not rare to hear people, especially the elderly, expressing nostalgia for such attitudes. However there are two shortcomings with eco-centrists confidence in indigenous worldviews. First, they take it for granted that the moral attitudes in indigenous worldviews can work in the contemporary world. That is notwithstanding that the attempt to apply them in contemporary might have

contributed to the conflict at hand. As Hoppe (1964, 15) observes, conflicts might arise as primitive survivals apply to the present ancient solutions which though they worked in the past, they are outdated relative to different conditions in modern world. As such, an intelligent appraisal of moral attitudes in indigenous worldviews is necessary.

The second deficiency of eco-centrists is that they seem to promote ethical relativism; the view that morality varies from time to time, and from person to person (Boss: 2008, 8). Njeru (1997) for instance opined that the moral attitudes in African indigenous cultures should be adopted as basis of environmental ethics in African context. By implication the soundness of any moral theory was relative to the context where it was applied. As Zimmerman (2013, 13) argues eco-centrists would not be justified to criticize anthropocentrism. But can there be objective environmental moral theory? This study is partly guided by the belief that that an objective environmental ethics is achievable given commitment to a common criteria for evaluation, the objective criteria.

Cognizant of the compatibility test, eco-centrists invoke the new scientific developments to justify their moral principle, 'biotic egalitarianism'. On basis of ecological science and evolutionary theory, Taylor (1986) for instance defends the doctrine of impartiality. On his part, Naess (1989) attempts an ecologically informed ontology for environmental ethics. Eco-centrists also cite reliability of ecocentrism in antiquity. Ecocentrists are also bringing the metaphysical beliefs embedded in indigenous worldviews into tune with the most current scientific data (Snyder: 1993).

Despite the persuasive support of a scientific worldview however, eco-centrists have not succeed in establishing that anthropocentrism is unsupportable or undesirable (Thompson: 1983). Surprisingly, anthropocentrists have employed the same scientific data used by

ecocentrists to vindicate their (anthropocentrists') ethical views (Vaughn: 2008). Some anthropocentrists for instance argue that in so far as humankind embodied a new stage in terrestrial evolutions, humans cannot be conceived as merely 'part' of nature (Zimmerman: 2013, 6). Given their position as the apogee of evolution they (humans) are special and superior (Vaughn: 2008, 298). Likewise, humans' exploitation of nature is also supported by science of ecology (Passmore: 1974, 173).

The above contradictory expectation, combined with the difficulty to locate intrinsic value, has enlisted pessimistic attitude among some philosophers towards the possibility of a theoretical resolution of anthropocentric - eco-centric antagonism. Consequently, some have opted out of the debate and instead supported alternative approaches to environmental problems which eschew meta ethical and metaphysical claims characteristic of anthropocentrism - eco-centrism theoretical debate (Zimmerman: 2013, 5; Shrader-Frechette: 2003). Norton (1992) for example has turned to pragmatic approaches, seeking to resolve the conflict from practical perspective.

While the anthropocentric – ecocentric conflict ensues even after the employment of scientific data, there is an indication of a move towards a common ground. Passmore (1993) acknowledges the need for revision of ethics and metaphysics. He also criticizes ecocentrism positively by applauding their recognition of scientific facts. This indicates anthropocentrists openness and respect to empirical scientific data. There is at least agreement between them on the need to base their ethical attitudes and principles on objective scientific data. The major problem is that both of them make opposing conclusions effect after they appeal to a common scientific data.

It is a common experience that when there is a conflict between two parties over a given either both or one party in the conflict does not make comprehensive use of relevant information. This may result from ignorance of such information or selective use of information to retain status quo. The question is: 'is it possible that both the anthropocentrists and ecocentrist or either of the party do not make comprehensive use of relevant data and why? Can there be a common moral ground between the two theories once all available information is considered? Such like questions are answered through critical examination of metaphysical assumptions of the two moral theories in the conflict.

Dissatisfied with philosophers' abandonment of meta-ethical issues and pragmatists' conversion of all value into instrumental value, Hargove (1992) and Attfield (1994) propose a weak anthropocentric theory as a resolution to anthropocentric – ecocentric antagonism. On his part Hargove (1992) argues that some nonhuman beings have anthropocentric intrinsic value. He argues that this position is closer to the weak independent values hypothesis (attributed inherent value theory) presented by J. Baird Callicott (Norton: 1992). This is the argument that nature has value that is independent of the values and goals of human valuers but nevertheless attributed by conscious valuers, either human or otherwise.

The similarity between Hargove (1992) and Callicott (Norton: 1992) notwithstanding, there is a glaring difference. While the former attributes intrinsic value to just some nonhuman beings, the latter attributes intrinsic value to entire nature (Hargove: 1992; Norton: 1992). Equally, they differ in that while Hargove (1992) limits valuing subjects to man, J. Baird Callicott indicates that there are nonhuman valuers (ibid). Just like Callicott (Norton: 1992) Hargove (1992) does not make clear the necessary conditions for intrinsic value. In fact he avoids such metaphysical concerns deliberately (ibid).

Attfield (1994) expresses desirability of intrinsic value arguing that lack of such a value impoverishes ethics. He is optimistic that an objective resolution of anthropocentric - ecocentric controversy is achievable. According to him such a resolution cannot be achieved by a single worldview. Instead he envisages an amalgamation of diverse worldviews as resolution to the controversy. In fact Attfield (1994) applauds Naess' deep ecology (1989) for recognition of multiple worldviews.

Attfield (1994) however, not only fails to work out the merger he envisages but also fails to reveal the methodology by which conflicting views would converge in an objective resolution. His determination to uphold moral attitudes held by people from diverse cultural background in the name of effectiveness of the resultant environmental ethics is problematic. He tries to appease each people in the controversy without prior critical assessment of their cherished moral attitudes. This provokes doubts over his commitment to the principle of rational acceptability. It is also not clear how he reconciles relativism implicit in this argument with the need for objective perspective.

At his best, Attfield (1994) proposes a weak anthropocentric theory which adopts GVA. This is the position that while some nonhuman beings have intrinsic value, human beings have a great measure of it. This way he advocates for preferential treatment of human beings. This theory faces the same criticism as does the weak anthropocentrism of Hargrove (1992). He is unclear on prerequisite conditions for intrinsic value on the part of nonhuman beings. Attributing great value to human beings basis of their unique qualities makes the theory vulnerable to the same accusations of arbitrariness, prejudice and biasness labeled against anthropocentrists by ecocentrists (Vaughn: 2008, 390; Taylor: 1986).

In the view of this study, Attfield (1994) takes for granted the amalgamation between anthropocentrism and eco-centrism as a way to resolve anthropocentric – eco-centric controversy. Such a proposal seems to be based on two assumptions: (i) neither of the two moral theories is solely adequate as the basis for contemporary environmentalism, and (ii) both theories contain plausible elements which can be synthesized into a new, higher, harmonized and objective moral theory. However, this presupposes a critical evaluation of both anthropocentrism and eco-centrism to determine the degree of their soundness. Attfield (1994) does not show this to be the case.

While the same assumption is retained in this work, it follows from the conception of worldview, and the basic beliefs thereof, as dynamic catalyzed by new discoveries and experience. The hope that there are some common elements in both anthropocentric and ecocentric theory is based first and foremost on the fact that both seem to be informed to a certain degree by objective empirical data. That there are areas of incompatibility is based on pre-scientific origin of some of beliefs constitutive of the two theories. Such beliefs are relative to the spatiotemporal milieu of a given people. However, their proponents can abandon them in light of new objective knowledge, thereby, narrowing the anthropocentric – ecocentric divergence.

In recent past, Zimmerman (2013) has attempted an objective judgment on anthropocentric – eco-centric debate. He agrees with the import of criticizing modernity, and by implication anthropocentrism. However, he cautions against replacing anthropocentrism with naïve biocentrism (ibid, 13). His views have three implications: (i) neither anthropocentrism nor eco-centrism is adequate enough as theoretical basis for contemporary environmentalism, (ii) both moral theories have some important strong points, and (iii) none of the two theories

should be overlooked in the attempt to construct a viable post-modern theory of environmental ethics.

Zimmerman (2013) proposes factors that should be considered in constructing a sufficient post-modern moral theory. Such factors include the competing economic interests, local socio-cultural perspectives and claims of natural sciences. In our view, Zimmerman's criticism comes closer to the objective criteria for acceptability of philosophical theories. Most importantly, the need to consider socio-cultural perspectives of people and the claims of natural sciences point at the need for psychological acceptability and external consistency of environmental ethics' theory.

Just like Attified (1994) however, Zimmerman (2013) fails in two important ways. First, he does not demonstrate the failure of anthropocentrism and eco-centrism to meet the objective criteria for adequacy of philosophical theories. Secondly, he does not proceed to develop the post-modern theory of environmental ethics he envisages. In the view of these shortcomings this study undertakes to perform a double task: (i) Critical evaluation of anthropocentric and eco-centric moral theory on basis of objective criteria acceptability of philosophical theories, and (ii) Formulation of a rationally justified common moral ground in which both anthropocentric and eco-centric moral theories are reconciled.

1.8.3 Theoretical and Conceptual Framework

1.8.3.1 Theoretical Frame Work

Theories in environmental ethics can be categorized according to their proponents' understanding of the boundaries of moral standing. Moral standing of an entity presupposes it (the entity) being intrinsically valuable. There are various theories of environmental ethics, more or less opposed to one another, on the basis of their proponents' understanding of the

boundaries of moral standing. These theories include: anthropocentric, pathocentric, biocentric, ecocentric and mixed theories.

At the extreme opposites however, are anthropocentric and ecocentric theories. All other theories gravitate towards either of the two extremes. While anthropocentric theory attributes intrinsic value solely or greatly to human beings, ecocentric theory tends to extend the value to the whole nature. Given the necessity for an impartial analysis undertaken by this study, none among the theories in environmental ethics is a suitable guide to the study. This is because all of them are directly or indirectly party to the controversy whose resolution is the pursuit of this study. This study adopts, as its theoretical framework, a combination of Hegelian dialectic and critical theory.

Traditionally, critical theory is the short for critical social theory, a term coined by Frankfurt school to describe their task of detecting and challenging beliefs and practices underneath normality in society. It was oriented towards radical social changes as opposed to traditional description of 'what is' (Corrine: 2011, 9). Presently, critical theory refers to any theoretic approach that attempts to give rigorous explanations and evaluations of controversial positions, with the aim of determining the strengths and weaknesses of each, and the way forward. This is the usage employed in this study.

The relevance of this theory is easily comprehensible given that the study aims at resolving controversial issues through impartial analysis of its (controversy's) conceptual foundations. Its techniques are already implicit in the objective criteria for testing philosophical theories used. The theory's guiding role is seen throughout the work, especially in the critical analysis of both the concept of intrinsic value and metaphysical assumptions of anthropocentric and ecocentric theories. The strengths and weaknesses of these metaphysical foundations are

determined. These strengths and weaknesses depend on the degree to which the metaphysical assumptions of each theory pass the objective criteria for acceptability of philosophical theories.

Hegelian dialectic is a philosophical method developed by Georg Hegel (1770-1831) (Brightman: 1951, 37). It shows how thought moves in triads of thesis, antithesis and synthesis to a higher and better conception of being. The method consists in taking, as a starting point, some assertion about experience (thesis) of which something that is relevant (anti-thesis) is left out thus rendering it (thesis) incomplete. Since it is impossible to be satisfied with contradiction, thought cannot remain stuck in the antithesis, because even this (anti-thesis) is incomplete. A tentative synthesis, growing out of the dialectical conflict between thesis and anti-thesis is arrived at. This synthesis is more like hypothesis. It becomes a new thesis and it holds until something is found wanting.

Suitability of Hegelian dialectics in this study consists in the conception of anthropocentric – eco-centric controversy in terms of thesis and anti-thesis in a dialectical movement towards a more satisfying synthesis (universal theory of environmental ethics). Within this framework, anthropocentrism is the thesis while eco-centricism is the anti-thesis. The synthesis, which is a tentative solution to the controversy, is an improvement of the two theories in the conflict. This understanding is informed by the dynamic nature of worldview; the dynamism mostly catalyzed by improved knowledge and understanding of the world, owing to new scientific discoveries and theories. Simply, there are knowledge gaps in every epoch.

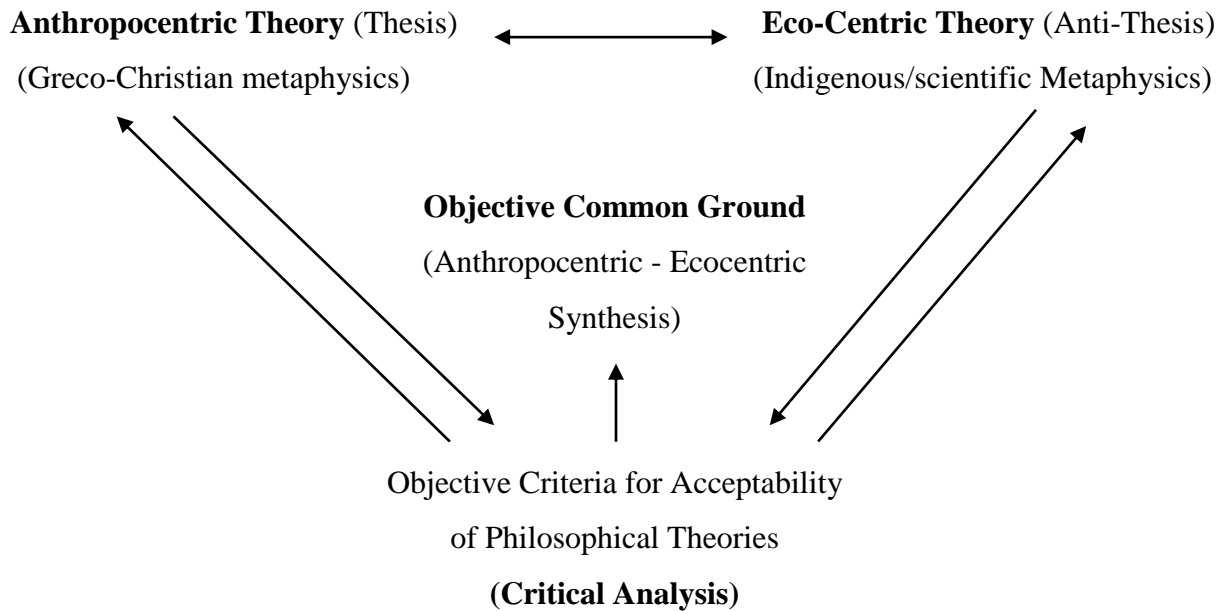
Given the ancient origin of some of Judeo-Christian metaphysical beliefs and subsequent moral attitudes towards nature, it is highly probable that knowledge and understanding of the world has increased. Ecocentrism (the anti-thesis) can be explained as a result of new

scientific discoveries which make people cast into doubts on Judeo-Christian metaphysics. Discoveries in ecological sciences and animals' psychology are good examples. Likewise, ecocentrism may not be fully justified given the ancient origin of some of its beliefs. For example, it draws some inspiration from pre-ecological indigenous worldviews characterized by lack of scientific understanding of the world. This way, anthropocentrists may be justified in their opposition to some of ecocentric views.

Critical theory and Hegelian dialectic are related and work hand in hand in this study. Hegelianism provides means by which anthropocentric – ecocentric controversy is understood. It also points at the direction to be followed. In this way it helps in the formation of appropriate assumptions and expectations. Critical theory provides the skills for determining the strength and weakness of both anthropocentrism and ecocentrism as thesis and anti-thesis respectively. The theory also provides critical thinking skills for integrating and synthesizing new findings into a new and more harmonized theory.

1.8.3.2 Conceptual Framework

The foregoing discussion shows the conception of anthropocentric – eco-centric controversy in terms of thesis and anti-thesis in a dialectical movement towards a more satisfying synthesis as a common ground. An impartial critical judgment is made on the basis of objective criteria for adequacy of philosophical theories is necessary. This critical judgment is intended to deliver a rationally justified anthropocentric – ecocentric common moral ground. This information is presented in a conceptual framework diagrammatized as follows:



1.9 RESEARCH METHODOLOGY

1.9.1 Data Collection

This study makes use of secondary sources of data such as textbooks and credible internet sources. Relevant information has been collected through review of such textbooks and credible internet sources. The study involves two major stages of data collection which adequately meet the research objectives. First, the existing literature relevant to anthropocentric – ecocentric controversy is reviewed. Through this review, knowledge gaps in philosophers’ attempt to address controversy are identified. Secondly, relevant information deemed necessary to fill the knowledge gaps so far identified at first stage is sought from other secondary sources mostly publications and texts on philosophy in general, cultural anthropology, empirical sciences and ethics. The sources of information are selected on the basis of research questions. Relevant information from these sources is recorded as notes and classified according to the research questions.

1.9.2 Analyzing Data

Philosophical methods are employed in analyzing the concept of intrinsic value and metaphysical assumptions of both anthropocentric and ecocentric moral theories. These methods include philosophical analysis and argumentation. They embody an attitude of the mind that maintains constant questioning of things which under normal circumstances are taken for granted. Philosophical analysis involves two but complementary theoretical approaches: explication and synthesis. These complementary approaches are necessary to give all round analysis of the theories. Explication is two-pronged in that it consists of descriptive analysis and evaluation.

Descriptive analysis helps in understanding the anthropocentric and ecocentric arguments. This understanding is a prerequisite for responding to such arguments. In particular the descriptive method helps us to know what conclusion, what reasons, what is assumed and where there is need for clarification. The method ideally highlights and explains the main arguments presented by proponents of both anthropocentric and eco-centric moral theories as well as their underlying metaphysical assumptions.

Evaluation provides a guide in deciding whether to be persuaded by the arguments of each theory or not. It involves assessment and vigorous critique of anthropocentrists and ecocentrists arguments and background assumptions. This is done by laying bare their strengths and weakness on the basis of objective criteria for acceptability of philosophical theories.

This process of evaluation is guided by such questions as: ‘are the underlying worldviews rational?’ ‘Are the moral theories psychologically acceptable?’ ‘Are the accepted moral principles as basis for psychological acceptability of either moral theory justifiable in contemporary world?’ ‘Are there other relevant considerations or arguments that render either

anthropocentric or ecocentric arguments untenable, weak or strong?’ ‘What is the overall evaluation - is either anthropocentric or eco-centric moral theory adequate foundation of contemporary environmentalism?’ At this stage all the relevant data ranging from views of great thinkers (philosophers) to scientific data is crucially invoked in the attempt to assess the degree of soundness or unsoundness of each party in the controversy.

The second part involves synthesis of the opposing moral theories; anthropocentrism and ecocentrism. First and foremost the sound points from each theory are incorporated into a higher, more harmonious and objective level. New insights gained throughout the study and analyses of relevant data are also incorporated in the synthesis. Clarification of such important concepts as intrinsic value is provided. It is at this point that certain answers on whether new ethics is necessary and whether such an ethic is necessarily eco-centric in nature are provided. This way, a resolution to theoretical controversies in environmental ethics was arrived at.

CHAPTER TWO

THE NOTION OF INTRINSIC VALUE

2.1 Introduction

This chapter is a critical analysis of the notion “intrinsic value” as a central concept in environmental ethics debate. The need for this analysis arises out of the contradictory situation whereby the two conflicting moral theories, anthropocentric and ecocentric, are based on the same concept namely intrinsic value. The purpose of the analysis is to establish the sense in which the concept is used by the proponents of both anthropocentric and ecocentric. It also aims at establishing whether intrinsic value has some characteristic features upon which intrinsically valuable entities can be identified.

The chapter starts with a clarification of the centrality of the concept ‘intrinsic value’ in anthropocentric – ecocentric conflict. Such a clarification provides justification for the necessity of conceptual analysis of the concept. This clarification starts with the background to the employment of the concept in environmental ethics as well as anthropocentric and ecocentric position on intrinsically valuable entities. This is followed by an exposition and critical examination of the concept intrinsic value. Precisely, analysis is done to determine whether the concept of intrinsic value meets the criterion of conceptual clarity.

2.2. Centrality of Intrinsic Value in Anthropocentric – Ecocentric Controversy

2.2.1 Intrinsic Value as Defining Quality of Moral Standing

The concept of intrinsic value was introduced into bio-ethics in response to the quest for defining quality of moral standing. The latter concept had been introduced by philosophers in

1970s, to deal with such new issues as the treatment of animals, abortion, euthanasia and the environment (Boss: 2008, 436). Establishment of moral standing of animals, fetuses, comatose persons, trees and so on was thought necessary for protection of animals, unborn, people in the state of coma and environment.

From moral perspective, moral standing means that one has moral claims that must be considered in decisions that may affect him or her negatively. In other words, moral standing means 'morally good reasons' why one may or may not be treated in one way or another. Something has moral status if it is a suitable candidate for moral concern or respect in its own right, regardless of its usefulness to humanity (Vaughn: 2008, 361). In other words, a being with moral status is a being with moral importance regardless of whether it is a means to something else and that, in our dealing with it we must somehow consider this fact (ibid). The concept (moral standing) is used synonymously with the terms moral rights, moral status and moral considerability (ibid).

The introduction of the notion of moral standing in bio-ethics led to the central question in environmental ethics debate "what entities have moral standing?" Philosophers, in general, are sharply divided on this (Boss: 2008, 436). Environmental philosophers however, seem to agree on intrinsic value as the standard by which entities have or lack moral status. Intrinsic value is, in other words, a gateway to moral community; a community composed of beings with moral status. This said, the central question in environmental ethics can be legitimately rephrased as "what entities have intrinsic value and to what degree do they have it" (Vaughn: 2008, 361)

Philosophers are divided in their response to this central question in environmental ethics. They differ on the extent to which nature is morally considerable. This has led to varied theories in environmental ethics: anthropocentric, pathocentric (animals' liberation), biocentric, ecocentric and mixed theories. These theories are categorized according to the proponent's understanding of the boundaries of moral standing (Njeru: 1997, 13). Among these disparate moral theories, anthropocentric and ecocentric theories are the two theories at the extreme ends. It is no wonder that anthropocentric or ecocentric distinction is perhaps the most important way to understand an extension of moral consideration to nature (Kortenkamp: 2001, 2)

Two things are clear from the foregoing discussion. First, intrinsic value is the concept around which many debates, and of course disagreements, in environmental ethics revolve (Vaughn: 2008, 361). Secondly, it is clear why anthropocentric and ecocentric distinction need adequate attention contrary to what has been done so far (Kortenkamp: 2001, 4). It is generally agreed, especially among philosophers, that anthropocentric and ecocentric distinction determines what the focus of the environmental ethic is, humans or nature (ibid, 2). In light these views, a detailed clarification of what anthropocentric and ecocentric theories are necessary. This necessity partly follows from the fact that there are various strands of both theories. This includes a clarification of each theory's positions with regard to the central question in environmental ethics 'what entities have intrinsic value and to what degree'.

2.2.2 Anthropocentric Position With Regard to Intrinsically Valuable Entities

The term 'anthropocentric' was coined in the 1860s, amidst the controversy over Darwin's theory of evolution, to represent the idea that humans are the center of the universe

(Kortenkamp: 2001, 2). This is based on the belief that human beings are superior to other forms of life (Boss: 2008, 3; Kortenkamp: 2001, 2). Anthropocentric ethics is a theory of environmental ethics that interprets the basis of value in terms of human concern or interests. It is supported by traditional western philosophies according to which nonhuman entities lack moral value (Boss: 2008, 735) Anthropocentrism is the most dominant and most widespread theory, not only in the west but to other parts of the world (Boss: 2008, 735; Keller: 2002, 368).

Anthropocentrism consider humans to be the most important life form; other forms of life are important only to the extent that they affect humans or can be useful to humans (Kortenkamp: 2001, 2; Zimmerman,2013, 8). There are two anthropocentric views with regard to what entities have intrinsic value and therefore morally considerable. Strong anthropocentrists such as Passmore (1974) subscribe to Sole Value Assumption (SVA). This is the view that only human beings are intrinsically valuable and therefore, the only entities with moral status. Nonhuman entities have only instrumental value and as such, they lack moral status. This is anthropocentrism in strict sense. It denies that nature has any intrinsic valuable (Boss: 2008, 744)

Weak anthropocentrists or mixed theorists attempt to reconcile anthropocentrism and eco-centrism (Shrader-Frechette: 2003, 190). They are mixed theorists in the sense that some nonhuman beings have both intrinsic and instrumental value. Unlike strong anthropocentrists, these do not limit intrinsic value to human beings but extend it also to some nonhuman beings. However, they are anthropocentrists by the virtue of subscribing to greater value assumption (GVA) on the part of human beings. As such, human beings are given priority over nonhuman beings in event of competing claims. Unlike nonhuman beings, human beings

are not instrumentally valuable in any way Human beings still remain the sole valuing subjects. Weak anthropocentrism is championed by Attfield (1994) and Hargove (1992).

On the basis of the foregoing exposition, anthropocentric position is that human beings are either solely or greatly intrinsically valuable. Nonhuman beings are either completely instrumentally valuable or some have intrinsic value, but to a lesser degree in comparison to human beings. Generally, only human beings have rights. Since intrinsic value is taken as basis for our seeing others as having value, anthropocentric theory assumes that humans are the ultimate source of what is right and wrong (Bunin: 2009, 721; Boss: 2008, 3). Nonhuman beings have no rights other than those they are granted relative to their human holders, either as property or relative to their proximity to human interests. Additionally, the theory is individualist in that the fundamental unit of moral consideration is the individual, animal (Vaughn: 2008, 364)

2.2.3 Ecocentric Position with Regard to Intrinsically Valuable Entities

The term ‘ecocentric’, coined by Warwick Fox (1989) comes from the term first coined ‘biocentric’ in 1913 by an American biochemist, Lawrence Henderson, to represent the idea that the universe is the originator of life (Kortenkamp: 2001, 2). This term was adopted by ‘deep ecologists’ in the 1970s to describe ‘biospherical egalitarianism’ or rather ‘biocentric egalitarianism’, the idea that all life has intrinsic value (Fox: 1989; Nash, 1989). Fox (1989) preferred the term ‘ecocentric’ to avoid confusion associated with the usage of prefix ‘bio’ which etymologically means life or living organism (ibid). It has sometimes been assumed that deep ecology’s concerns are restricted to entities that are (in some sense) biologically alive (ibid).

Deep ecologists such as Arne Naess and George Sessions have often pointed out that their sense of the term “life” is broader; it takes in individuals, species, populations, habitats, as well as human and nonhuman cultures” (Fox: 1989). Naess (1986), makes it clear that the term ‘life’ is used here in a more comprehensive non-technical way to also refer to what biologists classify as “non-living”: rivers, landscape and ecosystem. Ecocentric moral theory seeks to extend moral concern to all life. He affirms that the whole designation “ecocentrism” is closer to an equivalent for what he means by deep-ecology; certainly centering on ecosphere (Naess: 1987). As such ‘ecocentrism’ and ‘deep ecology’ can be used interchangeably.

Other deep ecologists commonly use “biocentric” or “anti-anthropocentric” to refer to the same philosophy (Nash: 1987). Consequently, the three terms ‘ecocentrism’, ‘deep ecology’ ‘biocentricism’ and ‘anti-anthropocentricism’ are equivalent. The terms can be used interchangeably. Other versions of ‘anti-anthropocentric’ which express the same philosophy are ‘organism’ or ‘animism’ of pre-ecological thinkers and theories of the most radical moral philosophers of recent times such as ‘Land Ethic’ of Aldo Leopold, ‘Ethical Holism’ of J.Baird Callicott and egalitarianism type of ‘Biocentrism’ of Paul .W. Taylor (Nash: 1989, 160).

There are other perspectives such as ecofeminism, green socialism and animal liberationism which have tried to redress the human-centeredness (Fox: 1989). However, ecocentrism stands out and subsumes them all (ibid). While most of the reasons they give for extending morality are the same, biocentrism is not mired with anthropocentric legacies.

Ecofeminism and green socialism focus only on reducing oppression of humans and attainment of a more egalitarian human society without considering humanity's unnecessary destructive treatment of nonhuman entities (Zimmerman: 2013, 5; Fox: 1989). Animal liberationism extends moral concern to some nonhuman entities by virtue of such entities possessing human intrinsically valuable qualities such as intelligence, sentience or consciousness (Rodman: 1983). These qualities are said to be proper to human beings (ibid). On the other hand, the focus of ecocentrism is to attain biotic egalitarianism (Fox: 1989)

Therefore, the term ecocentric is an umbrella term covering all anti-anthropocentric theories of environmental ethics which seek to extend moral concern to all life on its own merit. In other words, it is a general term for non-anthropocentric theories of environmental ethics which seek to extend moral concern to all life without reference to human beings as source of value or their qualities. However, more attention is paid to deep ecology.

Deep ecology represents a radical version of ecophilism in that it adds what it refers to as a spiritual dimension, a personal experience and connection (Russow: 2010). It is also a call to action, including very far-reaching policy changes which will require population reduction, and "basic economic, technological, and ideological structures. The ideological change will be mainly that of appreciating life quality rather than adhering to an increasingly higher standard of living" (Russow: 2010). The whole designation of 'ecocentrism' is closer to an equivalent for what deep-ecology means (Naess: 1989, 16).

Ecocentrism, in all its variants, assert that all organisms, and nature as a whole, have intrinsic value and therefore morally considerable (Kortenkamp: 2001, 2). It is characterized by two principles: biotic egalitarianism and ecological/ metaphysical holism. The former asserts that

all biota have equal intrinsic value (Boss: 2008, 33). The latter holds that the ‘whole’ (e.g. ecosystem), rather than individuals that compose it, is the ultimate source of value and therefore the sole thing of moral concern (Russow: 2010; Vaughn: 2008 364; Bunnin: 2004, 444). The parts of the ecosystem derive their value from whole by virtue of their contribution to its welfare (Russow: 2010). In this way, ecocentrism devalues the individual life relative to the integrity, diversity and continuation of ecosystem upon which the flourishing of human and nonhuman life is depends (Bunnin: 2004, 444; Nash: 1989, 160).

2.3 Analysis of Intrinsic Value: Meaning and Evidence

2.3.1 Necessity for the Analysis

Anthropocentric - ecocentric polarity on intrinsically entities amounts to divergence in the focus of environmental ethics. That is, they differ on point of reference upon which one’s actions relative to environment are judged right or wrong. While the focus of environmental ethics in anthropocentrism is on humans, ecocentric ethic has nature as the focus of environmental ethic. This polarity has led to several negative theoretical and practical consequences on environmentalism. Given that such negative consequences partly motivated this study (see page 11 of this work), analysis of the notion of intrinsic value around which Anthropocentric - ecocentric polarity hinges is indispensable.

The divergence on the list of intrinsically valuable entities leads to suspicion that either the concept is not used in the same sense or it lacks objective characteristic features upon which intrinsically valuable entities are identifiable. Of important concern in this section is to find out whether intrinsic value has a clear description, positive characteristic features and evidence as criteria upon which intrinsically valuable entities can be determined.

2.3.2 Definition of Value

Etymologically, the term value is derived from Latin term, *valere* which means to have worth or to be strong. Originally therefore, the term value means the worth of a thing (Bunin: 2009, 721), and valuation meant an estimate of its worth (Frankena: 1967, 229). Their meaning and their application was initially limited to economics (Bunin: 2009, 721; Frankena: 1967, 229). Value and valuation became technical terms central to that branch of economics labeled the theory of value. Today however, the terms ‘value’ and ‘valuation’ as well as their cognates and compounds are used in a confused and confusing but widespread way in our contemporary culture; they are used in a variety of disciplines (Frankena: 1967, 229).

In philosophy the meaning and usage of the terms “value” and to what it refers has evolved over time, with different definitions and or explanations from different philosophers as Frankena (1967, 230 -31) demonstrates. Cognitivists or descriptivist hold that terms like ‘value’ and ‘good’ stand for properties. Accordingly, value judgments are descriptive or factual in the sense of truly or falsely ascribing properties to things. Among cognitivists are naturalists who subscribe to interest theory of value, according to which value is either the relational property of being an object of desire or interest (e.g. Aristotle) or the satisfaction of desire .Other naturalist subscribe to affective theory of value which defines value as the quality of being enjoyed or enjoyable in some way or an indefinable natural quality ascribed to what we desire or enjoy (ibid)

Other cognitivists add that value or goodness is a metaphysical property which can neither be observed in ordinary experience nor made an object of empirical science. These include Neo-Platonists according to whom values are real (in ideal world); Hegelian idealists who hold to

values as being ontologically perfect; theologians according to whom values are willed by God; and intuitionists or non-naturalists who assert that intrinsic goodness or value is an indefinable non-natural or non-empirical quality or property different from all other descriptive or factual ones. These philosophers include: Plato, Sidgwick, G. E. Moore, Ross, Laird, Scheler and Hartmann). These philosophers hold that value belongs to objects independently of whether we desire, enjoy or value them. These values, according to them, are even independent of God's attitude towards them (Frankena: 1967, 230 -31)

Non-cognitivists or non-naturalists are of the position that value terms do not stand for properties, natural or metaphysical. Accordingly, value judgments are not property ascribing statements but have some other kind of meaning or function. These philosophers include many analytical and existential philosophers in recent decades. Their positive theories are varied. Some conceive value judgments as wholly or primarily embodiments or expressions of attitude, emotion, or desire and instruments for evoking similar reactions in others. Others conceive value judgments as prescriptions, recommendations, acts of grading or simply as valuations; not something else (ibid, 231).

The foregoing exposition shows clearly the ambiguity and looseness that the terms "value" and "valuation" often engender. As such, it is advisable to use them in their narrower senses (Frankena: 1967, 231). In its narrow sense, value is used to cover only that to which such terms as 'good', 'desirable' or 'worthwhile' are properly applied (ibid). In ethics, therefore, something has value if it is good or worthwhile (Bunin: 2009, 721; Frankena: 1967, 231).

2.3.3 The Concept of Intrinsic Value: The Sense it is used in Environmental Ethics

Philosophers have characterized intrinsic value somewhat differently (Tara: 2000, 62). However two important strains can be discerned: ‘good in itself’ conception, and ‘sought for its own sake’ conception (ibid, 63). The “good-in-itself conception” is a widespread belief that a thing is ‘good in itself’ (ibid, 62). That is, something has value in virtue of what it is, rather than in virtue of how it is connected to others.

In another sense, intrinsic value is objective value in that it is a value a thing has independent of anything else so that it would have its value even if it were the only thing that existed (Moore: 1993). Rolston (Norton: 1992) and Taylor (1986) argue that the value in nature existed prior to human consciousness and it will continue to exist even after human consciousness disappears. In this sense, to say that something is intrinsically good is to say that its goodness is completely self-contained. The ‘good in itself’ model construes intrinsic value as packed within the allegedly valuable thing, independent of and thus un-affected by the existence or condition of all other things persons and interests (Tara: 2000, 63).

In its “good sought for its own sake” model, intrinsic value consists of the fact that a thing is sought not as a means to or constituent of any other ‘end’. Such value is seen as ‘good without being good for anything’. Importantly, on this model, intrinsic value turns on a person’s reasons for seeking something rather than on the nature of the thing itself. The price of the greater plausibility of sought-for-its own-sake intrinsic value is its very intrinsic-ness (ibid, 63). A typical representative of this subjectivist view of intrinsic value is J. Baird Callicott (Hargrove: 1992; Norton: 1992). This is theory that nature has value independent of the

interests of human valuers, despite the value being attributed by a conscious valuer, either human or otherwise (Norton: 1992).

However, the two conceptions of intrinsic value are related. The belief that some things are good in themselves will often be the reason that those things are sought for their own sake. In other words, belief that things are good in themselves is reason that people believe that those things ought to be sought for their own sake. But this does not erase their differences (Tara: 2000, 64)

Between the two strains of intrinsic value, Philosophers have used ‘intrinsically good’ to mean that a thing is ‘good in itself’ (Tara: 2000, 62). The sought-for-its-own-sake version just represents people’s attitudes towards their ends. As such, it cannot deliver objective value because it is a subjective feeling. The discovery that something is sought for its own sake tells us only about peoples’ motivations in pursuing that thing. That says nothing about the propriety of their quest for the actual value of the thing sought. When intrinsic value is characterized solely in terms of the reasons for which something is sought, the embrace of intrinsic value collapses into subjectivism.

The advocates of intrinsic value typically seek ‘good in itself’ conception as their shield against subjectivism implicit in the “good-sought-for-its-own-sake” conception of intrinsic value (ibid, 63). This conception also matches the ordinary meaning of the terms ‘intrinsic’, whose principle definitions include: ‘situated within’, “interior” “inner” “inward”, and “internal”. All these definitions have connotation of a value belonging to the thing in itself or by its very nature, inherent. Thus intrinsic value in the sense of “good-in-itself” is

synonymous with inherent value. This is the sense of intrinsic value adopted in environmental ethics.

2.3.4 Characterization of Intrinsic Value: Good-In-Itself-Conception

Obviously what counts as evidence for intrinsic value depends on what intrinsic value is. As the proceeding discussion has shown, environmental philosophers adopt intrinsic value in the sense of “good-in-itself”. This means that something has value in virtue of what it is, rather than in virtue of how it is connected to others (Tara: 2000, 62). This has implication that a thing is intrinsically value simply by virtue of its nature. But reality consists of entities of different nature. There would be no problem if every being, both animate and inanimate, was considered to be intrinsically valuable.

However, anthropocentric – eco-centric conflict with regard to intrinsically valuable entities casts doubts on whether existents have intrinsic value simply by their own nature. If such was the case, it seems that not every kind of nature qualifies an entity to be intrinsically valuable. This indicates the need for objective value giving qualities or characteristics upon which intrinsically valuable entities are identified. This can be done only by defining intrinsic value in positive existential terms. This would serve as objective criteria for identifying intrinsically valuable things and ultimately resolving the anthropocentric – eco-centric controversy in environmental ethics.

Proponents of intrinsic value have been evasive when pressed to define intrinsic value in positive existential terms. In their descriptions, the proponents of intrinsic value have cast it (intrinsic value) in negative terms (Callicott: 2002; Tara Smith: 2000). That is, intrinsic value has been characterized in terms of what it is not rather than what really it is. Thus, the answer

to the question ‘what is intrinsic value?’ has come in the form ‘intrinsic value is not x’ instead of the form ‘intrinsic value is y’. The champions of intrinsic value emphasize that it is non-relational (ibid). Intuitionists or non-naturalists are categorical that intrinsic goodness or value is an indefinable non-natural or non-empirical quality or property different from all other descriptive or factual ones (Frankena: 1967, 231).

Moore (1993, 285), for instance asserts that to hold that any kind of values are “intrinsic” entails the recognition of a kind of predicate extremely different from any we should otherwise have to recognize and perhaps unique. As Sher (2001: 383) reports, some proponents of the value argue that intrinsically good is that which is good apart from any of the result it produces. Others contend that an intrinsically valuable thing need not be ‘linked with anything else’ (Tara: 2000, 63). Tara (2000, 63) cites Robert Nozick’s view that intrinsic value stands ‘apart from further consequences and connections’. In his essay “a case for animals’ rights” Tom Regan argues that to have such a value means that something is more than or something different from mere receptacles (Vaughn: 2008, 426).

Perhaps, G.M. Moore is more articulate on the negative characterization of intrinsic value. He discovers most immediately that the definition of intrinsic value as “good-in-itself” as well as definition of any other thing, and doing ethics at large, presupposes definition of the term “good” (Moore: 1993, 5,143; Olthus: 1968, 14). But in his essay “goodness as simple and indefinable” (Sher: 2001, 111- 112), Moore argues that goodness cannot be identified with any of the simple things that are found in nature. Yet he fails to provide a positive definition or explanation. Instead, he says that good cannot be defined (ibid). It is a simple notion that cannot be expressed in other words as in any other definitions. As such, one cannot explain what it is to anyone who does not already know it (ibid)

2.3.5 Detection of Intrinsic Value: Good-In-Itself-Conception

Defendants of intrinsic value have presented varied accounts of how intrinsic value in nature is detected. These accounts range from experiential account, appeal to organic unity and felt goodness, appeal to introspection, appeal to conscience and so forth (Tara: 2000, 66 – 77). In his search for viable values, Tara (2000, 6, 22, 71) correctly observes that all accounts given on the detection of intrinsic value can be reduced into two: the claim that intrinsic value is self-evident intuitively conceived and regress argument. Frankena (1976, 231), in his analysis of terms value and valuation also observes that the proponents of intrinsic values subscribe to intuitionism in their attempt to demonstrate its (intrinsic value's) existence.

2.3.5.1 Intuitionist Detection of Intrinsic Value

Intuitionism is one form of foundationalism: a view that all knowledge rests ultimately on foundational truths (Miller: 1984: 11, 12). These foundational truths are themselves not subject to any proof. This view arises from the belief, among some philosophers, that not everything can be grasped intellectually. The contention here is that not everything can be reduced to an argument or expressed in language (ibid). The common defense for foundationalism is regressive argument: the claim that from a purely logical standpoint, not everything can be argued or there would never be an end to the arguing (Miller: 1984, 12). Analogically, foundational truths are the final court of appeal where every argument rests on some ideas which are certain, basic and indemonstrable. This theory has been used as support for intuition (Tara: 2000).

Rorty (1967, 204) identifies various ways in which the term intuition can be understood in philosophy. First, intuition is understood as immediate knowledge of truth of a proposition,

where immediate means ‘not preceded by inference’. That one can have knowledge and thus, a justified belief without having made oneself aware through the process of inference of any justification for this belief is philosophically puzzling. It raises critical questions on how such kind of knowledge can be attained and if it can be objective. Secondly, intuition is immediate knowledge of a concept. “Immediate knowledge” here means roughly “knowledge which does not entail ability to define the concept. This sense of “intuition” is exemplified by sense perception considered as products of cognitive faculty distinct from the faculty of forming judgments concerning the entity sensed

Defenders of intrinsic value appeal to either of the aforementioned forms of intuitionism. Common among them is the argument that value is either intuited through emotions even though it is objective (Hartmann, Scheler, Meinong) or it is an object of intellectual intuition (Moore, Sidgwick, Ross, Laird and others) (Frankena: 1976, 231). Although intuitionist perspective does not always surface, the belief that intrinsic value is self-evident is common place (Tara: 2000, 22). Perhaps a few examples will illustrate this fact.

Nicolai Hartmann agrees with Emmanuel Kant that ethical principles do not have empirical sort of universality: instead, they are a priori (Cerf: 1967). However, contrary to Kantian formalism and subjectivism, Hartmann asserts a priori objective content of values as ideal entities that are intuitive (ibid). In distinguishing objectivity from intrinsic value, Moore (1993, 282), says that the latter means “internality”. But as to what this internality is, he says ‘I think simple enough and everybody will recognize it at once...as a notion which is constantly in people’s heads...’ (ibid)

Still, another group of philosophers maintain that the evidence for intrinsic value rests in the observer's experience. They may claim that intrinsic value consists of particular qualities such as organic unity and felt goodness (Tara: 2000, 68). Rather than attaining a purely intellectual grasp of a thing's intrinsic value, feelings or dispositions alert us to its presence (ibid, 67). This is the position especially held by C. Lewis and Philip Blair Rice (ibid). The former holds that experiences of certain emotions amount to 'felt goodness' direct findings of value. The latter, argues that the presence of intrinsic value is determined by direct introspection. But this line of argument presents the insistence on intrinsic value as merely an assertion of faith. Consequently this amounts to subjectivism.

In the attempt to escape subjectivism implicit in introspection, some recent authors, notably Peter Railton and Elizabeth Anderson have modified experiential account of intrinsic value, supplementing it with a reflective element (Tara: 2000, 68). Peter Railton elucidates intrinsic value as what a person would want, after fully informed rational deliberation (ibid). In other words, intrinsic value is what one would find compelling or attractive if s/he were rational and aware. Thus, an individual's intrinsic good consists in attainment of what he would, in idealized circumstances, want for its own sake. According to Elizabeth Anderson what is intrinsically valuable is the object of a rational favorable attitude (ibid). According to this argument is that we experience certain things as worthy of our appreciation; we 'sensibly care about them.

Perhaps, Ross W. D. (cited in Sher: 2001, 383; Tara: 2000, 22) sums up the intuitionist view. He holds that the question of whether dispositions or actions are good in themselves must be settled by intuition alone. He argues that we have no more direct way of access to the facts about rightness and goodness and about what things are right or good, than by thinking about

them. The moral convictions of thoughtful and well educated people are the data of ethics just as sense perceptions are the data of a natural science.

2.3.5.2 Regressive Argument in Defense of Intrinsic Value

Regressive argument is the reasoning that intrinsic value is necessary to plug what would otherwise be an infinite regress of values (Tara smith: 2000, 6). This implies that the basic impulse driving many people to posit intrinsic value is the wish to plant morality on a firm and objective footing. For many, intrinsic value is the foundation of morality: it is the anchor for derivative beliefs about what is good and bad, right and wrong, virtuous and vicious (Bunnin: 2009, 721; Tara: 2000, 71; Moore: 2000, 61). It is generally assumed that things of intrinsic value are fixed points to which instrumental values and other extrinsic values are contingently related (Thompson: 1983, 92). Moore (1993, 285), for instance points at the fixed relation to an intrinsic kind of value as the one that gives right and wrong objectivity.

2.3.5 Critical Remarks over the Definition and Characterization of Intrinsic Value

The foregoing exposition has shown the attempt by the advocates of intrinsic value to define it as well as to demonstrate its knowability. However, neither the definition nor argument for its knowability helps in arbitrating the anthropocentric – ecocentric antagonism. A simple experience shows that one thing is known and distinguished from others by its essential characteristic features. Just as it is with like any other kind of value, locating intrinsic value in any entity presuppose a clear description of the value's characteristic features or qualities. Locating economically valuable entities presupposes positive characteristic features of economic value upon which economically valuable things are identified. These features include the power to satisfy human needs.

It is evident from the preceding discussion on the characterization of intrinsic value that the concept has been cast in negative terms. The concept has been characterized in terms of what it is not rather than what really it is (Sher: 2001, 111,112, 383; Tara Smith: 2000, 63; Moore: 1993, 5,143, 285; Olthus: 1968, 14; Frankena: 1967). This negative characterization of intrinsic value is not sufficient to illuminate its genuine properties. This way of defining intrinsic value leaves the process of locating it mysterious.

Negatively defined, intrinsic value is subject to the same objections concerning the alleged objectivity of value that is identified in the absence of specified, justified standards. They are especially inadequate when the alleged property is employed to generate moral prescriptions such as required in environmental ethics. Claiming that intrinsic value is different from other types of values, say instrumental value, at best provides only part of the story; needed also is an explanation of what constitutes the value, and explanation of how 'intrinsic value' qualifies under the terms of value. Without clear characterization of intrinsic value, we have no grounds for accepting its existence leave alone grounds for determining entities which are intrinsically valuable.

As Tara (2000, 68) points out, the difficulty in defining intrinsic value marks ominous beginning for those who would defend it. It is a crippling failure for the proponents of intrinsic value to ask people to believe in something that when one is asked what it is says 'something I know not what'

In summary, the concept of intrinsic value fails the first test that any acceptable philosophy must pass: conceptual clarity (Lawhead: 2009, 38). This has two implications in the anthropocentric-ecocentric controversy. First, it seems that the controversy is based on

unclear concept. Secondly, and perhaps the most important for the purpose of this study, is that the definition does not reveal any positive and unbiased characteristic upon which intrinsically valuable entities can be identified. Consequently, the definition of intrinsic value and its characterization do not deliver any objective criteria necessary for resolution of anthropocentric-ecocentric controversy.

2.3.6 Critical Remarks over Detection of Intrinsic Value

The accounts given for **detection** of intrinsic value in nature can be summarized into two: intuitionism and regress argument (Tara: 2000, 6, 22, 71; Frankena: 1976, 231). None of the accounts however, can substantiate the location of this kind of value objectively. Their weakness rests on two major factors: subjectivism and arbitrariness.

As Tara (2000, 77) observes, the assertion of intrinsic value represents a variant of subjectivism. Since the advocates of intrinsic value do not furnish any external evidence warranting ascriptions of 'good-in-itself' value, the case for intrinsic value must turn inward: the sources of value must be located in the consciousness of the person asserting it. This applies whether one appeals directly to intuitionism or observer's experience or introspection. The only common denomination among the allegedly intrinsically valuable things is that such a value lies in the reactions of observer's or advocate's taste. Intrinsic values are united solely by the fact that they elicit similar responses in many people. As such intrinsic value seems to be subjective depending on emotions natural objects evoke in men. In this way, one person's list of intrinsically valuable entities will be as correct as the opponent's list.

The claim that intrinsic value consists of particular qualities such as organic unity and felt goodness leaves crucial questions unanswered. For instance why does the presence of organic

unity constitute value? How does one know that his favorable disposition to care for a certain entity is stimulated by value? Proponents of intrinsic value do not demonstrate how these qualities add up to value. Moore's isolation method instructs us simply to swap intuitions. If we fail to elicit others' endorsement of the same things as intrinsically valuable, for instance, our only recourse is to look longer. But the question is 'what are we to look for?' Attempt to explain intrinsic value in terms of what a person would want, after fully informed rational deliberation does not introduce elements necessary to transform this into an objective value. All these fail to confirm independent existence of things intrinsic value.

In the place of objective evidence, the advocates of intrinsic value are armed with confidence that they know it when they see it. They insist that they can spot it but cannot provide satisfactory account of how and thus, no means of verifying their claims. Some proponents of intrinsic value reveal the essence of the doctrine in their argument that we can recognize intrinsic value when it occurs, although we cannot state its conditions (Tara: 2000, 70). In his essay "goodness as simple and indefinable" G. E. Moore argues that one cannot explain what 'good', and by implication 'intrinsic value', is to anyone who does not already know it (Sher: 2001, 111- 112). Such a stance is an embarrassment to systemic ethics. It is hardly the route to a stable, objective basis for moral instruction.

The assignment of intrinsic value rests fundamentally on the fact that a person or persons firmly believe that something has it. This leaves its advocates helpless against anyone who detects intrinsic value elsewhere. Consequently, the belief in intrinsic value appears to be relative and arbitrary. This relativity and arbitrariness can explain diversity in intrinsic value allocation, evident in anthropocentrists and ecocentrists lists of intrinsically valuable entities.

This sheds some light in our attempt to understand anthropocentric – ecocentric controversy in environmental ethics.

Secondly, appeal to intuitionism is unwarranted. This is because philosophers disagree among themselves about the possible significance of the claims of intuition as in the sense of immediate and direct apprehension of truth (Miller: 1984, 12). This way, the concept of intrinsic value does not pass the test of having the support of compelling arguments (Lawhead: 2009, 40). As Moore & Bruder (2005, 7) argues, philosophy is more than a cafeteria where we pick and choose what we like. The acceptability of any claim demands an argument that such a claim follows either necessarily or highly probable from certain true (or plausible) statements. Apart from being a controversial issue, intuitionism is also subjective.

Since intrinsic value's apparent objectivity is deceptive, the effect of indulging this concept is the further entrenchment of subjectivism. In sum, intrinsic value does not provide the definite and sturdy foundations that a rational justification of morality requires. Specifically, intrinsic value cannot provide objective criteria upon which to assess anthropocentric and ecocentric theories in environmental ethics as pertains to intrinsically valuable entities. Owing to relativity and arbitrariness in detecting intrinsic value, each party can be as correct or wrong as any other.

That the advocates of intrinsic value do not provide objective criteria for identifying intrinsically valuable entities is evident in pluralism of criteria for assigning intrinsic value among its advocates (Tara: 2000, 62; Frankena: 1967, 230). Failure to establish value independent of personal taste may also explain the considerable fiddling found with the meaning of intrinsic value itself.

While regressive argument seems a plausible defense for intrinsic value it suffers serious flaws. The argument seems a natural fit for the ‘sought-for-its own-sake’ conception of intrinsic value. This is because it (regressive) only makes sense of things as means, given other things that we seek as ends. Use of this conception however, prevents the argument from demonstrating the existence of good-in-itself value. The fact that something is sought for its own sake informs us only about people’s attitudes, beliefs or aims in seeking those things. Tara (2000: 72) argues correctly that nothing follows from these concerning the independent existence of good-it-itself value. Seeking a thing does not confer such value on that thing. The argument thus quickly sinks.

The regress argument does not illuminate the distinctive character of intrinsic value: it does not identify its roots or name features that confer special status. Instead, the argument simply points and attaches the label ‘intrinsic’ when it has exhausted other observations. Bestowing a name does not enhance one’s understanding of what renders an object intrinsically valuable. As Tara (2000: 73) argues, the fact that a moral theory must start somewhere does not warrant an arbitrary starting place.

The argument that intrinsic value is presupposed by virtue of some things having instrumental or extrinsic value is hindered by its (the argument’s) impoverished conception of how to escape the threatened regress. An argument purporting to offer the only possible explanation of some otherwise inexplicable phenomenon must truly exhaust all alternatives. The regress argument however, overlooks the fact that acceptance of intrinsic value is not the only conceivable way to make sense of instrumental value (Tara: 2000, 76). Something may be valuable in a way that is neither instrumental nor intrinsic. Failure to exhaust all conceivable alternatives can easily lead to fallacy of false dichotomy.

2.4 Conclusion

Critical examination reveals two conceptions of intrinsic value: “good-for-its-own-sake” and “good-in-itself” conceptions. Strictly speaking however, intrinsic value is identified with “good-in-itself” conceptions. It is what philosophers mean when they talk of intrinsic value. The choice of this conception is based on two factors. First, it is the foundation of “good-for-its-own-sake” conception of intrinsic value (Tara: 2000, 63). Secondly, it is taken as an escape from subjectivism implicit in “good-for-its-own-sake” conception of intrinsic value (ibid). The concept of intrinsic value, in the sense of good-in-itself, is used interchangeably with inherent value. Both notions are widely used in environmental ethics discourse.

The foregoing discussion notwithstanding, there is no clear definition or description of what intrinsic value is in terms of clear distinctive features. Likewise, there is lack of objective criterion for detecting intrinsic value in natural objects. As such, it is unclear how intrinsic value can be identified or distinguished from other values. In the words of Warren (2008) and Norton (1992), intrinsic value remains a mystery: it is a highly obscure concept. Its obscurity makes it ill-suited to play the central role as foundation of morality. Specifically in environmental ethics, intrinsic value is not a reliable standard for determining which entities have moral status and which do not have.

Failure to positively characterize intrinsic value and provide its objective evidence leaves one at liberty to determine intrinsically valuable and morally considerable entities arbitrary. There is no objective criterion. The opinions of one person or party are as good as those of the other. Consequently, anthropocentric – ecocentric controversy cannot be resolved with reference to

intrinsic value. Particularly, neither anthropocentric preferentialism nor biotic egalitarianism can be justified on the basis of intrinsic value.

Both anthropocentrists and ecocentrists invoke qualities held by entities they present as intrinsically valuable as evidence that they have such a value. Anthropocentrists cite distinctive characteristics of human beings as evidence that intrinsic value solely or greatly belongs to human beings. This evidence anchors their claim for preferential treatment of human beings. On the other hand, ecocentrists cite evidence that shows similarity between human and nonhuman beings. This anchors their claim for egalitarianism. The major challenge lies in the fact that they are trying to defend an obscure concept, intrinsic value.

While anthropocentric – ecocentric controversy cannot be resolved with reference to intrinsic value, preferential treatment of man or biotic egalitarianism can be justified or unjustified with reference to the properties of human and nonhuman beings. Preferentialism and biotic egalitarianism are two moral principles held by anthropocentrists and ecocentrists respectively. While preferential treatment of man seems to be ultimately based on distinctively human properties, biotic egalitarianism seems to be ultimately based on human-nonhuman common properties. This implies metaphysical foundations of both anthropocentric and ecocentric moral theories. Critical examination of such metaphysical foundations is the major concern of the next two chapters.

CHAPTER THREE

METAPHYSICAL FOUNDATIONS OF ANTHROPOCENTRIC MORAL THEORY

3.1 Introduction

This chapter is a critical examination of Judeo-Christian metaphysics as foundation of anthropocentric moral theory in environmental ethics. The main concern is to determine whether human beings have exclusively distinctive feature which set them apart from nature and consequently their preferential treatment in case of competing claims. Precisely, the alleged unique nature of man as the basis of preferential treatment on his part is critically examined to determine the degree of its rationality in contemporary world.

The chapter starts with a descriptive analysis of Judeo-Christian metaphysics. This is followed by a critical examination of such metaphysical beliefs. Selective targeting which focus on critical concepts of any given theory is used to identify the critical concepts of the Judeo-Christian metaphysics. These concepts, as pillars of the metaphysical system, are then subjected to critical examination upon the objective criteria for acceptability of philosophical theories. Their strength or weakness depends on how they measure up to the objective criteria. Finally, a conclusion is made on basis of the finding on the strengths and weakness of anthropocentric theory as a thesis in a dialectical conflict.

3.2 Judeo-Christian Metaphysics: Foundations of Anthropocentrism

3.2.1 Hierarchical Conception of Being

In Judeo-Christian ontology, the universe is hierarchically conceived. It consists of multiplicity of existents each of which occupies a certain place in great chain of being. This chain of being extends from the most real and perfect, to the least real and most imperfect

(Taylor: 1986, 134; Mondin: 1975, 65; Lovejoy: 1936). God and the world comprise the totality of experience constitutive of this hierarchy (ibid). God, as the pure act of being and creator of the world, is at the top the hierarchy (Mondin: 1975, 64, 65). This hierarchical order continues down through various levels in the order of their degree of similarity to God (Mondin: 1975, 65; Lovejoy: 1936)

God, the creator, is the supreme model or exemplar whose divine essence contains within itself the similarity of every creature. Creatures, both spiritual and material, are copies or images of God. As such, whatever perfection found in creatures is exemplarily drawn from the perfection of the creator. However, creatures possess that perfection less than God and in varying degrees. The creature's essence i.e. a possibility of being that varies from one creature to another is one of the measures of similarity between God and the creature in question. As such, it determines the distance of a creature from God, its divine model. The closer it is to divine essence the more similarity between God and creature (Mondin: 1975, 63-65).

While both material and spiritual creatures are images of God, 'imago Dei', the degree of similarity lessens as one moves from spiritual to more corporeal entities. This is evident in Thomas Aquinas thought that "the body itself is an extremely imperfect copy inasmuch as it represents the model in a vague and fragmentary way" (Mondin: 1975, 65). The body becomes a participant of all the properties of the 'imago Dei' only when it is informed by the soul. The soul, translated as 'anima' in Aquinas (1225 – 1274 C.E), as well as in Aristotle (384 – 322 B.C) the word means that which animates' or 'that which gives life. As such, it is the "principle of life" (Brian: 1992, 209).

Corresponding to three aspects of life: vegetative, sensitive and intellectual life, there are three kinds of souls. Aristotle (384 – 322 B.C), who gives the concept its classical description, distinguishes between three kinds of the soul. These include vegetative soul, sensitive or animal soul and rational or intellectual soul (Stumpf: 1999, 92; Moore & Bruder: 2005, 68; Fuller: 1945, 185).

The rational soul is endowed with spiritual faculties such as knowing and willing. The two faculties are also proper to the divine nature. Thus, to be an image of God is primarily a property of the rational soul. Thomas Aquinas (1225 – 1274 C.E) assigns knowledge a priority with respect to the will. As a result, the knowing power is the ultimate basis of a creature being the image of God ('imago Dei'). Since from memory and understanding arises the will, the whole image resides in the intellectual part and as a consequence, the affective side (Mondin: 1975, 68).

3.2.2 The Order of the Origin of Things

The order of the origin of things coincides with the order of similarity (Mondin: 1975, 68). In this view, God first creates things that have a greater resemblance with him, then those that have a less one (ibid). The result is the hierarchical order that continues down through various levels of perfection starting with the angels and archangels, then to humans, nonhuman animals, plants and ends with mere matter at the bottom (Taylor: 1986, 134; Mondin: 1975, 65; Lovejoy: 1936). This metaphysical or ontological order is also a valuation one. Within the created world, God has made things of every possible grade of existence and value (Taylor: 1987, 134; Lovejoy: 1936).

The angels are spiritual beings and are immortal (Taylor: 1986, 139). Since their nature is more similar to God than man's nature, angels are closest to God in the hierarchy. They are as perfect as finite and contingent entities can be. In biblical theology they serve as messengers between God and humans (Taylor: 1987, 140; Mondin: 1975, 65).

3.2.3 The Nature and Place of Man in the Hierarchy of Being

According to Judeo-Christian metaphysics, human beings are distinguished from the rest of creation by virtue of possessing rational soul which however forms a single unity with the first two souls, vegetative and sensitive soul (Brian: 1992: 215; Fuller: 1945, 119). The first two are held in common with animals and are the basis for nourishment and reproduction and sensation as well as the ability to move respectively. Certain psychic processes are common in animals and human. These common psychic processes are rooted in the animal soul.

The third soul, known by such terms as the 'rational soul', 'the nous/mind' 'intelligent' or 'spiritual soul' is the centre of rational/ intellectual activity. By virtue of rational soul, man has intellect (understanding and will). By implication, man is essentially a rational animal: he is able to comprehend, think, love and chose (Brian: 1992: 211, 215). Human interest in ethics, epistemology and metaphysics arise from the higher speculative ways of thinking unique to the human soul. Only the human soul can know the nature of being-as-a-whole, and can intimate what God's nature must be (Moore & Bruder: 2005, 68). It is by virtue of having rational soul that Descartes sets man apart from nature (Copleston: 1960, 12 – 24).

Rational soul is pure and immortal. This follows from the conception of understanding and willing as spiritual rather than physical processes. Brian (1992, 211) cites Thomas Aquinas' argument that intellectual life cannot be reduced to what is simply bodily. This soul is pure

and immortal. It does not share the mortality of the body. It survives as something purely intellectual, as the locus of thought and will. Secondly, human soul must subsist as 'form of the body'. As a result, human beings are immortal since they are essentially rational beings. The belief in the immortality of human soul further distinguishes man from the rest of nature (Moore & Bruder: 2005, 68; Brian: 1992: 211).

By virtue of having rational soul and body humans beings fit into the order between the angels and the beasts respectively. Possession of the rational soul means that man is endowed with such spiritual operations as knowing and willing. As such, he is created in the image of God since it is especially in these operations that man's real similarity with God appears. Thus, by virtue of possessing a rational soul, man is closer to God than any other creatures in natural order. He is superior to them since they are endowed with a lesser degree of similarity (Nash: 1989, 91; Mondin: 1975, 65).

Despite of angels' spiritual nature and their closeness to God, there are secondary aspects by virtue of which man exceeds them in similarity to God. Man for instance is conceived as the governor of the universe. Being a composite being, he is a micro-cosmos by virtue of which he recapitulates in himself and mirrors the whole universe. By virtue of these qualities, being the governor of the universe as well as being a micro-cosmos, man deserves the title 'imago Dei', more than angels or any other creature (Mondin: 1975, 65).

The foregoing discussion leads to absolute uniqueness and distinct human destiny. Created in the image of God, human beings are conceived as the only creatures in natural order that are sacred, have been addressed by God and have redeemable souls. Since, the metaphysical or ontological order is also a valuation one, human beings are intrinsically valuable. They are

also other worldliness in that they are fixed on heaven (a perfect destiny) their supposed place of origin. This does not apply to a plant or animal. The Christian thinks of himself and salvation of his soul. This conception of man is one root of the idea of rights in non-Asian cultures (Nash: 1989, 113).

By virtue of his closeness to God, humans have a special status on earth as the lords and masters of all other living creatures (Taylor: 1987, 139). By virtue of being made in the image of God and his dominion over inferior creatures, man's proper purpose is to further their good by "subduing" these creatures and being good stewards of the earth (Nash: 1989, 90: Gen.1:28; Passmore: 1974, 20, 32). Man is also called to cooperate with nature in actualizing it (Passmore: 1974, 32, 33; Nash: 1989, 88). Man is governor of the universe (Mondin: 1975, 65).

3.2.4 Judeo - Christian Understanding of Nonhuman Nature

The foregoing discussion on the role of man in universe also depends on general conception of entities in natural order. Stewardship of man is based on three conceptions of nature: nature as static, created once and for all by God at creation and that nature exists merely for human utility (Passmore: 1974, 33) Lynn: 1967). This is the position in traditional Judeo-Christianity (Fuller: 1945, 255; Passmore: 1974, 12- 15). As such, the role of man is to enjoy nature and hand it over to the next human generation in conditions that they will find it useful.

The tradition of cooperation is based on the notion that nature is in potency and that the role of man is to perfect it (Passmore: 1974, 32, 33). This originated with Stoic Posidinius (91 B.C.E) who held that God willed that the universe should not be complete until man had done his part (Passmore: 1974, 32). Human beings are the first beings sufficiently rational to see

what nature, through gradual evolution, is doing, and sufficiently powerful to help it on its path towards that final consummation for which “the whole creation groaned and travels until now (Passmore: 1974, 32; Romans 8:22).

Cooperation, as opposed to both despotism and stewardship, rejects the conception of nature as complete in itself, simply there to be struggled against or conserved. Instead, nature is still in the making; it is moving towards perfection. This perfection can be achieved in two ways: imposing form on it or to improve form. The former is the position that the visible world would be more perfect if the seas and lands were made more regular figures. It is based on belief in metaphysical strangeness ascribed to nature by Descartes and that human beings have powers to civilize it (Passmore: 1993; Passmore: 1974, 35, 36).

In contrast to Cartesians, there is a view that to perfect was not to impose form but to improve the form. This is evident in practices of the late 18th century gardeners, mostly followers of Rousseau (Passmore: 1974, 35). They conceived everything as good for it comes from the hands of the creator. For them, the task of man is to remove hindrances to nature’s free development (ibid). Pruners for instance sought to help trees to assume their perfect form. Attfield (1994, 147) cites a seemingly similar view by Thomas Aquinas (1225 -1274 C.E). Aquinas argues that it were better to preserve natural entities in accordance with their specific nature.

Nevertheless, all the three ways of man’s relation with nature; despotism, stewardship and cooperation share a lot in common. They are basically anthropocentric in that nonhuman beings exist for human utility. Stewardship does not preserve nonhuman beings for their own sake but for the sake of future generation of humankind (Passmore: 1974, 30). Likewise,

perfection of nature in cooperation tradition is judged in Aristotle's manner that nature is at its best when it fulfils men's needs i.e. its reason for existing, what its potentialities are for. So, to perfect nature is to humanize it, to make it more useful for man's purpose, more intelligible (understandable), to their reason, more beautiful to their eyes (Vaughn: 2008, 365).

For a Christian therefore, nature has no other value than instrumental one. This is expressed in belief that the earth would not be around for long because a vengeful God would destroy it. The wilderness is conceived as a cursed Land and the antipode of paradise. This idea contributed significantly to the absence of respect for the nonhumanized landscape. This is the case especially among puritans who were against sensuousness. Their response to wild country and its wild inhabitants was one of conquest and subjugation (Nash: 1989, 91, Nash: 1989, 113, 192; Passmore: 1995, 130).

3.3 Critique of Judeo-Christian Metaphysics

A critical look at the foregoing exposition of Judeo-Christian metaphysics reveals that the system stands on two critical concepts: the concept of great chain of being and the concept of soul. The two concepts are the foundation of the rest of beliefs constitutive of this metaphysics. Their rational acceptability or indefensibility has similar consequences to the rest of beliefs.

The two critical concepts are connected in such a way that the possession or lack of soul in an entity determines its relative distance from God, the supreme reality in the hierarchy of being. By virtue of their possession of rational, human beings are for instance said to be closer to God, the top most being in the hierarchy of being. The rational soul is the virtue by which they are endowed with such intellectual faculties as knowing and willing which are proper to

divine nature. It is by virtue of this that man bears more similarity than any other creature in natural order. It is by virtue of this that he is the image of God. Lack of rational soul in nonhuman beings takes them away from God (Mondin: 1975, 65).

Humans' Possession of rational soul is also the principle by they are unique and superior to other creatures. The conception of man as rational being, immortal, redeemable, having a unique destiny and being intrinsically valuable is all based on rational soul. Adequacy or inadequacy of the Judeo-Christian metaphysics, and its resultant anthropocentric moral theory, at large depends on whether the critical concepts of Great Chain of Being and soul, pass the objective criteria for acceptability of philosophical theories.

3.3.1 A Critique of the Concept of the Great Chain of Being

3.3.1.1 External consistency

The conception of the world as a great chain of being is compatible with empirical data at least in its cognition of the multiplicity of being (species). It conceives beings of varied essences (nature's) corresponding to different degrees of perfection in which they are created by God (Lovejoy: 1936, 186). The multiplicity of existents is our conventional observations as well as the findings of empirical sciences. Studies in evolutionary science and animal psychology show that every species in the universe has some features that it shares with other species, and some that make it stand out (Smulders: 2013).The essence of things constitute the uniqueness by virtue of which we are able to distinguish one entity from the rest.

While man holds a lot in common with nonhuman animals in the domains of intellectual life, language and culture, Studies in animal psychology and evolutionary biology show that he

excels in many domains. He has a higher degree of rationality, consciousness, intelligence and foresight compared to nonhuman animals that possess them.

Additionally, man is especially distinguished from the rest of animals by his freedom of will, autonomy, open-ended imagination and deep-seated drive to link his scenario-building minds together. Such abilities help in turning animal communication into open-ended human language, memory into mental time travel, social cognition into theory of mind, problem solving into abstract reasoning, social traditions into cumulative culture, and empathy into morality. Associated with nested scenario building capacity is human beings ability to connect their minds with others; the wiring of minds evident in exchanging ideas (Suddendorf: 2014; Ropeik: 2016).

The idea of a common origin of all life is also compatible with empirical data. This is notwithstanding different explanations about the sources of origin. In Judeo-Christian cosmology, all existence is an act of creation by God, the Supreme Being. Evolutionary biology also affirms a common origin of all life. Contrary with Judeo-Christian cosmology, however, Evolutionary biology conceives all in the world as a long evolutionary process by which organisms develop organs and behavior necessary for adaptation to the prevailing environmental conditions.

3.3.1.2 External inconsistency and lack support of compelling argument

Epistemologically, the proof for the existence of such a chain of being which extends to immaterial world is problematic. Basically, the concept is based on the possibility of there being an infinite, spiritual and eternal world as opposed to the sensible and transitory world inhabited by corporeal entities (Lovejoy: 1936, 186; Mondin: 1965, 75). The spiritual world is

believed to be the residence of God and created spiritual entities (Mondin: 1965, 75). The goal of human salvation is to unite with God in this eternal world, which is the most perfect (Mondin: 1965, 75).

The knowability of the existence of a spiritual world is difficult. The Christian belief in spiritual world at best admits of Platonic dualism of two worlds, given its influence on St. Augustine, a prominent father of the church (Western Church) (Moore & Bruder: 2005, 80; Lynn: 1957). Plato (C.428 – C. 348) argues that there exist two worlds: the real and imperfect world of corporeal entities and a perfect ideal world of pure forms. Under the influence of Platonism, Augustine appeals to the human mind's capacity to grasp eternal truths (Moore & Bruder: 2005, 79). According to him, this implies the existence of something infinite and eternal apart from the world of sensible objects, an essence that in some sense represents the source or ground of all reality and all truth (ibid).

Augustine's proof for the existence of perfect and eternal world can be subjected to the same criticism directed to Anselm's ontological proof for God's existence. According to St. Anselm (C.1033 – 1109), thinking of something than which a greater cannot be thought, that thing must also exist in reality (Moore & Bruder: 2005, 430). This kind of proof contradicts common experience. Experience shows that it does not follow necessarily that whatever is thought of or imagined of must exist. It is on the basis of experience that several philosopher have criticized Anselm's ontological argument for God's existence (Moore & Bruder (ibid).

As Lovejoy (1936, 182) observes, the Great Chain of Being and its underlying assumptions are neither a generalization derived from experience nor, in truth, easy to reconcile with the known facts of nature. Therefore, the concept of great chain of being, especially its spiritual

part, is incompatible with known facts and experience. It is a mere speculation. At its best, the existence of a spiritual world is merely a product of faith which is a subjective source of knowledge. Due to lack of external consistency the idea of great chain of being lacks the support of a compelling argument. It is no wonder that many philosophers, according to Taylor (1986, 139) would hold the whole hierarchical picture of reality indefensible on epistemological grounds.

As Fuller (1945, 3) argues, it is possible that such a world is be a product of imagination as man struggles to survive. Given limitations of his practical activities and the desire to overcome and abolish the harsh conditions which distress and defeat him, man tends to appeal to his fancy. Through imagination he pictures goals that his practical activities can actually achieve within the fixed frame of the apparent nature of the universe. He can also dream of a universe remade according to the heart's desires, fixed from what he finds evil and wholly sympathetic with his vision of human perfection. Through imagination man can substitute the universe he wants for the universe he has at hand.

Fuller's sentiments are echoed in the demonstration of human irrationality by some psychologists (Ropeik: 2016). This irrationality consists in man's employment of foresight to invent phantom beliefs, complete with detailed rules of behavior and morality, which give him the illusion of control over uncertain fates (ibid). This is especially evident in religion. Stunned by the pervading sense of moral uncleanness, shortness of life and the finality of death, Pythagoras (c.580 – c. 500 B.C.E) formed a new religion hoping to control human fate of which Homeric gods were powerless (Stumpf: 1999, 10 -11). Sigmund Freud (1856 -1939),

the founder of psycho-analysis, terms religion a human illusion with future, a wishful thinking and intimidation of intelligence (Moore & Bruder: 2005, 13).

3.3.1.3 Internal Inconsistencies

Presentation of creation as having started with the most perfect and ended with least perfect implies that man, who is allegedly closer to God, was created first before anything else in natural order. This contradicts a biblical creation theory which presents man as the culmination of God's creation (Genesis: 1: 28). Yet, the creation story is a major source of Judeo-Christian metaphysics. Basing themselves on the creation story, some anthropocentrists have argued that God created to make the world complete (Passmore: 1974, 32). This implies that man was an afterthought and therefore a late comer into the world. The concept of great chain of being lacks internal consistency.

The simplicity and purity of God implicit in the concept of great chain of being is dubious given the relationship between God and creatures. They are related not only as creator and creatures, but also as model and images (Mondin: 1975, 63-65). God is the supreme model or exemplar whose divine essence contains within itself the similarity of every creature, both spiritual and material (ibid). This seems to suggest that God is a complex being composed of both material and spiritual elements. The same is implied by the belief that all creatures return to God and unite with the divine essence. This contradicts the purity and simplicity of God. If God is really pure, anthropocentrists have the burden to explain the origin of corporeality.

As Taylor (1986, 141) points out basing human moral superiority to nonhuman beings on the basis of ontological order is not justified. Assuming the ontological order to be sound, the

being's superior or inferior moral worth depends on the position assigned to it by God, the source of all existence and value. A being in a higher position has greater inherent worth than the one in a lower position. This is granted given that the first kind of being is more similar to the absolute perfection of God than the second. But the being's moral worthiness presupposes the moral goodness of the being that assigns the positions, in this case, God, the creator.

The moral goodness of the Creator however, does not follow from the mere fact of his being a creator. Humans cannot know that the Creator is good unless they already knew that mercy, justice and love are true virtues. This presupposes knowledge that such attributes fulfill valid standards of good character. These are however, valid norms for a system of human ethics. As such, their correct range of application is the relations between human persons and not other living things.

Employment of norms valid for human ethics to determine the superiority of humans over nonhuman beings contradicts the Aristotelian doctrine of teleology. Yet, Christianity draws a lot from the philosophy of Aristotle (384 – 322 B.C) (Moore & Bruder: 2005, 88). According to Aristotle (384 – 322 B.C.E), everything in nature has an end or a goal to achieve (Stumpf: 1999, 92). This goal is contained in the nature or essence of any given entity (ibid). The Judeo-Christian argument that God created beings of different essences (natures) implies multiplicity of goals. The being's valuation of anything else as good or bad depends on the bearing of the thing in question on the valuer's goal. By implication God's goodness according to man may not be the same with regard to nonhuman beings.

3.3.2 Critique of the concept of Human Soul

As previously shown in this chapter the concept rational soul was coined to explain the origin of spiritual activities such as knowing, willing and deliberation that purportedly could not be reduced to what is simply bodily (Lawhead: 2009, 312; Brian: 1992, 211). By the virtue of this soul human beings are distinct from the rest of creatures in the natural order. They have greater similarity to God and therefore highly positioned in the hierarchy of being. As such they are more valuable than the rest of creation. By virtue of this soul, human beings are capable of knowing and willing, they are redeemable, immortal and are otherworldly in the sense of having a destiny different from that of any other entity in the natural order.

3.3.2.1 External Inconsistency

While human beings are unique there are two main grounds for irrationality of the concept of a distinctively human soul. First, the argument that the intellectual faculties originate from rational soul which puts man apart from the rest of nature is inconsistent with prevailing scientific discoveries. Second, the intellectual faculties which, for quite long, have been regarded as exclusively human qualities have been discovered in nonhuman animals. Yet, is the reasoning that such faculties are exclusively human that something the human soul, as something exclusively human, is sought as the source.

Brain scientists for instance have located our cognitive and emotional activities in the neurochemical processes in the brain (Lawhead: 2009, 312). This is contrary to Judeo-metaphysics according to which spiritual cannot be reduced to what is simply bodily (Brian: 1992, 211). These processes are however not exclusively human properties. Both human and nonhuman animals have a central nervous system and brain which are same in structure (Newmyer:

2006, 13). Some non-human animals and birds have been discovered to have neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviors (Smulders: 2013; Arriaga et al: 2012; Bekoff: 2012;). For quite long, these have been thought as preserve for human beings (ibid).

Implicit in the foregoing discussion is that both human and nonhuman animals can perform the same activities. Recent studies for example reveal that some non-human animal are significantly more rational, intelligent and conscious than they are usually credited for (Ropeik: 2016). This is evidence by some animals' ability to make judgments based on objective analysis of the evidence (Ropeik: 2016; Bekoff: 2012; Matsuzawa: 2006; Newmyer: 2006, 12). There is evidence for decision making among non-human animals such as rats (Ropeik: 2016; Suddendorf: 2014; Bekoff: 2012). Suddendorf (2014) observes the capacity to think about hidden movements, learn and interpret human symbols, solve some problems through mental rather than physical computation among apes.

Scientists have concluded nonhuman animals are conscious beings. For example, all mammals, birds, and many other creatures, including octopuses also possess neurological substrates of conscious states along with the capacity to exhibit intentional behaviors. (Bekoff: 2012; Ropeik: 2016). Individual animals are able to recognize themselves not only in a mirror, but are aware of themselves as unique being separate from others (Ropeik: 2016). Suddendorf: 2014; Matsuzawa: 2006; Newmyer: 2006, 12). As Taylor (1986: 145), this ability of self awareness leads to development of self-identity. The latter is supposed to be one of the sure signs of having a mind (ibid).

Ropeik (2016) reports a powerful evidence of animal intelligence. This is especially evident among elephants, wolves, dolphins and killer whales, apes, fish, birds and insects (ibid). For example non-human animals consistently demonstrate the ability to intelligently figure things out, to make the right choices, to actively interpret all sorts of cues and interact successfully with their environments (ibid). Smulders (2013) observes basic capacity to imagine alternative mental scenarios of the world among great apes. They also show signs of pretense in play and deception (ibid).

Henneberg (2013), a professor of anthropological and comparative anatomy, observes that animals offer different kinds of intelligences which have been under-rated due to humans' fixation on language and technology. These include social and kinaesthetic intelligence. the former is evident among some mammals, like gibbons. These primates can produce varied sounds with clearly different meanings that allow them to communicate across the tropical forest canopy. Kinaesthetic intelligence is evident among many quadrupeds. This involves leaving complex olfactory marks in their environment. Other animals like dogs and koalas have special pectoral glands for scent marking. Domestic Pets can even communicate to us their demands and make us do things they want.

Animals possess social skills, emotions and moral feelings which for quite long have been regarded as exclusively human qualities (Ropeik: 2016; Smulders: 2013). Such animals as seals, dolphins, parrots and songbirds are capable of vocalization: the ability to make sounds and language by means of which they communicate with one another (Smulders: 2013; Arriaga et al: 2012). Many animals, ranging from pigs to bees act "pessimistically", following a bad experience (Smulders: 2013). This is a common characteristic of humans in low mood

as well (ibid). On the basis of this evidence, it can be correctly said that nonhuman beings have a learned way of communicating with one another just like human beings.

Study of animals' psychology reveals rudimentary forms of morality. This is evident among sub-human social groups such as apes, chimpanzees and pigeons: they appear to have certain impulses and habituated forms of behavior which are similar to the customary morality of early men (Harold: 1936, 13). Ropeik (2016), Suddendorf (2014), and Bekoff (2012) observe a kind of family_warmth and affection among social animals. For instance whales mourn at_the loss of a child; great apes console each other; mice, rats and chickens display empathy. As Newmyer (2006, 14) observes, these animals seem to be guided by some sort of 'code of ethics' (Newmyer: 2006, 14).

The preceding exposition of the current scientific finding in evolutionary biology and animal psychology provide a strong counter-argument for the existence of a distinctively human soul. The intellectual faculties for which it was coined to explain have been explained scientifically as natural processes. As such, the existence of human soul becomes dubious if not useless. It defeats logic for one to continue holding the mysterious idea when the 'mystery' it purportedly explains has been made intelligible scientifically.

Indefensibility of human soul casts into doubts other metaphysical beliefs associated with it. Most importantly, human immortality and human 'other worldliness' become less rationally defensible. The human soul and by implication man, subsists first by the virtue of man having intellectual faculties which cannot be reduced to anything material (Brian: 1992, 211). This implies the immortality of man, essentially defined as a rational being (Brian: 1992: 211, 215). The discovery of intellectual operations in the brain makes the concept of the soul

irrelevant. Unless another ground for immortality is given, the concept of the soul is not unconvincing. Since there may be no human soul by virtue of which man survives death, the talk about a spiritual world (heaven) as the final destiny of man becomes groundless.

The discovery of intellectual life among nonhuman beings make any thought about human special destiny skeptical. Such beliefs are grounded on intellectual life initially thought to be exclusively human quality. On the basis of these discoveries it can be rightly said that whatever applies to man, by virtue of having intellectual faculties, should also apply to nonhuman beings who possess such faculties. With such discoveries, the Cartesian dualism between human and nonhuman beings on the basis of rational soul on the part of man becomes dubious (Copleston: 1960, 12 – 24).

3.3.2.2 Lack of Comprehensibility

Incompatibility of the concept of human soul with empirical data can be attributed to lack of comprehensive use of relevant data in Judeo-Christian metaphysics. The argument for such a soul disregards scientific data which show intellectual operations as products of natural processes. There is also disregard for the facts that some nonhuman animals share intellectual life with man. In short, the beliefs which set man apart from nature have been formulated without due regard to all relevant information.

This lack of comprehensiveness can be explained partly on the basis of little scientific understanding of the world at the time when some of the Judeo-Christian metaphysical beliefs were formulated. The belief that humans have superior intelligence for example goes back to the Agricultural Revolution some 10,000 years ago (Saniotis: 2013). **It** gained momentum with the development of organized religion, which viewed human beings as the top species in

creation (Saniotis: 2013; Moore & Bruder: 2005, 88). Now, religion tends to attribute souls or spirits to natural phenomena which appear mysterious to people (Kottak: 1991, 334; Forde (1970, viii). The concept of the soul might have been coined to explain the seemingly mystery of human rationality in the pre-scientific ancient era.

While the Judeo-Christianity may be forgiven for lack of comprehensive relevant information, there is evidence for selective use of data. Ropeik (2016) and Smulders (2013) observe that philosophers and scientists have for centuries emphasized what distinguishes human beings from nonhuman beings. While other animals can be as intelligent, emotional or altruistic as humans, people usually consider this comparison from one side: they never consider the meaning of this comparison in attempt to understand human beings.

Zimmerman (2013, 8), Boss (2008, 734) and Nash (1989, 42) observe self serving interpretation of scientific data among anthropocentrists. For example, they skillfully interpret Darwin's theory of evolution and science of ecology in a way that justifies the alleged human's higher position in the hierarchy of being (Boss: 2008, 734; Passmore: 1974, 23; Nash: 1989, 43). They ignore the gist of Darwin's theory: an attempt to offer a unified explanation for the existence of both human and non-human forms of life (Snyder: 1993, 455; Nash: 1989, 42).

St. Augustine (354 – 430 C.E) adopted whatever he found in Platonists' writings consistent with Christian faith (Moore & Bruder: 2005, 79). He equally amended whatever he found in the same philosophy contrary to faith (ibid, 79). Fuller (1946, 5) blames the selective use of data on 'the inclination by the majority of people to interpret the behavior of the universe in a fashion favorable to their moral and religious interests'. This portrays anthropocentrists as

lacking respect for evidence and open-mindedness. This leads to lack of comprehensiveness in Judeo-Christian metaphysics and the attendant anthropocentric moral theory.

Implicit in the foregoing discussion is that commitment to objective and unbiased interpretation of the available scientific data would lead to a better rational cosmology. This would lead to a rationally justified theory of human-nonhuman moral relationship. The lack of comprehensiveness in Judeo-Christian metaphysics and anthropocentric moral theory may explain the external and internal logical inconsistencies therein.

3.4 Conclusion

This chapter endeavored to examine the Judeo-Christian metaphysics as the basis of anthropocentric theory of environmental ethics. By the technique of Selective targeting, the concept of the great chain of beings and the concept of the human (rational) soul are identified as the two critical concepts of the Judeo-Christian metaphysics. Beings are hierarchically arranged from top to bottom on basis of decreasing degree of perfection and similarity to God who is the creator, pure and most perfect being. Man's possession of rational soul places man close to God since it is by virtue of such a soul he (man) is endowed with such intellectual faculties as knowledge and willing. The two faculties are proper to God's essence. Given immortality of rational soul, man is immortal and otherworldliness.

To the degree that Judeo-Christian metaphysics acknowledges the plurality of being and variety of perfections, the concept of the great chain of being is consistent with empirical data. However, the concept of the great chain of being lacks the support of compelling argument. This is especially the case with the belief in spiritual world implicit in the general conception of reality as a great chain of being lacks. It seems more or less a product of mere imagination.

The concept of a distinctively human soul is rendered unnecessary. The intellectual faculties whose explanation such a soul purportedly explained have been explained as proceeding from natural processes in the brain. Furthermore, intellectual faculties are not exclusively human properties: they are possessed by some nonhuman animals. Unnecessity of a distinctively human soul farther casts into doubts the associated metaphysical beliefs such as immortality of man, man as the image of God, man's otherworldliness (heaven) and Cartesian dualism. These beliefs are not rationally justified.

Human beings are unique by virtue of a higher degree of intellectual life. However, this does not warrant preferential treatment on their part in the event of competing claims between human and nonhuman needs. Nonhuman beings not only have a lot in common with human beings but they are also unique relative to their distinctive characteristic features. The major shortcoming of Judeo-Christian metaphysics consists in its lack of comprehensive and objective use of scientific data concerning nature. Such metaphysics therefore, fails the objective test for acceptability of philosophical theories. Consequently, the resultant anthropocentric moral theory cannot be an adequate basis for contemporary environmentalism.

CHAPTER FOUR

METAPHYSICAL FOUNDATIONS OF ECOCENTRIC MORAL THEORY

4.1 Introduction

This chapter is a critical examination of metaphysical foundations of ecocentric theory of environmental ethics. The main concern is to determine whether both human and nonhuman nature have properties so similar as to warrant equal treatment of all of them in the event of competing claims. The chapter starts with descriptive analysis of the metaphysical beliefs underlying the ecocentric moral theory. These beliefs are then subjected to critical analysis on the basis of objective criteria for acceptability of philosophical theories. Finally, a summary of findings is provided.

4.2 Sources of Metaphysical Foundation of Ecocentric Moral Theory

Ecocentrism occurs in various versions: 'Deep ecology' of Arne Naess and George Sessions, 'biocentrism' of Paul .W. Taylor; Land Ethic' of Aldo Leopold, 'Organism' or 'animism' of pre-ecological thinkers and the most radical moral philosophers of recent times such as Ethical Holism' of J.Baird Callicott (Nash: 1989, 146, 160; Fox: 1989). It is worth to note that the term 'life' implied by the prefix 'bio' in biocentric version of ecocentrism is not limited to living things in biological sense. Instead, it also includes the nonliving things in biological sense. For this reason, biocentrism is a version of deep ecology (Fox: 1989).

The term ecocentrism is used for two reasons. First, it is to avoid the confusion that deep ecology is limited to living things in a biological sense whenever the term 'biocentrism' is used. This is the purpose for which Warwick Fox (1989, 270) coined the term ecocentrism. Secondly, ecocentrism is an umbrella term distinguishing deep anti-anthropocentric theories

from such other perspectives of anti-anthropocentrism as ecofeminism, green socialism and animal liberationism. While the latter also try to redress human-centeredness, they are nevertheless mired with anthropocentric legacies (Fox: 1989). Deep ecology represents a radical version of ecocentrism in that it adds what it refers to as a spiritual dimension; a personal experience and connection (Russow: 2010).

The sources of metaphysical assumptions of ecocentrism vary just as its versions. However, they can be put into two general categories namely: pre-ecological and ecological metaphysical beliefs. The former refers to cosmological beliefs formulated before the science of ecology came into being. They consist mainly of the cosmological beliefs embedded in such indigenous worldviews as Eastern religious worldviews, indigenous African worldviews, American native worldviews as well as ancient European worldviews. These beliefs are the main foundations of such ecocentric versions as animism and organism.

Ecological metaphysical beliefs are cosmological beliefs mostly influenced by the science of ecology. They are the main foundations of deep ecology or biocentric and land ethics. However, most of the variants of ecocentrism are not informed purely by pre-ecological or ecological metaphysical beliefs. Eclectic nature of Naess' deep ecology exemplifies this (Keller: 2002, 368). Naess (1989, 4, 27, 78,) makes it clear that deep ecology is a platform of various ecosophies probably with different ultimate premises. It is for this reason that the works of Arne Naess are mostly cited in this chapter.

Among pre-ecological metaphysical beliefs, special attention is given to the American Indian cosmology. This cosmology is praised as the best alternative to Judeo-Christian metaphysics. Callicott (1998) for instance points to the superiority of American Indian worldview to

modern worldview as pertains to promoting a balanced relationship between human beings and their natural environment (ibid). Nasr (1968, 98) argues that while American Indians possess the profoundest metaphysical doctrines expressed in the most concrete and primordial symbols. In fact Nasr (ibid) advises that Christianity should have a dialogue with American Indians. However, metaphysical beliefs in some other indigenous worldviews are also considered for the sake of a more representative pre-ecological cosmology.

4.3 Metaphysical Foundations of Ecocentric Moral Theory: An Exposition

4.3.1 The World as a Living and Conscious Organism

Ecocentrists, especially pre-ecological thinkers, conceive the world as a living organism by virtue of all natural objects having personalized souls or spirits (Feya: 2005, 12; Freya: 2003, 45 – 60; White: 1967; standard: online). According to American Indians for instance, nature is permeated by spirit which is part of the Great Spirit; the principle of life (Callicott: 1998). This conception of nature is also evident in Europe, especially among the ancient Greeks (Nasr: 1968, 52). The latter believe that matter is alive by virtue of nature being inhabited by spirits or gods (Stumpf: 1999, 11; Nasr: 1968, 52). As such, there is no distinction between spiritual and corporeal, animate and inanimate beings (ibid).

In the East, the conception of nature as living and conscious being is found among the Hindu and Chinese (Nasr: 1968, 92). According to Hinduism all natural entities, man included, are connected by consciousness which is the principle of life and the essence of everything (Pappu: 1994). They also believe that God incarnated himself to both human and subhuman beings (ibid). The Chinese believe that nature is animated by an incarnate feminine principle which is a divine force and power in the universe (ibid). Wiredu (1994) observes the presence

of spiristic beliefs common to both African and European antiquity. Both believe that nature is charged with forces or inhabited by extra human beings superior to man in power and sometimes in morals (ibid).

The more scientifically informed environmental philosophers, in other words ecological metaphysicians, also affirm the belief that nature is alive (Nash: 1995, 36). Naess (1986, 234) for example argues that ‘...but we will conceive reality or the world we live in as alive....’ According to Sessions (1995, 300) the world is a psycho-somatic entity. This means that the earth is not only alive but also conscious. This is made possible by a world soul or divine spirit, a continuous and mysterious force that permeates all beings in the universe (Nash: 1989, 20, 43, 51). The world is also understood as Gaia Clark (1998). The latter, is the idea that the biosphere operates as a living organism modifying its own survival (Lovelock: 1974).

4.3.2 Sacredness and Personhood of Nature

Nature is sacred and conscious by the virtue of the divine nature or origin of animating power or soul (Feya: 2005, 12; Nash: 1989, 20, 22, 113; Sessions: 1995). This sacredness of nature is variously expressed. The American Indians for example believe that every existent, animate or inanimate in biological sense, is sacred by the virtue of the spirit which permeates all being (Callicott: 1998). They also have a strong symbolic conception of nature according to which natural objects are images of celestial realities (Nasr: 1968, 98). The ancient Greeks also emphasize the ‘divine’ quality of cosmos (ibid, 54).

Symbolic conception of nature is also evident in the eastern religions. Hindu for example understands nature as a veil of the supreme reality (Pappu: 1994; Morgan: 1996; Nasr: 1968, 98). For them, nature is a means through which man communicates with the divine (ibid).

More specifically, Hindu gods are very closely associated with animals of which, cow is the most important nonhuman animals for it symbolizes sacredness of all nonhuman life (Pappu: 1994).

In Taoism, Zen tradition and Shinto, the universe is the 'body of the Lord': it is an incarnation of feminine principle, a divine force and power which permeates the universe (Nasr: 1968, 87). According to these religious traditions, natural objects have sacramental effects: they convey grace and are means of communion with transcendental reality (ibid, 83). Njeru (1997) and my experience attest sacred conception of nature in the indigenous African worldviews: some trees, animals and objects are revered.

Since everything in the world has soul or spirit, everything is a 'subject' or 'person' (Nash: 1989, 57,118,158; Snyder: 1993). Particularly, the American Indians hold that the 'person' attributes may be projected not only to animate properties but also upon inanimate objects in biological strict sense (Callicott: 1998). According to them, nonhuman persons may be spoken with, honored or insulted, may become allies or adversaries no less than human persons (ibid). Central to this concept of person is the possibility of entering into social relations (ibid).

Since all natural entities are subjects, it follows that all of them are plain members of biotic community (Sessions: 1991, 163; Nash: 1989, 38, 57,118). Since life forms seem not to differ in kind but only in the degree of evolution, Hinduism, for example asserts equality of being (Pappu: 1994). Because of unity of life, God does not show any favoritism. Humans are not alone God's chosen creatures. The relationship between human and nonhuman is one of

equality (biotic equality). Salvation is for all. Inhabitants of heaven are not human beings or man-like alone; there are animals as well (ibid).

4.3.3 Teleology of Beings

All living organism are teleological centers of life by virtue of having their own interests, goals or purposes which they strive to realize in their unique way. Taylor (1986, 121) for instance argues that each organism carries out its life functions according to the laws of its nature (Taylor: 1986, 121). Rodman (1983) agrees with Taylor (ibid, 122) that each organism has a perspective determined by its particular way of responding to its environment. The organism undergoes the regular law-like transformations of the various stages of its species-specific life cycle (Taylor: 1986, 122; Rodman: 1983). The unique way in which each organism strives to achieve its goal constitutes its personality' or 'individuality' (Taylor (1986, 118-120).

The ultimate or fundamental goal of each organism, according to Naess (1989, 240), is its Self-realization. This goal must be sought within the world and not beyond. It must be understood in the view of one's nature and potentialities to unfold. Self-realization therefore means the development of one's capacities or potentialities. The more one's nature and potentialities are realized, the more self-realization there is. The actualization of one's potentialities is internally related to happiness.

4.3.4 Unity of Life and Interdependentness in Nature

The concept of spiritual dimension of all natural things as well as their common origin leads to the unity of all entities in the universe. In both American Indians and ancient Greeks, natural entities are united by the earth and the sky which are conceived as mother and father

respectively, (Stumpf, 1999, 11; Callicott: 1998, 234). The same conception of the nature as the divine mother is also found among the Chinese (Nasr: 1968, 92). Additionally, presence of splinter spirit (among the American Indians) in everything facilitates the perception of human and natural realms as unified and similar. All the myriad things constitutive of the universe flow back to their source, united in one grandfather spirit (Callicott: 1998).

According to Hinduism, God and all living creatures are connected by consciousness which is the principle of life as well as the essence of everything. As such, all of them have the same essence, the consciousness. This unity of God and all living creatures is manifested for example in the Hindu conception of 'incarnation of God'. God did not keep himself aloof in heaven, totally distancing himself from living creatures; he incarnated himself not only as human beings but also as subhuman beings (Pappu : 1994).

The conception of the universe as a unity of life is expressed variously by the more scientifically informed metaphysicians. Leopold (1949) presents the universe as biotic community. Naess (1986) and Taylor (1986) present nature as a system of interdependent entities. This is the idea that the survival and well being of each entity is determined by its relations to other living things (Naess: 1986, 226; Taylor: 1986, 99). Consequently, the universe is a 'tightly woven web of life' or 'web of life' or 'ecosystem' (Nash: 1995, 31; Taylor: 1986: 116). Individual organisms are knots in this biospherical net (Naess: 1973, 151). All the different ecosystems making up the earth's biosphere fit together in such a way that any radical change or total destruction of one results to adjustment in others and the whole structure (Russow: 2010; Taylor: 1986, 118 -120).

Naess (1989, 9) also uses the expression of self-realization to imply that ‘all life is one’ despite our egoistic needs. Naess (1989) distinguishes between two kinds of ‘self’: ‘large comprehensive’ or ‘ecological Self’ and narrow egoistic self (Naess: 1986, 80). The former is the “Self” embracing all the life forms on the planet (ibid). The deep ecologists’ talk about ‘Self –realization’ makes reference to self in wider sense (Naess: 1996). While Self realization starts with self as ego-trip, the self is widened and deepened with increasing maturity (Naess: 1986). This owes from an inescapable process of self-realization of others (ibid). Enlarging our Self increasingly leads us to identify with other beings. Consequently, we see ourselves in other beings, and others see themselves in us (Naess: 1986).

Identification of self in the sense of ego-trip with others necessarily leads to the conception of being as one; “the comprehensive Self”. As such, there is no plurality of selves but only plurality of components of the wide Self. The ‘egoistic self’ is united with the “Self” in such a way such that when one says for example ‘this place’ the place is part of oneself. Destruction of the place is destruction of oneself (Naess: 1986, 232). “Our self-realization is hindered if the self-realization of others, with whom we identify, is hindered. Our love of our ‘self’ will fight this hindering process by assisting in self-realization of others according to the formula “live and let all live” (Naess: 1989, 226).

As a result of identification of the ‘egoistic self’ with others, Deep Ecologists have subscribed to the principle of metaphysical holism. This is the principle that the biosphere does not consist of metaphysically discrete individuals but ontologically interconnected individuals comprising one unbroken whole. This principle is in turn known through self-realization.

Devall and Sessions for instance argue that all organisms and entities in the ecosphere are parts of interrelated whole (Keller: 2002, 368).

Clark (1998) expresses the same idea of unity of all life in his elaborate defense of holistic environmentalist ethic on the basis of the notion of Gaia. Gaia hypothesis, as authored by Lovelock (1974), is the idea that the biosphere operates as does a living organism - modifying its own survival. Implicit in this hypothesis is that the universe as a whole is like one body with individual species as organs. The different species, as organs of the body, contribute variously to the well being of the whole body from where they also draw their well being. In agreement with Lovelock (1974, 109, 119, 150), Clark (ibid) conceives the universe as a self-regulatory system indifferent to the interests of human beings. However, the world is not wholly invulnerable (ibid).

4.3.5 Man as Integral Part of Nature

Brotherhood of all natural entities is a common idea among the ecocentrists. It results from the unity of life (Pappu: 1994). Human and nonhuman beings are related to one another as children of one father and one mother (the sky and the earth respectively). They are also related by virtue of possessing the same spirit which divides itself and enlivens all things with a consciousness that is essentially the same.

Man belongs to human as well as wider biotic community with the rest of nature. Analogous to human community, existence in biotic community places people in an environment in which reciprocal responsibilities' and mutual obligations are taken for granted and assumed without question or reflection. As such man is an integral part of nature: all parts united through kinship ties (Freya; 2003: 45 – 60; Callicott: 1998; Nasr: 1968, 93 – 95). Under the

influence the science of ecology and evolutionary theory Taylor (1986, 99 - 100), Sessions (1995, 305), Snyder (1993) and Naess (1973) argue that human beings are plain co-equal members in biotic community. The biological conditions necessary for the realization of our human values are inextricably linked with the whole system of nature (ibid).

Naess (1973, 151) is categorical that human species is no more than a knot in a fast biospherical net. According to ecocentrists, there is neither special place for human beings nor expectation that the rest of the nature existed to serve one precious primates (Nash: 1989, 20, 43). After human beings have also played their part in creation's plan, they too may disappear without any extra-ordinary commotion (Nash: 1989, 43).

Ecocentrist however, acknowledge the uniqueness of man in relation to the rest of members of the biotic community. Naess (1989, 170) for instance, argues that human beings have conscious perception of the urge the other living beings have for self-realization. They are also the first kind of living beings known so far as having the potentialities of living in community with all other living beings (Naess: 1986). Albert Schweitzer conceives human as the most articulate of life-forms (Nash: 1989, 129). For Sessions (1995, 305), humans have self-reflective consciousness. Taylor (1986, 119; Vaughn: 2008, 390) acknowledges distinctively human characteristic such as freedom of choice.

4.5 Critique of Metaphysical Foundations of Ecocentric Moral Theory

Defensibility of anthropocentric moral theory presupposes rational acceptability of the metaphysical assumptions described in the foregoing discussion. Such metaphysical assumptions are hereby subjected to critical examination upon the objective criteria for the

adequacy of philosophical theories. Such objective criteria include conceptual clarity, external and internal consistence, comprehensiveness and reliability test.

4.5. 1 Conceptual clarity

First and foremost, ecocentrism is just one among several anti-anthropocentric moral theories such as ecofeminism, green socialism and animal libertinism (Fox: 1989). This notwithstanding however, ecocentrists have used the term ‘ecocentrism’ to make a distinction between their version of anti-anthropocentrism from the other versions. The term is an umbrella concept of anti-anthropocentric moral theories which tend to extend moral concern to the whole nature without being mired with anthropocentric legacies (Zimmerman: 2013, 5; Fox: 1989). Ecocentrism is closer to an equivalent for what deep-ecology means; certainly centering on ecosphere (Naess: 1989, 15; Naess: 1987, 16). This is opposed to Ecofeminism, green socialism and Animal liberationism.

Ecofeminism and green socialism focus only on reducing oppression of humans and attainment of a more egalitarian human society without considering humanity’s unnecessary destructive treatment of nonhuman entities (ibid). On its part, animal liberationism extends moral concern to some nonhuman entities by virtue of such entities possessing human intrinsically valuable qualities such as intelligence, sentience or consciousness (Rodman: 1983). These qualities are said to be proper to human beings (ibid). On the other hand, the focus of ecocentrism is to attain biotic egalitarianism (Fox: 1989).

Ecocentrists make clear the usage of the term ‘life’ implied in biocentric theory which is a version of deep ecology (Fox: 1989). Generally, people limit the application of the term ‘life’ to living things in strictly biological sense. This is comprehensible given that it is what the

prefix 'bio' means in Greek. As such the term applies only to natural entities which exhibit such characteristics as growth, reproduction, perspiration and so forth. In contrast, ecocentrists use the term life broadly to cover even the natural entities which are biologically considered as non-living (Naess: 1986; Fox: 1989). It is no wonder that such natural objects are regarded as living things in ecocentric moral theories.

The expression 'self-realization' is very central in metaphysical assumptions of ecocentric moral theories. The expression means an active condition or process of continuously actualizing one's potentialities by the way one lives his life (Naess: 1989: 9). Without further explanation, this expression could be understood as implying self-centeredness. Naess (ibid) however, makes it clear that the expression is used to connect the general statement that 'all life is fundamentally one'. To avoid any confusion, Naess (ibid), distinguishes between 'large comprehensive or ecological Self' and narrow egoistic self. The former is the "Self" implying embracing unity of all life. Capital 'S' is used to distinguish between the larger and the narrow sense of self.

In most cases deep ecologists use the term 'Self –realization' with reference to self in wider sense. (Naess: 1996). While Self realization starts with self as ego-trip, the self is widened and deepened with increasing maturity (Naess: 1989, 9; Naess: 1986). This owes from an inescapable process of self-realization of others (ibid). Enlarging our Self increasingly leads us to identify with other beings. Consequently, we see ourselves in other beings, and others see themselves in us (Naess: 1986). Larger self is seen as a world of potentials to increase our own self-realization (Naess: 1989, 9).

The ecological wing of ecocentrism is fairly free from obscurity and conceptual confusion. This owes to its expression in terms of what is observable. Both Naess (1989: 9) and Taylor (1986, 159), utilize the basic concepts from the science of ecology to explain their versions of ecocentrism. Precisely, they use such terms as complexity, diversity and symbiosis to clarify the place of mankind within nature. Clark (1998) makes use of Gaia hypothesis formulated by the scientist Lovelock (1974) to demonstrate the unity of all life. Rolston III (1998) draws insight from the findings of ecology, environmental and evolutionary science to discredit subjective account of valuing. Leopold (1949: vii-ix) employs the concept of biotic community, an ecological terminology, to explain the unitary nature of the universe.

4.5. 1. 1 Conceptual obscurity: Demarcation Problem

The term ecosystem, implied in Leopold's use of the term 'land' as well as its value-giving qualities constitutes some of the unresolved conceptual issues in deep ecology (Russow: 2010). A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community (Leopold: 1949, 224-5). By biotic community Leopold (1949: vii-ix) means 'land and its contents' as a community. This is comprehensible given the extended application of life to include even the nonliving things in strictly biological sense (Naess: 1986; Fox: 1989). This further implies ecosystem given the connectedness of all life in land (Taylor: 1986). Leopold's formula entails that the intrinsic good is a stable, integrated and beautiful ecosystem.

The Oxford English Dictionary defines integrity as a condition of having no part or element taken away or lacking. This means the undivided state or completeness. This seems to be the sense in which Leopold (1949) employs the term as a value-giving quality. It implies

soundness of ecosystem (Russow: 2010). On the other hand, stability suggests some sort of permanent internal co-existence of all elements constitutive of ecosystem. This is made possible by equilibrium that exists among such constitutive components. Both stability and integrity presuppose definite identity of an ecosystem as basis for judging it complete or incomplete (ibid).

The concept ecosystem raises 'identity' problem. This is the question about what constitutes an ecosystem as well as where it begins and ends both in space and time (ibid). This is not clear. None of its components; native and invasive animals and plants, migration, water, soil, climate, air and the like has identifiable boundaries (ibid). Consequently, the ecosystem which comprises them does not have identifiable boundaries either (ibid). As such, the concept does not meet identity and conceptual criteria.

Faced with the challenge of developing a coherent account of how to identify and delineate ecosystem some philosophers insist that nature as a whole is "the ecosystem" This however does not seem to make the concept ecosystem clear. Instead, it leads to a deeper and as yet unresolved problem of demarcation which can be summarized in the questions: "what is nature" and "are humans and their activities part of nature?" (Russow: 2010; Sober: 1993).

There are three possible answers: (a) humans are not part of nature and therefore no human interference with environment is non-natural; (b) humans are simply part of nature and therefore any effect they have on environment is natural; (c) some effects of humanity are natural, but others are not. Unfortunately, no convincing arguments have been given for (a); (b) seems naive and certainly unhelpful to environmental ethics, and (c) Requires a criterion,

with justification, for determining natural and unnatural effects. Such a criterion is not forthcoming (Russow: 2010).

The acceptance of (a) that man is not part of nature implies that he is not accountable to nature. This allows him to continue with interference with environment with impunity. on the other hand, acceptance of (b) that man is simply part of nature and that his effects on environment is natural implies lack of grounds to judge morality of human actions in relation to environmental well being. Whichever choice is made between (a) and (b) definitely leads to undesirable results as pertains to effort to protect the environment from destructive activities of human beings. This is the kind of dilemma in which ecocentrists have found themselves (Sober: 1993).

In their effort to weaken the force of the dilemma associated with concept of nature, ecocentrists, especially the deep ecologists, often put more emphasis on wilderness than on other sorts of ecosystems (Russow: 2010; Naess: 1989, 79). Unfortunately, 'wilderness' has exactly the same problems as 'nature,' perhaps even compounded. What a 'wilderness' is and why is it singled out for special recognition and (sometimes) protection is a bit problematic.

There are two senses in which the concept wilderness has been understood by its proponents. In the strictest sense, wilderness is an ecosystem that is unaffected by human interference. More typically, 'wilderness' is used to designate an area that is set aside and protected from development or uses that would change the area's 'natural' condition. But both of these conceptions of wilderness are problematic. The former definition is challenged by the fact that there are almost certainly no wilderness areas on this planet. The latter definition not only leads back to what 'nature' or 'natural' means but also to the question whether human

intervention in environment can be morally accepted. This results into a circular argument (Russow: 2010).

In the final analysis the demarcation problem remains unresolved: the difficulty to identify the boundaries of what is natural and that which is not. Sober (1993) observes correctly that the contrast between ‘natural and ‘artificial’ beings for instance becomes too obscure once we realize that organisms construct their environments in nature. In nature, organisms do not passively reside in an environment whose properties are independently determined. Organisms transform their environments by physically interacting with them.

4.5.2 Consistency Test: External and Internal

4.5.2.1 External Consistency

External consistency of ecocentric metaphysical assumptions consists first and foremost in the scientific basis of its ecological wing. The science of ecology and evolutionary theory are especially crucial. While the former investigates the interconnections of organisms and their constant transactions with energy and matter, the latter explains the proliferation of life on earth from simple inorganic matter (Snyder: 1993; Nash: 1989, 43). Evolutionary theory offers a unified explanation for the existence of both human and non-human forms of life (ibid, 42). Of the two however, science of ecology has been most influential (ibid).

Emergence of ecological science provided a philosophical turning point for environmental ethics discourse (Nash: 1989, 9). The science widened the circle of thinking into new horizons that extended to the totality of biospherical world (ibid, 144). In his pioneering works ‘Land ethics’ Leopold (1949) demonstrates the impact of the new science (science of ecology) in environmental ethics. Naess (1987, 4) makes it clear that his ecosophy is a wisdom based on

concepts of science of ecology. Taylor (1986: 101, 102, 115) fully grounds his biocentrism on empirical truths drawn from ecological realities and evolutionary theory.

Ecocentric conception of the world as a system of interdependent entities of which individual organisms are conceived as knots in the biospherical net is consistent with ecological truths. Food-cycle relationships in Food chains, pyramids and food webs for instance show nutritional interdependency among organism: they depend on each other for their survival (Brennan: 1993). The concept of Tropho-Dynamics illustrates a biotic-abiotic relationship characterized by a complex passage of energy through various feeding levels in an ecosystem (Lancour: 2015; Brennan: 1993, 196,204). Naess (1986) and Taylor (1986, 99) therefore, observe correctly that the survival and wellbeing of each entity is determined by its relations to other living things.

The notion of biotic community as new basis for moral community is founded on ecological sciences (Nash: 1995, 9). Analogous to human community in which no individual is self-sufficient, it is plausible to argue that the living organisms are consciously or unconsciously organized into a biotic community for mutual help. This is bolstered by the fact that each species occupies a special place (ecological niche) in the ecosystem (Nash: 1995, 31). Science of ecology and evolutionary theory testify that members of biotic community are related both nutritionally and in their origins respectively. Implicit in these empirical findings also is common good of all organisms namely: continued existence.

Conception of man as a plain member of biotic community is to a satisfactory level compatible with most current scientific data. Human beings have the same physiological needs like any other living organism. Food-cycle relationships in food chains and webs show

that all organisms depend on each other for their survival (Brennan: 1993). As Fuller (1946, 3) notes, all living organisms, humans included, struggle to exist. Recent studies in evolutionary biology and animal psychology indicate that some nonhuman animals for instance have intellectual faculties. Such faculties include rationality, intelligence, consciousness, language and ethical behavior (Ropeik: 2016; Suddendorf: 2014; Bekoff: 2012, Newmyer: 2006, 12).

Possessing of intellectual life by nonhuman beings demolishes a long held belief that such a life is exclusively human (Smulders: 2013; Arriaga et al: 2012). Human and nonhuman beings share a number of physical features which make possible the aforementioned capacities. These include neuro-chemical processes in the brain responsible for rationality (Lawhead: 2009, 312), Neuroanatomical features are responsible for vocal learning (Smulders: 2013; Arriaga et al: 2012) and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviors (Bekoff: 2012).

The common faculties and features between human and nonhuman beings are supportive of evolutionary theory. The theory has tried to offer scientific reasons showing interrelatedness of all life in its origins (Nash: 1989, 56). It presents human being's coming into existence through the same evolutionary process governed by the same laws of natural selection and genetic transmission (Nash: 1989, 43). While man exceeds animals in some of the intellectual faculties and physical features, the difference is not one of the kind but of degree (Henneberg: 2013; Suddendorf: 2014). Smulders (2013) observes that the uniquely human characteristic features must have evolved in man's own lineage. Suddendorf (2014) gives example of how primate intelligence might have evolved.

The foregoing discussion testifies that there is hardly anything which is exclusively a human property. The findings of natural sciences reveal that man is subject to the same laws of nature which govern everything else. The assertion by Taylor (1986, 112) that man fits into the same structure of reality that accounts for every other form of life is sound from the perspective of natural science. The same applies to the assertion by such ecocentrists as Snyder (1993) that 'we (humans) are thrown back into the garden with the other animals, and the wall between nature and culture has crumbled'.

While most metaphysical assumptions of ecocentric moral theory are consistent with empirical data, there are exceptions. Such is the case with the conception of the world as a 'comprehensive self' (Naess: 1989, 9). This understanding of the world is based on the intuition of 'self-realization' which depends on one's ability to identify with the larger organic whole of all beings (Naess: 1989, 9; Shraser-Frechette: 2003). According to Naess (ibid) this is one of intuitions which cannot be validated according to traditional scientific or philosophical reasoning but only according to the deep ecology method of searching questioning, according to which the spiritual wisdom of these intuitions will reveal itself.

As Taylor (1986) points out, many intuitionists may be flawed because they are psychologically dependent on the basic attitudes towards nature that people acquired during childhood. As such they merely reflect the particular social group within which people were raised. Such intuitions often conflict with those of others who instead maintain that their views are also 'self-evident'. In short, intuitions are subjective and relative sources of knowledge.

Pre-ecological metaphysics explanation of the world as living, one and sacred by virtue of a common spirit permeating all natural objects is unconvincing. The concept of world soul or spirit seems to be postulated in background of ignorance: it serves as explanation of natural phenomena whose scientific explanation the ancients lacked. As Kottak (1991, 334), Passmore (1974, 176) and Forde (1970, viii) observe, people attribute the soul or spirits or deities to natural objects or events which appear mysterious to them.

As Passmore (1974, 176) argues, empirical sciences have made intelligible and solvable the problems were seemingly mysterious in the ancient. Lightning and thunder for instance have been scientifically explained as an effect of the encounter between positively and negatively charged air currents (Muriithi & Ringeera: 2003). This is contrary to ancient belief among some African communities that such natural phenomena are footsteps or warnings of God (Gachaga & Kerre: 2003, 145). Just like in the case of anthropocentrism, the existence of the soul or spirits is a matter of faith which is a subjective source of knowledge. The existence of such souls or spirits cannot be demonstrated objectively.

4.5.2.2 Internal Consistency

There is consistency between the general understanding of the universe and the place of man in it. The belief that man is an integral part of nature follows necessarily from the belief that the universe is a system of interdependent entities. These metaphysical assumptions demonstrate that human beings do not have any special quality to warrant preferential treatment. In any case, scientific discoveries show that human and nonbeings share a lot in common (Smulders: 2013). In case Human beings are unique, they are just unique like any

other natural entity (Smulders: 2013). Accordingly, the Principle of biotic egalitarianism follows from these metaphysical assumptions.

While ecocentrists have tried to demonstrate the fitting together of metaphysical components of ecocentric outlook, their system is vulnerable to several internal inconsistencies. Taylor (1986: 114, 115) for instance presents human beings merely as predators and having no role to play in enhancing the wellbeing of other species and biotic community as a whole. Basing himself on Man's late arrival into the world, he argues that the earth's biosphere could still continue to exist even without human beings. The demise of human beings would neither be a loss to other species nor adversely affect the natural environment. On the contrary, other living things would be much benefited. The physical environment of the earth would be greatly improved.

Such an argument contradicts a key metaphysical belief in ecocentric theory namely, interdependence among beings (Taylor: 1986, 116). Implicit in interdependence of being is the role played by each being. As previous discussion has shown, this belief is supported by ecological fact that each species occupies a special place in ecosystem, ecological niche (Nash: 1995, 31). Taylor (1986) therefore contradicts what is seemingly the economy of being according to which everything has a purpose in ecosystem (Naess: 1974, 153). Presenting human beings as having no role to play in ecosystem vindicates the anthropocentric belief that nature exists to the service of humankind.

In the event of competing interest between human and nonhuman beings, some ecocentrist tend to give priority to human beings. Naess (1989, 170) for instance, supports preferential treatment of human beings by arguing that 'in practice we have greater obligation to that

which is nearer to us'. In his attempt to resolve the conflict between human interests and duty to preserve nature, J.Baird Callicott grants priority to the closest (Shrader-Frechette: 2003; Fieser: 1998, 6). While the 17th and 18th century organists questioned anthropocentrism, they remained concerned of legitimacy of human control of natural world (Nash: 1989, 22). While Spinoza's system was not speciesist, he (Spinoza) was a speciesist as pertains to rights (Sessions: 1991, 163).

This tendency contradicts both the metaphysical belief in the plain membership of human beings in biotic community and egalitarian principle which are very dear to ecocentrists. The same internal inconsistency is evident in ecocentrists' appeal to beauty as one of the value-giving quality (Russow: 2010; Leopold: 1966, 262; Rodman: 1983, 128). The criterion is obviously based on human evaluation as it cries out for a sentient being to recognize beauty. Consequently, it contradicts the two key themes in contemporary environmental ethics that have their roots in Leopold's writing: a holistic approach and a rejection of the idea that the value of land is to be judged solely in terms of the usefulness of its products to human beings (Russow: 2010).

4.5.3 Reliability Test

The reliability or unreliability of ecocentric metaphysical assumptions consists in its consequent moral theory's capacity to offer a practical guidance in addressing environmental problems. The preceding discussion has shown that the metaphysical assumptions of ecocentric moral theory affirm biotic egalitarianism. However, the implications of this egalitarianism cast doubts over the ecocentric moral theory's capacity to offer a practical guidance in addressing environmental problems. In their attempt to adjudicate the conflict

between human interests and the duty to preserve nature, ecocentrists are open to ethical positions which may not be psychologically acceptable as they are opposed to traditional moral principles.

Tom Regan points out that the assertion of equality of all human and nonhuman members of biotic community leaves the ecocentrists' open to the charge of environmental ecofascism (Shraser-Frechette: 2003). The latter refers to the dangerous consequences that arise if one attempts to maximize biotic welfare (ibid). Fieser (1998) points out at the same negative implications of ecocentrism. If one maximizes biotic welfare independent of human interests, then under some circumstances one could fail to recognize human rights and allow humans to die, whenever human welfare seemed at odds with biotic welfare (Shraser-Frechette: 2003).

The above criticism seems justified considering arguments from such ecocentrists as J.Baird Callicott and Holmes Rolston III. The former argues that nature is indifferent to individual life and hence, the environmental ethics according to which individual's life is the highest good and death is the greatest evil, is fundamentally flawed (Shraser-Frechette: 2003). On his part, Holmes Rolston III argues that saving a particular species is sometimes a higher value than protecting human life in poor areas; he says that African poachers in poverty-stricken nations should be shot on sight (ibid).

Due to the fear of ecofascism implicit in the ecocentric moral theory, it may be hard to implement the theory in its current form. The assertion that human life can be sacrificed when human welfare is at odds with biotic welfare is contrary to the accepted moral principles. These include the principle of self defense against aggression and principle of self preservation (Sterba: 1993). The later requires a person to take necessary measures to ensure

his survival (ibid). Consequently, ecocentric moral theory is rendered psychologically unacceptable. As Schmitz (2008) argues combat seems necessary for one's survival.

In their attempt to diffuse ecofascism implicit in biotic holism and equality some ecocentrists grant priority to human needs. In doing so however, ecocentrism is reduced to anthropocentrism with its preferential treatment of man. But it is the preferential treatment of man that ecocentrism is opposed to. Prioritizing human needs leave human activities in relation to environment undeterred. This allows man to continue degrading environment without any feeling of guilt. This is the dilemma in which ecocentrists find themselves. Neither the biotic egalitarianism in its original form nor its adjustment to grant priority to human needs produces desirable practical results.

The passivity of indigenous worldviews is their major undoing. As Passmore (1974, 176) points out, the belief that nature is sacred can tell against attempts to preserve it. The recuperative powers of nature are thought to be sufficient to guarantee that the self-reliance would not issue in final devastation. A nature that is divine, men can't destroy. Just in virtue of its divinity, it may be argued that nature can be trusted to look after itself. Close to this is the attitude of divine providence. This is the belief that God's wondrous plan would accommodate even thoughtless human actions (Nash: 1989, 22). Such beliefs hinder human active intervention in environmental matters.

Passive response to environmental problems is also implicit in the intuitionist epistemic basis of deep ecology propagated by Naess (1986, 9). The most important of these intuitions are self-realization intuition and biotic equality (ibid). This is however problematic. As a US philosopher Richard Watson argues, self-realization intuition of Naess (1989), especially as

grounded in Spinoza (1632 – 1677) seems to lead to a contemplative, non-activist, passive environmental ethics (Shraser-Frechette: 2003).

Deep ecology is also unrealistic given its intuitionist epistemic foundations. As a US philosopher Richard Watson points out, the intuitionistic appeal to biotic egalitarianism underestimates human potential for evil. Great harm is likely to occur if humans are treated equally with other members of the planet. This is because of human propensity to propagate and thrive at expense of many other inhabitants' of the planet (Shraser-Frechette: 2003).

The appeal to animistic metaphysical beliefs by many pre-ecological thinkers is based on the reliability of such beliefs in encouraging preservation moral attitudes and behavior in antiquity (Njeru: 1997, 58; Callicott: 1983). It is doubtless that pre-ecological metaphysical beliefs inspired environmental protectionist and preservationist attitudes and behavior in the ancient days. It is not hard to hear people's expression of nostalgia for the innocent past. This is especially found among the elderly people who have had experience of health environment in the past.

The reliability of pre-ecological metaphysical beliefs is dubious in contemporary world. The descriptive analysis of metaphysical assumptions of ecocentric moral theory has shown that the reverential attitude towards nature is based on the belief that natural objects are inhabited by souls or divine spirits or deities. As such, natural objects were alive and sacred. This explains the observation made by many of pre-ecological thinkers that trees were not cut or animals killed anyhow (Njeru: 1997, 58; Lynn: 1967). This forms the basis for pre-ecology thinker's trust for indigenous worldviews as providing a stronger environmental ethics (Njeru: 1997, 58; Callicott: 1983; Lynn: 1967).

Animistic beliefs however, seem to be formulated at a time when people were ignorant of the scientific explanation of the workings of nature. Such beliefs as nature being inhabited by souls or spirits were formulated in the attempt to explain the 'mysteries' of nature (Kottak: 1991, 334; Passmore: 1974, 176; Forde: 1970, viii). As Passmore (1974, 176) argues however, scientific discoveries have made the once mysterious natural phenomena intelligible. The scientific explanation of natural phenomena therefore, renders pre-ecological metaphysical beliefs useless. Once the fear of spirits or souls is driven away the reverential attitude together with its consequent behavior towards nature fades away. Consequently, nothing deters man from environmentally destructive behaviour.

Reliability of ecocentrism, especially its pre-ecological wing is further cast into doubt by the fact that the Societies for whom nature is sacred have nevertheless destroyed their natural habitation. A lot of ecological destruction has for instance been witnessed in Japan and China despite all tradition of nature worship (Passmore: 1974, 176; Wiredu: 1994, 46). There is also disappearance of a great many of the large mammals: Kangaroo in Australia and Moa in New Zealand (ibid). These examples counter the argument that a return to indigenous worldviews characterized pre-ecological metaphysics would inspire environmentally responsible attitudes (Njeru: 1997, 58; Callicott: 1983, 231).

Furthermore, ecocentrism seems unable to deter environmentally destructive human behaviour. Birch (1990, 339) for instance observes the inadequacy of designating wilderness reserves as 'sacred' places in effort to protect the environment. He compares sacredness of wilderness with religion and morality. While there has been sacred in imperial power in western culture, secular power has long ago triumphed over the church. Just like the two, wilderness is fine for weekend and holidays but during the working week it may in no way

inform business as usual. Implicitly the talk of sacredness of wilderness melts down before human needs.

Thomson (1993) echoes the above sentiments with regard to environmental values and practical life. In practice, according to her, we know that even those who profess a love for nature often show by their actions that they in fact value their own welfare and human happiness a lot more. An environmental ethics often seems to be something we can show off on Sundays and holidays; the rest of time we engage in those activities, which presuppose the continued destruction of the wilderness and species, and we fall into the ways of thinking and attitudes appropriate to these activities.

Implicit in the foregoing discussion is the fact that more than attributing intrinsic value (something which not even clear) or sacredness to nature is needed: scaling down human needs is necessary. This is the direction which Wiredu (1994) suggest though implicitly. While he acknowledges less damage on African environment, he attributes it to low human population. Scaling down human population and needs however presupposes a theory which strikes a balance between human needs and environmental protection.

4.5.4 Comprehensiveness

Comprehensiveness or completeness of a philosophical theory requires that such a theory be considerate of anything important and relevant to the issue under discussion. A theory is evaluated positively if it makes sense out of a wide range of phenomena. It is evaluated negatively if it ignores significant areas of human experience or raises more questions than answers (Lawhead: 2009, 39; Taylor: 1986, 159).

To a satisfactory degree, ecocentrists have employed relevant data from empirical sciences to demonstrate the similarity between human and nonhuman beings. Particularly, they have made use of the evolutionary biology and the science of ecology to show that both human and nonhuman beings are subject to the same laws of nature. Likewise, they demonstrate the equally important role played by every natural entity in the world, both animate and inanimate.

However, in their effort to disprove the purportedly human superiority ecocentrists emphasize more on similarities between human and nonhuman beings without giving explanation of the place of human uniqueness. This is notwithstanding acknowledgement of such uniqueness by Taylor (1986: 110), Sessions (1995, 305) and Naess (1989, 170). All conceive man as highly rational and having self-reflective consciousness. Unlike other species, human beings are autonomous and have the freedom to choose (Taylor: 1986: 102, 103, 105,119). Albert Schweitzer conceives human as the most articulate of these life-forms (Nash: 1989, 129).

Some of the proponents of ecocentrism have acknowledged its lack of comprehensiveness. In preface to his book, Naess (1989 xii) for instance points out that his work in eco-philosophy serves only as introductory to such a new field. He therefore leaves room for anybody who would like to add something. Snyder (1993) expresses the same lack of comprehensiveness in his assertion 'We (ecocentrists) are still laying the groundwork for a 'culture of nature'.

A critical look at ecocentrism reveals that the aforementioned lack of incomprehensiveness is to a certain degree deliberate rather than accidental. Zimmerman (2013, 8) observes tactical avoidance of the explanation of the uniqueness human beings by ecocentrists. According to him, this is done with the aim of avoiding justification of preferential treatment of human

beings seemingly implicit in such uniqueness. Consequently, ecocentrists fall victims of what Fuller (1946, 5) observes as the inclination by the majority of people to interpret the behavior of the universe in a fashion favorable to their moral and religious interests.

In the final analysis ecocentrists fail to meet the requirement for comprehensive interpretation of nature. As Hoppe (1964: 522) argues, a comprehensive interpretation of nature must include an explanation of the meaning of distinctive powers of man. This should be the case despite the affirmation by new cosmology that man is part of nature (ibid).

4.6 Conclusion

A critical examination of metaphysical foundations of ecocentric moral theory reveals two wings of such metaphysical foundations: pre-ecological and ecological metaphysical beliefs. While the latter are mainly informed by the findings of empirical sciences, the former appeal to such inner and subjective feelings as faith, intuitions and dreams as sources of their validation. Pre-ecological metaphysical beliefs are difficult to demonstrate objectively given their subjective sources. Apart from subjectivism, pre-ecological metaphysical beliefs also encourage passive response to environmental problems.

The differences between pre-ecological and ecological metaphysics notwithstanding, both ecological and pre-ecological thinkers arrive at an almost uniform conception of the universe and the place of man in it. Both agree on unity of life, interrelatedness of natural entities, their equality and place of man as integral part of nature. Such conception of the world is compatible with empirical data.

The science of ecology and evolutionary biology show that human beings, just like nonhuman beings, are subject to the same natural conditions which make survival possible. Studies in

animal psychology demonstrate that both human and some nonhuman animals have a lot in common in terms of intellectual life. They also share physical structures and chemical processes responsible for much of intellectual faculties. In the final analysis, there is hardly any property which is exclusively human. Man is unique by virtue of having a higher degree of intellectual faculties. However, he is just unique as nonhuman beings are.

To a larger degree, the metaphysical assumptions of ecocentric moral theory meet the criteria of conceptual clarity and internal consistency. Ecocentrists make it clear the sense in which such concepts as life and self-realization are used. The difference between ecocentric moral theories and the rest of anti-anthropocentric moral theories is also made clear. There is internal consistency between the general conception of the world and the plain membership of man in the biotic community. The principle of biotic egalitarianism also follows necessarily from the metaphysical assumptions of the ecocentric moral theory.

Despite their strengths, metaphysical assumptions of ecocentric moral theory have several weaknesses. This is in addition to the weaknesses of the pre-ecological metaphysics discussed in the first paragraph of this section. It is not clear what the concept of nature, and consequently the concept of ecosystem, consists in. Precisely, the demarcation between 'natural' and 'artificial' as pertains to man is not clear. The tendency of the ecocentrists to give priority to human needs in the event of competing claims contradicts their principle of biotic egalitarianism. However, strict adherence to biotic egalitarianism also contradicts the accepted moral principles. This makes ecocentrism psychologically unacceptable.

The major shortcoming of ecocentrism is lack of comprehensiveness in its explanation of reality. Precisely and most importantly, ecocentrists fail to explain the place of man in the

universe. This is notwithstanding their acknowledgement of human uniqueness and the fact that each species has a special role to play. The failure to explain the meaning and the place of the distinctive human nature seems to be the cause of other deficiencies such conceptual unclarity and internal inconsistencies. Just like anthropocentrism, ecocentrism as an antithesis does not fully meet the objective test for acceptability of philosophical theorems. As such, it is not adequate basis of contemporary environmentalism.

CHAPTER FIVE

ANTHROPOCENTRIC-ECOCENTRIC COMMON GROUND

5.1 Introduction

This chapter is an attempt to formulate a common moral ground as a synthesis of anthropocentrism and ecocentrism. The task is informed by the results of the preceding chapters which reveal three facts about the anthropocentric-ecocentric antagonism. In the first place, neither anthropocentric nor ecocentric moral theory, as thesis and antithesis in a dialectical conflict, can adequately provide theoretical foundation for contemporary environmentalism. This owes to the failure of the concept of intrinsic value as well as the metaphysical assumptions of each theory to pass adequately the objective criteria for acceptability of philosophical theories.

Secondly, the metaphysical assumptions of each theory have some strengths by the virtue of the degree to which they pass the objective test for acceptability of philosophical theories. These strengths constitute anthropocentric-ecocentric common metaphysical ground. Thirdly, the major shortcoming in the metaphysical foundations of both theories is lack of comprehensive use of relevant data particularly in their explanation of the place of man. Once commitment to comprehensiveness is made, there is likelihood of an objective conception of the place of man in the universe. Consequently, the anthropocentric-ecocentric common metaphysical ground widens. Given the metaphysical foundations of ethics anthropocentric-ecocentric common moral ground can be deduced.

The foregoing discussion points at the two main phases of this chapter. The first stage is the description of the anthropocentric – ecocentric metaphysical convergence point. This includes not only the explicitly held beliefs but also the common metaphysical ground arrived at after

comprehensive inquiry into the major area(s) of divergence. The second phase is the deduction of anthropocentric – ecocentric common moral ground from the aforementioned metaphysical common ground. This goes hand in hand with a demonstration of how anthropocentric and ecocentric positions on the value of nature are reconciled. Ultimately, a new theory as a synthesis of anthropocentrism and ecocentrism is suggested.

5.2 Anthropocentric - Ecocentric Metaphysical Convergence

Both anthropocentrists and ecocentrists agree on interdependence and interconnectedness of all life (Nash: 1995, 31). Passmore (1974, 173), for instance argues that the survival of everything, man included, depends on exploitation of nature. The conception of the world as a system of interdependent entities of which individual organisms are knots in a biospherical net is a major metaphysical belief held by eco-centrists (Russow: 2010; Taylor: 1986, 99, 118 -120; Naess: 1986, 226, 235; Naess: 1973, 151). As Naess (1989, 6) demonstrates there is nothing that exists apart. This conception of the world is compatible with the facts of ecological facts. Food chains and food webs clearly show passage of energy through various feeding levels in an ecosystem (Lancour: 2015; Brennan: 1993).

Implicit in the interdependence among beings is the idea that each member of biotic community has a role to play. Aristotle (384 B.C.E – 322 B.C.E) correctly argues that everything in nature, man included, has a distinctive function to fulfill; a function relative to its distinctive qualities (Stumpf: 1999, 92). Ecological science testifies to the fact that each being occupies an ecological niche in an ecosystem (Nash: 1995, 31). The distinctive capacity of each being is the means by which it survives and contributes to what might be rightfully

called the 'common good' of the biotic community. Taylor (1986) at least acknowledges the instrumentality of human rationality to the survival of human beings.

While man is biologically at par with the rest of members of the biotic community, both anthropocentrists and ecocentrists acknowledge his uniqueness. According to anthropocentrists, humans are highly intelligent and rational (Nash: 1989, 91; Mondin: 1975, 65; Passmore: 1974, 35, 36). Ecocentrists acknowledge distinctively human characteristics such as self-reflective consciousness, foresight, freedom of choice and autonomy (Sessions: 1995, 305; Naess: 1989, 170; Taylor: 1986, 103, 119). Additionally, man has the ability to learn and use language (Newmyer: 2006, 15). Such human distinctiveness is affirmed by the findings of empirical sciences especially the animals' psychology (ibid, 14).

5.3 Main Anthropocentrism - Ecocentrism Metaphysical Divergence

The foregoing metaphysical agreements notwithstanding, anthropocentrists and ecocentrists differ sharply on their conception of the place of man in universe. The difficulty in reaching consensus on this issue is comprehensible given the fact that the special role of man in ecosystem is not explicitly evident. This is contrary to nonhuman beings whose special place in ecosystem is discernible from the way they relate and depend on one another at least nutritionally. This is clearly demonstrated in food chains and in food webs. The nutritional value of living human beings is not readily evident given that humans have intelligently shielded themselves from natural predatory. Much of difficulty in reaching consensus is contributed by the spiritual nature of human distinctive qualities.

According to anthropocentrists, the human distinctive qualities set man apart from the rest of nature (Newmyer: 2006, 15). By virtue of his higher rationality for instance, man is closer to

God as his image, more intrinsically valuable and governor of the universe (Nash: 1989, 91; Mondin: 1975, 65). Rationality endows man with powers to civilize and perfect the 'strange' and 'imperfect' nature (Passmore: 1993; Passmore: 1974, 35, 36). On the basis of his nature and special place in the order of nature, man is superior to nonhuman beings and he deserves preferential treatment in the case of competing claims (Passmore: 1974, 113).

Ecocentrists term the alleged superiority of man as irrational, arbitrary and self-serving prejudice that favours one particular species over several million others (Schmitz: 2008). They do not accord any special place to human beings or expectation that the rest of nature existed to serve one precious primate (Nash: 1989, 20, 43). According to them, man is no more than a knot in a vast biospherical net (Naess: 1973). As such he is subject to the same natural laws governing every other thing in nature. Human society is but only a part of the great cosmic society to which men and gods belong (Fuller: 1945, 19). Consequently, human beings are plain members of the biotic community. They should be treated equally with the rest of nature.

While the two theories differ in their explanation of the place of man in the universe, they seem to agree on inevitability of preferential treatment of man. In the event of competing claims between human and nonhuman needs, ecocentrists give priority to the vital human needs (Schmitz: 2008; Shrader-Frechette: 2003). They do so notwithstanding their hold on the principle of biotic egalitarianism according to which all entities should be given equal treatment (Keller: 2002, 368; Naess: 1989, 28). This portrays both ecocentrists and anthropocentrists as bed fellows practically; separating only theoretically,

On the other hand, anthropocentrists include into moral community the human beings who lack the popular human distinguishing qualities such as rationality, freedom of will and reflexive self-valuing into moral community (Newmyer: 2006, 12). They also exclude nonhuman beings possessive of such allegedly value-giving qualities, even though minimally (ibid).

The foregoing discussion raises a critical question about what makes preferential treatment of man inevitable. The current anthropocentric explanation of the place of man in the universe cannot be a sufficient ground for such a tendency. As previously demonstrated in chapter three of this work, much of anthropocentric conception of man is based on the concept of great chain of being and the concept of soul: the two pillars of Judeo-Christian metaphysics. It has been shown however, that the two concepts do not pass the objective test for acceptability of philosophical theories. Furthermore, the allegedly distinctive human qualities are also found among some nonhuman animals. Surprisingly, such animals are either shown little or no moral concern (Henneberg: 2013).

The foregoing discussion points at the need for a better and objective explanation of the meaning of human uniqueness and grounds for preferential treatment of man. But what is the possibility that such an explanation is possible? In most cases, disagreements between different people or parties arise from either party or both being less informed about the issue over which they disagree (Hoppe: 1964, 317). This seems to be the case in anthropocentric – ecocentric divergence over the place of man in the universe. The preceding two chapters show clearly that the lack of comprehensive use of relevant data as pertains to the nature of man is a major problem among the proponents of both theories.

Resolution of anthropocentric-ecocentric divergence requires a critical incorporation of any relevant information that might have been left out by the proponents of the antagonistic moral theories into the already existing metaphysical beliefs about man. Intellectual courage is also necessary for accepting whatever rationally justified place of man in the universe. The critical question is ‘can there be an exclusively human distinctive quality?’

5.4 The Nature and Place of Man Re-Visited

5.4.1 Egoistic Nature of Man and Nonhuman Beings

In his search for objective foundation of value, Tara (2000, 7, 85) observes that man is naturally egoistic. Egoism is the doctrine that all one’s conscious actions primarily promote one’s self interests above all else (Moore: 2005, 52). According to Tara (ibid) this egoism is logical implication of life being the basis of values. Since everybody wills to live, a person pursues value and abides by a moral code that advances his own life. A rational morality attempts to guide a person’s actions toward beneficial ends (ibid, 87). Principle of self-defense against aggression, a priority principle in environmental justice, is one among many evidences for egoism of human beings (Tara: 2000, 89; Sterba: 1983).

While human beings act egoistically, experience also shows a natural tendency by individual persons to promote the interests of the ‘other’. The ‘other’ in this case means any entity apart from the self. This can be a fellow human being or nonhuman being. However, the extension of any help depends on the closeness of the ‘oneself’ to the ‘other’ either by relation or proximity. One starts with close relatives or acquaintances, then to distant people and to all members of human species. This is the case regardless of the person’s mental or social status. Concern is also extended to nonhuman species again starting with those close to the valuer.

Such a tendency can be explained in terms of the ability of oneself to feel the experience of the 'other' as one's own. In short, it can be explained in terms of variation in degree of empathy with or understanding of the 'other'. It is easier for one particular human person to understand their feelings of fellow human beings since they are of the same nature. As such, it is easier for one to gauge the impact of some actions on fellow human beings than it is with members of other species. The effects of such actions on oneself also apply to fellow human beings. This seems to be the basis of the ancient golden rule 'do not do to other what you would not like be done to you'

Likewise, the concern for the interests of nonhuman beings seems to be based on the person's experience, knowledge and understanding of such beings. Experience shows that the extension of concern to nonhuman beings starts with those close to human beings, either by proximity or by relationship. By relationship means that human and nonhuman beings in question may belong to one family (homonidae) or one order (primates) or one class (mammalian). This closeness enables people to understand the feelings of nonhuman beings. Through this, it has been understood that there is a lot in common, for instance between humans and nonhuman animals. It owes to this commonness that animals for instance are classified to same taxonomic units (ibid, 19, 20).

Now, a general principle can be deduced from the foregoing discussion that "the closer one is to the 'other' the more s/he understands the 'other' and the more s/he extends concern to the 'other'". The opposite is true if the 'distance' between oneself and the 'other' increases. This can be expressed in a general principle that "the stranger the 'other' is to the 'oneself' the lesser the chances for moral concern of the other becomes". Ecocentrist' (Naess (1989) are

right in their observation that the closer man lives in nature, the more they understand it and the more they are likely to extend the circle of moral concern to include nonhuman beings.

Egoistic tendencies are however not limited to human beings: they are also present in nonhuman beings, especially those that have consciousness. Experience shows that organisms act in a way to defend themselves from anything that is detrimental to their survival. As Callicott (2005, 203) and Rolston III (2002, 118) argue, other forms of life can also “do” a bit of valuing. Now, a valuer’s valuing of value presupposes the valuer’s self valuation i.e. valuing one’s life Callicott (2005, 203). Reflexive Self-Valuing is therefore not confined to human beings or even to rational creatures at large.

Newmyer (2006, 14) has also observed the tendency of extending care to members of one’s own species as well as to those of different species among nonhuman animals. Elephants for instance slow their march if a member of their troop is injured. Dolphins may swim underneath injured dolphins and carry them safely to shore. The extension of concern to those close to oneself in terms of relationship is evident among social animals. Ropeik (2016), Suddendorf (2014), and Bekoff (2012) observe a kind of family warmth and affection among such animals. For instance whales mourn at the loss of a child; great apes console each other; mice, rats and chickens display empathy.

Animals also extend sympathy to members of different species starting with those close to them in terms of biological relationships. Elephants for instance kneel down and pull baby rhinos from mud holes in which they had become mired. Dogs and cats sometimes adopt orphaned piglets or skunks. While it is hard to attribute self-valuing to natural entities that lack

consciousness, suffice to say, on thought experiment, that they would also do the same if they were conscious (Newmyer: 2006, 14).

5.4.2 The Place of Man in Universe Re-Examined

The place of man in nature means the ecological niche of man as man. In other words, it is the special role or function human species play or fulfill in nature. Aristotle (384 B.C.E – 322 B.C.E) points out correctly that just like everything else in nature, human beings have function to fulfill (Stumpf: 1999, 92). According to him, human's special role in the universe is relative to his peculiar nature (ibid). This position is in line with the finding of ecological science. The latter testifies that each being, by virtue of its distinctive nature, occupies a special place (ecological niche) in an ecosystem (Nash: 1995, 31).

Man is distinguished from the rest of nature by the virtue of his higher intellectual life. For anthropocentrists this property puts man in a superior position to nonhuman beings and eventually set him apart from nature. While acknowledging the distinctive human properties, ecocentrists argue that man is plain member in the biotic community. However, they (ecocentrists) do not give a detailed explanation of the meaning and the place of human uniqueness in the universe. The anthropocentrists' elevation of man without considering the uniqueness of nonhuman beings has been found to be problematic.

The nonhuman beings, with their distinctive properties, play special role in ecosystem without necessarily being elevated from the rest of nature. One wonders why the distinctive human properties should place man in a superior position to that of nonhuman beings and eventually set him apart from them. In chapter three of this work, the allegedly supernatural place of man

has been proved unconvincing. In light of these considerations the meaning and place of distinctive human properties should be found within the order of nature.

Aristotle (384 B.C.E – 322 B.C.E) has tried to explain the role of man within natural order. He points out that nature does not leave man without work. According to him, man plays a special role which is relative to what is peculiar to humanity, namely rationality (ibid). In his analysis of human nature the ‘soul’ has two parts: irrational and rational. The irrational part is always contrary to the rational principle, resisting and opposing the rational principle. The particular function of the rational part is the control and guidance of irrational part of the soul (Stumpf: 1999, 92).

The rational soul, according to Aristotle, has the power for scientific thought or reasoning. Reasoning is of two kinds: theoretical reason and practical. The former gives knowledge of fixed principles or philosophical wisdom. This includes the power to distinguish between different things and to understand relationship of things to each other. This means discovery of the truth of nature of things. Theoretical reason also enables one to discover the guides for human behavior (ibid). Practical reasoning gives us a rational guide to our action under the particular circumstances in which we find ourselves (Stumpf: 1999, 91, 95).

The irrational part of the soul consists of concupiscent and irascible passions which are responsible for love and hatred respectively. While the concupiscent passions lead one to desire things and persons, the irascible passions lead to avoid or destroy them. In themselves these capacities do not contain any principle of measure or selection of what and how much should a person desire. These capacities can go wild if not controlled or guided. Again, our lives consist of an indeterminate number of possibilities. Reason is the guide to right choices

and virtuous living which consist in mean between excess and defects. It does so by knowing what we must do; deliberating about it and choosing to do it (Stumpf: 1999, 94, 95).

The foregoing explanation of the role of human rationality within human nature (micro world) can be extended to the whole of nature (macro world) in which there are less rational as well as irrational beings. As such, man's special role in the universe can be conceived as rational guidance and control of the less rational and irrational beings in the ecosystem. Since human and nonhuman beings lack common language, man's exercise of control consists in making rational decisions and acting on nonhuman beings in a way cognizant of their needs as well as the health of the biotic community at large. This is possible given the human's ability to know, to deliberate and to make appropriate choices under different circumstances.

Several philosophers, both anthropocentrists and ecocentrists have come close to this natural place of human beings in nature. Attifield (1994, 15) quotes Aquinas' view that the rational creatures have a role within God's providence of imparting perfection to irrational ones after their kind. For Passmore (1974, 33) man is sufficiently rational to see what nature, through gradual evolution, is doing, and sufficiently powerful to help it on its course to self-realization. According to Naess (1989, 170), human beings have conscious perception of the urge the other living beings have for self-realization.

While philosophers have pointed to man's special role as guidance and control over nature, there is need for clarification that this should include the control over his (man's) natural propensities. This is contrary to anthropocentrists' exclusion of man from nature. Failure to control human natural tendencies can be detrimental to own good as well as the good of biotic

community at large. Uncontrolled predisposition to reproduce has for instance led to overpopulation.

Man is part of nature. He is unique among other unique beings. His special role is, but just among myriad special roles played by nonhuman beings. The control he exercises in ecosystem is not solely for his own good but a fulfillment of a specific duty which nature bestows on him. In fulfillment of his special duty in nature, man makes contribution to what may be rightly referred to as the common good of the biotic community. Neither man nor his special contribution to biotic common good is superior to either nonhuman beings or their special contribution. Man is special just like nonhuman beings are special by virtue of their ecological niche. His contribution is as important as that of other beings.

5.5 Comprehensive Anthropocentric – Ecocentric Common Cosmology

The preceding re-examination of the nature and place of man in the world has generated additional information initially absent in both anthropocentric and ecocentric metaphysical foundations. Critical incorporation of this information to the already existing anthropocentric - ecocentric metaphysical convergence is crucial in the attempt to reconcile the anthropocentric and ecocentric theories.

Generally, the world is conceived as a biotic community composed of interdependent, unique, egoistic and self-valuing entities. Nothing exists apart. The entities in nature are interconnected in such a way that individual organisms are knots in the biospherical net. The survival of everything, man included, depends on exploitation of nature. While the members of biotic community share a lot in common each of them possesses species specific distinctive qualities by virtue of which it is unique. Man's uniqueness for instance consists in having a

higher degree of intellectual faculties. However, this uniqueness does not set him apart from nature. Man is unique among myriad unique nonhuman beings.

Each member (species) of biotic community has a special role or function to fulfill in ecosystem or nature at large. Such a special place is relative to the peculiar nature or the species distinctive characteristics. This distinctive capacity is the tool by which any given organism survives. It is also the mean by which each being consciously or unconsciously contributes to the 'common good' of the biotic community. The survival of every member of the biotic community depends on exploitation of nature. By implication, the well being of any given being depends on all members of the biotic community who constitute nature at large.

Man's role in the universe flows from his higher rationality and other intellectual capacities. First and foremost, human rationality controls and guides the irrational tendencies in human nature (the micro nature). According to Aristotle, human rationality the means by which man makes right choices and lives a virtuous life (Stumpf: 1999, 94). As such, it is the tool by which man attains happiness which according to Aristotle is the man's ultimate goal (ibid, 92). Taylor (1986) expresses the same view in his submission that rationality is the tool by which man survives.

Just as man has irrational elements within his nature (micro nature), the nature at large (macro nature) consists of both rational and irrational beings. While nonhuman beings may have the faculty of rationality, man has a higher degree of it. As such man's special role in nature is to control and guide the irrational or less rational in nature. This special role however, does neither make man superior to nor set him apart from the rest of nature as a master watching over nonhuman beings from far. His special role is just one among numerous special roles

played by nonhuman beings none of which claims to be superior to the rest. Man's rational control over nature also includes the control over his own natural propensities.

Nature consists of naturally egoistic, self-valuing beings; all driven by the will to live. This applies especially to the conscious beings. Their conscious or unconscious actions are geared primarily to promote one's self interests above all else. Concern is however extended to the 'other' (other than oneself) on the basis of their closeness. This starts with one's own next of kin to the members of one's species and then to other species. The ability to feel the other as oneself or empathize with the 'other' seems to be the basis of ethics. In this way, there seems to be some sort of code of ethics especially among social animals.

The other wordiness of man as well as the concept of human soul is not rationally defensible. The intellectual faculties which have been for a long time attributed exclusively to man are also possessed by some nonhuman animals though in most cases in a lesser degree. It is also clear that such faculties are results of natural processes especially in the brain. This makes the concept of rational soul, invoked to explain the origin of such faculties, unnecessary. The fact that human uniqueness finds a special place in natural order further renders the concept of rational soul superfluous.

The foregoing exposition, combined with the fact of man's dependence on nature for his survival, demystifies man. He is simply part of nature and subject to the same conditions which govern life in nature. Fuller (1945, 19) argues correctly that human society is only part of the great cosmic society to which everything belongs. As ecocentrist argue, human beings may too disappear without any extra-ordinary commotion after they have played their part in

creation's plan (Nash: 1989, 43). The best way to distinguish man from the rest of nature is not 'man' and 'nature' distinction but 'human nature' and 'nonhuman nature' distinction.

5.6 Anthropocentric – Ecocentric Common Moral Ground

Right from the beginning, this study has been partly informed by the observation that divergence in moral attitudes towards nature emanate from discrepancies in people's conception of the universe and the place of man in it. This is granted given the metaphysical foundation of ethics (Bernstein: 2008, 8). At this juncture, the moral implication of the preceding anthropocentric –ecocentric metaphysical common ground can be deduced. These moral implications constitute a synthesis of the two antagonistic theories in environmental ethics discourse: anthropocentric and ecocentric moral theories.

5.6.1 Intrinsic Value of Nature

As argued in the introductory part of this study the anthropocentric- ecocentric moral controversy is mainly a disagreement over the list of intrinsically valuable entities. Critical analysis of the concept of intrinsic value reveals that the concept is negatively defined and subjectively identified. Its characterization therefore fails to offer objective criteria for determining and identifying intrinsically valuable entities.

While there is no clear positive definition of intrinsic value, its attribution to any entity is seemingly dependent on the feelings of the valuer. In this way, it is identical with the feelings of 'self worth' or 'self-valuation' characteristic of natural entities especially those endowed with consciousness. These feelings follow from egoistic nature of conscious beings, both human and nonhuman beings (Tara: 2000,7,85 – 89; Harold: 1964, 10, 2; Callicott: 2005, 203; Rolston III: 2002, 118).

As discussed in the preceding section ‘self-worth’ or ‘self-valuation’ is the consideration of each being as ‘worth in itself’. This is the same feeling characteristic of those who feel that they are intrinsically valuable. The widespread “good-in-itself conception” of intrinsic value means that something has value by virtue of what it is, rather than in virtue of how it is connected to others (Tara: 2000, 62). It is the value a thing has independent of anything else that makes it valuable even if it were the only thing that existed (Tara: 2000, 62; Moore: 1993). This is equivalent to saying that the thing has ‘self worth’. By definition therefore, intrinsic value and self-worth or self-valuation can be used interchangeably.

Following from anthropocentric – ecocentric metaphysical convergence, self-valuation is not limited to human beings. There is a wide spectrum of nonhuman reflexively valuing subjects (Callicott: 2002, 203; Rolston III: 2002, 118). As Callicott (2002) argues, the self-valuing subjects, including man, begin by judging themselves worth then moves on to their close relatives and from there, to subjects more distantly related. Consequently, there is multiplicity of intrinsically entities in nature. Natural entities can be intrinsically valuable either through self valuation or being valued by a self-valuing subject.

Callicott (2002), an ecocentrists, correctly supports the subjective version of intrinsic value of nature. This version of ecocentrism acknowledges the inherent value of nature in the sense of value the natural objects have for themselves, quite independently from the satisfying aesthetic, religious, or epistemic experiences of human valuers (Callicott: 1989, 163). However, this intrinsic value is not something existing independently of the intentional act of valuing a subject (ibid, 133). This called attributed inherent value (Callicott: 2002; Norton: 1992). It is a weakly independent version of intrinsic value of nature (ibid). This is contrary to the objectivist view of intrinsic value of nature (Norton: 1992).

The latter view is championed by Taylor (1986) and Holmes Rolston, III (Hargrove: 1992; Norton: 1992; Callicott: 2002). According to them nature is valuable in the strong, 'intrinsic' sense in that natural objects have value entirely independent of human consciousness. According to this theory, the value in nature existed prior to human consciousness and it will continue to exist even after human consciousness disappears (Norton: 1992). This is a strongly independent or autonomous version of intrinsic value of nature (Norton: 1992). In the final analysis however, Rolston agrees with the subjectivists that the value of any object, a *valuee*, depends on the existence of a valuing subject, a *valuer*. (Callicott: 2002).

How does the subjectivist view of intrinsic value avoid the cultural relativity seemingly embedded therein? This question is important given that the main motivation for defenders of intrinsic value is to avoid cultural relativity of intrinsic value implicit in anthropocentric intrinsic value (Norton: 1992). Following Kant (1959, 47), Callicott (2002) makes it clear that the subjectivist version issues into objective value in the epistemological sense of objectivity. Objectivity of intrinsic value consists in the fact that the means by which a given entity thinks of its own experience holds for other members of the same species. This is objective principle which necessitates derivation of all laws of the will (Callicott: 2002; Kant: 1959, 47).

Multiplicity of self-valuing subjects and intrinsically valuable entities undermines both the strong and weak versions of anthropocentrism. While the former strictly limits intrinsic value to human beings, the latter extends the value to some nonhuman beings, though to a lesser degree compared to human beings (Passmore: 1974, 111; Attfield: 2004; Hargrove: 1992). According to Hargrove (1992) intrinsic value of nature is anthropocentric in that it is man, as a conscious being, who attributes such a value to nature.

As Hargove (1992) argues, anthropocentrism and ecocentrism seem to converge in their weak versions. Precisely, both weak anthropocentrism and weak ecocentrism agree that the intrinsic value of nature is dependent on the conscious self valuing subject. This is justified given the self valuing nature of natural entities and their tendency to extend the sentiments of self worth to close relatives. It is also plausible to conclude that both strong anthropocentrism and ecocentrism are not rationally justified. Against strong anthropocentrism, nonhuman beings are intrinsically valuable, at least by attribution. It is difficult to justify the ontological objectivity implicit in strong ecocentrism. Nothing exists by the name intrinsic value; it is just a perception (Callicott: 2002).

The aforementioned convergence notwithstanding, there are still areas of divergence between weak anthropocentrism and weak ecocentrism. According to weak anthropocentrism, man is the only valuing subject (Hargove: 1992). In contrast, weak ecocentrism acknowledges plurality of valuing subjects (Callicott: 2002; Norton: 1992). Consequently, ecocentrists have a wider list of intrinsically valuable entities. While anthropocentrists limit themselves to only that which human beings perceive as valuable, ecocentrists acknowledge the intrinsic value nonhuman self valuing entities (Rolston: 1994; Callicott (2002)).

Callicott (2002) in fact argues that it is logically possible to value intrinsically anything under the sun. The failure to value everything intrinsically, according to him, emanates from the fact that most people are wired to value things intrinsically when they perceive them to be part of a community to which they (humans) also belong (ibid). However, perception can be trained and redirected. Much of the persuasive environmental literature, according to Callicott (2002), aims at training and redirecting our perception of nature such that we see it as the wider

community in which all other communities are embedded. This is plausible given the revelation by empirical sciences that human and nonhuman beings share a lot in common.

5.6.2 Instrumental Value of Nature

The conception of the universe as a network of interdependent, unique and self-valuing and teleological entities has implications on how such entities value themselves and others. Everything acts first and foremost to defend and preserve itself (Tara: 2002, 3, 70). Interdependence means that none of the entity is self-sufficient as to solely achieve its goals. Consequently, any given entity values the other beings positively or negatively relative to its (the other's) bearing on the valuer's goal. If the effect is positive then the 'other' is good and vice versa if the effect is negative. This implies instrumental valuation of nature.

The instrumental valuation of nature is not limited to human beings: nonhuman beings, as 'valuers' most likely judge the value 'other' from the perspective their (others) bearing on their (valuers') interests. Every being is instrumental to the flourishing of life and realization of each other's goal or interests. This owes to the unique contribution of each being to the biotic common good.

Man's instrumentality to consist in his higher degree of intellectual faculties. By virtue of his rationality, man is able to pursue science and understand the interconnection among a variety of things (Attifield: 1994, 15). By his foresight, man is able to know what both the present and future humans and nonhuman beings require for realization of their potentialities (Sessions: 1995; Naess: 1989, 170; Passmore: 1974, 33). Man is for instance, able to foresee the effects of either his actions or those of nonhuman beings on environment. By virtue of his reflective

consciousness, he discerns the right thing to do. He can impose some restrictions on either natural or artificial pursuits by member of either human or nonhuman species.

5.7 Do We Need a New, Nonanthropocentric, Ethics?

This question marked the beginning of environmental ethics as a branch of professional philosophy (Dallmayr: 2001, 11). The advocates of the new ethics seek to extend moral concern to cover the natural environment and its nonhuman content as a justification for the preservation of integrity, stability and beauty of the biosphere (Leopold: 1949: 224-5). The extension of moral concern presupposes intrinsic value of nonhuman beings as a prerequisite to moral concern and the grounds for human obligations to non-human nature (Hargrove: 1992; Cheney: 1992). Intrinsic value of nature is deemed a necessary cure to the narrow anthropocentric instrumental valuation of nature, arguably the root cause of the contemporary environmental crisis (Norton: 1992).

So far, it is evident that nonhuman beings have a nonanthropocentric intrinsic value. This is by virtue of being self-valuing subjects and others being attributed of intrinsic value by self-valuing subjects. Given the intrinsic value as a prerequisite to moral concern, it is logical to conclude that a new, nonanthropocentric, ethic is conceivable. From pragmatic point of view however, the necessity of the new ethic does not follow necessarily from the fact that nonhuman beings are intrinsically valuable. Additionally, nature is also instrumentally valuable. Any reasonable theory must merge the two theories both of which are rationally justified.

In agreement with William James (1842 – 1910), an American pragmatists, philosophy aims at finding out the definite difference that a given world-formula makes to us at definite

instances of our life (Moore & Bruder: 2005, 212). The meaning of any idea consists its usefulness or workability (ibid, 212). Norton (1992) argues correctly that while examining the hypothesis that some natural objects have nonanthropocentric intrinsic value, one must bear in mind the more fundamental practical problem: proposing an adequate theory to explain and support the activities of environmental, as opposed to mere resource, managers.

The foregoing discussion points to necessity for reliability test of intrinsic and instrumental value; the two values of nature deduced from the anthropocentric – ecocentric metaphysical common ground. As Norton (1992) argues, the discussion of intrinsic value of nature should include discussion of advantages and limitations of including the value s an element in an adequate theory concerning human conduct in encounters with nature. This is so given the practical grounding of the philosophical discussion. The reliability of either value consists in their usefulness to solve environmental problems and answer the relevant questions.

5.7.1 Reliability of Intrinsic Value of Nature

There are two main ways in which intrinsic value has positive bearing on environmentalism. First, the value encourages wider preservation of nature. The value provides ground for protection and preservation of the natural entities which are seemingly not useful to man (Callicott: 2002). Besides its invaluable service to man, nature is good in itself. As such, the value seems to address the shortcomings of the narrow anthropocentric instrumentalism, the purpose for which it was deemed necessary (Norton: 1992).

Intrinsic value deters the potential abusers of nonhuman nature from committing the environmental crime. The concept of intrinsic value in nature functions politically much like the concept of human rights_(Callicott: 2002)._Precisely, the talk of the rights of nonhuman

beings is grounded on the belief that the entire nature is intrinsically valuable (ibid). Fox (1990. 101) puts it clearly that moral agents must be able to justify their actions in regard to their treatment of entities that are intrinsically valuable. Closely related to this is the fact that the hypothesis that nature is intrinsically valuable is changing people's attitudes towards nature (Callicott: 2002).

The concept intrinsic value of nature is playing an increasingly prominent role in the formation of environmental attitudes and policies worldwide (Callicott: 2002; Fox: 1990, 101). This is evident in North America, Western Europe, Australia, and New Zealand (Callicott: 2002). At the global level, this is evident in the preliminary drafts of Earth Charter (ibid). The Charter's first principle reads: 'Respect Earth and life in all its diversity; recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings (ibid). While the phrase "intrinsic value" does not appear in the final draft of the Charter, it seems to remain in the statement that "every form of life has value regardless of its worth to human beings' (ibid).

Despite its positive impact however, intrinsic value is weak in several ways. First, it is subjective. This owes to its identification with self-valuation. The existence of such a value in any other entity (the valued) depends mainly on the perception of the valuing subject (Callicott: 2002). While human beings can perceive things in the same way on basis of a common nature, the cultural background may bring about relativity in perceptions. Ethical systems and environmentalism build on this value lacks the kind of objectivity necessary for mobilizing everybody's contribution to contemporary environmentalism.

Secondly, intrinsic value does not generate sufficient motivation for environmentalism. This is because it (the value) does not offer practical reasons for protection and preservation of nature (Thompson: 1983). It emphasizes on the preservation of nature for its own sake. Naturally, people tend to pursue goals valuable to them (ibid). In other words, people tend to pursue goals which are of benefit to them.

Intrinsic value of nature does not seem have meaningful impact in resolution of the conflict between human – nonhuman needs. In the event of such a conflict, anthropocentrists have always given priority to human needs on the assumption that intrinsic value is solely or greatly a preserve for man (Passmore: 1974, 111). This value consists in their usefulness to human beings (Boss: 2008, 735; Baxter: 2008; Aristotle: Politics, Bk. 1, Ch. 8).the possibility that they will continue to do the same is conceivable given their treatment of people classified as “marginal cases” as intrinsically valuable.

Arguably, the aforementioned people do not have the allegedly value-giving properties such as rationality (Rodman: 1983, 124; Kant: 1959; Callicott: 2002). Anthropocentrists take rationality as the basis on which any given entity is intrinsically valuable (Callicott: 2002). While Kant (1959) identifies rationality as such a value-giving property, rationality and humanity, according to him, are not identical. By implication, human beings who lack such a quality should not be regarded as intrinsically valuable. Infants, the severely mentally handicapped, and the abjectly senile are the usual suspects (Callicott: 2002). On the other hand, rational nonhuman beings should be treated as intrinsically valuable.

Contrary to the logical expectation, the rationally deficient human beings are treated as intrinsically valuable. Surprisingly, the nonhuman animals which exhibit the alleged value

giving qualities are excluded for moral community (Callicott: 2002; Newmyer: 2006, 12; Henneberg: 2013). On their part, ecocentrists give priority to human vital needs (Schmitz: 2008; Shrader-Frechtt: 2003; Naess: 1989, 170).

The concept on vital needs can be justified on the basis of environmental justice only if the conflict is between human essential requirements of life and non essential needs of nonhuman beings. This way understood, giving priority to human needs is consistent with two priority principles of environmental justice: the principle of self preservation and the principle of proportionality (Sterba: 1983). The former principle allows one to take measures necessary for meeting his basic needs (ibid). Vital needs are the basic requirements for sustenance of life. The principle of proportionality prohibits meeting the non-basic needs of individual members of the humans at the expense of the non-humans (ibid).

While the above conception of vital needs can be assumed to be the sense in which ecocentrists make use of it, they (ecocentrists) are not clear on how the human - nonhuman vital needs conflict is to be resolved. The probability that both anthropocentrists and ecocentrists will give priority to human needs in such a scenario is high. This owes to the egoistic and self-valuing nature of man. Acting otherwise contradicts the accepted social norm expressed in one of the ancient wise saying 'blood is thicker than water' which seems to be informed by the aforementioned human nature. This saying implies granting priority to one's close relatives. Attempts to go against this norm can explain ecofascist and misanthropic accusations labeled against ecocentrists (Shrader-Frechtt: 2003).

This far, preferential treatment of man seems inevitable. This tendency however, may not be peculiarly human. Every being strives primarily to promote its own interests or end above all

else (Tara: 2000, 68; Callicott: 2002). As such, value judgments seem to be made from the perspective of each species interests. The product is multiplicity of species-specific code of ethics. Anthropocentric moral theory is one of such ethics. As “human-centered,” anthropocentric refers to a human oriented perspective. This means seeing from the standpoint of a human being (Hargrove, 1992).

Some kind of ‘code of ethics’ is evident among such social animals as apes, chimpanzees, pigs, whales, chickens, bees (Newmyer: 2006, 14; Harold (1936, 12). Ropeik (2016) and Suddendorf (2014) observe a kind of family warmth and affection among such animals. Great apes for instance, console each other. Just like human-centered ethics, nonhuman species-specific ethics too is expressive of the perspective of each specific species. Since each species-specific code of ethics primarily seeks to promote the interests of respective species, it may be unfair to condemn man for speciesism. All species are likely to act in a similar manner.

The foregoing discussion has double implication. First is that with or without intrinsic value of nature, human beings will give priority to their own needs. This owes to egoistic nature of human beings. Secondly, anthropocentric moral theory cannot be appropriate environmental ethics since it primarily promotes human interests. The best environmental ethic seems to be some sort of multispecies ethics akin to multiculturalism. Such an ethic can promote equality, respect and concern for all species. But this seems to parallel ecocentrism which is also problematic despite its principle of biotic egalitarianism: it gives priority to human needs. Unless it is based on a different value of nature, it does not work.

5.7.2 Reliability of Instrumental Value of Nature

The suitability of instrumental value as basis of environmentalism consists in its objectivity and the motivation it generates for the preservation of nature. The value is most objective since it flows from interdependence of beings. The flourishing of any organism depends on exploitation of nature. Man is not exempted: his happiness is inseparable from environmental health. In this way instrumental value provides practical reasons as motivation for environmental protection. Berry (1993, 253) observes correctly that development and the aim of an acceptable quality of life for all cannot be separated from environmental management.

The suitability of instrumental value of nature seems to vindicate anthropocentrists opposition to ecocentrists advocacy for new ethics. According to Passmore (1974), anthropocentric ethic is adequate basis for contemporary environmentalism provided people recognize that what harms environment also harms humans. This anthropocentric view is however unproductive unless instrumental value is modified. Anthropocentric instrumentalism is characterized by linear thinking of cause and effects evident in many policies (Berry: 1993, 37, 41). The value is ascribed to things of direct or immediate utility to man. This way understood, instrumental value of nature tends to promote protection of the only part of nature which is directly beneficial to man. It does not encourage wider protection nature.

In fact, the narrowness of anthropocentric instrumentalism combined with unmotivating intrinsic value of nature constitute ethical dilemma in the choice between anthropocentric and ecocentric moral theory as the basis for contemporary environmentalism (Thompson: 1983). While anthropocentric instrumentalism motivates environmental protection, it limits this to that which is of direct utility to man (ibid). On other hand, ecocentrism encourages wider

protection and preservation of environment on the basis of intrinsic value of nature. However, it offers little motivation to people since nature is preserved for its own sake (ibid). Naturally, man tends to take care that which is of benefit to him (ibid). As such, neither anthropocentrism nor ecocentrism can be an appropriate basis for environmentalism.

Implicit in the ethical dilemma are two main conditions for appropriate moral theory as foundation of contemporary environmentalism. First, it should encourage wider protection and preservation of environment in the sense of taking care of every species. Secondly, such a moral theory must be motivating in the sense of providing practical reasons for wider environmentalism. But this presupposes the value nature has. Neither intrinsic value nor anthropocentric instrumental value is sufficient. Between the two value systems however, instrumental value is most plausible. This owes to its objectivity and practicality. It is observable in the interdependence of beings in the order on nature and man, who is responsible offer practical reasons for man's engagement in environmentalism.

Instrumental value however, must be widened. That is, there should be a shift from narrow anthropocentric instrumental value of nature to conception of the entire nature as instrumentally valuable even though not necessarily on the basis of direct utility to man. This presupposes a shift from linear to systemic or web thinking implicit in the conception of the world as a net work of interdependent entities each of which has special role to play in the ecosystem. Such understanding of the world shows direct and indirect interdependence of beings in nature. Direct and indirect relatedness is evident in food chains and food webs respectively.

Corresponding to the direct and indirect interdependence of natural beings is direct and indirect instrumental value of nature respectively. In this way, the entire nature is beneficial to man. Something is of direct instrumental value if it is of direct utility to man as in food chains. On the other hand, man benefits indirectly from natural entities to which he is not directly linked through their direct benefit to the entities man is directly linked with in food chains. Likewise, man has both direct and indirect instrumental value to nonhuman beings. This way modified, instrumental value of nature meets the two conditions for a sufficient environmental ethics. It encourages wider protection of nature and provides motivation for such endeavour.

5.7.3 The nature of appropriate environmental ethics

Through convergence strategy, alternative theory in which anthropocentric and ecocentric moral theories are reconciled can be formulated. Convergence strategy is an approach whereby shared goals provide ground for consensual policy action between proponents of antagonistic parties. The strategy was put forward by Norton (1992; 1991, 241) as a way to reconcile anthropocentrists and ecocentrists in matters of policy. As the preceding subsections show, anthropocentrism and ecocentrism are not diametrically different as they may appear. They share a lot in common in terms of goals and theory.

In terms of goals, both theories aim at protection and preservation of environment. The two approaches differ only on the basis of reasons for such an endeavour. While anthropocentrism seeks to preserve nature for its utility to man, ecocentrism has additional reason: to preserve nature for its own sake regardless of its utility to man. This is based on intrinsic value of nature. Theoretically, both theories converge that agree that nature has both intrinsic and

instrumental value. As pertains to intrinsic value of nature, anthropocentric and ecocentric converge in their weak versions according to which intrinsic value of nature is dependent on the perception of the valuing subjects. They only differ in that ecocentrism has multiple valuing subjects as opposed to anthropocentrism which limit valuing subject to man.

Despite the disagreements on intrinsic value, modified instrumentality of nature serves the goals of both anthropocentric and ecocentric moral theories. Man is motivated to take care of environment for both its direct and indirect instrumentalism to his well being. On the basis of instrumental value therefore, the ecocentrists goal for wider protection nature is realized.

As Norton (1992) argues, the debate on the existence and implications of intrinsic value in nature can continue in academe while we pursue environmental goals on the basis of wider conception of the instrumentality of nature. However, this does not imply that intrinsic value is not important as Norton (1992; 1991) tries to put. The value, understood as sentiment of self worth, provides the impetus for will to live. As Berry (1993, 253) points out, quality life is inseparable from environmental management. Intrinsic value and its associated will to live therefore are instrumental to environmental protection. It motivates man to care for nature upon which intrinsically valuable beings, he included, depend for their livelihood.

Implicit in the foregoing discussion is pragmaecocentric theory of environmental ethics, in other words pragmatic ecocentrism. According to this theory, there is need to preserve nature in its entirety. This is the goal of ecocentrism. However, such an endeavour is motivated more by the instrumentality of nature to human and nonhuman beings considered intrinsically valuable. As such, the theory combines the elements of both anthropocentric and ecocentric moral theory.

Pragmaecocentric theory is close to a theory envisaged by convergence hypothesis of Norton (1992; 1991). Norton (ibid) points out that at the possibility of identity in policy implications of a broadly formulated and farsighted anthropocentrism and reasonable nonanthropocentrism. However, the theory differs with Norton's convergence hypothesis in various ways. First and foremost, Norton (1992) envisions the analysis of attributions of intrinsic value in environmental ethics as superfluous on condition that his convergence hypothesis is correct. Thompson (1983) also argues that the notion of intrinsic value may be unnecessary in environmental care. I have shown the practical importance of the value.

Norton (1991) argues that the explication of interspecies equality is unreasonable since such equality is impossible to apply in practice. This argument seems to be based on the inevitability of preferential treatment of man in the event of the conflict between human and nonhuman beings' needs. However, interspecies equality is possible if the principles of environmental justice, informed by instrumental value of each species, are adhered to. Environmental justice, as developed by Sterba (1983), is the concept that beings in nature have needs and one being/or species should not exploit nature excessively at the expense of others.

Environmental justice seems to be consistent with principle of biotic egalitarianism according to which all entities should be given equal treatment (Keller: 2002, 368; Naess: 1989, 28). In fact, the tendency of ecocentrist to give priority to human vital needs, as that which is essential for maintaining them is consistent with the principle of self preservation and the principle of proportionality. The former principle allows an individual to take measures necessary to meet basic needs of life. The principle of proportionality prohibits meeting the

non-basic needs of individual members of humans at the expense of the non-humans beings (ibid).

The only problem with vital needs is that they may be accumulatively excessive. This not only frustrates wellbeing of nonhuman species but also disrupting the biotic equilibrium. In order to avoid such a scenario, environmental justice will require the extension of the concept 'vital' to population and technology as means through which man produces goods and services for the satisfaction of his needs. Once this is done, there will be only 'vital technology' for the production of 'vital needs' for 'vital population.' such adjustments will in fact reduce the impact of overpopulation, affluence and technology which have been identified as major causes of environmental crisis (Dasgupta & Kiely: 2006, 189; Donella, et al.: 1972; Ehrlich: 1968).

By implication, the individual's interests can be overridden for the sake of the health the wholes: species and biotic community. Culling animals and thinning plants is a typical example of how the interests of individual animals and plants are interfered with. With regard to mankind, Jarveson (1998) argues correctly that the most important thing is to perpetuate human species rather than maximizing its population. As such, reduction of human population to vital levels may be morally acceptable provided that this is not overdone in a way as to wipe out either (a) the entire current membership of the species, or (b) all current members capable of reproducing successfully (ibid).

However, it may not be possible for human beings to eliminate their fellows through culling. This is because of great empathy that human beings, just like any other species, have towards their fellows. The degree of empathy and intrinsic worthiness is higher towards the members

of one' own species. Any suggestion that human beings can be culled like animals will most likely be met with accusations of ecofascism and misanthropy. This being the case, the most practical and ethical way to check human population is through forced birth control, as opposed to voluntary family planning.

Since birth control is done on the basis of the carrying capacity of a given ecosystem as well as on the basis of the efficient and effective execution of human beings' duties in ecosystem, selective birth control may be rationally and morally justified. This can be done on the basis of medical certification of the probability that a given person will give birth to a health child. The implementation of such a control measure however, presupposes a re-examination of our moral attitudes towards forced birth control and the methods thereof. It also requires re-examination of the institute of marriage and family structure.

As Hoppe (1964, 1- 3) observes, major events in history force man to rethink his values and practices. Such was the case with Graeco-Roman civilization, rise of Christianity, rise of modern science and industrial revolution (ibid). Contemporary environmental crisis is a major global event. Our values and lifestyles need to be examined most importantly in light of this event and the most current scientific data on the workings of nature. In fact, the contemporary environmental crisis has the potentiality of providing a new philosophical turning point as man is forced to re-examine his conception of universe, his place in the universe, his values, lifestyles and his social structures.

5.8 Conclusion

This chapter has discovered that anthropocentric and ecocentric moral theories are not totally irreconcilable. With reference to the analysis carried out in the preceding two chapters, the

two theories converge at some rationally justified metaphysical beliefs. They differ mainly in their conception of man and his place in the universe. Anthropocentrists tend to separate man from nature on basis of his uniqueness. On their part, ecocentrists maintain that man is part and parcel of nature. Such disagreements however, emanate from the lack of comprehensive use of relevant data about human nature in comparison with the rest of nature.

A re-examination of the nature and place of man in the universe has revealed that man, just like any other being, is part and parcel of nature. As a highly rational being, his role is the intelligent control over nature. This includes exercising control over his own nature. Man is also egoistic and self-valuing subject. However, this is not exclusively human quality; nonhuman beings are also egoistic and self valuing subjects. These new findings have been critically incorporated into the already existing metaphysical convergence resulting into a relatively comprehensive anthropocentric - ecocentric common metaphysical ground. Generally, the world is conceived as a biotic community of interdependent, unique and self-valuing entities each of which has a special place in the community.

The uniqueness of each being has double purpose. First, it is the means by which it adapts and survives in the environment. Secondly, it constitutes its giftedness by virtue of which it plays a unique role in the ecosystem. Members of the biotic community become useful to one another by the virtue of their special roles. These roles define the special duty of each member of the biotic community.

From such a rational cosmology, the intrinsic and instrumental value of nature can be deduced. Intrinsic value is identified with the self valuation. It is attributed to natural entities by a valuing subject starting with close relatives and associates. Intrinsic value of nature

makes possible a new, nonanthropocentric, ethic. From pragmatic perspective however, an environmental ethics build purely on intrinsic value may not be appropriate basis for effective environmentalism. Modification of instrumental value into direct and indirect instrumental value fulfils the aims of both the anthropocentrists and ecocentrists. It encourages preservation for environment for the narrow human needs and wider preservation of environment, as the ecocentrists aim at.

On the basis of the convergence of anthropocentric and ecocentric goals and instrumentality of nature a pragmaecocentric moral theory (short for pragmatic ecocentrism) is proposed as a synthesis of anthropocentrism and ecocentrism. This theory is a hybrid of anthropocentric and ecocentric theories. Just like ecocentrism, pragmaecocentric moral theory recognizes and encourages protection and preservation of entire nature. It also advocates for interspecies equality. Just like anthropocentrism, nature is not preserved for its own sake but for its utility, whether directly or indirectly. .commitment to environmental justice is necessary in order o avoid conflicts between human and nonhuman beings' needs. Exploitation of nature should be limited to vital needs.

The most appropriate Pragmaecocentric principle is the principle of reciprocity according to which man should take care of nature so that it also takes care of him. Thus, environmental destruction is self annihilation.

CHAPTER SIX

THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS OF THE STUDY

6.1 Summary of the Findings

This study set out to settle anthropocentric – ecocentric controversy in environmental ethic discourse by finding out a common ground, as a synthesis of the two antagonistic theories. The two theories differ on whether a new, nonanthropocentric, ethic is necessary. While anthropocentrists oppose the idea, ecocentrists are supportive of it. The difference is ultimately whether intrinsic value, as a prerequisite for moral concern, can be extended to nonhuman beings. By opposing the idea of new ethics, anthropocentrists maintain the status quo: the continued preferential treatment of man in the event of conflict between human and nonhuman beings' needs. Accepting new ethic implies biotic egalitarianism.

Resolution to this conflict has been achieved through critical evaluation of its conceptual foundations: the concept of intrinsic value and the metaphysical underpinnings of each theory. The objective criteria for acceptability of philosophical theories have been used as the standard measure for determining the adequacy of such conceptual foundations. Their adequacy or inadequacy has similar consequences to moral theories whose foundations they provide.

Critical examination of the concept of intrinsic value in chapter two reveals that the concept is negatively and subjectively defined and identified respectively. The definition does not reveal characteristic features upon intrinsically valuable entities can be determined. In a bid to identify the value in nature, its proponents appeal to such subjective sources of knowledge as intuition. The conflict ensues since the views of each party are as correct as those of the

opposing party. The impossibility of identifying intrinsically valuable entities through negative definition of intrinsic value makes it impossible to justify or to unjustified preferentialism or biotic egalitarianism.

Metaphysical assumptions of anthropocentric moral theories have been examined to determine whether there are distinctively human properties upon which preferential treatment of man can be justified. Critical look Judeo-Christian metaphysics reveals two pillars upon which anthropocentric theory stands. The first one is the idea of the great chain of being according to which creatures are hierarchically arranged depending on the degree of their similarity to God. This ontological order is at the same time a moral order. Those at the top of the hierarchy are more valuable than those at the bottom.

The second pillar is the idea of human (rational) soul, by virtue of which man is endowed with intellectual faculties. Among such faculty is the knowing power which is proper to divine essence. By virtue of having power to know, man bears greater similarity to God. Consequently, he is closer to God than any other creature in the order of nature. Given his position in the hierarchy of being, man is more valuable than the rest of creation. On basis of his intelligence, he is made the governor over the rest of the world. By virtue of the immortality of the rational soul, man is immortal and has a destiny distinct from the rest of creation. Possession of human soul therefore, makes man more valuable and sets him apart from the world.

The two concepts hardly pass the adequacy test for philosophical theories. The two are rooted more in imagination than in reality. The idea of another world (heaven) for instance, is derived from Platonic dualism which is a product of mere speculation. The discovery of

intellectual life among some animals and their origin in natural processes in the brain makes the concept human soul superfluous. Such discoveries show that there are no exclusively human qualities. While higher intellectual life makes man unique, he is unique among other unique beings. As such, Judeo-Christian metaphysics cannot rationally justify preferentialism.

The metaphysical foundations of ecocentric moral theories have been examined to determine whether the similarities between human and nonhuman beings are adequate enough to justify biotic egalitarianism. Constitutive of these metaphysical beliefs are two strands: pre-ecological and ecological wings. While the former are mainly founded on faith based epistemologies, the latter are informed by empirical sciences, notably the science of ecology..

Pre-ecological ideas such as organist's conception of the universe and its sacredness have failed the compatibility test: they are inconsistent with empirical data. For most part, pre-ecological beliefs were formulated in antiquity when people had little or no scientific knowledge and understanding of the workings of nature (Passmore: 1974, 173). Such was the time when mythical explanation of natural phenomena prevailed.

The conception of the 'self' as 'comprehensive self' according to Naess' (1989) is also incompatible with experience. It is a product of intuitionism (ibid). As we have seen, intuitions are subjective and in most cases, they are influenced by one's cultural background. In most cases pre-ecological beliefs lead to subjectivist ethics and passivity as pertains to environmentalism. Their reliability in provision of effective ethics is therefore dubious.

Most of beliefs in ecological wing are rationally justified. Most importantly, they are compatible with the findings of empirical sciences. Conception of the universe as a network of interdependent entities or simply as web of life is consistent with ecological truths. This is

evident especially in food webs and food chains. The conception of man as part of nature is also consistent with scientific data. Man is subject to the same laws of nature which govern natural phenomena. His unique nature and role in universe is just as unique as that of any other being.

Despite their differences, anthropocentric and ecocentric moral converge in various metaphysical beliefs. Both anthropocentrists and ecocentrists agree on the interdependence and interconnectedness of all life. Implicit in the interdependence is the idea that each member of biotic community has a role to play. Everything in nature, man included, has a distinctive function to fulfill; a function relative to its distinctive qualities. While man is biologically at par with the rest of members of the biotic community, both anthropocentrists and ecocentrists acknowledge his uniqueness. Man has a higher degree of intellectual life.

The major difference between anthropocentrism and ecocentrism consists in their conception of man and his place in the universe. While anthropocentrists set man apart from and above the rest of nature, ecocentrists maintain that human beings are part and parcel of nature. But there are contradictions among both theorists. Anthropocentrists include into moral community human beings who lack the allegedly value giving qualities while excluding animals who possess them. On the other hand, ecocentrists give priority to human needs despite their emphasis on biotic egalitarianism. Preferential treatment seems to be inevitable. Is there distinctively human quality that accounts for inevitability of preferentialism?

There seems to be some facts about human nature not captured in both theories. This is granted given the major weakness of both anthropocentrists and ecocentrists namely: incomplete use of relevant data in their arguments. Zimmerman (2013, 8, 13) for example observes selectivity

among the proponents of both theories for the fear of affirming the views of the opposing party. But if there are such facts, are they exclusively human? How do they impact on general conception of the world and place of man in the universe? What are moral implications of these?

Further inquiry into the nature and place of man in the universe reveals that he is naturally egoistic and self-valuing subject. He extends sentiments of worthiness to the 'other' starting with those who bear great similarity to him. However, this is not exclusively human quality; nonhuman beings are also egoistic and self valuing subjects. This is exhibited in the acts of self defense. On the basis of thought experiment, everything natural entity, animate or inanimate, can arguably be said to be naturally egoistic and self valuing. One can imagine of their affirmative answer to the question whether they think themselves worth. The place of man's higher rationality is found to be rational control of the irrational or less rational nature. This includes the control of his own irrational nature and egoism.

Critical incorporation of these findings into the aforementioned areas of metaphysical convergence resulted into relatively comprehensive rational cosmology. Generally, the world is conceived as a biotic community of interdependent, unique and self-valuing entities each of which has a special place in the community. From such a conception of the world, two values of nature can be deduced: intrinsic and instrumental value. Intrinsic value is identified with the self valuation. As such, every natural entity can arguably be said to have intrinsic value, either by virtue of being self valuing subjects or by such a value being attributed by a valuing subject.

Intrinsic value of nature makes possible a new, nonanthropocentric, ethic. From pragmatic perspective however, an environmental ethics build purely on intrinsic value is appropriate basis for effective environmentalism. With or without intrinsic value, preferential treatment of man is inevitable: it follows naturally from egoistic nature of munities highly probable that human needs will always be given priority in the event of competing claims between humans and nonhuman beings. It may be unfair to condemn man for these tendencies: nonhuman beings would also behave similarly given the opportunity. They are also egoistic.

Modification of instrumental value into direct and indirect instrumental value fulfils the aims of both the anthropocentrists and ecocentrists. It encourages preservation for environment for the narrow human needs and wider preservation of environment, as the ecocentrists aim at. Convergence of anthropocentric and ecocentric goals and instrumentality of nature results into pragmaecocentric moral theory as a synthesis of the antagonistic theories and by extension all the intermediate theories such as animal liberationism, pragmatism and mixed theories.

Commitment to environmental justice is necessary in order o avoid conflicts between human and nonhuman beings' needs. Environmental justice abhors extravagancy in all aspects of life. Exploitation of nature should be limited to vital needs.

6.2 Conclusions of the Study

On the basis of the findings of this study, it can be concluded that nonhuman beings are intrinsically valuable; intrinsic value understood as a sentiment of self worth. This confirms the ecocentric position while discrediting the strong anthropocentric one according to which intrinsic value is limited to human beings. Weak anthropocentrism and ecocentrism converge in their subjectivist view of intrinsic value according to which the value depends on the

perception of the valuing subject. This said however, the two differ in that while the former limits valuing subjects to human beings, the latter includes nonhuman beings into the class of valuing subjects. This is justified on the basis of multiplicity of egoistic and self valuing beings. The wider the class of valuing subjects, the wider the list of intrinsically valuable entities. Actually, everything can be said to be intrinsically valuable: it all depends on the perception of the valuer.

The foregoing conclusion leads to yet another, but related conclusion that a new ethic, as opposed to the dominant anthropocentric one, is necessary. From practical perspective however, the new ethic cannot be purely ecocentric. A theoretical basis for contemporary environmentalism should encourage wider protection and preservation of nature. It should also motivate people to engage in such an endeavour. Naturally, human beings tend to care for that which is beneficial to them. The most appropriate ethical foundations for contemporary environmentalism will be a pragmaecocentric moral theory, short for pragmatic ecocentrism. This theory encourages wider protection of nature, not for his sake of it, but bearing in mind its direct and indirect benefits to valuing subjects including human beings.

Pragmaecocentric moral theory therefore, is synthesis of the two antagonistic theories: anthropocentrism and ecocentrism. It draws some important elements from both theories. Inspired by ecocentrism, the theory seeks to protect and preserve nature in its entirety. It also promotes interspecies equality. Furthermore, the interests of individual entities can be sacrificed for the well being of such wholes as species and biotic community. From anthropocentrism, pragmaecocentric theory draws the most practical reasons for environmentalism namely, the instrumentality of the environmental health to the well being of the valuing subjects, including man.

6.3 Recommendations of the study

The study proposes a comprehensive social critique and consequent social system adjustments on the basis of pragmaecocentric moral theory. Precisely, there is need to adjust human population and lifestyles to vital levels. This is necessary for avoiding human-nonhuman beings' conflicts. Such adjustments however, presuppose re-examination of the values underlying our social structures and lifestyles, some of which have remained morally neutral. It also points to the need to come up with appropriate legislation to prohibit the behaviour judged immoral in the light of contemporary environmentalism.

Philosophy and science influence each other (Lawhead: 2009, 312). The need for adjustment of human population to vital levels suggests a new task for scientists. The latter should make efforts to determine the carrying capacity of each region of the planet earth. Studies should be done to determine the role of each species in the ecosystem as well as the vital number of each particular species.

This study proposes critical evaluation of the philosophical foundations myriad conflicts in the world today as ultimate solution. Just as in anthropocentric – ecocentric controversy, many conflict may be analyzed to their philosophical foundations. It is important to examine them to see if such philosophical foundations pass the objective criteria for acceptability of philosophical theories.

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