

DEEP ECOLOGY: SHOULD WE EMBRACE THIS PHILOSOPHY?

By

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Submitted in fulfilment of the requirements for the degree of Master of Arts

Philosophy

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March 2016

SUMMARY

The planet is in a dismal environmental state. This state may be remedied by way of an integrated approach based on a holistic vision. This research examines which ecological ideology best suits current conditions for humans to re-examine their metaphysical understanding of nature; how we can better motivate people to embrace a more intrinsic ecological ideology; and finally, how we can motivate people to be active participants in their chosen ideology. I will attempt to show that Deep Ecology is the most suitable ecosophy (ecological philosophy) to embrace; in doing so I will look at how Oriental and occidental religion and philosophy altered (and continues to alter) the way we perceive nature. I will show how destructive, but also caring and constructive, humanity can be when interacting with the environment. The Deep Ecological and Shallow Ecological principles will be look at, as well as criticism and counter-criticism of these ecosophies.

KEY TERMS: Deep Ecology, Shallow Ecology, anthropocentrism, ecocentrism, extrinsic values, intrinsic values, motivational drive, ecosophy

DECLARATION

I declare that ‘DEEP ECOLOGY: SHOULD WE EMBRACE THIS PHILOSOPHY?’ is my own work, and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at this or any other higher education institution.

SIGNED: _____
G.P.B. LOUW

21 March 2016
DATE

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Abstract

The planet finds itself in a dismal state, arguably brought about by the environmental misconduct from the side of humanity over the course of centuries. An ancient tradition of Indo-Tibetan Buddhism depicts human beings' suffering as exemplifying hungry ghosts trapped in a state of incessant greed and insatiability, which at its core reflects a desperate attempt to maintain a sense of self that is out of accord with basic reality (Pope 2011:171). How can we address and remedy this dualistic problem with regard to the state of the environment and the way in which human beings conduct themselves? The state of crisis in which both humans and the environment find themselves need not continue. Recuperation for both is possible, if only we will alter our way of thinking and provide a chance for the ecosystems to heal. There is a significant obstacle regarding an effective way to bring about this recuperative process. In this regard Conradie and Field (2002:3) say that if we want to have a healthy and sustainable environment, in which the intimate connections between all concerns are emphasised, then we will need an integrated approach based on a holistic vision regarding environmental awareness. They are of the opinion that such a vision can be fashioned through the perceptions we have about our external world (both animate and inanimate phenomena), and that we can respond to the environmental and intrapersonal challenges facing us by adopting such a holistic approach.

The question to be considered is whether this holistic approach is the only approach to be adopted in such a scenario? I will argue throughout my research that such an approach is a favourable one for the purpose of addressing the planet's environmental predicament. I will also argue that dualism is a less favourable path to follow to the extent that it contributes greatly to the environmental problem at hand. I will however concede that a holistic approach may create dialectical thinking between concepts such as Eastern and Western, anthropocentric and ecocentric, religious and non-religious, as well as intrinsic and extrinsic thinking. I do however want to make it clear that I am not disregarding one position in favour of another because I acknowledge that there are instances where the lesser favourable concept (under certain circumstances within a certain geographical area, for example) may be conceived to be actually the favourable one (under the same

circumstance within a different geographical location). In other words, when I evaluate opposites I am trying to conserve the integrity of the opposite rather than to create a convenient reduction thereof.

According to Okita (2009) it is vital to examine the metaphysical understanding of nature because the way we deal with nature is significantly influenced by our perceptions of nature (ecological ideologies). The way many people currently perceive nature, which is reflected by their practices, will patently not suffice. Presently there are many ecological ideologies from which individuals may choose when they embark on a path of re-examining their metaphysical understanding of nature. This leads to an important threefold question around which this research is constructed: Which ecological ideology best suits current conditions? Then, how can we better motivate people to embrace the correct ideology? And finally, how can we motivate them to be active participants in their chosen ideology? I will attempt to show that there is indeed one such ecological ideology which I hope everyone will embrace. This philosophy is known as Deep Ecology (DE), and as will be shown in a later chapter, DE embodies the psychologising of an egalitarian and holistic environmental philosophy founded on a phenomenological methodology. But this is not the only methodology on which such an environmental philosophy can be founded. In a subsequent chapter, I will point out that Kretz (2009:116-117) argues convincingly that there are multiple methodological reasons, such as the following, on which a re-conceptualisation of the ecological self (in favour of a holistic environmental philosophy) may take place:

- Thinking about the nature of ecological relations allows for a moral landscape. Such a moral landscape may address the ecological dimensions of what it is to be human and may serve to show how the failure of many humans to understand themselves ecologically has contributed directly to the current ecological crisis.
- Thinking about the ecological self has pragmatic benefits because it situates humans in a way that facilitates our survival and the survival of other organisms.
- And lastly, the ecological crisis requires new ways of motivating beneficial ecological action.

I will substantiate my choice of ecosophy (ecological philosophy) by following a rhetorical path, during which I will show why it is essential to embrace this philosophy. My path will commence from the point where I will look at how religion and philosophy, from both Oriental and occidental perspectives, have altered (and continues to alter) the way we perceive nature, whether in a constructive or destructive fashion. I will then show how destructive, but also caring and constructive, humanity can be when it comes to how we interact with the environment. This will culminate in an overview of the principles of Deep Ecology, contrasting it with what is known as a Shallow Ecology. I will also entertain the criticism and counter-criticism of Deep Ecology.

Before concluding this research, I will touch on how we may motivate otherwise inactive individuals to become more pro-active in embracing an ecosophy such as Deep Ecology as being a viable eco-philosophy. These are important aspects to explore if we want to create a platform on which humanity can start to peruse the aim of restoring our planetary imbalance.

CHAPTER 1 – INTRODUCTION AND BACKGROUND

It is interesting to note that when one asks people to imagine the future in 50 years' time, they tend to show a realisation that environmental problems, together with issues of population growth, poverty and fighting over scarce resources, will increasingly dominate global and local agendas in the near future. There are nonetheless many people who are convinced that our habits of consumption, and the ideologies driving our actions, are unconnected to the state of the environment. This conviction is however challenged by Annie Leonard's thought provoking book¹, entitled *The story of stuff – How our obsession with stuff is trashing the planet, our communities, and our health – and a vision for change*. The core argument in her book will be explained later in this dissertation when I address the issue of consumption.

Despite some people being at least generally aware of the environmental ramifications of our practices of consumption, others still hold the belief that the world will survive and that the suffering caused by exploitive and ecologically degrading practices is exaggerated. While I am glad that many informed people fully realise that the planet is in a state of jeopardy, I am concerned about those who realise this only partially. I am also concerned about those people who live their lives blissfully unaware of this fact. Can the claim about the planet's environmental dilapidation be factually substantiated, or is it merely speculative? I will substantiate this claim factually by elaborating on them later on in this dissertation. As a result of unprecedented economic growth and human prosperity during recent centuries, there was an immense increase in population numbers. Logically, the more people there are the more mouths to feed, the greater the pressure on natural resources. This state of affairs gave rise to the actuality that close to a thousand species became extinct and more than ten times as many are threatened with extinction. As a result, marine and other stocks are depleted and over-harvested.

¹ There is a short video in this regard, entitled "The Story of Stuff with Annie Leonard", which is available at: <https://www.youtube.com/watch?v=1-RnnEFWUM4>, [Accessed 21 February 2016]

Moreover, the global rate of deforestation for the sake of creating farm-land and timber is alarming and soil degradation is a major worldwide issue. These factors, namely the extinction of species, industrial pollution, the loss of forests, degradation of ecosystems, over-fishing and the degrading of freshwater supplies all contribute to the contemporary concern about the earth's environmental status of disarray. I will discuss these aspects in more detail later in this dissertation with the aim of showing that claims about the planet's state of dilapidation are not mere speculations, but are based on facts. At this stage it will suffice to say that human development is destructive and we already experience the impact of our ruinous actions in the form of global warming.

Despite polemic debates, there is sufficient evidence to show that global warming is a reality. In January 2014, the United Nations News Centre (UNNC)² reported that global warming is unequivocal and that there is a 95 to 100% probability that human influence (rather than naturally occurring phenomena) is the dominant cause of global warming. Still, many people do not realise that our present atmospheric concentrations of greenhouse gases have already reached the highest levels in at least 800,000 years. This lack of realisation was confirmed by a survey conducted in 2007 by TNS Research Surveys,³ during which a total of 2000 South African adults from all seven of South Africa's major metropolitan areas were interviewed about their views on climate change. Most of the interviewees placed the issue of climate change far below that of other social issues such as HIV/AIDS, corruption, poverty and unemployment.

The survey conducted by TNS Research Surveys found that South Africa's carbon dioxide emissions doubled between 1980 and 2004, and that South Africa is in the top 20 carbon-emitting countries worldwide.⁴ The study also found that poorer people are less concerned about climate change than wealthier people. Paradoxically, however, it is the poor who

² Human cause of global warming is near certainty - <http://www.un.org/apps/news/story.asp?NewsID=47047#.VFenfvmUeVU> (Accessed on 13 February 2014).

³ A research company in Africa, the Mediterranean and the Middle East - (AMME).

⁴ According to http://cdiac.ornl.gov/trends/emis/tre_tp20.html, South Africa dropped to 9th position in 2009, and according to http://www.ucsusa.org/global_warming/science_and_impacts/science/each-countrys-share-of-co2.html#.VF211_mUeQg, South Africa ranked 14th among the top 20 countries in 2011 (Both accessed on 17 February 2014).

contribute less to global warming than the wealthy⁵. Climate change is an anthropogenic global emergency, but there is a lack of leadership from larger countries, contributing to a sense of individual helplessness. For instance, India has a population of more than 1.27 billion, and it is continuously growing. As a citizen in a country with such a high population growth rate, an individual may feel that his/her efforts to curb climate change are worthless in comparison with the more than a billion people he/she is sharing the country with. Kirby (2014) writes in *Climate Network News* that even while China, the world's leading coal producer, recognises coal's serious polluting effects, India nonetheless announced that it aims to double its coal production to meet their soaring energy demands. This statement was made by Piyush Goyal, India's Minister of State for Power, Coal, New and Renewable energy, saying that India will produce a billion tonnes of coal per year by 2019. Many individuals who have good intentions with regard to environmental preservation may be demoralised by utterances such as Goyal's.

People should not allow such disregard to be shown towards the environment. With a mindset like Goyal's, the effects of climate change may never be reversed. People urgently need to re-think their place on this planet and how to run their lives in an eco-wise as well as energy-wise manner. The resources used to maintain our lifestyles ought to be utilised in a less resource-intensive way of living. Maslow (2000:5) says that people will first satisfy their lower-order or physiological needs (food, shelter and safety) and then they will attend to their upper-level or psychological needs (leisure, self-respect and self-actualisation). This state of affairs could be a contributing factor to the state of our ecology and the reason why humanity is often caught in a duality between what is beneficial to the environment and that which is personally satisfying or rewarding.

To my mind, a paradigm shift is needed in order to live in tune with a more ecocentric outlook on life. To this end, Rasmussen and Birch (1978:69) say that unless a different vision takes hold, people will live by the old myths and act in old patterns, even when every course they can conceive appears repugnant. It is an unfortunate situation when self-

⁵ <https://www.skepticalscience.com/co2-limits-poor-poverty.htm> **and** <https://www.washingtonpost.com/news/wonk/wp/2013/11/18/wealthy-nations-promised-billions-to-help-the-poor-adapt-to-climate-change-where-did-it-go/> (Both accessed on 19 February 2016).

deceptive beliefs are held collectively, because they tend to become entrenched in the human psyche to such an extent that their consequences – good or bad – become magnified. Conradie (2008:43) agrees with the point that the problem is to be found inside ourselves, within the human heart, within the collective psyche and the perceptions we have about our external world, and not in the ecosystem outside ourselves, the so-called external world itself. He considers the environmental crisis to be a pathological sign of a collective cultural failure, indicative of the values underlying our dominant cultural and economic practices.

In addition, Henning (1998:109) maintains that it is vital to address, not only the destruction, but also the reasons and values for not destroying the oldest, richest, incredibly complex and productive ecosystems on Planet Earth (if not in the entire cosmos). Such values are held individually and collectively and they significantly influence human behaviour because they possess emotional, cognitive and symbolic components that we use to determine what is important, worthwhile and desirable. Thus, values contain and at the same time evolve from judgements and beliefs about what is ‘good’ or ‘bad’ and about what is ‘right’ or ‘wrong’.

We act according to our thoughts, and it is precisely our actions and our failures to act that culminate in the preservation or suffocation of our planet. Humanity’s thinking in our contemporary societies unfortunately tends to be dominated by a lust for affluence. More than thirty-five years ago, Foster (1978:71) observed that such a lust for affluence is psychotic since it is completely cut off from reality. We crave things we neither need nor enjoy and we accumulate things we don’t want in order to impress people we don’t even like. Covetousness we call ambition, hoarding we call prudence, and greed we call industry. These behavioural signs are representative of an incorrect mind-set. As has earlier been shown by Conradie (2008:4), it seems that the environmental crisis is indeed a sign of the collective failure of our mind-sets. In Morton’s (2008:73) view, one of the things that modernity has damaged in its appropriation of the Earth has been modernity’s way of thinking. He says that thinking right is of cardinal importance in order to act right and in order to set our lifestyles back into a certain sense of balance.

Humankind needs to think right in order to grasp the intrinsic value of nature and to be able to see how intricately we are collectively bound up with a domain of being upon which we rely for our existence. It is also important to alter our thinking in order to bring about a new social system. Snyder (1980:101) opines that one of the most interesting things that ever happened in the world was the Western discovery that history is arbitrary and that societies are human, and not divine, and that we actually have the capacity of making choices about our social systems if ever a current social system seems to fail us. Snyder (1980:144-145) further points out that humankind's domination over nature is not only directed to nature. The natural world, he says, is being ripped off, exploited, and oppressed just as our fellow human beings are being exploited and oppressed. Snyder therefore joins social concerns with the effort to stop the destruction of the natural world. In fact, he considers this to be the best method to address the environmental crisis, and I agree with him in this regard.

More recently, Messersmith-Glavin (2011:13) states that social ecology's fundamental premise is that the ecological crisis is rooted in the social crisis, and that social hierarchies lead to the attempt to dominate nature. In order to solve the ecological crisis, we should therefore resolve the social crisis. The capacity to resolve the social crisis is in our power; it only requires that we have the courage to use our own understanding and start thinking – the *sapere aude* principle – and that we act in order to change social relations, thereby re-harmonising the human relationship with non-human nature and our fellow human beings.

If humanity can be made aware of an ecological ideology of which they were unaware, and if they embrace such an ideology, then we may be closer to re-harmonise the human and non-human relationship and set nature back into its former balance. The problem, however, is that for more than half a century, a period that witnessed unprecedented economic growth, prosperity and the serious despoliation of nature, humanity has been presented with a plethora of ecological theories, charters, policies and viewpoints. All of these theories, charters, policies and viewpoints shared the aim of creating ecological awareness. On a daily basis various environmental ideologies are being embraced, but still the environment continues to degrade. We should ask ourselves why this is the case? *The Global Environmental Outlook*, a report issued five years after the 1992-RIO summit and

seventeen years after the *Global 2000 Report* (Devall 2001:30-31), states that humanity has dismally failed nature and themselves. This did not come as a shock to Gray (2007:209), who writes: "... in wrecking the planetary environment humans are only doing what they have done innumerable times before on a local level."

Irrespective of the plethora of warnings and the destruction which are visible in nature, people still behave, according to Smith (2011:12), as global locusts, eradicating everything in their path. Rolston (1996:64) takes this argument further and calls humankind a planetary 'cancer.' These are harsh words, but they ought to strike a chord somewhere. Giving credit to the many informed individuals who adhere to some kind of ecological ideology, I still wonder why there is a failure to make a significant change in the collective mind-set of people and the required impact on the preservation of our planet. To my mind, the answer to this question is difficult to establish. The planet is worse off now than it was nearly five decades ago. Speth (1980:695) draws our attention to a report⁶ compiled in 1980, known as *The Global 2000 Report to the President: Entering the Twenty-First Century*. It predicts that: '... if present trends continue, the world in 2000 will be more crowded, more polluted, less stable ecologically, and more vulnerable to the disruption than the world we live in now.'

In addition to previous warnings during the past three decades, this report was intended as another warning and wake-up call for humanity to change its ways. The predictions of *The Global 2000 Report...* is still visible around us today, but still people are ignorant of the state of the environment and some even consider the study of nature as a pastime of fools. On the contrary, the study of nature is an imperative exercise that can enlighten us with regard to how we as humankind and nature interact. This will take us furthermore to a position where we reconsider how we see nature, and we can see it from one of two viewpoints: anthropocentrically or ecocentrically. If we are of the opinion that destructive environmental behaviour is wrong because it impacts on resources needed for human existence, then we are anthropocentrically inclined. If we think that destructive

⁶ The Global 2000 Study, initiated by President Carter in 1977, was a three-year effort by the U.S. federal government to discover the long-term implications of present world trends in population, natural resources and the environment.

environmental behaviour is wrong because all of nature has intrinsic value which must be respected, for its own sake, then we are ecocentrically inclined. In this study I will investigate these two issues with reference to intrinsic and extrinsic values; I will demonstrate that this is an important matter to consider in making decisions about the type of environmental ideology to be supported. The importance of choosing the correct environmental ideology cannot be overstated.

In conducting an investigation into the intrinsic and extrinsic values underlying our views of nature, I will give an overview in Chapter 2 about the extent to which Western philosophy and religion, as compared to Eastern thinking, has, over centuries, tended to contributed to the destructive (as well as a lesser constructive) mind-set of humanity. In this regard, Caldwell and Veiland (1996:10) state:

The environmental crisis is an outward manifestation of a crisis of mind and spirit. There could be no greater misconception of its meaning than to believe it is concerned only with endangered wildlife, human-made ugliness, and pollution. These are part of it, but more importantly, the crisis is concerned with the kind of creatures we are and what we must become in order to survive.

In addition, Hoffman and Sandelands (2004:4) state that environmental problems are not primarily technological or economic, but behavioural and cultural. However, it seems only a small proportion of the human population is concerned about this crisis. Surely we should find another relationship to nature besides reification, possession, appropriation and, as Haraway (1992:70) says, nostalgia! Over millennia, religion, as a social institution, contributed to establish a certain kind of environmental mind-set. The Western mind-set, as I will show in this dissertation, has been mainly negative as regards to its destructive environmental foundation. The church has an enormous role to play in this regard. Conradie (2008:11) reminds us that the church is a social institution, not something that exists *alongside* God's creation but *in* God's creation. In this research, I will show how religious adherents tend to fail to grasp this aspect.

Against this backdrop, I will argue in favour of embracing a typical Eastern *intrinsic* response to nature, rather than a less favourable Western *extrinsic* ideological mind-set. In

doing this I may be labelled as a radical environmentalist (Taylor 2008:27-61) because of my diagnosis and prescription, involving a critique of the dominant streams of occidental religion and philosophy, which I deem as desacralizing nature, to a certain extent, and thereby promoting its destruction.

In Chapter 3, I will highlight some ‘locust-like’ human activities in order to show the less informed, and remind the well-informed, just how destructive the force of humankind’s anthropocentric thinking can be. I will also examine a thorny issue, which is the current world population problem. Notwithstanding this, I will draw attention to the many environmental successes humanity has brought about due to an ecocentric way of thinking. In doing this I hope to bring the reader to a point where he/she will ponder whether to continue with his/her life in a laissez-faire, willy-nilly, ‘locust/cancerous’ manner, or whether he/she will reassess his/her life in favour of caring for the external world in a manner that may bring about lasting change. Dunstan and Swan (1993:1) says that people realise slowly that the planet and our resources are finite, and that human behaviour is having a significant impact on the present and future quality of life on this planet. In order to redress the balance we will need an ecologically sustainable perspective that embraces all the beings on the planet and all generations to come.

Such a perspective will be explored in Chapter 4, where I will focus on Deep Ecology as a Philosophy. In this chapter I will discuss the primary tenets of Deep Ecology, with its non-anthropocentric and widely sustainable ecocentrism, with the aim of highlighting its receptivity in contrast to altruistic and anthropocentric Shallow Ecology. I will build on this perspective by discussing intrinsic and extrinsic values and arguing in favour of intrinsic thinking as a fundamental aspect of Deep Ecology. The latter is an important aspect to investigate, because I will show how intrinsic mind-sets may contribute to environmental preservation, while environmental destruction may result from extrinsic environmental ideologies. Within modern industrial consumer states, individuals find themselves, to a greater or lesser degree, self-alienated. The reason for this, according to McComb (1997:1), is that the various institutions and policies within these industrial consumer states make it metaphysically impossible for the individual to attain a state of self-realisation and eco-

consciousness. This, in turn, threatens the success of the Deep Ecology movement. However, I maintain that the inverse is also true, that is, that through Deep Ecology we may change these policies within industrial consumer states and societies.

In the course of Chapter 4, I will examine arguments against Deep Ecology from various viewpoints as well as arguments in favour of Deep Ecology. Thereafter I shall investigate the issue of human motivation in Chapter 5. According to Morton (2008:85), shame will be the feeling that will save humanity. I will discuss the likelihood of this prediction coming true, along with additional ways in which humanity may be motivated, directly or indirectly, in order to think and act more eco-centrally.

In Chapter 6, I will conclude my research by weighing up all the aspects discussed and then argue, in the light of the preceding chapters and the arguments presented therein, that people ought to embrace Deep Ecology as a very viable philosophy which can bring about a *volte-face* in destructive thinking and behaviour. I will also argue that we may ultimately succeed in altering the imbalance of our environmental state by living a Deep Ecological lifestyle.

CHAPTER 2 – RELIGIOUS AND PHILOSOPHICAL FORMATION OF COGNITIVE PROCESSES

2.1 INTRODUCTION

Before embarking on this discussion, I deem it important to pause for a moment and take an overview of some concepts which will play a major part within this discussion. I am doing this in order to show that there is a relationship between them, specifically in regard to all of them being a form of discipline which contributes to giving humans a sense of guidance in their lives. I will give encyclopaedic definitions of the relevant concepts, after which I will make an assessment with regard to any relation they have with one another. Being a philosophical dissertation, it will be sensible to start with the concept 'Philosophy'.

Philosophy⁷ may be described as an academic discipline that exercises reason and logic in an attempt to understand reality and answer fundamental questions about knowledge, life, morality and human nature. This is done through the philosophical method which entails examining your own beliefs and doubting its validity, then applying a dialectical process in order to prove the rationality of beliefs and the discovery of fundamental truths. Questioning a deeply held belief or social practice sets one onto the path of true understanding, and it's this understanding that leads to meaningful personal and social change. Philosophy therefore contributes in shaping existence and assists in describing the best way to live. Philosophy⁸ may furthermore be defined as an intellectual activity of seeking a reflective understanding of ourselves and of the natural and social worlds we inhabit. In summary, Philosophy⁹ may then be described as the study of the fundamental nature of knowledge, reality, and existence, and as such a theory or attitude that acts as a guiding principle for behaviour.

⁷ <http://www.whatisphilosophy.net/> (Accessed on 16 February 2016).

⁸ <https://www.york.ac.uk/philosophy/why-philosophy/> (Accessed on 16 February 2016).

⁹ <http://www.merriam-webster.com/dictionary/philosophy> (Accessed on 16 February 2016).

A **Worldview**¹⁰ may be seen as a comprehensive conception or theory of the world and the place of humanity within that world. It is considered to be an intellectual construct that provides both a unified method of analysis for and a set of solutions to the problems of existence. The American Scientific Affiliation¹¹ defines the concept 'worldview' as a theory of the world, used for living in the world; a mental model of reality, a framework of ideas and attitudes about the world, ourselves and life, a comprehensive system of beliefs. Another dictionary¹² defines a worldview as the way someone thinks about the world. A worldview is therefore a particular philosophy of life or conception of the world.

Ideology is defined by Merriam-Webster¹³ as a systematic body of concepts, especially about human life or culture. Routledge¹⁴ takes it further by adding that it is a set of ideas, beliefs and attitudes, consciously or unconsciously held, which reflects or shapes understandings or misconceptions of the social and political world. According to the National Encyclopedia of Social Sciences¹⁵, ideologies arises in the midst of ongoing cultures and are responses to insufficient regard for some particular element in the dominant outlook as well as attempts to place that neglected element in a more central position and bringing it into fulfilment. An ideology is therefore, in a nutshell, the product of humanities' need for imposing intellectual order on the world. It sometimes helps in achieving desirable social change, sometimes facilitates undesirable social change, and at other times facilitates desirable or undesirable resistance to social pressure for change.

Religion is defined as an organised system of beliefs, ceremonies, and rules used to worship a god or a group of gods; it is a personal set or institutionalised system of religious attitudes, beliefs, and practices¹⁶. According to the International Encyclopedia of the Social Sciences¹⁷, religion is a system of ideas about the ultimate shape and substance of reality. In other words, it relates a view of the ultimate nature of reality to a set of ideas of how

¹⁰ [http://www.encyclopedia.com/topic/Worldview_\(Philosophy\).aspx](http://www.encyclopedia.com/topic/Worldview_(Philosophy).aspx) (Accessed on 16 February 2016).

¹¹ <http://asa3.org/ASA/education/views/index.html> (Accessed on 16 February 2016).

¹² <http://www.learnersdictionary.com/definition/worldview> (Accessed on 16 February 2016).

¹³ <http://www.merriam-webster.com/dictionary/ideology> (Accessed on 16 February 2016).

¹⁴ <https://www.rep.routledge.com/articles/ideology/v-1> (Accessed on 16 February 2016).

¹⁵ <http://www.encyclopedia.com/topic/Ideology.aspx> (Accessed on 16 February 2016).

¹⁶ <http://www.merriam-webster.com/dictionary/religion> (Accessed on 16 February 2016).

¹⁷ <http://www.encyclopedia.com/topic/religion.aspx> (Accessed on 16 February 2016).

man is well advised, even obligated, to live. Religion tunes human actions to a view of the cosmic order and projects images of cosmic order onto the plane of human existence.

Ethics, according to the International Encyclopedia of the Social Sciences¹⁸, may be taken to refer to the values of a given society, its systematic codes of moral principles and the theory about the rationale of moral action. Merriam-Webster¹⁹ defines ethics as an area studying the rules of behavior based on ideas about what is morally good and bad. The Routledge Encyclopedia of Philosophy²⁰ adds to this by defining it as a system of values and customs instantiated in the lives of human beings, involving notions such as the rightness and wrongness of actions, guilt and shame, and as such, entailing moral principles.

Reflecting on the above definitions one may notice that there is a thread of similarity that runs through these concepts. The following can be highlighted:

- Philosophy – *a guiding principles for behaviour*
- Worldview – *a theory of the world, used for living in the world*
- Ideology – *the ideas, beliefs and attitudes that shapes our knowledge of the world*
- Religion – *a set of ideas of how humanity is well advised, even obligated, to live by*
- Ethics – *the rightness and wrongness of actions*

The thread of similarity in all these concepts entails the following: it gives humanity a sense of guidance with regard to how to live an acceptable and respectable life, by supplying us with relevant tools to be used to ponder life (internally and externally). Although these concepts appear frequently in this dissertation, I wish to point out that I am not writing a theological exegesis. Rather, my aim is to show how ideas from certain religions and philosophical streams may contribute in forming the abovementioned guidelines for living.

¹⁸ <http://www.encyclopedia.com/topic/ethics.aspx> (Accessed on 16 February 2016).

¹⁹ <http://www.merriam-webster.com/dictionary/ethics> (Accessed on 16 February 2016).

²⁰ <https://www.rep.routledge.com/articles/ethics/v-2/> (Accessed on 16 February 2016).

In the light of the above, I want to investigate the most suitable current framework to allow humans to rearticulate their understanding of nature and humanity's place in the grander scheme of things, as a possible remedy for the unsustainability of current cultural ways of life on earth.

According to Schein (2014:10), ecological worldviews can be thought of as mental patterns for how we see the natural world. These worldviews are cognitive, perceptual and affective maps that we use continuously to make sense of our natural environment. These mental patterns form unconsciously and can limit or enhance our perception of the natural world. This process not only forms our behaviour and the values according to which we live, but also serves as a mirror that reflects our social reality. On the basis of this, I argue that religious and philosophical traditions continuously shape our views, opinions and understanding of ourselves and the world around us. Mohd, Siti & Ismaniza (2009:85) state that there are many campaigns, courses and even forms of legal enforcement in place to ensure the success of educating constructive attitudes towards the environment. However, they believe that the educational process can be more effective and have a longer-lasting effect if the understanding of environmental attitudes is based on religious and philosophical teachings. While I concede some value in this view, I argue that there are religious and philosophical teachings which may bring about the inverse result of what is being envisioned by Mohd et al.

I therefore concur with Fairbanks (2010:80), who maintains that traditional Christian and/or Greek philosophical views are to be blamed for the way human attitudes, values and beliefs are conditioned. This also applies to a capitalist consumerist model of the good life – *I buy, therefore I am* – and the epistemologies of mastery that it underwrites. Humans are conditioned by philosophical and religious conceptual schemes and are predominantly driven by consumption while having the self-image of enjoying mastery over the natural world. In support of this claim, Conradie and Field (2002:102-103) reiterate that the key to the lifestyle many of us have adopted is one of consumption. We are conditioned to consume in order to be popular; to stay in sync with the spirit of competitiveness; and to possess material commodities. We also tend to consume in order to escape our problems or

to be happy. The essence of this statement is well reflected in a song titled ‘The Fear’, performed by Lily Allen (2009). In that song she sings: “And I am a *weapon of massive consumption*. And it’s not my fault it’s how I’m *programmed to function*.” The italics are my own. The chorus²¹ also needs mentioning in order to understand the meaning of the song better:

I don't know what's right and what's real anymore
And I don't know how I'm meant to feel anymore
And when do you think it will all become clear?
'Cause I'm being taking over by The Fear

This catchy song, that won the Best Track of the Year at the Virgin Media Music Awards in 2010, was inspired (according to Lily Allen) by one of those days when you just shout at the television, “This is wrong!” She says that The Fear she is referring to in her song title, is of the world becoming a horrible sterile place where nothing is going to be real anymore, her song is also much about feeling lost in such a world driven by false consumerism.

Our planet cannot sustain such a consumerist lifestyle, which is based on anthropocentric attitudes that are rooted in value-hierarchical dualities and structured by a logic based on a dominating attitude. Such a form of consumerism is disastrous for the environment. Recall my earlier reference in Chapter 1 with regard to Annie Leonard’s book on ‘The Story of Stuff’? In her book, Leonard (2010:55) wants us to recognise that each thing we buy involves all sorts of resources and labour. She argues that someone actually mined the earth for the metals in our cell phones; someone unloaded the bales from the cotton gin for our T-shirts. Someone in a factory assembled that pair of sunglasses, and they might have been exposed to carcinogens or forced to work overtime in the process of manufacturing them. Someone drove or flew certain items around the country or the world to get it to you. Leonard wants us to understand the true value of our Stuff, far beyond the price tag and far beyond the social status of ownership. She (2010:60) also asks us to consider the

²¹ Lyrics and song meaning obtained from: <http://www.songfacts.com/detail.php?id=14015h> (Accessed on 19 February 2016).

hypothetical question that when we cut down a virgin forest to make disposable wooden chopsticks, wrapping them in paper and then burning fossil fuel to ship them halfway around the world, aren't all those processes not really production but simply consumption, aka destruction?

In substantiation of these consumerist views, Ambrosius (2005:5) identifies anthropocentricity as the main culprit of current environmental problems. This anthropocentric attitude is an attitude that is bred in humanity from childhood in the manner we are taught to interpret the world around us and how we fit within this world. In this respect, philosophical and religious thinking plays a major role.

In what follows, I will show how destructive religious thinking can be, with specific emphasis on Occidental religion. In addition, I will discuss the impact of Western Philosophy on moulding humankind's anthropocentric thinking. However, I will argue that there are exceptions to the rule, that is, ecocentric-inclined ideas can be found within an otherwise anthropocentric-minded Western religious and philosophical mind-set. The same goes for examples of anthropocentric-minded teachings which may be present within an otherwise ecocentric-minded Eastern philosophy and religion.

In the next section I will explore how religion and philosophy contribute to shape our anthropocentric thinking.

2.2 HOW RELIGION SHAPES OUR THINKING

Human beings (since as early as the Palaeolithic period) has shown themselves to be innately spiritual creatures that are capable of and drawn to abstract thought (Henning 1998:110). Spirituality connotes for each of us a diverse, broad and deep range of relationships that define our underlying sense of identity with ourselves, with others, with life itself, with the earth, with the universe and with a higher power. As we press further into the past for guidance to the future, we are translating each other's great religious texts and we experiment with one another's ancient spiritual disciplines (Tucker 2007:4). We do

this because we realise that each religious tradition has a value through which it reasserts its uniqueness, such as justice (in Judaism), salvation (in Christianity), submission (in Islam), insight (in Buddhism), liberation (in Hinduism) and integration (in Confucianism). In modern times many of the world religions have confined themselves to personal salvation and interpersonal ethics that have become the norm for defining the religious life. In doing so, humans have lost their earlier sense of being situated within a larger cosmos of beings. Such a cosmic sensibility, says Tucker (2007:9), is actually quite old within the human community, but sadly it has been lost in the modern period beneath stacks of data, verification and empiricism. We are existentially so engrossed with our own fast-moving lives, problems, stress and deadlines that we do not see the broader picture, of human life crucially intertwined with the ecosystem as a whole. This kind of mind-set constitutes the essence of the charge against Western religion, that is, the way in which occidental religious dogma (especially the interpretation of Christian dogma) has shaped a destructive environmental consciousness.

Notwithstanding the above considerations, I maintain that the religions of Taoism²² and Buddhism are more ecocentric in their outlook on nature. To my mind, these religions have retained their awareness of human situatedness within a larger cosmos of beings. I will, however, not set the occidental and oriental religions against one another. I will rather show that there are, within anthropocentrically inclined occidental religions, aspects of intrinsic thinking present, just as there are instances of anthropocentric thinking to be found within oriental religious thinking. For example, in an otherwise anthropocentrically minded Christian tradition, we can identify a strand of ecocentric religious thinking in the form of Franciscanism. In the same manner there is anthropocentrically inclined thinking, such as Islam, to be found within otherwise ecocentrically inclined oriental religious traditions. In my discussion of the 'shaping processes' of our thinking, I will use the present tense in order to emphasise that the shaping of our thinking worldwide is a continuous process that happens in the classroom, at home, on the battlefield, from the pews or via the different forms of social media. People are constantly being bombarded with information and ideological opinions which alter their way of thinking and behaviour.

²² Also spelled 'Daoism'.

Dunstan and Swan (1993:2) blame the unique blend of Judeo-Christian, early Greek and medieval views for the anthropocentric cultural beliefs which are prevalent in our society. This is because these views have placed *Homo sapiens* as central in the organisational structure of the universe. Taylor and Zimmerman (2005:456) and Fairbanks (2010:80) concur with the view that environmental infractions can be traced back to a blatant anthropocentrism that is grounded in Western religious thinking. In addition, Nelson (1993:223) argues:

Whilst environmentalism and related bodies of thought are diffusing outside the academic sphere, still, for the most part, our society remains embedded in the Western worldview which isolates us from the natural community and leaves us spiritually alienated from nonhuman life.

In the next section, I will explore the charge against Christianity as being anthropocentric in its outlook on nature and the universe.

2.2.1 *Occidental religion – Christianity*

According to the biblical texts in Genesis 1:27-28, human beings are called to be fertile, to multiply, to subdue the earth and to exert control over it. This command can be misinterpreted by Christians (as it often happens) as a licence for humankind to consider itself the dominant species on earth. According to such an ideology, the natural world was created for humans' benefit because they are the crown of creation and are created in the image of God. This (distorted) interpretation has led many critics to accuse the Judeo-Christian faith of providing ideological support for an aggressive exploitation of nature, which has led to the current environmental crisis. Gruen (1994:2, 259) agrees with Nelson's observation cited above and maintains that for the most of its history, Western culture has been characterised by a highly exploitative attitude toward nature, often justified by appeals to God's plans. Following the logic of this argument, Christianity may not be seen as part of a solution to the environmental crisis, as Mohd et al. (2009:85) would have us believe.

However, later on in this dissertation when I discuss 'Motivational Initiatives' in Chapter 5, I will show that Christianity can indeed be part of the solution of the environmental crisis.

Going back to the ancient Hebrews, Western religion perceives humanity as unique and set apart from the rest of nature, instilling in adherents of Western religions a sense of bifurcation between the so-called 'us' and 'them', 'we humans' versus the non-human world. Historian Lynn White, Jr. (1967:1205) claims that how people interact with their ecology will depend on what they think about themselves in relation to things around them and this is deeply conditioned by their religiously inspired beliefs about their own nature and destiny. He also criticises Christianity, saying that our ecological problems are derived from Christian attitudes because Christianity leads us to think of ourselves as superior to nature, to be contemptuous of it and to be willing to use it for our slightest whim.

In addition, Passmore (1974:6) levels the following critique against the Christian anthropocentric attitude:

The Lord created man, so Genesis certainly tells us to have 'dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth and over every creeping thing that creepeth upon the earth' (1:26). This has been read not only by Jew but by Christian and Muslim as man's charter [*sic*], granting him the right to subdue the earth and all its inhabitants. And God, according to Genesis, also issued a mandate to mankind: 'Be fruitful and multiply and replenish the earth and subdue it' (1:28). So Genesis tells men not only what they can do, but what they should do – multiply and replenish and subdue the earth. God is represented, no doubt, as issuing these instructions before The Fall. But The Fall did not, according to the Genesis story, substantially affect man's duties. What it did, rather, was to make the performance of those duties more onerous. After the Flood ... God still exhorted Noah thus: 'Be fruitful, and multiply, and replenish the earth' (9:1). But then added two significant riders. The first rider made it clear that men should not expect to subdue the earth either by love or by exercise of natural authority, as distinct from force: 'And the fear of you and the dread of you shall be upon every beast of the earth and upon every fowl of the air, upon all that moveth upon the earth and upon all the fishes of the sea: into your hand they are delivered' (9:2). The second rider — 'every moving thing that liveth shall be meat to you' (9:3) — permitted men to eat the flesh of animals.

In addition to Passmore's sharp criticism of Christianity, Bishop (1991:8) sums it up by identifying the following points about the Christian view of creation:

- (i) It establishes a duality between humanity and nature;
- (ii) It is anthropocentric: no item in the physical creation has any purpose save to serve humanity's purpose;
- (iii) Humanity is simply not part of nature;
- (iv) It insists that it is God's will that humanity exploit nature for its own ends.

Moreover, White (2002:250) identifies the source of humanity's exploitation of nature as fundamentally Christian when he says: "Especially in its Western form, Christianity is the most anthropocentric religion the world has seen... [it] not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends."

To put things into perspective, Ambrosius (2005:5) argues that White has not entirely given up on religion. Religion is not *per se* the problem for White: the problem is conventional, institutional and fundamental Christianity, which has set humanity apart from its environment. This strand of Christianity fuelled the inherited notion that humanity is superior to its environment, leading to the assumption that the environment is there for their use and pleasure. However, there were Christians who played a significant part in ecological thinking, such as Saint Francis of Assisi. But I maintain that he should not tower above the Christians who, on a daily basis, contribute to ecocentric thinking in our contemporary world. St Francis and his ilk are, sadly, in the minority.

In their work *A Rainbow over the Land – A South African guide on the church and environmental justice*, Conradie and Field (2002:36-38) argue that the responsibility for the ecological crisis can be placed at the feet of patriarchy, capitalism, technology, science, colonialism, modernity and especially Christianity. In their book they challenge Christians, as I do, to re-examine the responsibility placed upon them by scripture to care for God's creation and to ensure that they act as responsible stewards of all life-forms, a position given to them by God. The Christian Church has also confined itself for too long to matters

of human spirituality, and, in the process, excluding the wider scope of God's creation. Christians therefore need to extend their spirituality to include all of God's creation.

At this point, it is helpful to summarise Conradie and Field's discussion of all the contributing factors which have led to the current environmental crisis because it will serve as a background against which contemporary religious conditioning may be analysed. According to Conradie and Field (2002:36-38), there was a limited negative impact of humans on the environment during the earliest settlements. This status quo changed, however, in approximately 10,000 BCE when the shift from hunter-gatherers to agricultural societies (in China, Mesoamerica and the Middle East) took place. This shift led to food surpluses, population growth and defined territories with organisational structures. From these settlements, the first great civilizations developed. In the past, abuse of the environment was due to four main factors:

- Religious and philosophical ideas placed limits on exploitation of the non-human world.
- There was a lack of required technology.
- The human population was limited in size.
- Human societies were limited in geographical size.

It was typical of ancient societies to live in unison with the external world. There was a sense of symbiotic understanding that the one relies on the other. This changed because of the great social changes of 'modernity' that swept through Europe from the fifteenth to the eighteenth century, namely:

- The feudal economic order was replaced by industrial capitalism.
- Exploration voyages and conquests led to the colonisation of the non-European world.
- Accumulation of wealth as a direct consequence of colonialism and associated trade.

- Modern science in the West made the Industrial Revolution possible, which transformed colonies into exporters of raw materials and importers of manufactured goods.
- The Industrial Revolution created vast pollution industries.²³
- Scientific developments led to health care improvement and a dramatic rise in population.
- A new confidence in the ability of human reason developed during the intellectual climate of the European Enlightenment in the 18th century. This suggests that humanity had limitless potential to control and manipulate creation.
- The tacit and explicit support by Christianity emphasised human dominion over creation.
- Political and economic power was concentrated in the hands of European middle-class male elites, who demanded more goods to satisfy their extravagant lifestyles.
- Competition over resources and trade led to wars and the development of weapons that destroy both humanity and creation.

The tacit and explicit emphasis on human dominion over creation by Christianity is important for the purpose of this dissertation. The core of Christianity, as I will show, is not anthropocentric. However, Christianity inherited this notion as a result of many years of the exploitation of natural resources. I will explore this point in more detail in the subsequent sections.

The great social changes of ‘modernity’ in Europe during the fifteenth and eighteenth century contributed to the formation of large metropolises. However, Yeld (1997:41) believes that we tend to forget that these metropolises not only:

...generate and accumulate wealth and are the main centres for education, new job opportunities, healthcare and culture. But they are also immense and often wasteful consumers of natural resources, requiring enormous quantities of water, energy, food and raw materials. They generate massive amounts of pollution which

²³ According to the Intergovernmental Panel on Climate Change (IPCC 2007) and Sethness (2010), the industrial revolution with its capitalist mode of production has been polluting the air, land and water at an alarming rate, in the process wrecking civilizations across the globe.

contaminate water, soil, air – which endangers the quality of life of all their inhabitants.

I concur with Yeld and I maintain that we tend to forget about these problematic aspects because we easily get caught up in the rat-race of life. We often find it very difficult to give environmental concerns priority in our busy daily agendas. This, according to Conradie and Field (2002:10), tend to be the same situation as regards the church because they acknowledge that the environment is not (yet) a priority on their social agenda. Conradie and Field (2002:10) give the following possible reasons for this situation:

- Local Christian communities often have a hectic schedule, which includes worship services, Sunday school, choir practices, Bible study groups, prayer meetings, women's groups, youth groups and numerous committee meetings. They are involved in caring for the sick, the elderly, the lonely, widows, the poor, the illiterate, victims of abuse, those in prisons, etc. Committed Christians are often very busy people!
- Some Christians also question whether the environment should really be added as a priority on the social agenda of the church. Should the Church not be engaged in far more urgent issues such as poverty, unemployment, education, housing, health services, AIDS and crime?
- From a different angle, many Christians dismiss environmentalism as being 'New Age'. They feel uncomfortable and threatened and fear that working with others towards a 'green' agenda may compromise their faith.
- Many Christians feel that the Church should primarily be concerned with the message of salvation. They feel that their vertical relationship with God is more important than a horizontal concern for the environment.
- In some extreme forms of Christianity, people even argue that one should oppose efforts to ameliorate poverty, prevent war, or clean up ecological damage, for this is to oppose God's will and delay the final judgement.

The above factors indicate Christianity's lack of commitment to environmental preservation. But can we therefore conclude that Christianity is anthropocentric? Before

reaching an answer to this question, let us first consider what the Christian Bible says. Christians often turn to a few popular biblical textual examples that celebrate the wonders of nature, namely Genesis 1 and 2 and Psalms 8, 19 and 104. Conradie and Field (2002:47) find this approach problematic because they argue that this attitude is too narrow, thereby reinforcing the idea that ecology is only a minor aspect within the Christian faith. However, I argue that if one reads the Bible in a holistic manner and examines it for its relevance to ecology, one will discover that ecological concern is an integral issue in the Christian understanding of God and the world. To my mind, this is the central feature that the majority of Christians ignore (whether consciously or unconsciously) in their understanding of their faith. In substantiation of this claim, I wish to emphasise the following two themes in the Bible:

1. The Earth and all its creatures are intimately interwoven with God's loving care for humanity. The scope of biblical reflection on ecology is thus broadened from a narrow preoccupation with texts dealing explicitly with creation to encompass God's redemptive love for the world as a whole.
2. Ecology relates to the central themes of the Christian Gospel. The redemption of the whole earth itself, and not only of humanity, is at stake in the biblical narratives of creation, sin, salvation and new creation.

These two aspects, I think, should be borne in mind when reflecting on Christianity. They are important because they re-emphasise the essential state of Christianity as it was (and as it is supposed to be) before it started to be interpreted in a more anthropocentric manner, as pointed out by Conradie and Field, when they refer to the great social changes of modernity that swept through Europe during the fifteenth to the eighteenth centuries. Conradie and Field (2002:48-51) argue that these two biblical dimensions can be deduced from the extent to which the entire Pentateuch²⁴ describes a covenant relationship uniting God with the people of Israel and the land as an entirety. Apart from the Pentateuch, the Prophetic books²⁵ show how those who destroy creation are subjected to the judgement of God

²⁴ The first five books of the Old Testament: Genesis, Exodus, Leviticus, Numbers, Deuteronomy.

²⁵ Isaiah, Jeremiah, Lamentations, Ezekiel, Daniel, Hosea, Joel, Amos, Obadiah, Jonah, Micah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah and Malachi.

(Habakkuk 2:17), and how the prophets – in looking forward to the redemption of Israel – describe the natural world as sharing in that exact redemption (Isaiah 11:6-9, 35:1-3, 35:5-7; Ezekiel 36, 47:1-12; Amos 9:11-15). This pro-ecological stance is reflected in the Biblical Wisdom²⁶ literature. In Job 38-41, God overwhelms Job with the splendour of creation and Job recognises his limitations as a human being who can never comprehend the sovereignty of God. Psalm 104 furthermore describes God's care for all of creation as God has arranged it in a dynamic and beautiful order, while Psalm 148 calls upon all aspects of creation to worship and praise God.

The above views are expressed in the first 66 books of the Old Testament. But what does the New Testament say? Conradie and Field (2002:50) argue that the relationship between Jesus and the natural world is a less dominant and somewhat ambiguous theme in the Gospels,²⁷ which form part of the New Testament. In Paul's letter to the Romans (Romans 8:18-23), it is written that the whole creation groans because of its alienation from God, but that the resurrection of the believers initiates the liberation and transformation of the whole of creation. Revelation 4 and 5 describe the ultimate worship of God in which all created things partake, those in heaven, on earth, under the earth and in the sea. Lastly Revelation 21 and 22 pictures God's final goal for creation as a city in which humanity lives in the presence of God and in harmony with the rest of creation.

Throughout the Bible, God's interaction with created beings is not limited to humanity. It is always an interaction with humanity in relation to the rest of creation and at times with other creatures to the exclusion of humanity. God's acts of creation, judgement and redemption embrace the earth and all its creatures. During a sermon held on environmental day, Conradie²⁸ quoted the renowned South African Theologian, Albert Nolan, by saying that the majority of people in the world today seem to have lost touch with the earth from which they were born because they no longer experience themselves as part of the cosmos. Many Christians participate in the destruction of God's creation, and when they lose touch

²⁶ Job, Psalms, Proverbs, Ecclesiastes and Song of Songs.

²⁷ Matthew, Mark, Luke and John.

²⁸ Sermon held on 10 June 2001. Available at: <http://www.communitas.co.za/leesrooster/ot/19-Psalms/Psalm%20008.htm> (Accessed on 31 August 2015)

with creation, they lose touch with God. Conradie and Field (2002:1) agree with this view and maintain that the encompassing vision that ‘the earth is the Lord’s’ is at the heart of the Christian faith. The vision that God’s love extends to the earth itself and to all its creatures ought to stimulate Christians’ commitment to the earth. However, this is not much in evidence.

Accordingly, Conradie (2008:41) maintains that the abundance of God’s love for the world has to be balanced with sustainability and justice. This needs to be done in order to allow other creatures to flourish. The problem, however, is that some species and some representatives of the human species have flourished at the cost of others. This is not compatible with a vision of God’s love. The church has also often failed to embody this vision in terms of a lifestyle of caring for the earth. All too often the church has neglected God’s love for creation by focusing instead on a heavenly hereafter, free from earthly preoccupations. The church should rather focus on the vision that the earth is the Lord’s because this may have important *ecological* dimensions (Conradie & Field 2002:6). Such a vision can call for a sustainable community of *all* living beings within the rest of nature, not just of a selection of living beings. The relationship between humanity and nature cannot be one of domination and exploitation.

In addition, Conradie (2008:66) says that Christians mainly follow a sacramental approach in addressing environmental degradation. They do this by focusing on the beauty of God’s creation and portraying it as a sacred gift that we as human beings are called upon to treasure, keep and protect. In this way the sacramental character of nature is rediscovered and the disenchantment of nature in Christianity is rejected. The notion of nature as a sacrament implies that nature is a realm where the divine presence is revealed and where human beings should live and act in conscious awareness of this divine presence. To celebrate this divine presence, a re-enactment of nature is called for, one where the practice of living proceeds from a sense of gratitude and wonder for the life-sustaining richness of creation. This will foster among believers a feeling of deep commitment to all life on Earth as God’s creation, and some moral indignation about all threats to this richness. Conradie (2008:66) continues to say that such a sacramental approach to Christian earth-keeping is

found in theologies within the African, Native American, Latin American, Aboriginal, Philippine and Pacific contexts, which have trains of thought that emphasise the community of all living beings.

In my opinion, Conradie and Field contribute significantly in arguing against the view that Christianity is anthropocentric. One should rather rephrase the accusation and concede that many Christians are anthropocentric in their environmental thinking due to a misinterpretation of the biblical scriptures. Following Conradie and Field, I agree that environmental consciousness forms an integral part of the biblical message and the Christian faith.

Related to the above point, I consider the following questions to be relevant in exploring the argument that the way in which Christians practice the Christian religion tends to be destructive towards nature: What does an appropriate Christian response to environmental concerns entail? Should Christians interpret Genesis 1 in a different way from the way it has traditionally been interpreted? I want Christians to move away from a model of domination to one of dominion, where they can be stewards, guardians, gardeners, or caretakers of creation. But why should Christians be stewards, guardians, gardeners or caretakers of creation? Conradie and Field (2008:62-63) supply the following three reasons why this ought to be the case:

1. [*For Christians*] The earth is a *sacred gift* from God. The *beauty* of the Earth proclaims the glory of the Creator. The earth and everything in it is the Lord's and must therefore be treated with respect,²⁹ humility³⁰ and awe.
2. [*For Christians*] The whole cosmos is the object of God's *continuous, creative, loving and nurturing care*. As followers of Christ we are called to treat others, including nature, with the same loving, nurturing care and respect.

²⁹ An epistemology of clear-eyed attentiveness [*attentive listening to, and reciprocal communication with, the earth*] with an eye to adaptive fit rather than control of one's environment is precisely what many indigenous people in North America are referring to when they use the English word *respect* (Cheney, 2005:118).

³⁰ Our self-centered, chest-pounding, 'look at me' mentality — exemplified in television and news tabloids, sports and entertainment — seriously undermines the development of the virtue of humility (Fairbanks, 2010:92).

3. [For Christians] The Christian hope is that *the Holy Spirit will renew the whole creation*, that God will establish a new heaven and a new earth; that our own bodies, together with the rest of creation will finally be taken up in God's presence. To destroy creation is to turn away from this promise of God.

The square brackets are my own addition because I am making it clear that this is the case for Christians only as laid down by their biblical scripture. Non-believers do not resort under these aspects.

In addition, White (2002:254) states that since the roots of human problems are so largely religious, the remedy must also be essentially religious. From this arises the question whether an alternative Judeo-Christian theology should be made available to people, one that will stand for the affirmation of life, taking care of the Earth, and fostering kinship amongst all living things. In my opinion, this is an option. However, I wish to point out that although it can be claimed that the Christian dogma contributes much to the current ecological world-view, the church and Christians are also playing a more proactive role in correcting this adverse situation. In substantiation of this above claim, I will give a few examples. The first example concerns the Franciscan order. According to the Order of Friars Minor (2011:2-3), Franciscans confront the environmental crisis and social injustice on a daily basis. The spirituality of Saint Francis of Assisi, which they follow, offers a strong motivation to Franciscans to become thoroughly involved in efforts to deal with the current environmental crisis. It highlights a special concern and responsibility towards Earth and all of Creation, arising from a desire to follow in the footsteps of Saint Francis. His approach to the world and his relationship to nature remind Franciscans of the moral imperative to address the crisis that threatens the planet and all its inhabitants. Unlike the conventional spirituality of his time, Saint Francis did not separate the spiritual world from the material world. He related to all created things – living or inanimate – with great respect and sought to be subject to them. This attitude is clearly different from a spirituality that sees human beings as rulers of the earth.

Another example is the Presbyterian Church, who decided in 1991 to place environmental concerns directly into the church canon, thus making it a sin to ‘threaten death to the planet entrusted to our care’ (Hoffman & Sandelands 2004:11). More examples of Christian-induced attempts to show ecocentric behavior are given by Hoffman and Sandelands (2004:12). In 1996 groups of Christian evangelists rallied support for the reauthorisation of the Endangered Species Act, calling it ‘the Noah’s ark of our day’. In 1997 His All Holiness Bartholomew I, spiritual leader of the world’s Orthodox Christians, equated specific ecological problems with sinful behaviour. He announced that it is a sin for humans to cause species to become extinct and to destroy the biological diversity of God’s creation. He also claimed that it is a sin for humans to degrade the integrity of the Earth by causing changes in its climate, its water, its land, its air, and its life by using poisonous substances. In 1998 both the National Council of Churches (a coalition of Protestant, Greek Orthodox, Catholic and Jewish religious leaders) and the National Religious Partnership for the Environment (a coalition of the National Council of Churches, the US Catholic Conference and the Coalition on the Environment and Jewish Life) rallied to support the Kyoto Treaty on climate change, sending a letter to President Clinton and lobbying senators to implement the treaty because it is ‘an important move towards protecting God’s children and God’s creation’. Moreover, the World Council of Churches³¹ initiated a programme for Justice, Peace and the Integrity of Creation. In this programme, the World Council of Churches drew on the vibrant ecological wisdom in many local communities all over the world. The following quotation from Conradie (2008:56) provides a summary of the declaration of the World Alliance of Reformed Churches, held during its 24th General Council in Ghana (30 July-13 August 2004):

21. Therefore we reject the culture of rampant consumerism and the competitive greed and selfishness of the neoliberal global market system, or any other system, which claims there is no alternative.

22. We believe that any economy of the household of life, given to us by God’s covenant to sustain life, is accountable to God. We believe the economy exists to

³¹ <http://www.oikoumene.org/en/what-we-do/eco-justice> (Updated January 2015) (Accessed on 9 February 2015)

serve the dignity and well-being of people in community, within the bounds of the sustainability of creation....

Pope Francis wrote an extremely insightful Encyclical Letter in 2015. In it he made an overview of the environmental crisis we face and considers principles drawn from the Judaeo-Christian tradition which can render our commitment to the environment more coherent. He addresses the need for Christians, not only Catholics, to return to being caretakers and not dominators of God's creation. Pope Francis also states that this Encyclical Letter on the state of the environment and Christian's responsibilities toward the earth has been added to the body of the Church's social teaching (Pope Francis 2015:13).

Although these initiatives towards creating positive ecological awareness and preservation give us hope for future environmental reform, the question remains: Why are we still where we are? To my mind, the answer has to do with our mentality, or way of thinking; we are still following a train of thought that requires drastic transformation. I will address this point later in this dissertation.

In the next two sections, I will briefly discuss the Eastern religions of Judaism and Islam, Taoism and Buddhism and the issue of environmental conservation.

2.2.2 Mid-Eastern religion – Judaism and Islam

Judaism:

Earlier in this chapter I referred to the Pentateuch (as used by the Christian faith) and how it describes a covenant relationship uniting God with the people of Israel and the land in its entirety. I have also shown how excerpts from these five books have been used to justify destructive anthropocentric behaviour towards the environment. In discussing Judaism, it is important to note that the same five books from the Old Testament also constitute the central reference of the religious Judaic tradition, known as the Torah (the Jewish Pentateuch). But how does the Judaic tradition view nature? According to Vogel (1999:3),

Judaism imposes numerous restrictions on how, when and to what extent people can use the natural environment. Rather than simply expressing anthropocentric values, many of its ideas and principles either explicitly or implicitly evoke themes that are consistent with ecocentric or biocentric understandings of the relationship between people and nature. The Jewish tradition is none the less complex to the extent that it contains both ‘green’ and ‘non-green’ elements because humans have both moral claims on nature and nature has moral claims on humans. Neither claim is however absolute: nature both exists for the sake of humans and for its own stake.

Vogel (1999:8-9) continues to point out that even Jewish dietary laws are ‘green’ to the extent that it distinguish between which animals Jews can and cannot consume. The restrictions on fish and animal consumption specified in the laws of the *kashrut*³² are actually noteworthy in the sense that a significant number of animals protected by international environmental laws are also forbidden to be eaten or sacrificed by Jews. These include lions, tigers and the other animals of the cat family, elephants, bears, rhinoceros, dolphins (mammals), whales, eagles, alligators and turtles. Imagine this *kashrut* being a universal law? It however doesn’t stop at consumption because Vogel (1999:11) says that a similar principle, to be found sporadically in the Pentateuch and echoed in the rabbinic tradition (*zaar baalei hayim* – ‘the pain of living creatures’), underlies the various rules regulating the treatment of animals. This principle encompasses a requirement for compassion for all of God’s living creatures: animals have feelings which humanity is obligated to respect. It is in this regard that kosher slaughtering (*shehitah*), as prescribed by Judaic law, seeks to minimise the pain of the animal being killed.

In conclusion, Vogel (1999:13) recalls a biocentric perspective (that humans do not enjoy a privileged place in the universe) in the voice of the Jewish medieval philosopher Maimonides (1131-1205) who stated³³ that it should not be believed that all the beings exist for the sake of the existence of humanity. On the contrary, all the other beings too have been intended for their own sakes, and not for the sake of something else. This is a typical

³² Laws regarding the fitness of items to be used by Jews.

³³ This statement may also be found in: Davies, D. 2011. *Method and metaphysics in Maimonides’ guide for the perplexed*. Oxford University Press, New York, p.153, where it is discussed in broader detail.

third formulation of Kant's categorical imperative, uttered six centuries before the birth of Kant himself, and stated more than seven centuries before the advent of radical ecology.

In conclusion, there are four ideas that Vogel (1999:23) identifies in summing up the Judaic tradition:

- *protecting the natural world is not the highest human imperative,*
- *human life is more important than non-human life,*
- *nature is to be used and enjoyed as well as preserved,*
- *nature can threaten humans just as humans can threaten nature*

According to Vogel (1999:23), these ideas represent an important contribution to contemporary efforts to define and redefine the appropriate ethical relationship between people and the physical world in which they live and which God created.

In affirmation of the aforementioned, and by adding some extra points, Rabbi Lawrence Troster³⁴ stipulated ten Jewish teachings on Judaism and the environment. For the purpose of this discussion, I will give a short version of these teachings because I deem it as being important for the purpose of understanding the environmental attitude of Judaism, as a religion.

1. *God created the universe* – This is considered to be the most fundamental concept of Judaism. Thus Judaism's worldview is theocentric not anthropocentric. The environmental implications are that humans must realise that they do not have unrestricted freedom to misuse Creation, as it does not belong to them.
2. *God's Creation is good* – All of God's creations are consequently part of the Order of Creation and all are subject to its nature.
3. *Human beings are created in the image of God* – This idea is expressed in the concept that humans were put on earth to act as God's agents and to actualise God's presence in

³⁴ <http://www.greenfaith.org/religious-teachings/jewish-statements-on-the-environment/ten-jewish-teachings-on-judaism-and-the-environment> (Accessed on 17 February 2016).

Creation. They should help to maintain the Order of Creation even while they are allowed to use it for their own benefit within certain limits established by God (Genesis 2:14).

4. *Humanity should view their place in Creation with love and awe* – When we study Creation with all the tools of modern science, we are filled with love and a sense of connection to a greater order of things. Love and humility should then invoke in us a sense of reverence for Creation and modesty in our desire to use it.
5. *The Sabbath and prayer help us to achieve this state of mind* – The Sabbath is a way to begin to engender this sense of love and humility before Creation. For one day out of seven, we limit our use of resources. We do not cook and we do not shop. We can use the day for relaxation, contemplation and to ask ourselves: what is the real purpose of human life? Are we here on earth only to get and to spend? Prayer also helps us to recognise that everything we are, everything we have and everything we use ultimately comes from God.
6. *The Torah prohibits the wasteful consumption of anything* – In Judaism the *halakhah* (Jewish law) prohibits wasteful consumption. When we waste resources we are violating the *mitzvah* (commandment) of *Bal Tashhit* (Do not destroy). The underlying idea of this law is the recognition that everything we own belongs to God. When we consume in a wasteful manner, we damage Creation and violate our mandate to use Creation only for our legitimate benefit. Modesty in consumption is a value that Jews have held for centuries.
7. *The Torah gives an obligation to save human life* – The Jewish law forbids us from knowingly harming ourselves and there are numerous sources mandating the proper disposal of waste and that noxious products from industrial production must be kept far from human habitation (Deuteronomy 23:13-15, *Mishnah* Baba Batra 2:9). In the Jewish tradition, the public good overrides individual desires.
8. *The Torah prohibits the extinction of species and causing undo pain to non-human creatures* – It is evident from the first chapter of Genesis and other Biblical texts (Psalm 104, 148, and Job 38-41) that God takes care of, and takes pleasure in, the variety of life that makes up Creation. And although we might regard a species as unimportant or bothersome to human beings, God does not regard them so. In

environmental terms, every species has an inherent value beyond its instrumental or useful value to human beings. Related to this idea is the concept of *Tzar Baalei Chayyim*, the prohibition of hurting animals without good purpose (based on Deut. 22:6, 22:10, 25:4, Numbers 22:32, Exodus 20:8-10, Lev. 22:27-8).

9. *Environmental justice is a Jewish value* – The Torah has numerous laws which attempt to redress the power and economic imbalances in human society and Creation. Examples are the Sabbatical year (Exodus 23:11, Leviticus 25:2-5, Deuteronomy 15:1-4) and the Jubilee (Leviticus 25:8-24) There is a whole program in the Torah for creating a balanced distribution of resources across society (Exodus 22:24-26, Leviticus 25:36-37, Deuteronomy 23:20-1, 24:6,10-13,17).
10. *Tikkun Olam: The perfection/fixing of the world is in our hands* – The perfecting or the repairing of the world, has become a major theme in modern Jewish social justice theology. There is a midrash (Rabbinic commentary on the Bible) which Jewish environmentalists are fond of quoting: “When God created the first human beings, God led them around the garden of Eden and said: “Look at my works! See how beautiful they are—how excellent! For your sake I created them all. See to it that you do not spoil and destroy My world; for if you do, there will be no one else to repair it.” (*Midrash Kohelet Rabbah*, 1 on Ecclesiastes 7:13). In our ignorance and our greed, we have damaged the world and silenced many of the voices of the choir of Creation. Now we must fix it. There is no one else to repair it but us.

I think that what I presented here provides the reader with a good idea as to the essence of Judaism, and it is through good initiatives like the *Shomrei Adamah*³⁵ (Guardians of the Earth), held yearly, that the Judaic environmental outlook on life are instilled in people and taken further. In short, this is a multi-day interactive program designed for students by integrating outdoor environmental education with Jewish concepts and values, such as the importance of ruling over our lands responsibly and of tilling and tending to them as *shomrei adamah*. There are also four spiritual reflections which are instilled during these programmes:

³⁵ <http://hazon.org/teva/day-school-programs/shomrei-adamah/> and <http://www.myjewishlearning.com/the-canteen/shomrei-adamah-guardians-of-the-land/> (Both accessed on 17 February 2016).

- Being grateful for all that has been given.
- Being mindful that humanity are only temporary stewards of the land, holding it for future generations.
- Accepting the *mitzvah* (commandment) to *tikkun olam* (repair the world).
- Believing that it is idolatry to worship the things of our own creation.

By keeping these reflections in mind, participants of the programme are being reminded of the initial God-given charge to their ancestors, to protect and guard the earth. I think that Judaism is a faith that has much to offer when it comes to environmental concern.

Islam:

According to Mohd et al. (2009:86), the existence of human beings, as entities created by the Muslim god (Allah) within the entire ecological system, has always been correlated to other environmental entities. In Islam, humanity interacts with its creator Allah, with human beings (environmental entities of the same species) and with the environment (entities other than human beings). This indicates that Islam hinges on a holistic interaction between humans and the environment. However, is this really the case? According to Islam,³⁶ humans are assigned the position of Caliphs as regards the general interaction between humans and the earth. Mohd et al. (2009:87) makes it clear that Islam's way of life is perceived to be perfect in relation to three main interactions, that is, human interaction with Allah, human interaction with fellow human beings and human interaction with the environment. There are numerous textual examples that mention such an environmental interaction.³⁷ Islam is also very particular about human interaction with both flora and fauna. Despite the fact that most animals are consumed as food and manipulated for human's advantage, the interaction – according to Islam – should remain positive. The history of Islam narrates the consequence of hell-torture for people abusing animals, while people are rewarded with a heavenly afterlife if they do good deeds to animals. These

³⁶ The Holy Quran – Taha 55; Al Qasas 77; Al Mu'minun 80; Al An'am 142; Yasin 71-73, and so on.

³⁷ An Nahl 12; Al An'am 141; Al Anbiya' 78, etc.

examples illustrate the significance of human interaction with nature within the Islamic view.

The Islamic environmental attitude can, as such, be categorised into five rationales; rationales which are the pre-requisites in the construction of Islamic environmental ethical codes (Mohd et al. 2009:88-91). The five rationales are: *tauhid*, *khilafah*, *amanah*, *wasatiah* and *tawazun*. I will summarise these rationales as postulated by Mohd et al.:

- *Tauhidic* – All decisions as regards environmental conservation should be guided by the guidelines stipulated by Allah. Such decisions should not be conducted or intended for the advantage of any entities in the ecosystem.
- *Caliphatic* – Humans are assigned by Allah to the role of caliphs who are responsible to manage and administer the environment. The environment acts as the realm for humans to conduct the assigned tasks before being evaluated by Allah.
- *Welfarial* – The environment is created with functions to contribute and serve human beings. Each entity that cares for and gives priority to other entities will create mutual respect, thus leading to a better interaction amongst them. In this case, problems are usually triggered by humans because other created beings simply and without exception obey Allah's rules. This concept indirectly solves the extreme theory of anthropocentrism that poses commercial value as the utmost criterion in determining the hierarchy of interaction between environmental entities.
- *Moderate* – Islam encourages moderation in all acts and practices.
- *Balance* – The environment is readily created, balanced and of the best measure specified by Allah. This concept should steer the actions and decisions in the protection of and interaction with the environment.

On the basis of the above, Mohd et al. arrive at the conclusion that the Qur'anic and Prophetic teachings of Islam will lead humanity to a clear paradigm for good behaviour and good attitudes towards the environment. This will bring about a reward in the Day of Hereafter (Mohd et al. 2009:91-92). As such they consider Islam to be a better alternative than any other environmentally unfriendly ideology.

Notwithstanding the above positive attitude presented by Mohd et al., I wish to interrogate the view that the environment, according to Islam, has been created for humankind and if humankind interacts with the environment in a good manner, then there will be some kind of reward in the life hereafter. As in Christianity, so in Islam, adherents are exhorted to act piously for the primary sake of a reward, not because it is the right thing to do. Concern for the environment is therefore only a means to an end – securing a blissful afterlife. In my discussion on humanity's failures as regards environmental preservation, with specific reference to the human population dilemma, I will show how Islam directly contributes to an anthropocentric attitude. It seems that Islam, like Christianity, is a religion with good intentions that is being marred by the misinterpretations of its adherents.

In the next section, I will briefly explore how Taoism and Buddhism contribute to an ecocentric way of thinking.

2.2.3 Eastern religions – Taoism and Buddhism

Taoism is associated with Deep Ecology because of its influence on the Deep Ecological mind-set and the principles it presents. Devall and Sessions (1985:100) state that contemporary Deep Ecologists find their inspiration in both the Taoist classic *Tao Te Ching* and in the writings of Dōgen,³⁸ a thirteenth-century Buddhist teacher. In these works, Eastern traditions express organic unity and an acceptance of biocentric equality. Curtin (1994:195) says that in searching for a more inclusive understanding of self, Deep Ecologists often look to Buddhist philosophy and, in particular, to the Japanese Buddhist philosopher, Dōgen, for inspiration. She opines that Dōgen shares a non-dualist, non-anthropocentric framework with Deep Ecology. In fact, within the Deep Ecological Philosophy the religions of Asia (Buddhism, Taoism and Hinduism) and other indigenous cultures provide superior grounds for ecological ethics and greater ecological wisdom than in the event of the tendency of Occidental religions. Booth (1999:96) concurs with this

³⁸ Among his writings the following will be mentioned: *Flowers of Emptiness: Selections from Dōgen's Shōbōgenzō*, ed. and trans. Hee-Jin Kim (Lewiston, N.Y.: E. Mellen Press, 1985); *How to Raise an Ox*, ed. and trans. Francis Dojun Cook (Los Angeles: Center Publications, 1978).

view, but he adds Franciscanism and Native American spiritual practices to the list of ecocentric spiritual paradigms.

With reference to White's (2002:254) question, whether the remedy for the environmental crisis can be religious since the roots of human problems are largely religious, the question arises whether Taoism can supply the 'religious remedy'. When Smith visited the Chinese University of Hong Kong in the mid-1970s, he claimed that if a viable Theology of Ecology were to be found, it could be found in Taoism (Woo 2002:112). Taoism has many spiritual tenets and this makes it a very attractive ecocentric religion, which is easy to embrace. The most important principle of Taoism, according to Cleary (1991:21), is the idea of the Tao (the *Way*) that refers to an original oneness in things, an eternal underlying foundation of being, from which the many parts of the universe continuously spring and to which they continuously return. In Taoism it is only required to follow the *Way* for the expression of great virtue.

Although I will discuss Deep Ecology as a philosophy in detail later in this research, I consider it important at this stage to show how Taoism relates to Deep Ecology and, consequently, to an ecocentric philosophy. In this discussion, the ecocentric essence of Taoism will be highlighted as being more favourable than the typical Christian anthropocentric tendency. Ambrosius (2005:5-6) refers to Deng Ming-Dao who identified eight important qualities that are unique to the Taoist way of life. The importance of these qualities lies in their remarkable resemblance to the Deep Ecological principles. In mentioning these principles, I will, in brackets, show how each principle relates to Deep Ecology.

The eight principles are *simplicity* (Deep Ecological principle of valuing quantity of quality); *sensitivity* (Deep Ecological principle of becoming aware of nature's value); *flexibility* (synonymous with Deep Ecology's principle of interconnectedness); *independence of the individual* – independence from the fundamental institutions of society that shaped much of the ideals for domination over nature in Western culture (Deep Ecology calls for a new reform of thought, away from anthropocentrism); *focus*, meant in

terms of following the direction of the Tao (Deep Ecology also recommends looking beyond daily concerns of civilization and following the natural environment life-flow); *cultivation* (in Deep Ecology there is an obligation of action after realising the importance of all living things in accordance with a more perfect life); *discipline* (in Deep Ecology there is also a moral obligation in this regard), and finally *joy* (Deep Ecology has the same intent). In addition, Ambrosius (2005:7) points out that Taoism, like Deep Ecology, recognises the importance of being aware of other beings and showing sensitivity towards them. Moreover, Taoists have no intention of alienating humankind from nature, because humans are part of nature. However, it is expected of humankind to wisely refrain from interference with nature and to follow the principle of simplicity and to value all other beings by recognising that they are part of humankind.

From the above discussion, it follows that Taoism is in essence a much more ecocentric religion as Christianity. However, many Westerners consider Taoism and Buddhism as a type of mystical awareness. Although this is partially true, for the purposes of my research, Taoism is a distinctive religion in the sense that it fosters Deep Ecological awareness.

Below I will briefly discuss Buddhism and how it contributes to environmental awareness. Buddhist teachings embrace an ecological ethic with a strong concern for nature and emphasise the importance of coexisting with nature rather than conquering it. Loy (2003) compares the related visions of Buddhism and Deep Ecology by showing that in both of these ideologies there is an interchange regarding the solution to ecological problems. The interchange lies in reaching an insight into the *nature* of things, in other words, realising that there are no discrete entities, only the intermingling processes of a unified ecosystem. In my discussions thus far I have pointed out that an understanding of the union of all beings is a crucial aspect of ecocentrism and one of the main aspects which humanity fails to grasp. Do they fail to grasp this because of ignorance? Loy (2003:90) thinks so; he ascribes our distorted ecological views to a blatant ignorance of this aspect. If humanity can shrug off this ignorance and pursue an insight into the nature and unification of phenomena, then a solution could be found to our environmental and social problems. Such an insight can unshackle people from the dualisms that dominate the Western way of thinking. In the

light of this, I will now demonstrate that Buddhism contributes significantly to fostering a non-dualistic vision of nature.

The central insight of Buddhism is a critique of our tendency to portray things and perceive the world as a collection of self-existent objects in objectified space and time, and not as being interconnected (Loy 2003:91). A more metaphorical way to express this interconditionality and the interconnectedness of all phenomena can be found in the analogy of Indra's Net.³⁹ This analogy narrates that far above us in the abode of Indra (the Indian god) there is a net, which stretches out infinitely in all directions. In each 'eye' of the net is located a single glittering jewel, and since the net itself is infinite in all dimensions, the number of jewels are also infinite. If we arbitrarily select one jewel for inspection and look closely at it, we will discover that its polished surface reflects all the other jewels in the net, infinite in number. Each jewel reflects all the other jewels, so that there is an infinite reflecting process that is taking place. Indra's Net therefore symbolises a cosmos in which there is an infinitely repeated interrelationship among all the members of the cosmos. The concept of a universe of identity and interdependence, where every single individual is simultaneously the effect and the cause of the whole, is not at all familiar to the majority of Western people (Cook 1977:3).

In addition, Kaza (2000:46) ascribes this unfamiliarity to the ritualistic behaviour which the body undergoes. She says that preferences and personal desires are often based on what one's body likes, what it needs or wishes to avoid. A self-centered view of the world becomes solidified because of these likes and dislikes and the experiences that generate them. Zen Buddhist practice aims to break through this conditioning and to enable the practitioner to gain a truer view of the interpenetrating world, in which all phenomena are dependent on others and empty of a separate self. According to Loy (2003:92), one of the most important characteristics of such a universe is its non-teleological nature: "There is no theory of a beginning time, no concept of a creator, no question of the purpose of it all.

³⁹ Described in the Avatamsaka Sutra and developed in the Hua-yen (Japanese, Kegon) school of Mahayana (Cook 1977:2).

The universe is taken as a given”. In such a universe human beings cannot be considered the crown of creation, because it has no hierarchy.

In my discussion on Christianity I have shown how humanity is seen as the crown of God’s creation. From a Taoist and Buddhist perspective, a religion such as Christianity is seen as anthropocentric. According to Buddhism, when I let go of my sense of self, I then come to realise my interdependence with all other phenomena in the all-encompassing net of Indra. As Loy (2003:93) maintains, this realisation means more than simply being dependent on another phenomenon. As soon as I discover that I am you, that I am the trace of your traces, then the ethical problem of how to relate to you is transformed. Loss of self-preoccupation entails the ability to respond to others without an ulterior motive of gaining something material or symbolic from that encounter. The analogy of Indra’s Net implies that, insofar as I am caused by the whole universe, it exists for my benefit; but insofar as I am the cause of the whole universe, I exist for it. This view relates to Mbiti’s African communitarian view of personhood, when he says: “I am because WE are, and since WE are, therefore I am” (1970:141).

This view challenges a dualistic worldview and sees the world in an all-encompassing non-dualistic manner. This non-dualistic worldview also finds its place in the Jatakas,⁴⁰ in which it is emphasised that not a single life-form is outside the path of the Buddha. Many Westerners find such non-dualistic views difficult to accept because non-dualism challenges some of their most deeply-rooted assumptions regarding the external world, the essence of being human and the relationship between humans. Loy (2003:94) believes that this is why the American ecologist Aldo Leopold’s Deep Ecological ideas were not appreciated in 1949 and that they were also probably too radical for the time in which he wrote.

Linked to the above non-dualistic views is another Buddhist view that has significantly influenced the formation of the Deep Ecological Philosophy, namely the idea of intrinsic worth. This concept entails that there is biocentric equality, because all separate organisms

⁴⁰ A body of literature concerning the previous births of the Buddha.

in the ecosphere are equal in own value. It should be noted that this idea is not part of the Christian faith. According to Loy (2003:97) the view of intrinsic worth has immense moral implications. For example, something does not exist for something else (there is no hierarchy of existence), everything has equal worth, a worth that is inherent in the said thing (whether it is a living thing or part of inanimate matter). Consequently, a person does things because it is the right thing to do, not in order to secure a reward. This moral attitude is based on the idea that intrinsic value is independent of any awareness, interest or appreciation of any conscious being (Regan 1981:23). This means that things should flourish, not for our or their own sake but because they have value in and of themselves. Questions of utility and justification, which are often found in anthropocentric attitudes – no longer apply when we appreciate something or someone's intrinsic worth. A further moral implication of such a world view of phenomena holding intrinsic value is that we can no longer see things as being mere means to an end, but we are compelled to recognise and respect all things as having deep-seated, inherent intrinsic value.

Buddhist ethics teaches an eightfold path that is grouped into three pillars: *Sila* (morality), *Samadhi* (meditation) and *Prajna* (wisdom or insight). This eightfold path furthermore contains five ethical principles that focus on avoiding the following: killing, stealing, false speech, sensuality and intoxicants. It is important to note that these are principles and not commandments.⁴¹ In other words, one chooses to enact these principles for oneself as an act of will, and not as an act of duty or for the sake of reward. The tendency in Western religions is to act ethically in hope of securing a future reward (heaven, immortality, feasting with the gods on Olympus or in Valhalla). However, in Buddhism one does things because it is the right thing to do, not because of an expectation of reward.

From the above discussions it follows that there are similarities between Taoism, Buddhism and Deep Ecology. According to Henning (1998:108-9), both Buddhism and Deep Ecology hold that ecological problems are created through ignorance and greed, and they seek to solve these problems by moving from an anthropocentric orientation to an ecocentric approach concerning all living beings. These worldviews contribute to the protection of

⁴¹ In the Western worldview, such commandments were imposed upon humanity by a transcendent deity.

spiritual and cultural values and uphold a holistic and value-oriented approach to protect the environment. Like Taoism, Buddhism presents a perception and awareness of nature through interrelatedness and compassion for all living beings.

Considering the problems within Western and Eastern religious thinking and an alternative spiritual view of Eastern religious thinking, I shall now explore the possibility of a new religious way of thinking as regards environmental issues in the next section.

2.2.4 A new religious thinking?

Can religions in any way be resources for our fight against environmental problems? Okita (2009) maintains that they can. By focusing on the concept of primordial nature, *Prakṛti*, and its relation to the transcendental reality, *Brahman*, Okita (2009) shows how the rich Vedāntic traditions and view of nature, developed in South Asia, can offer fertile ground for formulating an ecosophy. In addition, Tucker (2007:7) argues that there is an acute need for such a spiritual ecosophy that will reunite the religious drive of humankind with the Earth-process itself. He says that humans' obsession with the divine-human relationship – often to the exclusion of all else – causes us to lose sight of the very sphere in which the divine has often been encountered, namely, in and through the natural world (Tucker 2007:5).

Moreover, Hoffman and Sandelands (2004:23) maintain that if we see humanity alongside nature as creations of God, then our perspective of viewing humanity either as above or as below nature will shift to viewing humanity and nature as being interconnected in communion. Following the logic of this argument, it means that a simple cognitive shift from 'humankind and nature' or 'humankind in nature' to 'humankind and nature *in god*' is needed. Hoffman and Sandelands therefore think that anthropocentric and ecocentric environmentalisms invite conflict between these two objectives, and that the solution is theocentric environmentalism, because it forswears the dichotomy between anthropocentrism and ecocentrism. Hoffman and Sandelands (2004:2) are of the opinion that neither anthropocentric or ecocentric views adequately reconcile humankind to nature.

His theocentric view is therefore an alternative view of humanity's relationship to nature, one which reconciles in god humanity's value for nature. Such a view is not something new; the Gauḍīya tradition in Hinduism also holds a theocentric view of nature; and we may recall what Mohd, et al. (2009:86) said with regard to the Islam faith, where humanity are supposed to be in interaction with their creator Allah, in interaction with human beings and in interaction with the environment, thereby indicating that Islam hinges on a holistic interaction, similar to a theocentric view of nature.

The worldview and moral stance of the Navajos and Hopi people are also examples of people who fostered a theocentric view by adapting themselves to their environment and accepting the changing environment and climate. Both tribes subscribed to an ethic of passing through the landscape without disturbing anything, leaving no trace, like a fish through water, or birds through the air (Cather 1927:235-236). Hoffman and Sandelands (2004:16-19) say that such a theocentric environmentalism can also be found in the older, pre-Cartesian metaphysics of the Church before the Reformation. This is the metaphysics of the Church's deposit of faith, the word of God, because it defines, among other things, the relations between God, Humanity and Nature (as shown earlier by Conradie, et al.). The word of God, according to Hoffman and Sandelands, trumps all subjective belief about the objective world, because the faithful believe in God's truth apart from and superior to human truth. Hoffman and Sandelands (2004:26) claim that the Bible is a barrier against the egoism with which people nowadays regard everything in creation, including nature and God, as objects to our subject.

The essence of Hoffman and Sandelands' theocentric discourse is that humanity should not lord over nature, and nature does not lord over humanity. According to them, God lords over both. They conclude by arguing that the theocentric view of humanity and nature in God sets our conduct in and toward the environment in an entire new light. It means that everything we do in this world, every act we take toward others and toward nature, finds its meaning and value in God. Nevertheless, Hoffman and Sandelands (2004:12) argue that the above approach of 'green spirituality'⁴² is problematic because some people could interpret

⁴² This expression is better known as eco-spirituality, an ideology that gained much support in the Catholic Church.

this environmental message as threatening, where trees and animals are placed ahead of people and before God as being the centre of the universe. Hoffman and Sandelands are concerned because this view lends itself to a deification of the environment and connecting a pantheistic element to it. Pierre Teilhard de Chardin (1888–1955) was also concerned that such a spiritual vision could be misunderstood as a pantheistic union with the cosmos (Tucker 2007:16). In addition, Sirico (1994:47), president of the Acton Institute for the Study of Religion and Liberty, expresses his concerns about the danger of green spirituality: “...looking upon nature as a lens through which we see God’s hand as author of creation is not the same as finding God Himself present in nature, much less substituting nature for God”.

In my opinion, and as a proponent of the Deep Ecological Philosophy, such a theocentric environmentalism may be a fitting path to be followed by adherents of such a theocentric faith for the purpose of attaining a shift in ideology and subsequent environmental restoration. This is also the view of Beuving (2012), who says that for Christians to care for the environment, they will need to subscribe to the right kind of environmentalism. He claims that neither biocentric nor anthropocentric environmentalism will satisfy the Christian and he proposes that Christians should rather subscribe to a theocentric environmentalism in which the natural world is viewed as the perfect creation of God. Christians might then act as stewards of nature to God’s glory. The focus of theocentric environmentalism is furthermore not as theological as it is teleological, because it recognises a design as well as a divine intelligence or purpose in creation (Levine 2010:401).

In the previous sections, I examined the issue of how religion shapes our thinking in anthropocentric and ecocentric directions. In the next section, I will explore the role of philosophy in shaping our thinking about the environment.

2.3 HOW PHILOSOPHY SHAPES OUR THINKING

It is fascinating how people are inclined to favour peace and justice in their thoughts and words, but their actions reflect the opposite behaviour. This might be due to the strong desires, convictions and emotions in people that determine their actions and beliefs. Philosophy, in its drive to change the world, attempts to show people that there is a correct way of thinking that is based upon epistemic truths. Philosophy is a guide to life and an encouragement to right action. According to Herman (1990:11), philosophy is an activity which involves the cognitive mind by interacting, analysing, debating, postulating and articulating ideas that can give a reasonable solution or answer to a problem. Philosophy is thus the art of forming, inventing and constructing concepts, exposing hypocrisy, encouraging the curious and enlightening the bewildered. As such philosophy is a light to wisdom.

The traffic of ideas is of vital importance if we wish to maintain the life-changing structures and systems that we so easily take for granted. We need to cultivate and stimulate high-level philosophy (Deleuze & Guattari 1996:2) in order to ensure meaningful change. Over millennia, humans have shown themselves to be able to adapt to and flourish within nearly any physical environment. An environment in which sub-standard Philosophy is practiced, is problematic and a potent destroyer of human life. Even though philosophy partakes in the process of guiding right thought, there are instances where it fails to instil the right kind of thinking as regards how we perceive and interact with the external world, with specific reference to fellow human beings and the environment.

As in the case of religion, I will show that philosophy can also instil in people an anthropocentric way of thinking. This process may be either unintentional or deliberate. In the discussion that follows, I will show how certain thought-processes may contribute to an anthropocentric attitude and how such an attitude is grounded in so-called 'bad' Western philosophical ideas (Taylor & Zimmerman 2005:456; Fairbanks 2010:80). Before I explain this point, I will give an overview of the Western philosophical tradition as compared (not opposed) to the Eastern philosophical tradition.

2.3.1 *Eastern and Western philosophical thinking*

Since ancient times, some aspects of philosophy have been confined to either the Western or the Eastern philosophical tradition. Yet, Buddhist, Naiyāyika and Vaisesika disciples built schools of philosophy and logic that compare well with some schools of Western thought (Das 1952:634). However, there was a sense of unwillingness, mainly from the West, to embrace Eastern ideas. Guo (2012:92) shows how Eastern culture was basically even denied the title of being a culture. He refers to the sphere of Western anthropology, such as Levy-Bruhl's *Primitive Mentality* and Levi-Strauss' *The Savage Mind* to show how these works denounced the Eastern mode of thinking as being full of intuitive colour and holistic ideas. Consequently, Eastern thought is portrayed as primitive or savage, whereas Western thinking, with its emphasis on logic and analysis, is deemed modern or civilized. According to Comfort (1979:50), this habit of discarding Eastern ideologies can be traced back to the Greeks. He points out that the Greek sense of practicality and zest for life was inimical to the typically Eastern Buddhist attitude of detachment.

Moreover, the general Greek distrust of Oriental exoticism made the illusory character of experience an unpopular philosophical postulate. The interesting point, says Das (1952:636), is that the major lines of thought that have developed in the West to date, such as theism, pantheism, pluralism, monism, deism, materialism, idealism, empiricism, solipsism and realism, are also met with in Eastern systems. Even pragmatism was anticipated in some Indian systems. The only exclusion is scientific philosophy.

Even though there are synergies between Eastern and Western thinking, Das (1952:636) thinks that there is no need for a synthesis of Western and Eastern philosophy because such a synthesis would be otiose. He concedes, however, that Eastern philosophy is practical (or lived) while Western philosophy is theoretical (or speculative).

Table one⁴³ illustrates a comparison of Eastern and Western thinking.

⁴³ http://www.1000ventures.com/business_guide/crosscuttings/cultures_east-west-philosophy.html (Accessed on 14 February 2015).

Issues	Eastern Philosophy	Western Philosophy
Main Schools	BUDDHISM, CONFUCIANISM, TAOISM, ZEN, HINDUISM, INTEGRAL YOGA AND ISLAM	CHRISTIANITY, RATIONAL, LOGICAL AND SCIENTIFIC SCHOOLS
Main Principles	<ol style="list-style-type: none"> 1. Cosmological unity 2. Life is a journey towards eternal realities that are beyond the realities that surround us 3. Circular view of the universe, based on the perception of eternal recurrence 4. Inner-world dependent 5. Self-liberation from the false 'Me' and finding the true 'Me'. The highest state is believed to be a state of 'no-self', where neither self-worth nor self-importance has any real meaning 6. Behavioural ethics 	<ol style="list-style-type: none"> 1. Feeling oneself as an element of the Divine 2. Life is a service (to God, money, business, etc.) 3. Linear view of the universe and life, based on the Christian philosophy where everything has its beginning and its end 4. Outer-world dependent 5. Self-dedication to the goal (life vision, success, happiness, etc.)
The 'Me' concept	Eternal reality of the universal truth: self-liberation through getting rid of the false 'Me' and discovering the true 'Me'	'Me' is here and now. The true 'Me' in every human being is a part of the Divine that needs to become apparent. The true 'Me' is given and doesn't have to be cognisable
Relationship with Religion	Integration	Opposition
Search for Absolute Truth	<ul style="list-style-type: none"> • Systemic approach – all events in the universe are interconnected • Searching inside yourself – by becoming a part of the universe through meditation and right living <p><i>Though he should live a hundred years, not seeing the Truth Sublime; yet better, indeed, is the single day's life of one who sees the Truth Sublime. ~ Buddha</i></p>	<ul style="list-style-type: none"> • More focused on individual events and the role of the person • Searching outside yourself - through research and analysis <p><i>The truth that survives is simply the lie that is pleasantest to believe. ~ H.L. Mencken</i></p>
Search for Truth & Fundamental Research	The truth is given. It does not have to be proved. The philosophic base for and culture of fundamental research is weaker.	The truth needs to be proved. The philosophic base for and culture of fundamental research is stronger.
Future	Your future is determined by your deeds today. <i>Study the past if you would like to divine the future. ~ Confucius</i>	Your future is unknown. It is predetermined by God and is not much influenced by your deeds.

Beliefs & Values	<p>The true key is inside. The inner world of a human being and his or her ability to control and develop it is of the highest value. The way to the top is inside yourself and through self-development.</p> <p><i>The superior man understands what is right; the inferior man understands what will sell.</i></p> <p>~ Confucius</p> <p><i>By chasing desires you will meet only the outer surface.</i> ~ Lao Tzu</p>	<p>The main values are success and achievement. These that can be achieved in many ways, but rarely through developing inner strength. The majority of success and achievement criteria have an external nature (money, faith, popularity, etc.). The way to the top is through active outside intervention.</p> <p><i>Happiness lies in virtuous activity, and perfect happiness lies in the best activity, which is contemplative.</i> ~ Aristotle</p>
Individualism / Collectivism	<p>A human being is an integral part of the universe and society. People are fundamentally connected. Duty towards all others is a very important matter. Collectivism is stronger.</p>	<p>A human being has an individualistic nature and is an independent part of the universe and society. Individualism is stronger.</p>
Improvement / Evolution	<p>Cyclic development, hence improvement is a never ending journey that has no limits.</p>	<p>Linear development, hence improvement has a goal. Development stops when the goal is reached.</p>
Radical Innovation / Revolution	<p>The fundamentals of the <i>status quo</i> should not be questioned. The culture of considering and introducing radical changes is weaker.</p>	<p>The fundamentals of the <i>status quo</i> can – and often should – be questioned. The culture of considering and introducing radical changes is stronger.</p>
Passion & Venturing	<p>Entrepreneurial creativity and venturing is contained by the habit to control one's passions</p> <p><i>Desires are the cause of suffering. If desire, which lies at the route of all human passion, can be removed, then passion will die out and all human suffering will be ended.</i> ~ Buddhism</p> <p><i>Vain indeed is all overweening pride in the conquest even of the entire universe if one has not conquered one's own passions.</i> ~ Sri Aurobindo</p>	<p>Entrepreneurial venturing is encouraged emotionally</p> <p><i>Nothing great was ever achieved without enthusiasm... Always do what you are afraid to do... Do not go where the path may lead, go instead where there is no path and leave a trail.</i></p> <p>~ Ralph Waldo Emerson</p> <p><i>If you want to succeed, you have to forge new paths and avoid borrowed ones.</i> ~ John Rockefeller</p>
Achievement & Winning	<p>Winning is inside yourself</p> <p><i>Though he should conquer a thousand men in the battlefield a thousand times, yet he, indeed, who would conquer himself is the noblest victor.</i></p> <p>~ Buddha</p>	<p>Winning is outside yourself</p> <p><i>Life affords no higher pleasure than that of surmounting difficulties, passing from one stop of success to another, forming new wishes and seeing them gratified.</i> ~ Samuel Johnson</p>
Implementation	<p>Spiritual and missionary approach</p> <p><i>To create and develop without any feelings of ownership, to work and guide without any expectation and control, is the best quality</i></p> <p>~ Lao Tzu</p>	<p>Pragmatic and emotional approach</p> <p><i>The supreme accomplishment is to blur the line between work and play.</i> ~ Arnold Toynbee</p> <p><i>Since most of us spend our lives doing ordinary tasks, the most important thing is to carry them</i></p>

		<i>out extraordinary well. ~ Henry David Thoreau</i>
Goals & Key to Success	<p>Spiritual</p> <p><i>The Three Armies can be deprived of their commanding officer, but even a common man cannot be deprived of his purpose. ~ Confucius</i></p> <p><i>If you really want everything, then give up everything. ~ Lao Tzu</i></p>	<p>Materialistic</p> <p><i>The secret of success in life, and subsequently of making money, is to enjoy your work. If you do, nothing is hard work – no matter how many hours you put in. ~ Sir Billy Butlin</i></p>
Living Principles	<p>Virtue</p> <p><i>The thought manifests as the word; The word manifests as the deed; The deed develops into habit; And habit hardens into character. So watch the thought and its ways with care, And let it spring from love born out of concern for all beings. ~ Buddha</i></p>	<p>Ethic</p> <p><i>Refrain from doing ill; for one all-powerful reason, lest our children should copy our misdeeds; we are all too prone to imitate whatever is base and depraved. ~ Juvenal</i></p>
Establishing Control Over Your Emotions	<p>Through meditation</p> <p><i>A man can separate his/her mind from his/her emotions and control them. ~ Taoism</i></p>	<p>Through analysis</p> <p><i>I can control my passions and emotions if I can understand their nature. ~ Spinoza</i></p>
Leadership	<p>Spiritual; walking behind people; silence is golden</p> <p><i>In order to guide people, the leader must put himself behind them. Thus when he is ahead they feel no hurt. ~ Lao Tzu</i></p>	<p>Hands-on; walking ahead of people; speech is golden</p> <p><i>Leadership is done from in front. Never ask others to do what you, if challenged, would not be willing to do yourself. ~ Xenophon</i></p>

Table 1: Eastern and Western thinking.

To my mind the above comparison between Eastern and Western thinking is insightful because it highlights their main tenets and underlying philosophical ideas. However, I want to emphasise that it is easy to say that X is X-negative, while ignoring the fact that X may possess an X-positive. The Eastern concept of the Yin and the Yang portrays this principle well by including a white dot within the dominant black Yin, and a black dot within the predominant white Yang. This implies that every extreme contains the seed of the opposite extreme.

In the light of the above, I will refrain from categorising the above traditions and placing one above the other. In my opinion, the two traditions should not be seen as binary

oppositions or placed in a hierarchal order because I concur with Socrates⁴⁴ that nothing is a single, non-relative identity. On the basis that nothing is single, it can be argued that if you call something big, it will also turn out to be small, and if you call something heavy, it will also turn out to be light, and so on. I will apply this principle to the picture I will paint regarding how we should see Western and Eastern thinking. From the table above it is interesting to note that the Eastern way of thinking takes a different path from that one laid down by the Western mind-set.

Below I will show how the Western tradition tends to be non-ecocentric by referring to the way it dichotomises the world.

2.3.2 *Dichotomisation*

Until recently humankind was seen as the conqueror-hero, but of late humankind has been considered to be a tyrant — there is recognition that whatever humanity subjugates is despoiled and nature is the victim. If the majority of people can realise that each organism has an Aristotelian formal and final cause and an end (a *telos*), then there might be a more widespread recognition that each organism has something to conserve, something for which it stands, namely its life and its existence. As humans we have more understanding of the natural world now than ever before. We have more predictive power to foresee the intended and unintended results of our actions and more power to reverse undesirable consequences. In my opinion, the continuous maelstrom of killing and insensitivity to all forms of life is ethically callous. It seems as if humanity lacks the cognitive capacity to realise what it is doing. Since the ancient Greeks, a major theme in Western Philosophy has been the idea that humanity is unique and set apart from the rest of nature. Western segregation of humankind from nature has become a veritable cachet of Western ideology. According to Guo (2012:108), ancient Greek and medieval philosophy, as a rule, dichotomise the integral world into a metaphysical spiritual sphere and a physical material sphere. Following this

⁴⁴ <http://www2.winchester.ac.uk/edstudies/arch%2010-11/level%20one%20sem%20one/es1201socrates.htm> (Accessed on 22 April 2015).

tradition, Descartes divided the world into an internal, spiritual and an external, objective world.

This system of dichotomies is not taught in the major Eastern philosophical traditions. Chinese Philosophy has surpassed metaphysics, aggregating many relative facts rather than separating them by means of a dichotomy. From the viewpoint of Fang (2009c:53-54), ancient Greek philosophy and medieval philosophy dichotomise, as a rule, the integral world into a metaphysical, spiritual sphere and a physical, material sphere. Descartes, as mentioned, contributed to this endeavour by dividing the world into an internal, spiritual world and an external, objective world. He says that the continual dichotomisation of the world into two parts brings about severe problems of association. It is here that Chinese Philosophy, unlike Western Philosophy, has surpassed metaphysics by aggregating many relative facts rather than separating them by means of dichotomy, thus eliminating the gap between the two layers created by the act of dichotomising. This viewpoint, says Guo (2012:108), is valuable because it reveals the difference between Western and Chinese thinking, even if, to a certain extent, such a view denies dualism because it clings to monism. He is nonetheless of the view that the East upholds equality and treats dualism and Advaita⁴⁵ as equal and, simultaneously, does not cling either to dualism or Advaita.

We should neither dichotomise nor be dichotomised, because when we split the world into two parts, we are setting our external world apart from nature, and in doing so, we should then ask ourselves if we – being set apart from nature – have any moral responsibility toward nature. I believe that we do have a moral relationship with the nonhuman environment. Such a moral relationship, according to Cheney (1987:139-140), must depend upon a complex understanding of what it is to be a human being and our response to other human beings. Secondly, such a moral relationship will depend on an understanding how complex webs of relationship that constitute the human moral community might expand to include the nonhuman and to understand what it might mean to care and respond to something in the nonhuman environment as being a member of one's own moral

⁴⁵ The Merriam-Webster online dictionary defines *Advaita* as a Vedantic form of non-dualism that denies the separateness of any aspect of reality from the impersonal oneness of Brahma: <http://www.merriam-webster.com/dictionary/advaita>, (Accessed on 15 February 2015).

community. If we however bring about a schism in the world by dichotomising concepts and entities into ‘us’ and ‘them’, then we may easily condone what Odysseus, our ancestors and Apartheid did.

According to Smith (2011:62), mid-century readers of Leopold’s work were well aware of the fact that the injustices of slavery were mainly defended on the basis of property rights. Property and the way we see property, with the important role it portrays in satisfying (even though it seldom does) our egoistic greed, recall what Leopold (1989:201) wrote in an extract he took from Homer: “When god-like Odysseus returned from the wars in Troy he hanged all on one rope a dozen slave-girls of his household, whom he suspected of misbehaviour during his absence.”

This hanging, according to Leopold, involved no question of propriety because the girls were considered to be property, and the disposal of property was then a matter of practicality, not a matter of right and of wrong. What Odysseus did was not in line with what Cheney (1987:139-140) proposed regarding ethical behaviour towards our fellow human beings and the environment, namely to expand the moral community by attempting to grasp what it mean to care and respond to any other member of one’s moral community.

The mental act of dichotomisation is, by nature, anthropocentric. It suits an anthropocentric mentality to place a rift between it and other entities in order to exploit those entities. Such exploitation is later justified on the basis that those entities may be exploited because they do not fall within the dichotomised sphere of humankind. However, in my opinion, the classical position of the schism between humanity and the non-human world has been overturned during the epistemological-evolutionist shift. Hume’s epistemological arguments undermine the uniqueness of human intellect and provided inspiration to Darwin for his naturalistic world view, which contributed to his work on evolution and natural selection. Brown (2007:92) emphasises that we should rethink those dualities which structure and colonise traditional moral thinking. In my view, this can be done by taking a phenomenological/holistic approach and returning to the moral ‘things themselves’, that is, our actual experiences of phenomena. The distinctions between human and animal and

between reason and emotion have been inadequately characterised by the moral tradition. The *prima facie* form of rationality in moral experience is not separate or discontinuous from subjectivity, emotion, animality or particularity. In contrast to a phenomenological/holistic approach, traditional moral theory is monistic in that it assumes a monistic criterion of what and who matters morally. I recommend that humanity should follow the main argument which Calarco (2008:149) postulates in his *Zoographies*, that we should simply let the human-animal distinction go, or, at the very least, not insist on maintaining it at all.

Apart from its tendency to proliferate dichotomies, Western philosophy has also been labelled as anthropocentric in its composition. In the section to follow, I will discuss some viewpoints on the anthropocentric nature of Western philosophy. It is important to address this anthropocentric nature because I consider it to be the single most important reason why the environmental situation on our planet is as dismal as it is.

2.3.3 The anthropocentric nature of Western philosophy

According to Berdyaev (2009:44, 47), people will criticise a philosophy that is foreign to their own philosophical concepts of the world. Western philosophy has been criticised for being anthropocentric, not because the Eastern philosophic tradition wanted it so, but because of some of its tenets. Berdyaev criticises Western philosophy as being anthropocentric but denies that humanity itself is anthropocentric. This is the reverse of German idealism, which denies the anthropocentricity of philosophy, while it asserts the anthropocentricity of humanity. Siefkes (2012) observes that philosophy is anthropocentric because it views and discusses all things from humanity's standpoint. Humanity is seen as the centre and the measure of all things, and this is not a new concept. Protagoras, as far back as 400 BCE, said that 'Man is the measure of all things', while Aristotle built on this and argued in his *Politics* that plants exist on account of animals, and animals on account of humanity as a source of food, clothing or whatever else can come from it (Bunnin & Tsui-James 2003:519). Aristotle was actually of the opinion that if nature does nothing in vain and does nothing without an end, then nature surely made all these on account of humanity.

This is a typical natural teleological belief according to which everything serves some purpose.

According to the British Philosophical Association,⁴⁶ traditional moral philosophy is anthropocentric because it is firmly human-centered and based largely on the treatment of one individual by another individual. It typically assumes that moral considerability results from either being made in the image of God, or being rational, or simply being human. The relevant criterion of moral considerability is objective, determinately specifiable and independent of particular beliefs or sentiments. Traditional attempts to establish a single criterion of moral essence and moral considerability run counter to ordinary experience. In everyday experience we intuitively find that both the consequences of our actions and respect for the subjective integrity of the other are morally relevant. On the basis of this, both humans and nonhumans should be considered worthy of moral regard.

In addition, humanist philosophy is considered anthropocentric in the sense that it accords humans a superlative status. Derrida (2008:113) shows how Levinas inserts a flawed ontology into his analyses of the ethical, which is profoundly anthropocentric and humanistic. Moyer (2010:iv) also shows how Levinas' philosophy was initially perceived to provide for an ethics of the non-human. However, this view has been criticised by Atterton and Calarco (2004:55) and Kuperus (2011:326) for being unabashedly and dogmatically anthropocentric. Levinas' project was to break with the totalising and totalitarian tendencies of ontological categorisation. But Moyer (2010:12) wonders why Levinas restricted the ethical to a peculiar domain of being. I interpret this as representative of an incipient anthropocentrism – perhaps inherited from Descartes, Husserl or Heidegger – that is inconsistent with the broader movement of Levinas' own thinking. However, it is important to recognise the crucial role that Levinas' anthropocentrism plays in his philosophy because this anthropocentrism is precisely what makes it possible to care about ethics, justice, goodness and our relations with humans and non-humans (Moyer 2010:45-46).

⁴⁶ http://www.bpa.ac.uk/view.php?type=discourse_articles&id=121 (Accessed on 11 February 2015).

When metaphysical theories such as anthropocentrism are at odds with lived experience, it is often the meaning of experience that is played down or even dismissed to protect the theory. An example of someone who downplayed a theory for his own benefit is Baxter. Baxter (1974:4-5) defends his anthropocentric position by arguing that wildlife has instrumental value and that the only rationale for protecting the environment is for human benefit:

I reject the proposition that we ought to respect the 'balance of nature' or to 'preserve the environment' unless the reason for doing so, express or implied is the benefit of man. I reject the idea that there is a 'right' or 'morally correct' state of nature to which we should return. The word 'nature' has no normative connotation.

...

My [environmental] criteria are oriented to people, not penguins. Damage to penguins, or sugar pines, or geological marvels is, without more, simply irrelevant. One must go further, by my criteria, and say: Penguins are important because people enjoy seeing them walk about rocks; and furthermore, the well-being of people would be less impaired by halting use of DDT than by giving up penguins. In short, my observations about environmental problems will be people-oriented, as are my criteria. I have no interest in preserving penguins for their own sake. Thus, nothing in the environment is valuable for its own sake, but only for the benefit that it brings to humans.

According to Baxter, it is irrelevant to discuss issues of environmental damage without linking them to human considerations. However, to my mind Baxter's claim that the word 'nature' has no normative connection is fallacious. I believe that if the non-human world is denied a moral status, it will become unsustainable. Baxter's argument is now four decades old, but there are still many people who subscribe to this anthropocentric way of thinking, as is evident from the consumerist tendencies of humanity. I maintain that we as philosophers need to change this situation and that Deep Ecological Philosophy can accomplish this.

Intuitionism is another philosophical doctrine, which Das (1952:634-5) considers to be anthropocentric. This doctrine asserts that a perceived object is intuitively known to be real. This assertion is based on the ethical principle that knowledge of goodness or duty, and the values governing them, can be discerned through intuition. It should be pointed out that

intuitionism as a concept is foreign to Indian Philosophy. Intuitionism marks the cycles of Philosophy in the Western world. Excluding Greek Philosophy, we find intuitionism in Gnosticism and Neo-Platonism. Bergson, for instance, was an anti-intellectualist who devoted his major works to establishing the thesis that we must discard the intellect and adopt intuition as the proper organ of philosophising. In this assertion, he was probably thinking of intuitive metaphysics (Das 1952:634-635).

Anthropocentricity may also be found in Continental philosophy. Continental philosophy tackles human problems about being human from a human point of view and it focuses on the human condition, culture, politics and society. Accordingly, it can be argued that Continental philosophy is human-centered. On the basis of this it can be claimed that Continental Philosophy is anthropocentric and it contributes to anthropocentric conditioning. However, I want to point out that Continental philosophy defends anti-humanism as is apparent in Heidegger's polemics and articulated by Foucault and post-structuralism.

Aesthetic knowledge is the final anthropocentric concept which I will discuss before concluding this chapter. Guo (2012:107) gives a thorough layout of how anthropocentric this Western concept is. From the time of Socrates, Plato and Aristotle, people have been focusing on judgment and differentiation and choice when it comes to subject and object. Such a distinction between subjectivity and objectivity has fundamentally penetrated the whole history of Western aesthetics. This is the aesthetics of knowledge. Guo (2012:94) argues that Western aesthetics is characterised by the consciousness of self-liberation, the spirit of social criticism and the idea of natural coordination. This is, however, not the case in Eastern Philosophy, where Chinese aesthetics, for instance, is characterised by the self-surpassing spirit based on cultivating the moral self and adherence to harmonious principles and the idea of the harmonious cosmos. Furthermore, Indian aesthetics is characterised by the goal of self-liberation by cherishing wisdom and the idea of social equality.

Aesthetic knowledge often clings to the dualistic opposition of essentialism and anti-essentialism. Such a dualism makes value judgments and differentiates between two poles

of an opposition by going against one in favour of the other. In this respect, Adorno (1999:343) observes: “The dilemma of aesthetics appears immanently in the fact that it can be constituted neither from above nor from below, neither from concepts nor from a conceptual experience”. This is the typical encapsulation of the dualistic mode of thinking in aesthetics since Aristotle, and more especially since Descartes. Because aesthetic knowledge cannot be constituted from above or below, or from concepts or conceptual experience, therefore a mode of dualism in the aesthetics of knowledge is adopted. In the aesthetics of knowledge these two horizons will always favour one pole of the spectrum over the other, but this is not the case when it comes to aesthetics of wisdom. The latter accomplishes the fusion and unity of the aesthetics of dualism and the aesthetics of harmonism. As Guo (2012:101-2) say, this is actually an aesthetics of Harmony Theory, something that has long been discussed in the values of ‘benefiting people’ (in Confucianism), ‘saving people’ (in Taoism), ‘universal salvation’ (in Buddhism), ‘heaven and earth coexist with me and everything in the world is commensurate with me’ (by Zhuangzi), and finally ‘I share the same root with things’ (by Seng Zhao). The aesthetics of the Theory of Opposition, based on dualism, is in effect the aesthetics of knowledge. The aesthetics of Harmony Theory embodies a concentrated reflection, according to which all the conflict and opposition between humanity and the self, humanity and society, and humanity and nature can be dissolved and the harmonious aesthetic wisdom can be attained (Guo 2012:103).

From the above discussions it follows that Western Philosophy does indeed contribute to structuring an anthropocentric and destructive mind-set towards nature. There is, however, a Western philosophical tradition which is not anthropocentric, that is, the tradition espoused by the Native American Indians who possess a rich philosophy of living in unison with the land and nature as a whole. Deloria (1999a:46) mentions that the real interest of the old Native American Indians, for example, was not to discover the abstract structure of physical reality, but rather to find the proper road along which, for the duration of a person’s life, individuals were supposed to walk. This has three important implications: first, the universe is a moral universe; second, there is a proper way to live in the universe and, finally, the sum-total of our life experiences has a meaningful reality. The universe is,

accordingly, seen as proceeding in a preordained direction, empirically exemplified in the physical growth cycles of childhood, youth and old age, with the corresponding responsibility of every entity to enjoy life, fulfil itself and increase in wisdom and the spiritual development of personality. As Westerners we can also foster such a mode of thinking and such a mode of living that is in right relation to all of life. There is a Cree proverb⁴⁷ that reads: “Only when the last tree has died and the last river been poisoned and the last fish been caught will we realise we cannot eat money.” The current state of environmental degradation leads one to wonder if we will ever collectively realise this truth.

2.4 SUMMARY

I concur with Collins (2013:94), who contends that people will make sacrifices if they are asked to do so for the right reasons. The world’s religions can fulfil a role in helping people to understand their finite lives as making a contribution to the planetary future and to help them to care about what will happen to the world in two or three generations. There is, however, one prerequisite, namely: the religions in question must become more ecocentric in their constitution and must actively propagate an ecocentric frame of mind. According to Woo (2002:115), there are many traditions that support a continuous interactive ethic of inclusivity and respect. Each of these traditions has its own strength and uniqueness: Taoism with its mystical sense and clear perception of the environment, Confucianism and Hinduism with their moral responsibility and integrity and Judeo-Christianity with its stewardship and mutual responsibility.

Das (1952:637-8) says that some Eastern philosophers regard the world as the manifestation of the Divine, and because of this they raise the world to a position of paramount importance. In the West, however, some pessimists dismiss the world as a hopeless mess, discarding life as a labyrinth. Outlooks on life vary according to ideologies, as discussed in the beginning of this chapter. Ideologies that make for pessimism or optimism are found both in the East and in the West. This means that in our outlook on life

⁴⁷ <http://www.unitedearth.com.au/tipiwisdom.html> (Accessed on 23 September 2015).

there is no absolute distinction between the East and the West. It is thus pointless to say that the East and the West are opposed to one another. Eastern and Western philosophies are, broadly speaking, alike. I believe we should, with regard to other philosophical world-concepts, be eclectic in the process of building our world views. Just as Deep Ecology borrows concepts from various religious and philosophical views, so we should borrow from various religious and philosophical ideologies. What is important for the purpose of this study is to show that Deep Ecology is not anthropocentric and that it has been formulated from ecocentric and intrinsic ideologies which show both Eastern and Western influences. I believe that this may also be the reason why Deep Ecological principles find it so hard to achieve prominence in Western civilizations.

In the next chapter, I will show how anthropocentric attitudes manifest in environmental degradation and how the inverse takes place as a result of an ecocentric lifestyle, as postulated by Deep Ecology.

CHAPTER 3 – HUMANITY’S FAILURES AND SUCCESSES WITH REGARD TO ENVIRONMENTAL PRESERVATION

3.1. INTRODUCTION

In the previous chapter I discussed the extent to which religion and Philosophy contribute to the formation of our perceptions along either anthropocentric or ecocentric lines regarding our internal and external worlds. This perception is important within the current discussion on how we are to address the current environmental problems, and ultimately how to solve these problems. Our perceptions guide us in taking positive steps to honour creation, but have also shaped behavior that dishonour creation. Hoffman and Sandelands (2004:3) point out:

- That the world’s population increased by a factor of four;⁴⁸
- That the world economy increased by a factor of fourteen;
- That 816 species became extinct and 11,046 species are threatened with extinction.
- That nearly 25% of the world’s most important marine fish stocks are depleted or over-harvested, while another 44% are being fished at their biological limit and as a result are vulnerable to depletion.
- That the global rate of deforestation averaged nine million hectares per year in the 1990s, with soil degradation being an additional issue on as much as 65% of agricultural land worldwide.

Foster (2008:4) backs Hoffman and Sandelands in this regard, reiterating that all ecosystems on earth are in decline; that water shortages are on the rise and that energy resources are becoming more than ever the subject of global monopolies, which are enforced by war. Homer-Dixon (1994:43) actually predicts links between environmental changes such as ozone depletion, global warming and violent conflict. He revised his

⁴⁸ ‘By a factor of...’ is used to mean the same as ‘multiplied by’. If x is increased by a factor of 4, it becomes four times more (<http://www.beatthegmat.com/word-translation-when-x-increases-by-a-factor-of-4-t112477.html>). According to *The Math Forum@Drexel*, when we say ‘increased by a factor of 2,’ the word ‘factor’ means ‘multiplied by 2’ (<http://mathforum.org/library/drmath/view/74439.html>) (Both accessed on 09 February 2015).

models to focus on the environmental scarcity of renewable resources caused by population growth, inequalities in the distribution of resources, and overall decline in the quality and quantity of renewable resources within states. According to Timura (2001:106), Homer-Dixon and his colleagues published a number of articles and case studies supporting their claims that environmental scarcity was a significant factor in the Senegal-Mauritania conflict, the Zapatista Rebellion, the Somali clan wars, the ethnic riots in the Bangladesh-Assam region, the Philippine and Peruvian insurgencies, and potentially the conflict in China.

In 2015 there are many conflicts over resources in the form of oil, and it seems likely that it will not be long before conflict will revolve around land and water, because humanity is very destructive in its interaction. Foster (2008:4) says that the so-called human-made fingerprint of global warming has been detected on ten different aspects of the earth's environment: its surface temperatures, humidity, oceanic water vapour and heat content, barometric pressure, total precipitation, wildfires, change in species of plants and animals, water run-off, as well as upper atmospheric temperatures. Foster goes on to argue that this will bring about a regression of civilization and life itself beyond comprehension – an economy and ecology of destruction – that can only be curbed by radically changing our course of action.

Issues such as species extinction, industrial pollution, forest loss, ecosystem degradation, overfishing and degraded freshwater supplies are all a part of the drama that is in process behind the scenes of our normal day-to-day lives. This shows that our human development is ruinous. Throughout my discussion I frequently suggest that humankind should embrace Deep Ecology as a viable philosophy that can holistically address and solve the issues mentioned above. As pointed out earlier, people's ideologies can be altered, and I will later spend some time on looking how this may be facilitated. But what affect do different ideologies have on the environment? For example, we may know that Mr X and Mrs Y are respectively anthropocentrically and ecocentrically inclined in their thinking, but apart from knowing their inclinations, what do we know of the consequences of their thinking? How do their respective modes of thinking manifest itself in the tangible world?

In this chapter I will address this issue. In my discussion, I will not draw on the ten issues mentioned by Foster (2008:4). Rather, I have chosen ten environmental issues which have an impact on every single living being on this planet. In each of the issues I have chosen, I will show how detrimental the manifestation of anthropocentric thinking can be. I am doing this to show why it is important to consider Deep Ecology as an ecocentric Philosophy and why people should consider embracing it. I have not ranked these issues in order of importance, but I do want to add that the first issue – human population – is an issue which I deem to be of crucial importance, the thorny issue I referred to in my first chapter. In the following discussion, it will become clear why this is the case.

3.2. HUMANITY’S FAILURES AND SUCCESSES

Hawken (2009), in his commencement address given at the University of Portland, states that human beings will have to figure out what it means to be a human being on earth at a time when every living system is not only declining, but doing so at an accelerating rate. He says that if people start looking at the scientific data with regard to the state of our planet, and aren’t pessimistic, then such people do not understand (or maybe do not want to understand) the data that was presented.

If, on the other hand, Hawken observes, you meet people who are working hard to restore our planet, and they do not make you feel optimistic, then you may not have a pulse. Some ordinary people are willing to confront despair, power, and incalculable odds in order to restore some semblance of grace, justice and beauty to this world. The planet, he says, came with a set of instructions, but unfortunately many people seem to have misplaced the important rules such as not to poison the water, soil, or air, and not to overcrowd the earth.

I find the issue of overcrowding a source of great concern and the second biggest driving force behind the dismal state of the planet (the first being our mind-set). I am convinced that the issue of overpopulation is not receiving enough attention. As an example, during the annual meeting of the World Economic Forum (2014), the issue of the world’s population did not even make the *Ten Global Risks of Highest Concern in 2014*. The

meeting's programme consisted of more than 250 official sessions, organised under four thematic pillars: *Achieving Inclusive Growth*; *Embracing Disruptive Innovation*; *Meeting Society's New Expectations*; and *Sustaining a World of 9 Billion*.

The *Ten Global Risks of Highest Concern in 2014* are:

1. Fiscal crises in key economies
2. Structurally high unemployment / underemployment
3. Water crises
4. Severe income disparity
5. Failure of climate change mitigation and adaptation
6. Greater incidence of extreme weather (e.g. floods, storms, fires)
7. Global governance failure
8. Food crises
9. Failure of financial institutions
10. Profound political and social instability

Most of the abovementioned points may be attributed to a direct result of overpopulation, but the focus seems to have been more on sustaining 9 billion people than on curbing the growth of the population. I will start with the issue of overpopulation and then continue to address the other nine issues identified for the purpose of this discussion.

3.2.1 Population

Many environmental concerns are not only legitimate, but are serious issues which we ignore at our own risk, and the overpopulation of our planet is one of these. According to the Planet Earth Herald's *Top 10 Environmental Issues Facing Our Planet*, the world's population tripled in the last 60 years. In 1950 the population stood at 2.5 billion and skyrocketed to over 7 billion in 2012. I agree with Fisher (2013) that countries need to grow in order to stay healthy and successful and that bigger populations imply bigger economies (and bigger militaries). However, I maintain that, if population growth is too

rapid, then countries face problems because more people means more pressure on every aspect of a country's natural resources and on the planet's natural resources. Too much is being taken out of the ground, too much is being discarded into the environment, and there are just too many of us. According to Radford (2014), researchers attribute overall climate disruptions and seasonal differences to the 20th-century human population explosion. Basnet (2014) agrees by saying that it has become clear that over-consumption and overpopulation underlie just about every environmental problem.

In the past, when population growth was low and our scientific capabilities to alter the world were limited, we exerted little impact on global ecosystems (Dunstan & Swan 1993:1). As we grew in numbers, this changed proportionally to our ability to exploit natural resources (Meek Lange 2011:11). Societal growth is therefore connected to exploitation of environmental resources, which in turn will result in further growth and further exploitation. It does however seem as if humanity is *slowly* coming to the realisation that our natural resources are not unlimited and that the more people there are, the more resources are needed to sustain them. However, I wish to emphasise the term 'slowly' because, as it will become clear from the statistics I will present, population growth is still very high. In this respect, Sir David Attenborough⁴⁹ is of the opinion that, instead of controlling the environment for the benefit of the population, perhaps we should control the population to ensure the survival of our environment. This is an aspect that Deep Ecology also proposes as one of its eight pillars. This sounds harsh, but let me present the relevant statistics.

According to the World Population Data Sheet (2015:11) – hereafter referred to as the WPDS – a data sheet issued by the Population Reference Bureau (PRB), the world population in mid-2015 stood at 7.336 billion while the worldwide total fertility rate (TFR) stands at 2.5 (the TFR ranges from as low as 1.2 children per woman in places such as Portugal, Taiwan, South Korea, Hong Kong, Macao and Bosnia-Herzegovina, to as high as 7.6 in Niger). However, despite these facts, there are still people who dismiss the statistical fact that overpopulation is a reality. Newman (2013), for example, is of the opinion that

⁴⁹ Sir David Attenborough – <http://www.rollins.edu/sustprog/> (Accessed on 16 February 2015).

there is no population explosion and that the entire overpopulation thesis is flawed and he substantiates this by an analogy he draws from homelessness in the beginning of the century. Homelessness, he says, was actually not caused by too many people crowding a too small country, but because too few people owned too much land. As with shelter, so it is with food, because food security and ecological sustainability are impossible without democratic control of land. Only through land nationalisation can connected landscapes, smart cities and wildlife corridors be introduced that will allow ecosystems to bend, not break. As in the case of homelessness a century ago, the problem facing a population of 7 billion is not a matter of too many people crowding a too small piece of land, but rather too few people owning too much land, according to Newman. I do not consider this argument to be plausible. Population growth is not determined by geographical density but by fertility rates, as it will become apparent in my discussion below.

In addition, Roberts (2013a) gives the impression that the ‘overpopulation drumbeaters’, as he calls us, are worried about too many people being born in poor overseas countries and that this implies implicit racism. Roberts (2013b) asks that if there are too many people on earth, then who are those in the ‘too many’ category? Is it the one-child family in London consuming massive amounts of resources with their Western standard of living; or is it the family with eight children living in a shanty town consuming so few resources that they are under-nourished? Conradie (2008:31) also touches on this aspect, saying that some consider the increasing human population to be the most serious threat to the environment, while others argue that environmental problems are caused by the gluttonous consumption of those in the affluent economic centres and the economic processes required for such consumer products. Conradie (2008:30) actually make mention of the ‘Ehrlich equation’, an equation proposed by economist Paul Ehrlich, who argues that the environmental impact is a function of essentially three factors: population growth, increasing per capita consumption, and the environmental impact of the technology employed for the sake of consumption. This is expressed in the formula E=PAT:

E (environmental impact) = P (population) x A (affluence/consumption) x T (technology).

I do not agree with Roberts that our concern is with rising populations in poorer countries, thereby creating a sense of racism. The concern is global, not specific to any race. It is true that consumption is a related concern when it comes to overpopulation, but the focus is not on consumption at this stage, merely on the increase in global population. I also agree that if we can address the three factors portrayed in Ehrlich's equation, then environmental preservation may be attained. Finally, I believe that Deep Ecology is the relevant philosophy to address these factors.

The essential point, however, is that countries' population numbers are increasing at a rate like water lilies in a pond. The French, according to Brown (2013), use a riddle to teach exponential growth to schoolchildren. A lily-pond contains a single leaf. Each day the number of leaves double – two leaves the second day, four the third, eight the fourth, and so on. If the pond is full on the 30th day, at what point is it then half full? The answer is on the 29th. Our global lily pond may already be in its thirtieth day. Such a growth is outrunning the carrying capacity an economy's natural support systems, such as its forests, fisheries, grasslands, aquifers and soil. As a result, the resource base itself is being consumed, we over-cut, over-fish, over-graze, over-pump and over-plough our resources. Let us look at cases from around the globe that will refute the claims made by Newman and Roberts.

3.2.1.1. Europe

According to Brown (2013), nearly all the countries in Western and Eastern Europe have reached population stability as a result of gradual fertility decline over the last several generations. The WPDS (2015:14) confirms Brown's observations: the European population stood at 742 million in mid-2015. Europe's fertility rate dropped from 2.3 (in the 1970s) to 1.6 (in 2013). The fertility rate for Europe (WPDS 2015:14) stands at 1.4; the WPDS estimate that the population would reach 728 million in 2050, which indicates a decline. Such a decline is an exception to the rule. According to statistical findings by the Eurostat 2014, the EU-28's population⁵⁰ continues to grow. It states that the pattern of uninterrupted population growth experienced since 1960 (when the series began) continues.

⁵⁰ The EU-28 refers to the 28 member countries which constitute the European Union.

As can be seen from Figure 1 below, the peak population of the EU-28 (on 1 January, 2013) was estimated at 505.7 million. This should be compared to the starting-line in 1960, when it was just 406.7 million. From Figure 1 it can be seen that inhabitants in the EU-28 increased by 98.9 million people over a period of 53 years.

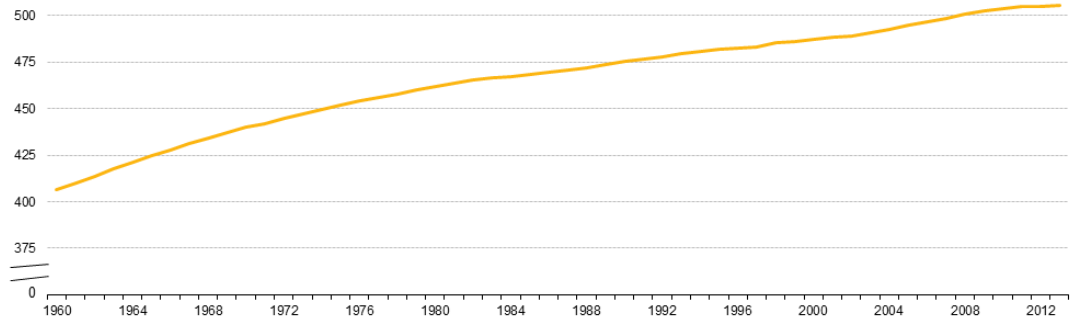


Figure 1: Population, EU-28, 1960–2013 (Source: Eurostat)⁵¹

Furthermore, backing the statements with regard to lower births in the EU, the Eurostat 2014 report found that the natural increase (the positive difference between live births and deaths) added 0.22 million inhabitants (20%) to the EU-28 population. The relatively low contribution of natural change to total population growth is the result of two factors: the number of live births went into decline, while the number of deaths increased (Figure 2).

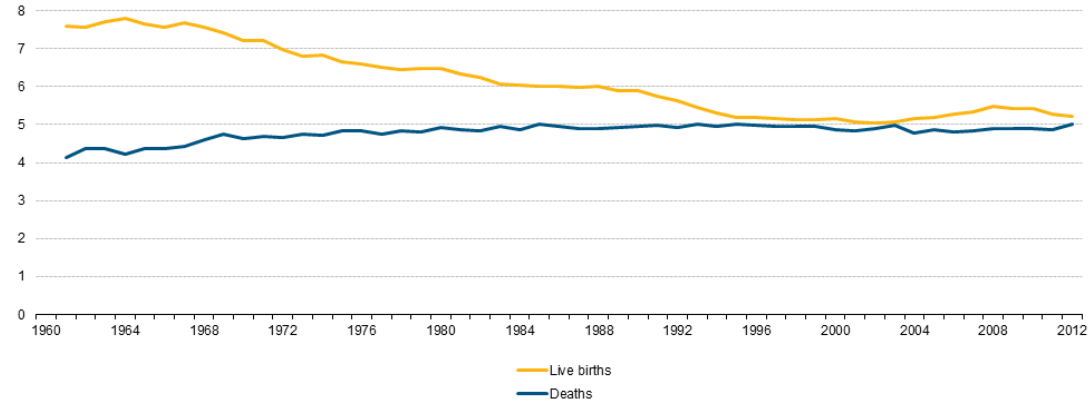


Figure 2: Births and deaths, EU-28, 1961-2012 (million) (Source: Eurostat)⁵²

⁵¹ http://epp.eurostat.ec.europa.eu/statistics_explained/images/d/da/Population%2C_EU-28%2C_1960%E2%80%932013_%281%29_%28at_1_January%2C_million_persons%29_YB14.png (Accessed on 16 February 2015).

⁵² http://epp.eurostat.ec.europa.eu/statistics_explained/images/d/da/Population%2C_EU-28%2C_1960%E2%80%932013_%281%29_%28at_1_January%2C_million_persons%29_YB14.png (Accessed on 16 February 2015).

From the statistics provided above, it can be inferred that the European Union shows an increase in population growth, even though there are countries in Europe showing a decline in growth. Fortunately this incline is relatively stable compared to what will still be observed in other regions in the world, such as Asia.

3.2.1.2. *Asia (Near-East and Far-East)*

In Asian regions the situation looks gloomier. Asia's population, according to the WPDS (2015:13), stands at 4.397 billion people. Bearing in mind that the world's population is 7.336 billion, Asia's population thus represents 59.9% of the world's population. This is something to ponder and it is therefore not strange that Asia will reflect a less positive picture than the rest of the world. Although the WPDS (2014:09) shows that Asia's fertility rate has fallen from 5.4 children in 1970 to 2.2 children in 2013, the latest WPDS (2015:13) estimate that the Asian population will increase from its current 4.397 billion to 5.324 billion in 2050. Each of these nearly 4.4 billion mouths needs to be fed and they need to be kept clean. This places a huge amount of pressure on the available resources needed for this purpose. In the next section, I will discuss some case studies in Asia by first looking at the Near East and then at the Far East.

A. *The Near East*

Al-Amri (2013), in the *Saudi Gazette*, states that religious scholars, economists and educators are warning people that a rise in population growth, if not dealt with wisely, will result in socioeconomic disasters. He says that Shariah⁵³ encourages having more children and that fear of poverty (because of having too many children) is disliked in Islam because sustenance and the unknown are determined by almighty Allah alone. Muslim men are furthermore encouraged by scripture to marry women who can procreate many kids. This is a typical example of both the destructive ideological and religious mind-set, which is prevalent in anthropocentrism. There is more wisdom in embracing Deep Ecology than in fostering such a mind-set. According to Al-Turigee

⁵³ This refers to the Islamic moral code and religious law.

(2013) the population growth in Saudi Arabia is among the highest in the world. He says that the economic growth is not keeping pace with the increase in population, which is alarming and unacceptable. He reports on an elderly man who lives in absolute poverty while sustaining 23 sons and daughters on his monthly pension and continues by stating that families of 12 to 18 members living on a meagre monthly income are also not an uncommon sight in Saudi Arabia. The problem, according to Al-Turige, is that even though the population explosion started in the 1980s, nothing has been done by the Saudi Arabian government to deal with it. My question is, why should people wait for higher powers, such as government, in order to start addressing an issue such as this?

B. The Far East

Shafi (2013) grew up in Pakistan during the mid-1950s. He talks about leisurely walks he took along the Dhamra, then a pristine little river. He used to catch fish there and swim in its clear and cool waters, but nowadays the river is a sewer, carrying all forms of debris and raw sewage and chemicals from housing colonies and factories located upstream. The river reeks repulsively and not even frogs live in it. He says that Wah, his village – like any urban area in Pakistan – brims with ugly plazas, garbage dumps, plastic bags flying about, and motor service stations spewing oil and grease into the Dhamra. How did a pristine river and the surrounding area arrive at such a point of decay? This he ascribes to high population numbers, saying that it simply boggles the senses to see just how many people there are in Pakistan and even in his village. The pressure of the growing population is so great that even the hills around Wah, which were once home to wildlife such as partridges, jackals and foxes, are being levelled to make way for housing colonies. Sabri (2014) further observes that there are no vacant places in Pakistan where there are no homes because every place is full of people. This is something Conradie & Field (2002:26-27) refer to when they maintain that the expansion of urban areas has contributed to the destruction of natural vegetation and habitats upon which plant and animal species are dependent. An increase in population implies an expansion of living space, which implies a reduction of the environmental

area. Shafi (2013) is not convinced that Pakistan can support so many people due to its current dense population.

In addition, Husain (2014) says that this exponential rise in Pakistan's population is not only the country's biggest problem but also its biggest scandal. Unfortunately the major segment of Pakistani society has its faith in customary and social practices, exercised from generation to generation. Sabri (2014) makes an interesting comment that is worth mentioning: Khaja Hussain, from Islamabad, is of the opinion that Allah is giving, so what can an innocent Muslim and four wives do if Allah gave them what they have? Furthermore, Rasheed and Al-Dabal (2007:888) remind Muslims and the Muslim world of another perspective that denounces such an outlook like that of Khaja Hussain. They express their findings in the light of Islamic perspectives on family planning by saying that Muslim communities have been guided by the divine script of the *Quran* in which 3 verses in 3 different suras have indirectly indicated the optimum birth interval period (*Holy Quran* 2:233; 31:14; 46:15). According to these scriptures it is specified that a suggested time of 24 months for breastfeeding should pass, and the period of pregnancy and suckling should range from 24 to 30 months. This would mean that a minimum birth interval ranging of 2.5-3.0 years is adequate. The Quran therefore indirectly suggests spacing out one's children, which is a good family planning practice. Notwithstanding this, women are still mainly unable to debate the issue of contraception with men, especially within Pakistani patriarchy (Janjua 2014). This situation is, however, gradually starting to change as there are many women in these regions of the world who wish to use contraception for family planning. In this regard I think it is notable to add Madeline Weld's⁵⁴ statement (she is the president of Population Institute Canada) who said that even though there have been spectacular advances in family planning, powerful – notably religious – opposition has kept governments and international bodies from actively promoting small families and as a result have prevented hundreds of millions of women who would plan their families from having access to modern methods.

⁵⁴ Madeline Weld, 2016. Opinion: Sadly, Malthus was right. Now what? Published on 14 February 2016 in the Montreal Gazette, Canada, online available at: <http://montrealgazette.com/opinion/columnists/opinion-sadly-malthus-was-right-now-what> (Accessed 21 February 2016).

A report, the *Family Planning (FP2020) Partnership in Progress – 2013-2014*, was issued in November 2014. This report was compiled as part of the Melinda and Bill Gates foundation. The foundation works with global and local partners who can mobilise and influence governments, civil societies, the private sector and the public to raise the visibility and importance of quality family planning (FP2020 2014:54). Much work is done in this respect and it is encouraging to know that Pakistan is, as of October 2014, one of the Commitment-Making Countries with regard to the use of contraceptives (FP2020 2014:208). Pakistan is also actively involved in family planning projects (FP2020 2014:36). This is important work because a high number of badly timed pregnancies and births are considered to be a huge problem in Pakistan. As a matter of fact, according to the FP2020 (2014:194), the number of unintended pregnancies in 2012 was 1.1 million and in 2013 it rose to 1.2 million. Pakistan is the sixth most populous country in the world,⁵⁵ with an estimated population of 188 million in 2013-2014. The WPDS (2015:14) estimates Pakistan's population as 199 million in mid-2015 and expect it to rise to 344 million in 2050. Each year that the population increases, there is a lack of availability of natural resources required to sustain the population. The biggest hurdle is still the rapidly growing population, but in these regions there is another hurdle in the path of curbing population growth, that is, the cultural and religious limitations in developing strategies with relation to birth control.

Moving West to India, the same phenomenon predominate. Venkataramn (2014) questions whether population control is on the agenda of India's governmental list of important issues. India has too many uncontrolled births and India has a population of 1.314 billion (WPDS 2015:13). According to Venkataramn, India is likely to emerge as the most populated country in the world. In fact, India occupies second place on the lists of most populated countries, with China⁵⁶ in first position. It is projected that India will respectively have a population of 1.512 to 1.660 billion by 2030/2050 and that China will respectively have a population of 1.422/1.365 billion by 2030/2050 (WPDS

⁵⁵ <http://www.infoplease.com/world/statistics/most-populous-countries.html> & <http://www.internetworldstats.com/stats8.htm> (Accessed on 17 February 2015) & <http://www.worldometers.info/world-population/> WPDS (2014:2) (Accessed on 21 August 2015).

⁵⁶ <http://www.infoplease.com/world/statistics/most-populous-countries.html> (Accessed on 09 January 2015).

2015:13). Venkataramn says that India's population increase is due to a lack of awareness amongst the people about the perils of population explosion and inadequate efforts of the government to implement population control measures.

World Population day is celebrated yearly on 11 July. On the 11th of July 2014, according to an article in *The Hindu News*,⁵⁷ school and college students held a rally in the city of Tiruchirapalli, attempting to sensitise people on the occasion of World Population Day with regard to the perils of the population explosion. After the rally an awareness seminar was held in an effort to make people aware of the effects of unchecked population growth. One of the effects of unchecked population growth, as predicted by experts, is that the rise in population could cause a shortage of drinking water over the next 20 years. There is also the danger of arable land being increasingly converted into space for habitation. To my mind, this rally was a good initiative and something that should be done more frequently worldwide, and not only on days such as World Population Day.

Moving south to the Philippines, we find a similar problematic population situation. According to the FP2020 (2014:194) the number of unintended pregnancies in the Philippines in 2012 was 1.284 million and in 2013 it rose to 1.313 million. On 27 July 2014, Manila experienced the birth of the 100 millionth baby⁵⁸. The population of the Philippines (WPDS 2015:13) stands at 103 million, with the prediction that it will reach 127.8 million in 2030 and 157.1 million people in 2050. According to the ABS-CBN News report on the 100 millionth baby, the wish to push the fertility rate down to two children per woman's lifetime, from the current level of an average of three children per woman, has for a long time been hampered by the influence of the Roman Catholic Church. About 80% of Filipinos are Roman Catholic followers and the Roman Catholic Church disapproved of all forms of artificial birth control. It was only in April 2014 that the government finally overcame Church opposition to implement a reproductive health

⁵⁷ Rally sensitises people to perils of population boom. <http://www.thehindu.com/news/cities/Tiruchirapalli/rally-sensitises-people-to-perils-of-population-boom/article6206247.ece> [Updated on 13 July 2014] (Accessed on 23 August 2014).

⁵⁸ Philippines welcomes 100 millionth baby – <http://www.abs-cbnnews.com/nation/07/27/14/philippines-welcomes-100-millionth-baby> (Accessed on 10 October 2014).

law providing the poor with birth control services. The Philippines, like Pakistan, is also, as of October 2014, one of the Commitment-Making Countries (FP2020 2014:208).

As far as Indonesia is concerned, the Indonesian population stands at 255.7 million (WPDS 2015:13), with the prediction that it will rise to 366.5 million in 2050. This is a predicted rise of more than a 110 million people. Gantan (2014) is of the opinion that a change in the mind-set on family planning is the only thing that may save Indonesia. FP2020 (2014:28) says that in August 2014, the Indonesian National Population and Family Planning Board (BKKBN) signed a Memorandum of Understanding to revitalise the national family planning program. The partnership will focus on four areas: co-hosting the 4th International Conference on Family Planning, to be held in Jakarta in November 2015; dovetailing BKKBN's family welfare surveys with data-gathering by Performance Monitoring and Accountability 2020 (PMA2020); expanding the success of Advance Family Planning's local, evidence-based advocacy approach; and implementing the *Right Time – Right Method – My Choice* partnership to reinvigorate family planning through a demand-supply initiative coupled with leadership development.

Time will tell if these initiatives will make a noticeable impact on population dynamics. As Bauer (1998:68) maintains, the problem with people's ideologies still remains an issue of concern. The different values which cultures assign to fertility is an example of how this process may be hampered by perceptions. Young women in some countries often want more children to support them in their old age. Also unknown to many people in the West is the following injunction to Indian brides, as noted by Bauer (2000:31): 'May you be the mother of eight sons.' Bauer wonders if environmental proponents of population control ever consider the cultural values of developing countries. I will now discuss another region, namely Oceania.

3.2.1.3. Oceania⁵⁹

Throughout the section on Oceania, I will only focus on Australia and New Zealand. In Australia we see pristine areas being invaded for the purpose of development, due to an increasing growth in population.⁶⁰ Southeast Queensland may have to sacrifice pristine areas to accommodate a projected population increase of more than two million over the next 30 years, and this will require an additional 480,000 houses above the already projected 750,000 to be built by 2040. These projections are in line with the WPDS (2015:15), placing Australia's current population at 23.9 million, with a projected increase to 28.5 million in 2030, and 34 million in 2050. The Daily Advertiser⁶¹ recently released population figures that project that Australia's population will double to 46 million by 2075. *The Daily Advertiser* also reports that statisticians at the Australian Bureau of Statistics predict that cities such as Melbourne and Sydney could swell by up to 7.9 million people by 2053.

As Brine (2014) shows, Australia's population growth is a reality. She says that the population of Australia's capital city, Canberra, is predicted to grow by up to 98% in the next 50 years. New South Wales was projected to grow from 7.3 million to 9.9 million (an increase of 35%). In addition, Mercedes (2014) reports that Perth's population reached 1.9 million in 2012 and new projections foresee 3.9 million people inhabiting the city by 2050. This means that in less than 40 years, more than double the number of houses, roads, public transport, hospitals, schools and services has to be built to accommodate the rising population. This is more than have been built in the region over the past 185 years. Moving westward to New Zealand, in the city of Tauranga, an estimated 30,000 new homes will be built by 2041 to deal with a predicted population explosion (Dixon 2014). A study done by *Smartgrowth*⁶² (during which the social, economic and environmental goals in that city were considered) is in accord with Dixon and says that the rise in Tauranga's population

⁵⁹ The Central and South Pacific, Micronesia, Melanesia, Polynesia (including New Zealand, Australia and the Malay Archipelago), available at: <http://www.merriam-webster.com/dictionary/oceania> (Accessed on 04 February 2015).

⁶⁰ <http://www.news.com.au/finance/real-estate/previouslly-offlimits-areas-of-southeast-queensland-may-need-developing-due-to-population-explosion/story-fndbalka-1226848543173> (Accessed on 21 March 2014).

⁶¹ <http://www.dailyadvertiser.com.au/story/1940032/leaders-debate-population-explosion-flow-on-effect/?cs=156> (Accessed on 21 March 2014).

⁶² <http://www.localgovernmentcareers.govt.nz/Site/Case-Studies/Smartgrowth.aspx> (Accessed on 03 March 2014).

will be due to the following predicted figures: (2001) 130 000 people; (2021) 197 000 people; (2051) 286 000 people.

As is the case in other regions, it is clear that population increases in Oceania are a reality and also a challenge to many. In the next section, I will discuss population growth in Africa.

3.2.1.4. *Africa*

According to Fisher (2013) almost all the countries showing a rate of natural increase⁶³ higher than 2% per year are to be found in Africa. The WPDS (2015:11-12) confirms this. Fisher says that Africa's growth is expected to quadruple in size by 2050. The statistics supplied by WPDS (2015:11) reflect that there are currently 1.171 billion people on the African continent, with the prediction to increase to 2.473 billion in 2050. Conniff (2014) reports that Kenya's population quintupled from 8.1 million people in 1960 to 44.4 million in 2014. Kenya, where many rhinos, hippos, elephants and other wildlife once roamed wild, is now poor in wildlife. This is bad news for wildlife in a nation that has already eradicated cheetahs, pygmy hippos, black rhinos, giant elands and a menagerie of other species. This is the reason why Kamau (2014) reminds Kenyans to adopt the small family standard through making use of family planning as a means to reduce the population growth, because smaller families will put less strain on forests and other natural resources. Every effort should be made to ensure that environmental degradation is reduced and ultimately eliminated. The need to have smaller families will only become optional after the existing imbalance between people and natural resources is brought under control.

In addition, Orondo (2014) reports that the Niger Delta communities need to be sensitised on birth control if they want to prevent a population boom. He draws our attention to a woman from the Ode-Igo community in Ilaje who has already given birth to 13 children in total, and she plans to have more. Niger is one of the poorest countries on earth; most of its

⁶³ Rate of Natural Increase (RNI) – The birth rate minus the death rate, implying the annual rate of population growth without regard for migration, expressed as a percentage (WPDS, 2014:19).

inhabitants grow subsistence crops on drought-stricken plots that are small and the soil is infertile. Food production is a problem in Niger and it is exacerbated by the highest worldwide fertility rate that stands at 7.6. This has risen from 7.2 since 1970 (WPDS 2014:7). This trend is also seen in its neighbour country, Nigeria, where the population is estimated to increase fivefold, from 160 million to as many as 914 million people by 2100. Olawale (2014) says that Nigeria will suffer dire consequences due to an uncontrollable population explosion. If Nigeria's population continues to grow without check, a time will come when the massive population will be unmanageable. Even though the fertility rate declined from 6.5 in 1970 to 5.6 in 2013 (WPDS 2014:7), this is still much higher than the world average of 2.5. The major concern expressed by Olawale (2014) about such growth is a shortage of jobs, national infrastructure, social services, housing and health care facilities, which are not keeping pace with the population growth. Not a single word is said, however, about the impact of such growth on the environment. The environment seems to be of lesser concern than the hungry mouths which must be fed and the jobless people who must have an occupation. This situation recalls Maslow's hierarchy of needs as briefly discussed in the previous chapter.

Tanzania, according to the WPDS (2015:12) has an estimated 52.3 million people, projected to increase to 79.4 million (2030) and 129.5 million (2050). This is actually one of the countries on the list of countries that face major population increases (WPDS 2014:8) projected to quintuple its population by 2100. With population increase comes a visible and rapid dwindling of wildlife populations. Closer to home, Malawi seems to be in an equal predicament with regard to its population. According to Fox news,⁶⁴ President Joyce Banda was reported as saying that Malawi's runaway population growth has put pressure on scarce resources and so hampered development. The population increased from 4 million to 15 million in a period of 49 years. Overpopulation in an area half the size of Britain led to environmental degradation as people cleared the land for farming. Malawi's population density will rise to 220 people per square kilometre (0.4 square mile) of arable land by 2028 from the current average of 171 people per square kilometre. This is far above

⁶⁴ Fox News, published online on 06 July 2013. <http://www.foxnews.com/world/2013/07/06/malawi-population-explosion-crippled-development-banda/> (Accessed on 13 November 2014).

Africa's average of 87 people per square kilometre of arable land. It is noteworthy that on 28 January 2014, the BBC⁶⁵ held a debate in Malawi on Africa's youth population. The topic during this debate was: *Africa's Youth Population: An Opportunity or Risk?* The discussion revolved around the question whether the recent population explosion in Africa can be used to propel economic growth – or whether it could backfire. Against the backdrop of what President Banda said, I cannot see how economic growth can be successful with an underfed, poor and overpopulated country. It is, however, good to know that some countries, such as Ethiopia, Rwanda, and Malawi, have already begun to put more emphasis on reproductive health and are seeing an increased uptake of contraception.

Kingsley (2014) tells us that Egypt had 560,000 more births in 2012 than it had in 2010. Egypt is struggling to contain a population explosion that peaked in the past three years. This rise is the highest spike in all of Egypt's history. This rise in population will exhaust Egypt's already depleted resources, worsen a dire job market and contribute to yet more social frustration. Egypt already faces severe water, energy and wheat shortages, and it lacks the foreign currency reserves to fund the import of extra supplies. Kingsley says that, according to experts, population control was relatively successful during the 80s and 90s, but then it started to fall off the agenda during the last years of Hosni Mubarak's government. After his removal and the chaos that followed in 2011, population control was largely ignored. That negligence became official policy after Mohamed Morsi was elected in 2012. According to Kingsley, Morsi is a religious conservative and his administration publicly declared that population control was not a government concern. Under Morsi, population control was seen as an attempt to disrupt traditional family life, which did not sit well with the socially conservative Muslim Brotherhood. According to the WPDS (2015:11), Egypt has a population of 89.1 million, projected to reach 162.4 million in 2050. Their fertility rate dropped from 5.9 in 1970 to 3.5 in 2013 (WPDS 2014:7), which is still higher than the world average. It is, however, good to know that about 65% of Egyptian women now use some form of contraception.

⁶⁵ <http://www.nyasatimes.com/2014/01/28/bbc-holds-debate-in-malawi-on-africas-youth-population/> (Accessed on 23 February 2014).

Contraception is however only one way to curb overpopulation. The education of girls, with the aim to encourage geographic redistribution, campaign against child marriage and educate young people about sexual and reproductive health and family planning, are methods that can be followed.

3.2.1.5. *North and South America (Americas)*

Cotto (2014a) says that the United States of America (USA) stands as the third most populous country on earth, and that its population quadrupled during the twentieth century. This, he says, is killing the American dream with regard to prosperity and economic growth, yet not a single word is said about the impact such growth has on the environment. He further maintains that there is no greater threat to any civilization than overpopulation, and that today, millions of Americans may not even know that it is an issue, since it is an issue that has generally been ignored (2014b).

In addition, Quinn (2014) reports that just south of Houston, in Manvel (Brazoria County), developers are building homes to accommodate the fast-paced growth taking place there. Over the next 15 to 20 years, the city of Manvel envisions 10 000 new homes to be built due to a prediction of exploding population, expected to rise from the current 8 000 to more than 130 000 people within the next twenty years. According to McFadden (2013), the Hawaii Island's population explosion is turning it into the fastest-growing county in the state. From 1990 to 2011 the population of Hawaii and Maui counties grew by 54% and Kauai County grew by 31%.

Moreover, Bush (2014) reports on a study conducted by Washington State University Professor Timothy Kohler and fellow researcher Kelsey Reese. Kohler and Reese looked at population changes that took place from 1000 BCE to about AD 1500 in the Southwest, primarily New Mexico, Arizona, Utah and southern Colorado. The northern Southwest had as many as 40,000 people in the mid-1200s. Within 30 years, it was vacated, with nothing left behind but mystery. The vacation of the area, according to Kohler, was perhaps due to the population that grew too large and subsequently to feed everybody in the deteriorating

climate became impossible. As people began to leave, it may have been more difficult to maintain the social unity needed for defence and for building new infrastructure. Kohler says that whatever the reason for the vanished population may be, the moral of the story is clear: Population growth has consequences. Stanger (2014) says that more than 200 years after the founding of the United States, its cities are becoming increasingly crowded. This observation was made as a result of population density maps, using data from the 1790-2000 decennial censuses and the American Home Community Survey five-year estimate for 2010. The results show how America has become denser over time, particularly on its coasts and near metropolises. The population of the USA was 3.9 million in 1970, compared to 313.9 million today.

In South America the population stands at 414 million people (WPDS 2015:13). Brazil represents nearly half of this total with 204.5 million people. The projections made by the WPDS indicate that the South American population will reach 496 million people in mid-2050. The population growth is already impacting negatively on forest areas and other environmental aspects of South America. Positive correlations between fertility and deforestation have been made in studies in Central America (Carr 2005:157-168; Rosero-Bixby 1998:149-178) and South America (Rudel 1993:234; Pichón 1997:707-744).

Following my discussions of the major regions with regard to population growth, I will conclude this section by summarising the statistics in table 2, as obtained from the 2014 and 2015 World Population Data Sheets († 2014:7-11) (* 2015:11).

Geographical area	† Population mid-2014 (millions)	* Population mid-2015 (millions)	* Projected Population mid-2030 (millions)	* Projected Population mid-2050 (millions)	† Total Fertility Rate (1970)	† Total Fertility Rate (2013)	* Total Fertility Rate (2015)
<i>Europe</i>	741	742	744	728	2.3	1.6	1.4
<i>Asia</i>	4.351	4.397	4.939	5.324	5.4	2.2	2.2
<i>Oceania</i>	39	40	48	59	3.4	2.4	2.5
<i>Africa</i>	1.136	1.171	1.658	2.473	6.7	4.7	4.7
<i>Americas</i>	972	987	1.116	1.221	4.0	2.1	2.0
World	7.238	7.336	8.505	9.804	4.7	2.5	2.5

Table 2: Statistical Synopsis.

The overall reduction in fertility rates is good news for the planet, but the projected population figures are still a major problem for the environment. The preceding discussion on population figures clearly shows that population explosion is not mere illusion.

In the next section I will briefly look at other destructive influences that humanity has exerted on the planet. These aspects are mainly a result of the increase in population.

3.2.2. *Water*

Will water in the near future become a commodity like that of Gold and Oil? Will wars one day be fought over water supplies? Currently a third of humans have inadequate access to clean, fresh water, and this may increase to two-thirds by 2050. The blame for this is placed at the feet of overpopulation and industrial pollution. Ingham (2014) thinks that a water crisis is looming by the end of the 21st century. He says that by then billions of people are likely to be engrossed by water stress. The situation is so severe, according to gravitational data from the GRACE satellite system⁶⁶, that more than half of our Earth's 37 largest aquifers are depleted.

One example of such depletion can be seen in the recent drought that California experienced. This was the worst drought in the region in 100 years. This, according to Bourzac (2014), is because of long-term withdrawal of water in the San Joaquin Valley. She says that ten years of satellite data show that the use of groundwater in the Central Valley is outpacing its replenishment, a trend that is intensifying in the current drought. In addition, this withdrawal is leading to a decrease of stress on the San Andreas Fault, and this in turn promotes earthquakes. Such earthquakes were predicted by geologists (Amos, Audet, Hammond, et al. 2014:483). In August 2014 an earthquake considered to be one of the strongest non-Alaskan temblors to hit the USA struck California (Rice 2014).

⁶⁶ <https://www.washingtonpost.com/news/wonk/wp/2015/06/16/new-nasa-studies-show-how-the-world-is-running-out-of-water/> (Accessed on 17 February 2016).

In my discussion on fracking below, it will be shown how this process may furthermore pollute already scarce water reserves. Water is a very precious commodity, and the pollution and depletion of rivers, wetlands, estuaries and aquifers by industry and humans are severely destructive to all ecosystems and endanger the existence of all fauna and flora.

3.2.3. *Climate change*

Climate change, a direct result of human behaviour (as shown earlier), has a contributing impact on the water problem due to changing rainfall patterns. According to Basnet (2014), climate change brings about one positive aspect — it makes people look at Malthus's predictions with a fresh eye. In 1798 Malthus predicted that unless population growth was curbed, humanity would suffer a population explosion and concomitant natural calamities. His prediction was never taken seriously because food production grew rapidly due to the advancement of technical know-how. Between 1820 and 2000, the global population grew six-fold, whereas economic output multiplied 50-fold. This made Malthus' forecast seem more irrelevant. However, Malthus's prediction is regaining ground today due to the growing evidence of global warming and climate change. This statement is substantiated by Madeline Weld⁶⁷ who writes that Malthus (based on his prediction) foresaw famine, disease and much suffering, especially among the poorest. In addition to these 'negative checks,' as she refers to it, Malthus nonetheless also recognised 'preventive checks' like limiting birth rates and later marriage (as a cleric Malthus advocated chaste postponement of marriage). The seriousness of Malthus' statement, says Weld, lies in the provision of our ever-growing population. She says that in providing for our ever-growing population, we are, in Ehrlich's words, turning the planet into a 'feedlot for humanity' taking into account Homo sapiens' gargantuan appetite.

As we strive to get at dwindling resources for ever more people, we dig deeper into the Earth, we blow the tops of mountains and divert rivers; we cut down forests and pave over

⁶⁷ Madeline Weld, 2016. Opinion: Sadly, Malthus was right. Now what? Published on 14 February 2016 in the Montreal Gazette, Canada, online available at: <http://montrealgazette.com/opinion/columnists/opinion-sadly-malthus-was-right-now-what> (Accessed 21 February 2016).

swaths of land. We fill the land, water and air with our pollution. We're driving record numbers of species to extinction and decimating others by simply taking over their habitat. Weld also reminds us of the extent to which greenhouse gases from our industries are changing the Earth's climate, with dangerous consequences such as ocean acidification, rising sea levels and flooding, the changes in rainfall patterns and loss of forest cover. The negative effects of climate change are incomprehensible. If we fail to act, then it will only get worse, and climate change is already affecting many lives. Homes and businesses are lost due to tsunamis, tornados, hurricanes, cyclones and earthquakes which are becoming more frequent, but most of all, ecosystems are being destroyed and in the process species are being extinguished.

In addition, Adaschik (2013) draws our attention to the scientific evidence with regard to polar ice packs in the Arctic and Antarctic disintegrating, with global sea levels rising and world average temperatures increasing. The bad news is that the rise in population numbers lowers any chance of managing the current climate change. It is maybe too late to undo the damage that climate change has done to the environment; the best we can do is to regulate the further impact upon the environment. I believe that Deep Ecology may contribute in accomplishing this.

3.2.4. *Loss of biodiversity*

Based on information provided by data sources (WWF LPR 2014:20), three main threats to the decline of the planet's fauna and flora have been identified. They are: *habitat loss*, *degradation*, and *exploitation through hunting and fishing*. Le Roux (2014:1-3) says that wildlife numbers have plummeted by more than half in just 40 years, while earth's human population has nearly doubled. Le Roux bases his observation on a survey of over 3000 vertebrate species that was conducted by the World Wildlife Fund (WWF) in its 2014 Living Planet Report (LPR). Stated in another way, in less than two human generations, the population sizes of vertebrate species have dropped by half. These species are the living forms that constitute the fabric of the ecosystems which sustain life on earth – and they serve as the barometer of what we are doing to our own planet, our only home (WWF LPR

2014:4). From 1970 to 2010 there was a 52% drop in numbers across a representative sample of land and sea-dwelling species, while freshwater populations declined by 76% (WWF LPR 2014:12). The 52% decrease confirms that humanity was chomping through nature's bounty much faster than the rate of replenishment. The Living Planet Report for 2012 found a 28% drop in species numbers from 1970-2008, but that was based on only 2,688 monitored species. The 2014 report tracks the growth or decline of more than 10,000 populations of 3,038 species ranging from forest elephants to sharks, turtles and albatrosses. The report stresses that humans are consuming natural resources at a rate that would require 1.5 earths to sustain such a consumption; humans are cutting down trees faster than they mature and humans are harvesting more fish than oceans can replace (WWF LPR 2014:12). The report says that wildlife decline was worst in the tropics, with a 56% drop, compared with 36% in temperate regions (WWF LPR 2014:19). It should be mentioned that when we exterminate one species, this has a knock-on effect on the food chain, which in turn upsets eco-systems. The catastrophic impact of loss of biodiversity is likely to affect the planet for millions of years to come. The current rapid loss of biodiversity around the world is being named the 'Sixth Extinction' (Lavery, Sterling & Cullman 2008:2).

3.2.5. Deforestation and desertification

Another concerning consequence of human interaction with nature is deforestation and desertification. Kibor (2013) says that the population explosion in Kenya has led to the clearing of vegetation in order to create more farming and settlement space. He says that deep gullies have been formed in such areas due to the consistent movement of livestock, the loss of top growth and flooding during heavy rains. These deep gullies in turn threaten the survival of fauna and flora in the area. Together with deforestation, this poses a problem for the environment. In addition, Kamau (2014) writes that knowledge of the importance of forests should be spread across Kenya so that the population is made aware of the worldwide effects of deforestation on all human and nonhuman phenomena. Adaschik (2013) says that rainforests are rapidly disappearing in all areas of the world and the effects of their depletion, without considering any other factors, rivals that of the disappearance of

the dinosaurs sixty-five million years ago. Every year Brazil chops down an area of forest the size of the state of Nebraska. Current deforestation trends point toward catastrophic and irreversible losses of biodiversity and runaway climate change (WWF LPR 2014:76). Since 1990, half of the world's rainforests have been destroyed.

Even though the clearing of forests seems to be the status quo, there is a good initiative that needs to be mentioned. The World Wide Fund (WWF) may be mentioned as the fore-runner in the initiative of protecting and preserving forest areas in the Amazonian region. In cooperation with Sky⁶⁸ they are working to help protect one billion trees in Acre in the north-west of Brazil. They do this by tackling some of the major causes of deforestation, such as cattle ranching and poorly planned road and dam development. They also promote sustainable farming as a way to move away from 'slash and burn' agriculture and they improve market conditions for sustainably produced forest products, such as acai berries with their sought-after juice, and tapping natural latex from rubber trees. As part of this initiative Sky Rainforest Rescue is helping over 1,000 families and farmers to improve their crops at the same time as reducing the land that they deforest. The work Sky and the WWF are doing is important if we take into consideration that the Amazon rainforest represents over 40% of the remaining tropical forests in the world and that it has lost more than 520,000 km² (200,773 square miles) of forest over the past 30 years. WWF estimate that at current rates of deforestation, 55% of the Amazon's rainforests could be gone by 2030. Other forests like those in Indonesia, Zaire, Papua-New Guinea, Malaysia, Burma, the Philippines, Peru, Colombia, Bolivia and Venezuela, are not as lucky as the Amazonian rainforests. These rainforests are disappearing at an alarming rate and there is no end in sight to the devastation. The primary reason for the destruction of rainforests is to make way for farms that will only be used for a few years. After that, the exposed soil will be depleted of nutrients and will no longer support crops or other plant and animal life. The farmers responsible for this crime against nature will then move on to do the same thing deeper into the rainforest.

⁶⁸ <https://rainforestrescue.sky.com/our-campaign/where-were-working/faqs> (Accessed on 21April 2015).

Teague (2011:23) reminds us that in ecosystems, such as rainforests, species are interconnected through dynamic, interdependent, cooperative and symbiotic relationships. These relationships are disturbed and destroyed by human interference. But deforestation also has an impact on rainfall. Cutting down trees leads to a reduction in evapotranspiration, which in turn leads to lower rainfall.

3.2.6. *Ocean acidification*

Our footprints continue to affect all aspects of the environment. Adaschik (2013) says that fourteen billion pounds of solid waste and nineteen trillion gallons of liquid waste are dumped each year into the oceans of the world. Ocean pollution affects every nation around the world because water movement disperses pollution to every corner of the globe. Another form of oceanic pollution is oceanic acidification. According to Planet Earth Herald (2014), a direct effect of excessive carbon dioxide production is ocean acidification. The oceans absorb as much as 25% of all human carbon dioxide emissions. The gas then combines with other elements to form compounds such as carbonic acid. Over the last 250 years, surface acidity of the ocean has increased by an estimated 30% and it is expected to increase to 150% by 2100. We should also take into consideration what Adaschik (2013) refers to, namely acid rain. The latter is caused by airborne pollutants that acidify falling rain. The prime contributors to acid rain are automobile emissions and coal-burning power plants. Different regions of the world experience different levels of acid rain, but so many gases are now being produced that the problem is global and basically no area of the planet escapes this onslaught. Acid rain that falls into the oceans and the rain that is transported by rivers into oceans all contributes to the acidification process.

But what are the effects of oceanic acidification? The effect on sea creatures such as shellfish and plankton is similar to osteoporosis in humans. The acid dissolves the skeletons of the creatures, and this has catastrophic repercussions for a wide variety of sea creatures. The effect of ocean acidification may as a result challenge marine life on a scale that the planet has not seen for millions of years.

3.2.7. *Depletion of marine resources*

Humankind depends upon the oceans to produce a significant amount of the food it consumes. In a previous discussion on loss of biodiversity, I have shown how fish stocks throughout the world have significantly decreased and how more and more varieties are being classified as being over-exploited or depleted. Adaschik (2013) says that only 3% of marine stocks are currently classified as being underexploited, while 21% are moderately exploited. He continues by saying that 52% are being fished at their maximum biological productivity and this means they are exploited to such an extent that increased fishing would reduce future harvest levels. The remaining 24% are made up of the following: over exploited (16%), depleted (7%), recovering from depletion (1%). According to Planet Earth Herald (2014), it is estimated that by 2050, due to supplying an ever-increasing population's demand for sea food, there will be no fish left in the sea because of over-fishing. The collapse of the Atlantic Cod Fishery is one example of how humans have exploited the planet's natural resources to the brink of extinction. Conradie and Field (2002:26-27) maintain that marine life is also threatened as a result of oil spillages, plastics and licensed pipelines that carry industrial waste and sewerage into the sea. Rivers carry silt and agricultural chemicals into oceans, while storm-water pipes carry chemical cocktails of heavy metals and polluting substances down to oceans that have been deposited on our roads, pavements and roofs. These chemicals disturb the complex food chain in the sea and contribute to a decline in marine species.

3.2.8. *The phosphorus and nitrogen cycles*

The pollution of air, water and soil is done through chemical compounds that are by-products of our modern lifestyle. Such chemical compounds take many years to break down. The two contributors to pollution which I will highlight are the nitrogen and phosphorous cycles. These cycles provide essential nutrients for plants to grow, and even though phosphorus is currently reaching dangerous levels, the nitrogen cycle is completely out of hand (WWF LPR 2014:67). Although the effect of human activities on the carbon cycle is better known, the lesser known and more underappreciated threat on the

environment is the nitrogen cycle. In fact, the nitrogen cycle has a greater impact on the environment than the carbon cycle due to its severe impact on aquatic ecosystems, the air, on biodiversity as well as on the climate and human health.

According to the Living Planet Report (WWF LPR 2014:72-73), nitrogen makes up four-fifths of the air that we breathe. Unreactive nitrogen must however be fixed by natural or synthetic processes to form the reactive nitrogen (N_r) needed by plants to grow. Industrially produced fertilizers containing N_r have been one of the main drivers of dramatically improved agricultural yields over the last 60 years, and are fundamental to global food security. The problem, however, is that human activities now convert more nitrogen from the atmosphere into reactive forms than all of the planet's natural terrestrial processes combined. The production of nitrogen fertilizers, ineffective agricultural use and leakage of nitrogen, untreated urban waste water, and the burning of fossil fuels, which releases N_r into the atmosphere, have been identified as the main causes of pollution. Excessive nitrogen in water can cause huge algal blooms, sucking oxygen out of the water and creating so-called 'dead zones'. In the air, nitrous oxide (N^2O) is a potent greenhouse gas that is 200 times more powerful than carbon dioxide (CO^2), thereby contributing greatly to ozone depletion in the stratosphere. Increased nitrogen in the soil can also upset the balance of ecosystems and reduce biodiversity.

On a planetary scale, the additional amount of nitrogen activated by humans is now so high that it significantly upsets the global cycle of this important element. The planetary boundary for human modification of the nitrogen cycle appears to have been passed, due to the release of more N_r per year into the biosphere than is acceptable. It seems from this, as in other instances of environmental damage, that we continue to fail the planet because of our actions and we do it inadvertently.

3.2.9. *Ozone layer depletion*

In the previous section I have pointed out how the nitrogen cycle contributes to the depletion of the ozone layer. In this section I want to highlight the destructive force of the

carbon cycle on the ozone layer. According to Planet Earth Herald (2014), the depletion of our ozone layer has been mainly attributed to the release of chemical pollution containing chlorine and bromide. Once the chemicals reach the upper atmosphere, they cause ozone molecules to break apart to form a hole, the largest of which is over the Antarctic. The atmosphere blocks many of the harmful UV rays from the sun that can damage living tissue. The National Oceanic and Atmospheric Administration (NOAA) has been keeping data relating to atmospheric carbon dioxide (CO²) levels since March 1958. These levels are expressed in parts per million (ppm) and the data are made freely available to everybody with the hope that their wide dissemination will lead to greater understanding and new scientific insights into the atmospheric health.

According to their data,⁶⁹ as reflected in table 3, we can observe an increase of nearly 100 ppm in CO² levels in the atmosphere:

DATE	MONTH	CO ² ppm
1958	March	315.71
2016	February	403.61

Table 3: Atmospheric Carbon Dioxide levels in parts per million

The rise from March 1958 to February 2016 is only 87.9 ppm. This seems insignificant but according to CO²Now⁷⁰ the concentration of CO² in the atmosphere is increasing at an accelerating rate, from decade to decade. The upper safety limit for atmospheric CO² is 350 ppm, but CO² levels have consistently been higher than that since 1988.

Conradie (2008:27) says that because CO² is recycled through the process of photosynthesis, the balance is disturbed when more carbon dioxide is released as a result of burning carbon and when less carbon dioxide is absorbed through photosynthesis. The problem is complicated by a number of factors:

⁶⁹ <https://www.co2.earth/daily-co2?noaa-mauna-loa-co2-data.html> (Date released: 15 February 2016) (Accessed on 15 February 2016).

⁷⁰ <http://co2now.org/> (Accessed on 15 February 2015).

- The tendency of industrialised countries to increase the use of fossil fuels.
- The world's human population's consumptive habits, especially Western society, which has preached consumerism as the good life.
- The hope and aspiration of the world's poor to attain the standard of living that they observe amongst the affluent.

According to Porter (2014), the carbon problem can be reduced by curbing population growth. Population growth is, however, only one factor contributing to global climate change. During the 20th century, emissions of carbon dioxide grew 180% faster than the population in poor countries and 60% faster than the population in rich countries. Shifting the world's economy into more sustainable energy sources and away from fossil fuels remains a very promising strategy.

3.2.10. Fracking

The last human infringement on nature that I will discuss is fracking. Fracking is a shorthand term for hydraulic fracturing and anecdotal evidence indicates that few people know what the process of fracking entails. The technology of fracking is used for the extraction of shale gas, or methane, from deep under the earth. Its extraction requires drilling deep into the earth for between 4-6 kilometres (2.5-3.7 miles) through underground freshwater supplies. When the drilling reaches the level where the gas is found, enormous quantities of water, combined with sand and a cocktail of toxic chemicals, are pumped at high pressure into the rocks. The injection of sand particles causes the rocks to fracture and to release the gas. The gas is then captured and piped back to the surface by means of the same equipment.

The process of fracking sounds straightforward, what then makes this process so environmentally unfriendly? Are we not constantly searching for cleaner energy resources where gas is such a resource? Debates have arisen between those in favour of the potential economic benefits that fracking may hold, and those opposing fracking because the process

and its by-products are dangerous to the environment. Fracking may entail economic benefits in tapping rich gas reserves, but can economic benefits ever outweigh the environmental degradation that it may bring about? The environment has often played second fiddle to that of economic welfare. Should this tendency be tolerated?

According to Fig (2011:26), Hedden, Moyer and Rettig (2013:9) and Zucker (2014:44), fracking is detrimental to the environment. Fracking's harmful environmental implications entail local air pollution, earthquakes and especially the pollution of clean water supplies. The latter aspect is one of the main reasons why Germany proposed a partial moratorium on hydraulic fracturing for the next seven years. According to Kerpon (2014), the German Environmental Minister, Barbara Hendricks, states that the protection of drinking water and health has the highest value for them. Improperly handled wastewater used during the process of hydraulic fracturing could pollute groundwater and underground fresh water supplies. The moratorium proves Germany's commitment to ask tough questions first before drilling.

In addition, Iacuri (2014) reports that fracking's hefty consumption of water is especially concerning; wastewater disposal is also one of the biggest issues associated with fracking because 10% to 40% of the chemical mixture injected into the ground during fracking flows back to the surface during the development of the well. The impact of fracking on both climate change and local air pollution is similar to its impact on water. Those living near fractured wells are potentially at risk of health threats given the increased amount of volatile organic compounds and air toxins in the area.

Of the ten issues I have discussed above, three boundaries already appear to be crossed: *biodiversity* is declining much faster than any natural rate; the *concentration of carbon dioxide* in the atmosphere is already causing significant changes to our climate and ecosystems; and while converting nitrogen into fertilizer has helped feed the world, *nitrogen pollution* has become a significant, underappreciated environmental threat (WWF LPR 2014:10).

3.3. SUCCESSES AND OTHER ISSUES

Despite my discussions on failures regarding environmental preservation, I wish to point out that there are people who are actively doing their part to live in unity with nature, rather than against it. In a subsequent chapter I will discuss the driving force behind this positive mind-set. For now I will identify some successes with regard to environmental preservation.

The social media plays a big role in promoting constructive environmental actions. Networks for civil rights activists, environmentalists and advocates of healthy, sustainable living have created opportunities for like-minded people to connect with each other online. These sites and forums are everywhere, especially niche environmental forums, and many allow individuals to participate actively in making a change. The following list of social media sites⁷¹ and forums are but a few of such cyber-places promoting environmental activism:

HUGG - Tree hugger's own green social news site; **CARE2** - an online community focusing on green causes; **ECOURLS** - promotes green news and information; **MINDBODYGREEN** - is a social news site that focuses on eco news; **CELSIAS** - an online environmental community based on actions, not words. Members participate in green projects, track progress, and share results; **CHANGE.org** - a clear, simple activist forum; **CARBONRALLY** - rather than supporting and connecting with other green minded people, you compete with them; **MAKE ME SUSTAINABLE** - this site helps members create personalised carbon calculators; **TOPIC** - a forum for green issues focused on politics, news and law; **RATE IT GREEN** - is straightforward: you join, you rate; **TREEHUGGER** - a social news network; **GREEN OPTIONS** - home to many of the best green blogs online with its own forums; **RESPONSIBLE WORLD CITIZEN** - a sustainable conscious business community platform; **PLANET GREEN** - a

⁷¹ <http://webecoist.momtastic.com/2008/09/17/25-environmental-forums-and-social-media-sites-get-connected-with-the-guide-to-green-online-communities/> (Accessed on 16 January 2015).

forum; **GREEN BUILDING TALK** - a green building community where you can learn about green building products and methods; **ENVIROLINK** - a forum emphasising how green issues impact consumers and health; **ABOUT MY PLANET** - a green blog with an attached forum; **THE ENVIRONMENT SITE** - is a purely green discussions forum; **AVAAZ.org** is also an online community that focuses on green causes.

This is not a complete list. In addition, there are many action groups fighting and standing for various environmental concerns across the globe. On local soil the Rhino Action Group Effort (RAGE) is actively fighting the scourge of rhino poaching in South Africa. The Green Scorpions are South African Environmental Management Inspectors (EMIs), who are responsible for enforcing environmental law and subsequently chasing down those who trespass this law. The primary areas of their enforcement include biodiversity, protected areas, pollution and waste, as well as coastal, marine and environmental impact assessment. People collectively also do much to save our natural resources.

The Nimiipuu (Nez Perce) people (in North-West America) have committed themselves to twenty-nine forest restoration projects, with about five thousand acres to carbon sequestration and the planting of Douglas fir and Ponderosa pine saplings (Colombi 2012:74,92). These are projected to absorb a year's worth of carbon dioxide from nearly five hundred thousand cars, trucks, and SUVs. In Thailand community forestry is practiced as a solution to deforestation. Participation of local people in the management of forest resources is a promising way to conserve remaining forest areas. McKibben (2007:73) says that Cubans have created what may be the world's largest working model of a semi-sustainable agriculture, one that relies far less on oil, chemicals, and the shipping of vast quantities of food back and forth. Cuba has thousands of *organopónicos* – urban gardens – and this is something that is even promoted in South Africa. This is a good initiative, but the driving force is mainly economic and not ecological.

Scientific advancement is being utilised by many countries to obtain cleaner forms of energy, such as geothermal resources and technology; wind power generation; hydrogen

energy; using waste heat from power plants; cogeneration;⁷² and solar energy applications. With regard to the latter, the use of solar panels for electricity and even solar geysers, justifies a few extra observations. According to an article⁷³ in the City Press, the Renewable Energy Independent Power Procurement Programme (REIPPP) has been a success as far as luring power investment to the country is concerned. The bids to date represent more renewable energy investment, in terms of money and megawatts, than all other renewable power projects in Africa over the past 20 years. Google⁷⁴ invested 80 million dollars to open 6 solar energy plants in California and Arizona; currently⁷⁵ Google receives 37% of its energy from renewable sources and hopes to be 100% renewable in the foreseeable future.

The examples supplied here are scanty, but it is important to show that there are positive actions going on behind the scenes of destruction, and that we can do the right thing if we have the will to do it. The problem still remains: Why don't more people make an effort to change their way of thinking, to embrace a different mind-set and to become actively engaged in fighting for our environment?

3.4. SUMMARY

In an effort to answer the above question, I am of the opinion that many people are driven by power and profit and that they are more concerned about having rather than being. These are anthropocentric tendencies and in my discussions above I have pointed out the results of such tendencies. I have also suggested that if we could be less concerned about ourselves and care more about the environment, then we may achieve successes that can inspire others to do the same.

If populations continue to grow to such an extent that overpopulation results, then more pressure will be placed on resources due to overpopulation. In the light of this

⁷² Cogeneration refers to the combined production of electrical power and thermal energy by the sequential use of a fuel or fuels.

⁷³ Published on 23 June 2014, page 4 of the Business section.

⁷⁴ <http://mashable.com/2013/11/14/google-solar-plants/> (Accessed on 18 January 2015).

⁷⁵ <https://www.google.com/green/energy/> (Accessed on 17 January 2016).

overpopulation will be driving many issues, as discussed in this chapter, so curbing it should be a priority (Conniff 2014). The flip-side of this entire debate has to do with how we live, what we consume, how we produce the goods we consume, and how we dispose of them, and the energy we use in all of this. If we want to have a world worth living in, we are going to have to embrace new ideas, new behaviours and new designs for living. This is not a futuristic exercise because we have Deep Ecology as a philosophy that is suitable for the purpose of overturning environmental destruction. Deep Ecology is, however, not being embraced to the extent that I feel it should be embraced. Taking everything into consideration that I have touched on in the previous three chapters, I will now move on to give an in-depth discussion of Deep Ecology as a philosophy, and I will argue that it is a suitable philosophy to be embraced in order to amend not only our fragmented selves, but also to amend the planetary injustices done by humanity.

CHAPTER 4 – DEEP ECOLOGY VERSUS SHALLOW ECOLOGY

4.1. INTRODUCTION

The current state of environmental stress inspires much retrospection and introspection amongst global communities. As a result environmental scholars busy themselves with investigating possible solutions centred on rejuvenating the earth's current status. This is a sluggish process if we take two aspects into consideration: the negligible success of attempts at environmental preservation and the dominant environmental outlook of people around the world. One 20th century movement that has contributed towards addressing our environmental outlook is Deep Ecology. This is an ethical system that focuses on reversing the current global environmental trends by re-pondering the human-nature relationship (Ulrey 2010:10). Deep Ecology seeks an alternative to the current trends of vast environmental degradation through the creation of environmental ethics. It promotes a shift away from purely quantitative measures of happiness and it recommends that 'quality of life' be given precedence over our predominantly material standards of living. This may be achieved by abandoning the prevailing model of infinite economic growth. Taylor (2008:42) considers the Deep Ecological movement to be a stunning revolution in environmental philosophy.

The Deep Ecological concept may be unfamiliar to many people, but Deep Ecology is a philosophy that is more than half a century old. That many find Deep Ecology and its tenets unfamiliar can be tested by simply asking randomly if people are aware of Deep Ecology and what it entails. Generally, it would be the exception to the rule if a single individual could be found among those asked, who could answer the question adequately. This is troubling; my dissertation is written from the belief that every person on this planet should be familiar with Deep Ecology because it not only diagnoses the current environmental crisis, but also criticises the dominant streams of religion and philosophy that contribute to the desacralizing of nature and promoting its destruction, as I have argued in Chapter 2. Further, Deep Ecology reconnects us with nature and overturns anthropocentric and

dualistic belief structures, structures which not only alienate people from nature but also people from people.

In this chapter I will show why I advocate a widespread adoption of Deep Ecology as a response to the environmental crisis. Throughout this chapter I want the reader to keep in mind the picture I have sketched in Chapter 3 with regard to the repercussions of living outside of the Deep Ecological tenets. Throughout my discussion thus far, the question was frequently asked: Which ideology is highly suitable to embrace in order to address the despoliation of nature? The answer is Deep Ecology. I will argue that Deep Ecology is the platform we should utilise in order to reconnect people with nature and to overturn the anthropocentric and dualistic beliefs that alienate us from nature and from each other. To my mind, Deep Ecology is a platform that can contribute to the development of eco-philosophy, eco-psychology and intellectual discussions, thereby helping people to articulate and develop their own ecosophy⁷⁶ both individually and as part of a community (Glasser, 1996:159).

In the next section I will focus on the origin and tenets of Deep Ecology.

4.2. ORIGIN AND TENETS OF DEEP ECOLOGY

At the beginning of the twentieth century George Santayana made a scathing attack on the anthropocentrism (regarded as a product of the hypertrophied rationality of the Enlightenment – Beam 2014:1) of Western philosophy and the dominant version of Christianity. In his speech *The Genteel Tradition in American Philosophy*, presented at the University of California at Berkeley in 1911, Santayana catalysed an historic turning point in the development of the contemporary search for an alternative worldview and an environmental ethic that would not be subjectivist, anthropocentric or materialistic. Santayana was on the right track, but it took a very long time for such a theory to see the light.

⁷⁶ According to Devall (2001:23-24), the term ecosophy refers to a philosophy of ecological harmony/equilibrium.

Leopold also expressed a Deep Ecological worldview in his now famous *Land Ethic* essay, as published posthumously in 1948 in *A Sand County Almanac*. Leopold hypothesized an ever-expanding global community that, he imagined, would grow to include all human and non-human life, calling it 'the land ethic'. He argued that this ethic would only emerge in the wake of substantial changes in both historically specific social structures and biologically anchored instincts (Smith 2011:61). Leopold therefore supplied us with one of the earliest and best-known examples of a transformation to a deeper ecological approach, as is now being propagated by Deep Ecology. Here I wish to recall my reference to Loy (2003:94), who says that Leopold's insights were too revolutionary for the environmentalism of his era, and that their implications went unnoticed until the 1970s.

The 1970s was the era in which Deep Ecology sprang fully clothed from the head of the Norwegian philosopher, Arne Naess. In 1973 he published *The Shallow and the Deep, Long Range Ecology Movements: A Summary*. This five-page paper is considered to be the inaugural document of the Deep Ecology Philosophy, releasing for the first time Naess' principles of the social responsible movement called Deep Ecology. According to Forsythe (2003:75) these principles are as follows:

- A metaphysic of interrelatedness
- An ethos of biospherical egalitarianism
- Values of diversity and symbiosis
- An anti-class posture
- An opposition to pollution and ozone depletion
- Value of complexity
- Emphasis on local autonomy and decentralization

In this five-page paper Naess describes a deeper, more sensitive openness to ourselves and nonhuman life around us, and asks us to keep asking questions (in the Socratic Western philosophical tradition) about human life, society, and nature (Messersmith-Glavin 2011:12). Due to its eclectic and interdisciplinary attitude, Deep Ecology has become an influential green form of spirituality, ethics and philosophy since its inception in 1973.

Deep Ecology is also widely recognised (though I think not widely enough) within environmentalist enclaves. According to Deep ecologists, environmental philosophy must recognise the values that inhere objectively in nature, independently of human wants, needs or desires (Nelson 2008:207). In a more narrow sense, Deep Ecology represents the psychologising of environmental philosophy, referring to an egalitarian and holistic environmental philosophy founded on phenomenological methodology.

The central insight of Deep Ecology, according to Fox (1984:196), revolves around the idea that we can make no firm ontological divide in the field of existence. This means that there is no bifurcation between human and non-human realms. This kind of ecosophy is deeply influenced by Gandhi's vision of non-dualism (Naess 1987:38). In addition, Nelson (2008:206-207) says that Deep Ecology rests on two foundations: an axiology of *biocentric egalitarianism* and an ontology of *metaphysical holism*, which asserts that the biosphere does not consist of discrete entities, but, rather, of internally related individuals that make up an ontologically unbroken whole. This basic insight has been developed into two 'ultimate norms,' considered to be the *sine qua non* of Deep Ecology. The first is self-realisation and the second is biocentric equality. I will now explore these two norms briefly.

Self-realisation implies that all things in the biosphere have an equal right to live and blossom and to reach their own individual forms of self-realisation within the larger Self-realisation. According to Fox (1990:68), such a transpersonal ecology emphasises a fundamentally different kind of self to that of the contemporary tripartite model of the psyche. He says (1990:59-60) that most of us recognise a *desiring-impulse* aspect, a *rationalising-deciding* aspect, and a *normative-judgmental* aspect of the self. The desiring-impulse of the self wants gratification and wants it *now*; it functions without particular regard for others, for the future, or for the constraints that are imposed by reality in general. The normative-judgmental aspect of the self, places standards or expectations on our behaviour, whether in the moral sphere (where it decrees what *ought* to be and demands conformity to a certain code of conduct) or in other spheres of activity (where it expects the attainment of certain standards of performance). It also judges us critically if we fall short of its standards or expectations. The rationalising-deciding self sees itself as the decision

maker or the locus of control with respect to the three selves. This means that it mediates between the competing demands of the desiring-impulsive self, the normative-judgmental self, and the constraints imposed by reality.

What does this have to do with Deep Ecology? A fundamentally different vision of the self from that portrayed by the tripartite conception of the self is emphasised by Deep Ecology. Whatever their qualitative differences, the desiring-impulse self, the rationalising-deciding self, and the normative-judgmental self all refer to a narrow, atomistic or particle-like conception of the self, whereas the transpersonal self refers to a wide, expansive, or field-like conception of the self. This, says Fox (1990:69-70), has the interesting, even startling consequence of ethics (conceived as being concerned with moral 'oughts') being rendered superfluous. This is because if one has a wide, expansive, or field-like sense of the self, then (assuming that one is not self-destructive) one will *naturally* protect the spontaneous unfolding of this expansive self (the ecosphere or the cosmos) in all its aspects. Devall (1985:66) agrees that the modern Western *self* is defined as an isolated ego which strives primarily for hedonistic gratification or for a narrow sense of individual salvation. The latter is important because Deep Ecology's perspective of self-realisation embraces an expansive or transpersonal sense of the self, where 'Self' stands for 'oneness' or 'organic wholeness beyond humanity to include the nonhuman world.' The Deep Ecological sense of the self can therefore be understood as the sense of being connected with something greater than the individual ego. Such a self-realised individual is driven by the need to live simply within the universe and perceive his/her external environment as sacred, holy and precious, rather than as normal, everyday and familiar (McComb 1997:5).

Davis (2011:139) went on to explore the connection between eco-psychology and transpersonal psychology and the cultivation of environmentally responsible lifestyles. For the most part, eco-psychology presents two images for the relationship between humans and nature: (a) nature as home and its inhabitants as family and (b) nature as self, in which self-identifications are broadened and deepened to include the non-human world. These views stand in contrast to views that nature is dangerous and needs to be controlled and dominated, or that nature is merely a useful resource which needs to be protected,

conserved, and nurtured for ourselves and future generations. A transpersonal view of human-nature relationships can include these two images. To conceive nature as an expanded and more inclusive self may be a necessary step in developing a more transpersonal view of the human-nature relationship.

Deep Ecology should not be compartmentalised as a moral theory *per se*, even if it is classified under ecological philosophy and environmental ethics, because Deep Ecology is more concerned with ‘how we experience the world’ than defining its ethics or morals (Ulrey 2010:12). Devall (1984a:8) quotes Naess in saying that if you experience the world in a particular way, then you don’t kill. If you articulate your experience, then it can be a philosophy or religion. Deep Ecology is not an attempt to *discover* intrinsic value or *develop* universal moral rules, but a *reshaping and re-directing* of human consciousness. Therefore the concepts of *self*, *self-realisation*, and *self-in-Self-realisation* (Katz 1991:84) become imperative in fully appreciating Deep Ecology. Next I will discuss the second ‘ultimate norm’ of Deep Ecology, that is, biocentric equality.

Biocentric equality refers to going beyond the ‘self’, defined as an isolated ego striving for sense-gratification or individual salvation. Biocentric equality is intimately related to the all-inclusive self-realisation as discussed above — if we harm the rest of nature then we are, in fact, harming ourselves. According to this concept, there are no boundaries and everything is interrelated. This insight inspires us to respect all human and nonhuman individuals in their own right as parts of the whole, without feeling the need to lay down hierarchies of species, with humans at the top (Devall & Sessions 1985:68). According to this norm, all organisms and entities in the ecosphere are equal in intrinsic worth.

These are the central tenets of Deep Ecology, but Deep Ecology stands for much more than these two insights. In April 1984, George Sessions and Arne Naess summarised more than a decade of thinking on the principles of Deep Ecology by articulating these principles in literal, neutral terms, hoping that they would be understood and accepted by persons from different philosophical and religious positions (Devall & Sessions 1985:69-70). This formulation is known as the Deep Ecology Platform (DEP); an eight-point platform

constituting the essential principles of Deep Ecology. Devall (2001:23) says that this eightfold platform is a pedagogical tool that can assist people in developing their own ecosophical statement and to stimulate dialogue between supporters and critics of the Deep Ecological movement. The platform also helps to bring about a rethinking of societal values. My knowledge of the eight DEP points is drawn mainly from Taylor & Zimmerman (2005:457). However, I will elaborate on each of the eight DEP points in order to explain them in more detail.

1. Human and nonhuman life has inherent value

Deep Ecology endorses the view that all living things are alike in having value in their own right. This is the 'biospherical egalitarianism' referred to earlier and relates to the point Fox (1984:196) makes that no ontological divide ought to be made between human and nonhuman existence. Existence includes every individual, all species, watersheds, habitats, landscapes and ecosystems (Devall & Sessions 1985:70). Inherent value is therefore alike in both human and nonhuman existence — we exist within a horizontal rather than a vertical relationship to all other beings (Lenz 1994:159). We exist within nature, not above or outside of nature (Fox 1995:80). As soon as we start to realise that ontological boundaries between living beings are illusory, we will come to realise that biospherical interests are also our own interests (Nelson 2008:206-207). This is why it is important for humans to change the basic perception they have of themselves and why it is important to nurture an image that will reflect a deep-seated respect and reverence for the ways and forms of all life-forms. Such a reconstruction is not something new; Shepard made this point before Deep Ecology came to its fullness. According to Shepard (1969:3):

If nature is not a prison and earth a shoddy way-station, we must find the faith and force to affirm its metabolism as our own — or rather, our own as part of it. To do so means nothing less than a shift in our whole frame of reference and our attitude towards life itself; a wider perception of the landscape as a creative, harmonious being where relationships of things are as real as the things. Without losing our sense of a great human destiny and without intellectual surrender, we must affirm that the world is a being, a part of our own body.

The stream of thought that locates humans as part of and not apart from the rest of nature, is not only promulgated by Rachel Carson's *Silent Spring* (1962) and Stewart Udall's *The Quiet Crisis* (1963), but it can be traced, according to Devall (2001:19), as far back as the pre-Socratic Greek philosophers and eventually to the Sumerians in the *Epic of Gilgamesh*. The first defining principle of the DEP also suggests that the average human fails to appreciate the innate value of all things, and thus also fails to appreciate the self.

2. *Richness and diversity of life contribute to realising these values, and are themselves valuable*

This point stresses inherent value and maintains that so-called 'lower' species of life also contribute to the richness and diversity of life. It reinforces the importance of biodiversity in the world and that everything is connected to everything else. In their infinite relationships, all things help to contribute to the richness and diversity of life. The web of natural phenomena is not complicated by the inclusion of all things, but is lent a beautiful complexity by all things. This reminds us of the metaphor of Indra's Net as discussed in Chapter 2. There is a second aspect to this Deep Ecological platform point, namely that life itself, as a process over evolutionary time, implies an increase of diversity and richness. Complexity, as referred to here, is different from complication. Urban life may be more complicated than life in a natural setting without being more complex in the sense of its multifaceted quality (Devall & Sessions 1985:71). Lower life forms have inherent value and are not stepping-stones to higher or rational life forms. The fictional character Elizabeth Costello (Coetzee 1999:34) asks us to show sympathy with all life forms, for if we show sympathy then violence against other life forms will be rendered impossible. We need to have respect for the richness and diversity of life. Costello (Coetzee 1999:34) draws an analogy with the Holocaust: "The particular horror of the camps ... is that the killers refused to think themselves into the place of their victims, as did everyone else. They said, 'It is they in those cattle-cars rattling past.' They did not say, 'How would it be if it were I in that cattle-car?'"

Not everyone will agree with Costello with regard to having respect for the richness and the diversity of life. Levinas (Marais 2001:4) is of the opinion that respect for the richness and diversity of life is not possible because human subjects seek to realise their free will and, by affirming themselves, they annul all that resists this pursuit. Levinas continues by saying that humans exist 'for-oneself', and because of this 'ontological solitude', the autonomous subject is a self-sufficiency that does not care for other beings. Although this may be a human trait, I do not agree with Levinas. According to me, such 'ontological solitude' is a result of the way in which our thinking has been moulded by capitalistic consumerism and anthropocentrism. This mind-set can be changed, and I maintain that Deep Ecology can assist in this process.

3. *Humans have no right to reduce richness or diversity except to satisfy vital needs*

This platform point stresses that the inherent value or intrinsic worth of something or someone may only be reduced in order to satisfy the vital needs of an individual. Not much has been written, however, on the term 'vital needs'. The term, says Taylor (2005:457), is left deliberately vague to allow for considerable room in judging what will constitute as a 'vital need'. Differences in climate and related factors, together with differences in the structures of societies as they now exist, must be considered (for example, snowmobiles are nowadays necessary for some Eskimos in order to satisfy their vital needs). Furthermore, people in countries that have richer resources cannot be expected to make an overnight reduction in their excessive interference with the nonhuman world. Reduction to a moderate level of interference will take time and interim strategies need to be developed. However, this does not justify the present complacency (Devall & Sessions 1985:71). According to Deep Ecology, nature can no longer be viewed as a mere resource for human use and profit; it must be seen as a partner and model in all enterprises. This partnership will require that we learn to identify with the whole ecosphere and it would involve a radical change of consciousness.

4. *Human life can flourish with a substantial reduction in human population, which is needed for the flourishing of nonhuman life*

In Chapter 3 I discussed in detail the situation regarding human population. Deep Ecology deems it crucial to curb population growth. This is envisaged against the backdrop of tremendous rates of consumption and waste production, as pointed out in Chapter 3. If we want to restore and regenerate nonhuman life, we need to curb population growth. This does not imply that we must exterminate humans left, right and centre. It simply means that we need to look at our families and the amount of children we wish to have. We need to bring down fertility rates and thereby stabilise the population growth to such an extent that a sense of balance may be attained which is in tune with the earth's carrying capacity. In this regard, Ehrlich (Gruen 1994:310) wants human numbers and human behavior to be brought in line with the constraints they place upon the earth. Van De Veer and Pierce (2003: xxviii) agree that this will ease the pressure that people place on natural resources, habitats and the atmosphere.

Deep Ecology faced fierce criticism for this DEP point. However, I concur with Taylor (2008:34), who makes it clear that Deep Ecology is not 'against civilization, against science [or] against humanity'. It does however oppose human-centeredness, anthropocentrism and the view that the world exists solely for the sake of humans. Deep Ecology is not opposed to science, which means simply knowledge, but it does oppose science when it is misapplied, the worship of technique and technology and the perversion of science called scientism. Deep Ecology is not opposed to civilisation but to industrial cultures. Supporters of the Deep Ecology movement, like myself, are united by a long-range vision of what is necessary to protect the integrity of the Earth's ecological communities and ecocentric values. A reduction in population is essential for this purpose. Unfortunately some enthusiastic environmentalists, who claim to support the movement, have made claims that are misanthropic in tone (Belshaw 2001:279). Consequently, supporters of the Deep Ecology movement are considered anti-human. In defence of the Deep Ecology movement, I wish to reiterate the first principle of the DEP that emphasises and recognises the inherent

worth of *all* beings, humans included. How can we be misanthropic if we value and recognise the intrinsic worth of all living things?

5. *Present human interference with the nonhuman world is already excessive and is worsening*

Since ecosystems are self-regulating, there is no need for human interference. However, this does not imply that humans should not modify ecosystems — humans have done this since the dawn of humanity. Humans are part of nature and are expected to interfere in their environment according to their needs. The nature and extent of humanity's interference (driven by wants) is however still considered to be too excessive. Many people realise that human interference is excessive. However, I think that they suffer from what is known as Ostrichism.⁷⁷ This means that many people still do not know what the essence of the philosophical theories is on which they build their life-foundations and ecological viewpoints. Elgin (1993:14) says that the human race must start to recognise how dangerous our excessive interference is to the Earth's ecosystems. Does this not imply that humanity should begin to live consciously in a harmonious relationship with the rest of the web of life? To my mind, human interference has for too long allowed to be excessive. I hold it as self-evident that this should stop because it has done more harm than good. Humankind should start to realise that nature does not need humans to survive, but humans cannot survive without nature. A paradigm shift is therefore of paramount importance.

6. *Economical, technological and ideological policies must be changed in a way that leads to states of affairs deeply different from the present*

According to Lenz (1994:159), Deep Ecologists reject the premise that the world's ecological problems can be solved through activism, legislation, better resource management, or the application of scientific expertise. Devall and Sessions (1985:73) comment that economic growth, as conceived and implemented today by the industrial states, is incompatible with the first five points of the DEP. There is only a faint

⁷⁷ The deliberate avoidance or ignorance of conditions as they exist, considered as a sort of self-delusion.

resemblance between ideal sustainable forms of economic growth and present policies of the industrial societies. The term ‘sustainable’ still means ‘sustainable in relation to humans’. There is prestige in vast consumption and waste production; things are valued as means to an end. In order to implement deep changes, we will have to change our thinking completely. To make these changes, new ideals and mind-sets need to come about, and thus, new policies must emerge on how humans treat the environment. This can be done through Deep Ecology. However, this cannot be done overnight — it will take time to transform every single part of human life (Ambrosius 2005:3). The rapidly increasing impact of technology on the world, says Hit (1999:618), has only heightened the urgency for the need to reconsider the sublime. He says that the sublime is more relevant than ever before in an age in which humankind, in its moments of hubris, imagines that it can ensure its own survival through technological means, that it will ultimately win its war with nature. The fact that we *do* have more control over nature than ever before, due to technological advances, has undoubtedly contributed to the traditional natural sublime being seen as out of date.

7. *The ideological change must involve appreciating the inherent value of all life, rather than continually increasing the material living standard*

I will show in Chapter 5 how the materialistic conception of the good life may undermine the progress we make in the field of environmental wellness. This platform supports a simplified lifestyle — quality of life should take precedent over quantity of possessions and a higher level of happiness should be strived for instead of a higher standard of living. The seventh DEP point furthermore holds that all human cultures have a mutual interest in seeing earth and its diversity continue for its own sake. This means that humans should appreciate the inherent value of all life and see themselves in harmony with other beings and cultures, rather than pursuing a materialistic way of living.

8. *Those who subscribe to the foregoing points have an obligation to implement the necessary changes*

Adherence to the aforementioned seven rules places an obligation on every adherent to implement the proposed changes and to commit themselves to respect the intrinsic values of richness and diversity. In recognising the principle that all living beings have intrinsic worth, one may acknowledge that they are good for their own sake. Ambrosius (2005:3) says that subscription to these principles should bring about an intention of a better living, and in theory a better environment.

Adherents of Deep Ecology should fight for these values and for a change in the way the world operates. What Deep Ecology is aiming at is a better world as a whole, spawned by caring individuals. According to me, this is something that should be adopted by all humans because it makes sense to do so. I believe that the implementation of these principles will greatly assist us in overcoming environmental problems as well as social, political, economic and human relational problems.

Notwithstanding the above discussion on the positive aspects of Deep Ecology, the question may still be raised: Why should we adopt Deep Ecology instead of the ecological movement, in the sense of the well-known nature conservation movements that is currently active? Deep Ecology stands in contrast to the nature conservationist ideology. Deep Ecology considers these movements to be shallow in their ecological ideologies. Deep Ecologists thus call such movements Shallow Ecology. In the next section, I will briefly discuss Shallow Ecology.

4.3. SHALLOW ECOLOGY

In asking whether nature has the right to be protected or whether humans simply have a responsibility to protect nature, Campbell (1983:56) says that the most important distinction between the two (the right to be protected or the responsibility to protect) is whether the moral extension is anthropocentric or ecocentric. The answer to this question

will determine the focus of any environmental ethic – is it human or is it nature? In an anthropocentric ethic, nature warrants moral consideration, because the degradation or preservation of nature can in turn harm or benefit humans. In this view, it would be considered wrong to cut down the rainforests because they contain potential cures for human diseases. In contrast, an ecocentric ethic represents the idea that the universe is the originator of life. Thus nature warrants moral consideration because it has intrinsic value; it possesses value aside from its usefulness to humans. It would therefore be wrong to cut down the rainforests because it would cause the extinction of many plant and animal species. Fox (1990:66-67) says that when we move on to argue for the moral considerability of the nonhuman world (according to the theory of intrinsic value), we see that certain members or aspects of the non-human world are morally considerable *irrespective* of how one happens to feel about them personally. In other words, this happens regardless of how this approach may *inspire* one to feel a certain way towards certain members or aspects of the non-human world. Such objectivist, intrinsic value theory approaches are ultimately normative-judgmental in character and they attempt to show that it is morally wrong to do some things to certain members or aspects of the nonhuman world while it is morally right to do other things. Intrinsic value theory approaches also attempt to show that one's personal likes and dislikes (prejudices) are not relevant with respect to the validity of such judgments. Finally, intrinsic value theory approaches also attempt to show that, wherever conflict occurs between intrinsic value-based concerns (that is, moral concerns) and anthropocentric, 'responsible management' concerns, it is the intrinsic value-based concerns (aligned with Deep Ecology) that ought to be given overriding priority.

Shallow Ecology is a typical anthropocentric ethic because it emphasises the tenet that sustainable economic growth and development for both developed and underdeveloped societies are desirable and indeed necessary in order to achieve goals of cleaner air and water as well as protection of natural resources for sustained use by a growing human population (Devall 2001:28). It differs from Deep Ecology in that it considers nature to be at the disposal of humans. Naess (1973:98) characterises the Shallow Ecology movement as a "fight against pollution and resource depletion ... central objective: the health and affluence of people in the developed countries." As a result, Shallow Ecological

movements are mainly concerned with minor reforms of the system without fundamental changes in values and practices. For instance, Conservation International⁷⁸ says: “We know that human beings are totally dependent on nature — and that when we work to save nature, we’re really working to save ourselves.”

Consequently, Shallow Ecology addresses a short-term, pragmatic reform approach that is mainly concerned with the symptoms of environmental disease, such as pollution and resource depletion. Emphasis is placed on conservation and efficient use of resources, rather than on rethinking the human/nature relationships. Unlike Deep Ecology, Shallow Ecology can be practiced successfully by *homo economicus* – a person who is embedded in the ecologically damaging system of capitalism (Reeder 1990:235).

Contrary to Shallow Ecology, the Deep Ecology movement advocates a deep questioning of mainstream values, beliefs and practices in order to arrive at intuitions that are at the level of ultimate norms and hypotheses. Forsythe (2013:76) says that the word ‘deep’ in the title of the philosophy signifies the level of thought that Naess wished its followers to strive for, namely wanting Deep Ecologists to ask more meaningful questions, pushing not only for the examination of society as it exists but for the further investigation of what kind of society would be best for maintaining a balanced system. Devall and Sessions (1985) reiterate this issue by emphasising the need to ask more searching questions about human life, society and nature. In contrast to Shallow Ecology, Deep Ecologists ask why and how. The shallow approach stops before the ultimate level of fundamental change, often promoting solutions based on consumption-oriented values and profit-driven methods. For Shallow Ecologists, nature exists for instrumental use; it is an object void of inherent value. Different from this view, the Deep Ecology movement recognises the inherent value of all living beings in shaping environmental policies. Schein (2014:24-25) agrees with this view in his discussion of the conflicting ecological and ecocentric worldviews. Deep Ecology and Shallow Ecology should, however, not be seen as opposites. According to Drengson et al., (2011:107) there is common ground between Deep Ecology and Shallow Ecology. This common ground can be found in the fact that both movements acknowledge humans as

⁷⁸ <http://www.conservation.org/about> (Accessed on 13 January 2015).

having a negative impact on the natural world and they agree that this impact should be minimized.

Even though Deep Ecology, in my opinion, is a very sensible ideology to embrace, it does not escape criticism. There will always be critics and we should keep in mind that Deep Ecology is not practiced everywhere perfectly (Ulrey 2010:13). In what follows I will look at the criticism brought against this philosophical ideology.

4.4. CRITICISM

According to Ambrosius (2005:4), Deep Ecology has been accused of being too mystical, too religious, unrealistic, hypocritical and making claims that are too large, narrow-minded and anti-human. Bookchin (1987:22), considered to be Deep Ecology's leading critic (Messersmith-Glavin 2011:14), claims that Deep Ecology is a black hole of half-digested, ill-formed and half-baked ideas. He maintains that Deep Ecology is an ideological toxic dump, a bottomless pit which sucks in vague notions and moods of all kinds. Even Deep Ecology's principles of biocentric egalitarianism and metaphysical holism have elicited robust critique. In addition, Luke (in McMurry 1998:400), says that Deep Ecology, as a biocentric approach to repairing the schism between humans and nature, is so resolutely anti-humanist and irrational that it portends a new kind of totalitarianism. In response to the claim that Deep Ecology is, or threatens to be, a totalising worldview, it must be said that Deep Ecology is constituted by multiple perspectives or ecosophies, and is compatible with a wide range of religious perspectives and philosophical orientations. More recently, Beam (2014:1) draws attention to the accusation of Deep Ecology's presumed political naïveté, misanthropy, and indifference to social justice.

To my mind one of the most powerful contributing factors to criticism against Deep Ecology is due to the radicalism with which Deep Ecology has been associated. I will briefly explain the phenomenon of radical environmentalism before I start to discuss various criticisms against Deep Ecology. Taylor (2008:27) says that radical environmentalism commonly brings to mind the actions of those who break laws in

dramatic displays of direct action in defence of nature; actions which may involve civil disobedience and sabotage (also referred to as ecotage). In an article discussing various branches of radical environmentalism, Taylor (2008:28) shows how radical movements like the Earth Liberation Front (ELF), Earth First! (EF!) (the exclamation mark is part of its name), the tree-huggers and others who followed or preceded them, were inspired and shaped by drawing deeply from many sources. The Deep Ecological philosophy and organised Monkey-Wrenching campaigns are two of the inspirational sources of, among others, the ELF and the EF! In fact, shortly after its formation in 1980, leaders of EF! learned about Deep Ecology and instantly embraced it as their own spiritual philosophy (Taylor 2005:3-4). Taylor (2008:45) further points out that if it was not for Deep Ecology, the impact of Earth First! would have been far less significant than is now the case. He says further that as environmental studies and ethics courses proliferated on college campuses, so students who resonated with biocentric or ecocentric ethics were often drawn to radical environmental activism. Deep Ecology thus contributed significantly to the development and strengthening of radical environmental ideas and groups, providing activists with historical and philosophical foundations for their actions on the ground and an alternative lineage of thought to counter the more predominant, culturally acceptable ideologies. Noss (1983:13) goes so far as to assert that Earth First! is the ecological resistance embodiment of Deep Ecology.

Notwithstanding the perception that radical environmentalism can be lawless, Ambrosius (2005:1) notes that those who foment revolution are fighting for a better way of life because they have noticed some injustice in the world that needs to be put to a stop. As long as humans have been around, so has the relationship between human beings and nature. Concerns about the lack of resources, a decreasing number of species, a booming human population and an overall place in which to live, are real in our current highly destructive civilisation. Is it thus surprising that radical environmentalism is so widespread? All over the world people are willing to die for the principles in which they believe. What makes radical environmentalism so different? Ambrosius (2005:2) thinks that Deep Ecology as a radical environmental philosophy may very well lead us into something like Reich's new revolution. Reich (in Ambrosius 2005:1) writes:

There is a revolution coming. It will not be like revolutions of the past. It will originate with the individual and with culture, and it will change the political structure only as its final act. It will not require violence to succeed, and it cannot be successfully resisted by violence. It is now spreading with amazing rapidity, and already our laws, institutions and social structure are changing in consequence. It promises a higher reason, a more human community, and a new and liberated individual. Its ultimate creation will be a new and enduring wholeness and beauty - a renewed relationship of man to himself, to other men, to society, to nature, and to the land.

Even though Deep Ecology contributes significantly to radical environmentalism and provides it with a coherent philosophical foundation, the question still remains whether radical movements would ever have emerged without the eruption of ecotage (sabotage to save ecosystems and/or species). More deliberate monkey-wrenching campaigns unfolded in the 1970s, a decade before the formation of Earth First! Taylor (2008:52) concludes by stating that the Deep Ecology philosophy, the emergence of monkey-wrenching and conservation biology, have all clearly played key roles in the formation of radical environmentalism, but so have other streams of thought, especially those promoting or reinforcing perceptions of the sacredness of life, which animate many radical environmentalists. This sensibility provides a life purpose which drives the passions of such activists.

In this respect Engler (2010:96) remarks that a large proportion of the American public has been alienated by movements like Earth First!, Greenpeace, the Sea Shepherd Conservation Society, the Rainforest Action Network and the Centre for Biological Diversity. This is due to their civil disobedience and confrontational litigation. It is because of radicalism that alienated people tend to discard the principles of Deep Ecology. The fact however still remains: Deep Ecology is not, in its essence, a movement that incites ecotage and anarchy, but it is, in Reich's sense, a radical movement.

To return to the criticism levelled at Deep Ecology, I will subsequently discuss points of criticism from ecofeminists, social ecologists and theorists who claim that Deep Ecology is anti-human. In addition, I will look at criticism against Deep Ecology's biocentric

egalitarianism and its normative status. Finally, I will conclude this chapter by looking at criticism from vegetarians regarding animal rights.

4.4.1. Ecofeminist critique

Some of the fiercest criticism of Deep Ecology comes from ecofeminists. According to Ambrosius (2005:4), criticism from the ecofeminist movement is centred on the accusation that Deep Ecology mistakenly makes both men and women the cause of the environmental crisis. Spretnak (1987:11) maintains that the problem is androcentrism (male-centeredness) and not anthropocentrism (human-centeredness), as maintained by Deep Ecology. According to this view, a patriarchal society is responsible for the destruction of the biosphere and the development of authoritarian practices. Consequently, they should be held responsible for the environmental problems of our day. Moreover, it is claimed that the male definition of reality is normative and it is the fear of women and nature that set the stage for biocide. According to Spretnak (1987:1) the term anthropocentrism, as used by Deep Ecology, deflects our attention from the real problem of, and the real solution to, the ecological crisis.

Spretnak (1987:11) reminds us that Deep Ecologists concede that patriarchy has been responsible for violence against women and nature. However, while Deep Ecologists oppose the oppression of women and promote egalitarian social relations, they also warn us that getting rid of patriarchy will not necessarily solve the problem because it is easy to imagine a society with fairly egalitarian social relationships where nature is still used instrumentally. Taylor (2005:6-7) says that even such a fully egalitarian society could continue to use anthropocentrism to justify exploiting the non-human realm.

The question remains: Would the situation be different within a matriarchal society? I do not think so because the problem, according to me, lies in our thinking and not in gender relations.

4.4.2. Social ecological critique

Bookchin is considered to be the architect of social ecology. He is known for his insulting attacks on Deep Ecology as being intellectually incoherent, ignorant of socio-economic factors in environmental problems, given to mysticism and misanthropy, and for being an ideology that flirts with fascism (Taylor 2005:5). Bookchin also thinks that Deep Ecology overemphasises cultural factors, such as worldviews, religion and philosophy, in diagnosing the roots of and solutions to environmental problems, thereby minimizing the roles played by the social, political and economic factors inherent in global capitalism. According to social ecologists, Deep Ecology preaches a return to an organic social system that is attuned to nature. In defence of this claim, Zimmerman (AtKisson 1998:24) says that Deep Ecologists recognise this danger by calling not for a regression to collective authoritarianism, but for the evolution of a mode of awareness that does not lend itself to authoritarianism of any kind.

Bookchin's central philosophical problems with Deep Ecology lie in his criticism of its tendency not to make distinctions within human society and to blame 'humanity' in general, rather than specific human rulers. Bookchin (1987:222) accuses Deep Ecology of viewing nature as being what one sees looking through a picture window. He argues that Deep Ecologists maintain a strong distinction between humans and nature and between the city and the wild (Messersmith-Glavin 2011:15). I disagree with Bookchin because an important point Deep Ecology makes is the issue of biocentric egalitarianism. This means that a distinction is not made between humans and nature but between human behaviour and nature. In my opinion, Deep Ecology recognises the equal intrinsic worth of both humans and nature. I will elaborate on this point in section 4.4.4 below.

Returning to Bookchin and his accusation that Deep Ecology flirts with fascism, the liberal democrat and French scholar Ferry (Taylor 2005:6-7) maintains that Deep Ecology is incapable of providing guidance in moral decision-making. This, according to him, is because Deep Ecology fails to recognise adequately that human life has more value than

other forms of life. Ferry maintains that this promotes ecofascism,⁷⁹ meaning that humans are sacrificed for the benefit of the ecological whole. A counter-argument against Ferry comes from Bratton (1999:18), who says that Ferry is so eager to attack Deep Ecologists and other movements he considers to be part of the new ecological left that he has adapted an analysis of Nazi environmental philosophy to current politics rather than delving fully into national socialist history. Bratton's major argument against Ferry is that he under-reports the direct link between Nazi environmentalism and anti-Semitism and misses its importance as the deadly link in the animal protection case. This situation is ironic because Ferry accuses the environmental left and even the ecofeminists of racism. Bratton (1999:19) concludes that Ferry's arguments lack historic depth and presents the national socialist perspective on nature as more consistent and unified than is actually the case.

Considering the social ecologists' criticism, is Deep Ecology really politically naïve, misanthropic and indifferent to social justice? In defence of the Deep Ecologists' position, I concur with the point Beam (2014:1) makes: these accusations, even though generally unwarranted, can be explained by the reluctance of Deep Ecologists to develop a more comprehensive political philosophy. Taylor's rejection of anthropocentrism and commitment to diversity make him an attractive source for an ecocentric political theory. This shared conceptual foundation leads Taylor as well as Deep Ecologists to a political position that favours the steady state⁸⁰. Such a steady state exists within a decentralised network of meaningful communities, achieved and maintained by consensus on basic and intrinsic values. I argue that Taylor's emphasis on overlapping consensus and practical reason might correct some of the excesses of Deep Ecology, and I believe that Deep Ecology and Taylor's philosophy might strengthen each other. While the founding theorists of Deep Ecology were generally averse to dogmatic pronouncements on first principles, preferring instead that people might be brought to agree with their position through a wide variety of 'ultimate premises,' one consequence of this focus on effective political action

⁷⁹ Ecofascism, in its most extreme form, links the racial purity of a people to the well-being of the nation's land; calls for the removal or killing of non-native peoples; and may also justify profound individual and collective sacrifice of its own people for the health of the natural environment.

⁸⁰ The term 'steady state' refers to some kind of equilibrium in societal growth due to an onset of ecological scarcity. The term is in contrast to that of an industrialised full-speed-ahead growth mentality Available at: www.mmsi.org/pr/11_01/webking.pdf (Accessed on 21 April 2015).

has been the failure to develop a more comprehensive ecocentric political philosophy. As a result, Deep Ecology has been plagued since its inception by accusations of political naïveté, misanthropy and indifference to social justice.

4.4.3. *Anti-Human critique*

In addition to the above points of criticism, it is claimed that Deep Ecology is anti-human. Guha (1989:71) accuses the American Deep Ecological position of failing to address developing world problems, such as overconsumption and growing militarisation, in a tangible way because of their conviction that intervention in nature should be guided primarily by the need to preserve biotic integrity rather than human needs. The fourth principle of the DEP declares that a decrease in population is necessary for the flourishing of life and culture. However, according to me the valid question is rather: flourishing of life and culture for whom? The problem comes in when we consider that the fourth principle cannot materialise without a violation of the fifth principle.

The fifth DEP principle of Deep Ecology describes human interference as excessive. Does this mean that we should not interfere with a famine in a country like Ethiopia? Should we let nature take its toll, thereby fulfilling the fourth principle? As I maintained earlier, the point is not the interference *per se*, but *how* we interfere. Interference is necessary for the responsible stewardship of creation. However, it can be done obediently *or* disobediently. To my mind, it is disobedient interference that gave rise to the crisis we face today. According to Spretnak (1986:41), Bookchin makes a sound point when he claims that we consider humanity to overpopulate the planet and devour its resources while destroying its wildlife and the biosphere. The fifth Deep Ecological Platform principle does not consider humanity to be an ugly ‘anthropocentric’ thing which is a malignant product of natural evolution. Humanity is not the problem; rather, the problem is humanity’s way of thinking and conduct. I maintain that in the event of a non-human species overpopulating a biome to such an extent that it will bring about an imbalance in nature, even Deep Ecologists will on rational grounds take action to bring about a balance that does not pose any harm to all living and non-living beings. In this respect, Keller (2008:209) points out that the necessity

of exterminating ungulates, such as goats and pigs, for the sake of the health of fragile tropical-island ecosystems is one example. But Keller's view may be problematic when we take biocentric egalitarianism into consideration. It shows, if we take Keller's view to heart, that regard for the health of whole ecosystems might sometimes require that we treat individuals differently, because individuals of different species may have unequal utility (or disutility) for wholes. From this point of view, biocentric egalitarianism and metaphysical holism might be mutually exclusive and inconsistent with each other, to the extent that at least one would have to be abandoned, or perhaps both.

As regards the claim that Deep Ecology is anti-human, Byers (1992:33) questions if it is correct to say that environmentalists are 'anti-human, reactionary misanthropes' and if proponents of Deep Ecology are 'anti-rational airy mystics' According to him we should distinguish between being *misanthropic* (hating humanity) and being *anti-anthropocentric*. There is a difference between saying we want to get rid of all human beings, and saying that humans are not the most important species on the planet. In addition, Fox (1989) emphasises Deep Ecology's positive and constructive task of encouraging ecocentric egalitarianism and its negative or critical task of dismantling anthropocentrism. Ecocentrism recognises that other species and ecosystems have intrinsic value and a right to existence apart from any 'instrumental' or 'use' value to humans. Thus, to equate ecocentrism with misanthropy is, according to Byers, a complete misunderstanding. Deep Ecology philosophers argue that if you really love humans you must love and defend the biosphere that is their only home. Byers (1992:33) maintains:

Chico Mendes, the Brazilian peasant who was murdered because he organised rubber tappers and other forest people to non-violently oppose the cutting of the rainforests upon which their lives depended, is sometimes portrayed as a true 'tree hugger,' willing to give his life to defend the forest. This is a misunderstanding of Chico Mendes. His real wisdom was to recognise that one cannot be a 'people hugger' without being a 'tree hugger' and vice versa.

Central to this argument is the recognition that we can love and serve people only if we protect the whole ecological community that sustains them. However, Byers notes that, on an endangered earth, anthropocentrism can easily be labelled misanthropy if it promotes

further ecological degradation. What we do to the natural world, we ultimately do to ourselves.

4.4.4. Biocentric egalitarianism and the self

As I have pointed out earlier, Deep Ecology upholds biocentric egalitarianism. This principle does not place humankind above or below anything external to humanity. Biehl and Bookchin (1995:1) argue that Deep Ecologists emphasise an ungraded, non-evolutionary continuity between human and nonhuman nature, to the point of outright denial of a boundary between adaptive animality and innovative humanity. In addition, Wilber (2001:134) argues that Deep Ecology portrays humankind as merely one strand in the web of life, thereby adhering to a one-dimensional metaphysics. Paradoxically, by asserting that material nature constitutes the whole of which humans are merely a part, Deep Ecologists agree with the modern naturalist view that humankind is a clever animal capable of and justified in dominating other life-forms in the struggle for survival and power. A 'deeper' ecology would follow from discerning that the cosmos is hierarchically ordered in terms of complexities, but that respect and compassion are applicable to all phenomena because all of them (according to and for some people) are manifestations of the divine (Taylor 2005:7).

According to Nelson (2008:209-210), biocentric egalitarianism has been criticised as being misanthropic. Deep Ecology reduces humans from complex social beings to a simple species. In the estimation of ecological feminists, the idea of self-realisation is patriarchal. Plumwood (1993) argues that the notion of the expanded self produces 'boundary problems' which stem from the impulse of subordination. She argues that there are serious conflicts of interest between constituent members of larger wholes and that expansionary selfhood does not adequately recognise the reality of these conflicts. Plumwood (1993:178) continues by saying that there is nothing to guarantee that the needs of the rainforest should govern those of an individual: "Why should the needs of an individual not dictate the needs of the rainforest?"

Watson (1983:24) finds biocentric egalitarianism hypocritical. How can Deep Ecology desire that humankind be treated equally with nature? Why can nature be allowed to live out its full potential while humankind is not supposed to do so? Watson thinks that such a 'hands-off-nature' egalitarian anti-anthropocentric biocentric position is based on setting humankind apart. The ecosophical position is thus neither egalitarian nor fully biocentric because a fully egalitarian biocentric ethic would place no more restrictions on the behaviour of human beings than on the behaviour of any other animal. Watson is of the opinion that humans will only care about the environment if they see its usefulness for humans. However, in my opinion, this is the exact point that Deep Ecologists make. Humankind and nature can exist in perfect harmony, but there are still too many people who foster an extrinsic mind-set toward nature and even toward fellow human beings. Shallow Ecology not only fails to address this problem, it actually instils such an attitude in its reluctance to address deeper problems of the well-being of every living thing.

To my mind, it is a misinterpretation of the Deep Ecological viewpoint to see it as anti-human. Even though the DEP starts off by saying that human interference in nature is excessive, it does not claim that humans need to be eliminated altogether. Nature is also not something that is hands-off for humans, nor should humans be alienated from their environment. The inculcation of a new mind-set and the understanding and acceptance of the Deep Ecological principles should be the priorities.

Another important aspect that comes to the fore in the discussion on biocentric egalitarianism is the concept of the self. Diehm (2002:27) gives us an account of the self, the so-called 'expanded self,' as expounded by Plumwood (1991:14-15). Diehm shows how Plumwood suggests that because Deep Ecology has failed to question the structures of rational egoism, it ends up promoting a model of the self that takes egoism for granted as its starting point. Once this assumption is made, Deep Ecologists can see no other way to promote responsible behaviour than to expand the self to include others. In this way, self-realisation becomes an extension of egoism, a way to allow for a wider set of concerns while continuing allowing the self to operate on the fuel of self-interest. Although the ecological 'self' acts in favour of a collective and not a narrow set of interests, the

motivation for such an act still lies in one's concern for oneself. Thus, far from being a critique of egoism, Deep Ecology actually relies upon and reinforces it.

With reference to the above issue Naess (1973:95) says that subjects are not conceived of as 'things in themselves.' Subjects are instead understood in the way that objects of perception are understood within gestalt psychology; they are constituted by their relations to larger wholes which shape and define the individuals within them, just as a text is illuminated by its context (Naess 1995a:243). Naess gives the example of three dots arranged on a piece of paper in such a way that, when seen, the experience is not of three separate points but of a triangle (1995a:241). Any single one of these dots is not originally a 'dot' but an integral part of a whole, a term defined by its relations to the other dots. And so, literally, the dot is its relationships, for if the field changes, then the meaning of the dot will change. The same is said to hold true for human beings: to be human is not to exist 'in oneself,' but to be a product of relations that are constitutive of oneself. Thus, says Diehm (2002:27-28), according to Naess's ontology the self is always already relational and from within this ontology we can catch sight of what Naess means by self-realisation through identification. Naess (1995c:233) writes: "...through the wider Self every living being is intimately connected, and from this intimacy follows the capacity of identification."

Another type of the self on which Diehm (2002:30) touches, is Plumwood's 'indistinguishable' self. Plumwood (1991:12) claims that some Deep Ecologists have developed a variant of identification that dissolves all differences between humans and nature, a self that rejects boundaries between self and nature. Plumwood calls attention not only to Deep Ecology's failure to critique the sources of the sense of radical discontinuity from nature, but also to the fact that a merger of self and other does not guarantee responsible action. For Plumwood there is an overtone of violence in the claim that there are no boundaries between self and other. According to her, failing to recognise the difference between self and other runs the risk of repeating the colonising gesture, which is a root problem and not a solution to environmental problems. Second, it is problematic that indistinguishability at the ontological level is taken to imply an indistinguishability of interests. When discussing the idea that Deep Ecologists' views are compatible with many

types of holism, Naess (1999a:272) says that such views are incompatible with the kind of holism which obliterates individuality. Individuals, according to Naess (1989:195), remain separate at any level of self-realisation. They do not dissolve like individual drops in the ocean. Our care continues ultimately to concern individuals and not a collective whole. The individual is not, and will not be isolatable — everything that exists has a gestalt character. Naess (1989:11) maintains that we must see the vital needs of ecosystems and other species as our own needs. There is thus no conflict of interests.

Nevertheless, Diehm (2002:32) thinks that Naess does not believe that interests merge in this way. Rather Naess (1993:29) stresses that, even in identification, one must recognise that self and other are different individuals. The argument made by Plumwood (1999:208–9) is that, although the other's interests are not the same as those of the self, those different interests are still important. From Naess and Plumwood's views, it may be said that there is not an indistinguishability of interests so much as there is a mutuality of interests: the flourishing or the failure of the other, while not being identical to that of the self, is experienced by the self as either enriching or as diminishing. Diehm (2002:33) says that Plumwood's criticism with regard to the indistinguishability thesis has trouble recognising the 'distinctness of the needs of things in nature from ours'. In this respect, I concur with Diehm because, although selves do not fuse, and even interests may not fuse, it remains true that, when the bonds between self and other are fostered and enriched by a process of identification alone, the interests of others will always be understood with reference to one's own. Ethics, then, will involve inference or movement from self to other which is not complemented by attentiveness to the unique demands and needs of the other. Diehm (2002:34) says that self-realisation, that is, the making real of the self as a relational being, should be seen as a function of our dialogue with the differences of the world. In terms closer to Naess, we could perhaps describe self-realisation as an ever-renewing process of open-ended identifications and their revisions — the movements from self to other that are possible only as responses to the movements from other to self. As Morton (2010:135) says, the *ecological thought* is the thinking of interconnectedness, dynamic, borderless, interpenetrative and hugely expanding our ideas of space and time.

4.4.5. Normative status

According to Keller (2008:208), Naess maintains that Deep Ecology is essentially descriptive, because unmitigated empiricism or eco-phenomenology promotes a direct experience of the qualities of nature. Deep Ecology is simply an enumeration of general principles that command the assent of persons who are open to the direct apprehension of nature; it is not a normative system and ought not to be judged as a normative system. Keller (2008) says that scholars have treated Deep Ecology as the legitimate object of the analysis of moral philosophy. Deep Ecology is even regarded as a strident axiological egalitarianism that is useless in adjudicating conflicting interests. The argument is that, if all organisms are of equal value then there is no basis upon which to make prescriptions because the kinds of value distinctions necessary for evaluating the moral situations of environmental ethics are deliberately disqualified. According to this view, the principle of biocentric egalitarianism renders Deep Ecology impotent as an ethical theory. Environmental ethics is predicated on the possibility of a non-egalitarian axiology. As Norton (1991:224) says: “The 120 000th elk cannot be treated equally with one of the last Californian condors – not, at least, on a reasonable environmental ethic.”

In addition, Callicott (1980:327) claims that environmental ethics must not accord equal moral worth to each and every member of the biotic community and consequently biocentric egalitarianism must be scrapped. Fox (1984:198-199) also argues that Deep Ecology must be forsworn; that it does itself a disservice by employing a definition of anthropocentrism which is so overly exclusive that it condemns more or less any theory of value that attempts to guide realistic praxis and employ a workable definition of anthropocentrism. Furthermore, Fox argues for a position that abandons biocentric egalitarianism and asserts, instead, that all biota have intrinsic value but are not equal in intrinsic value. In response to Fox, Naess (1984:5-6) maintains that some intrinsic values may differ, but not the kind he talks about, and that Fox means something different by ‘intrinsic value’ from what he means by it.

4.4.6. Mysticism and anti-rationality

With regard to the charge that Deep Ecologists are mystical and anti-rational, Byers (1992:34) notes that science is a natural human process and that its foundation is the fresh, immediate, direct experience and observation of nature, untainted by preconceptions, done by training oneself in mindfulness and awareness by way of meditation and other contemplative practices, which may enhance the creative process of both science and art. In the same manner, the study of nature can enhance mindfulness and awareness. The pure, mindful experience of nature leads naturally to a personal, emotional relationship with nature, but opens the way for the misconception when some people describe such a relationship as mystical or spiritual. Byers (1992:35) says that terminologies such as ‘Earth spirituality/rituals/prayers’ and ‘eco-theology’ may not only distract us from a direct experience of earth, but additionally aid and abet anthropocentrism. This is because such terms reinforce a dualistic view of spirit versus matter, mind versus nature, or reason versus intuition — they are also anthropocentric projections onto non-dual reality. ‘Mystical ecology,’ a term Bookchin uses to refer to Deep Ecology, is a contradiction in terms because the term ‘ecology’ refers to the science of ecosystems and cannot be ‘mystical’. The Deep Ecology movement is supported by philosophers who begin with the fundamental facts and principles of ecological science and then proceed to ask ‘deeper’ questions than the scientific method can – questions about values and ethics, as well as social and political action. Ecological facts become fundamental values or norms for these philosophers supporting the platform principles of the Deep Ecology movement. It can thus be claimed that Deep Ecology is neither anti-rational nor anti-scientific.

4.4.7. Vegetarian critique

To my mind, not one of the above critiques convinces me that Deep Ecology is philosophically or ethically lacking. There is however one criticism that I support fully, that is, the vegetarian critique. Waller (1997:187-188) says that for all their antagonism, deep and social ecology share at least this much: a lack of interest in the issues of animal rights, animal welfare and vegetarianism. Waller argues that this disinterest is inconsistent with

deep and social ecology's practical programs and philosophical foundations. They ignore the animals' case for special moral recognition, while both schools nevertheless exploit people's special feelings (pro and con) toward animals in order to advance their own agendas concerning nature. Deep ecologists favour egalitarianism between the species. They repudiate anthropocentrism and supplant it with ecocentrism and its moral and spiritual implications. Ecocentrism involves not only a concern for but identification with the other components of our environment. It involves dissolution of the man-in-environment concept, as Naess (1973:95) puts it. Deep Ecologists have little to say regarding the implications of these premises *vis-à-vis* the human consumption of other animals, even though these are the species with which we can most readily identify. In response to this, Naess (1973:95) only replies that one of Deep Ecology's basic ideals is, in principle, 'biospherical egalitarianism' and that the 'in principle' clause is inserted because any realistic praxis necessitates some killing, exploitation and suppression. He never explains what he means by 'realistic praxis' and 'some killing.' Avoiding such explanations undercuts the meaningfulness of Deep Ecology. Waller (1997:189) asks whether an unsatisfied vital human need is behind driving the beef industry or even hunting in general. Fox (1984:198) argues that if all organisms really are of equal intrinsic worth, then the Deep Ecological doctrinaire might just as well eat veal as vegetables. Fox actually predicts that Deep Ecologists probably tend to be vegetarians because cows scream louder than carrots. This argument has been used until readers have grown bored with it. Food is a vital need; the least amount of suffering is brought about by a vegetarian diet. I would therefore not mind if vegetarianism is a prerequisite as one of the DEP points. The expression 'vital need' unfortunately denotes a concept that is too vague to lean on uncritically; it is a concept which cannot be called upon to pinch-hit for specifics regarding the proper relationship between humans and animals (Waller 1997:189).

The vitality of needs is still a bone of contention. McLaughlin (1993:182) explains:

The key point in this claim is the implied distinction between 'vital' and other needs. This distinction is denied by the consumerism inherent in industrialism. To lose sight of it is to become trapped within an endlessly repeating cycle of deprivation and temporary satiation. Making the distinction opens the possibility of

achieving more enduring forms of happiness and joy. Of course, the distinction cannot be drawn precisely because what is a vital need in one context may be a trivial want in another. There is a real difference between an Eskimo wearing the skin of a seal and wearing a fur coat for social status in an affluent society.

Again the consumption of marine mammals is used to illustrate the concept 'vital need.' According to Waller (1997:189), he cannot learn anything useful here since McLaughlin contrasts the Eskimo with the crassest of consumers satisfying the most trivial of wants. It's an easy sell. McLaughlin offers the standard Deep Ecology criticism of animal liberation for being based on an individualist ethic. Still, this is a criticism only of reasons, not of practical conclusions. The closest McLaughlin (1993:190) comes to offering an alternative is to endorse Callicott's distinction between domestic and wild animals and to suggest that duties to wild animals be based on what would benefit the ecosystems they inhabit. Waller (1997:190) shows that even in Devall's work *Simple in Means, Rich in Ends: Practicing Deep Ecology* (Devall 1988:82), the preferred examples of the crass consumption of nature involves unnecessary uses of animals:

A person seeking to establish this [Deep Ecology] type of lifestyle will be an informed and careful consumer. Such a person would reject products made from parts of endangered or threatened species. Examples include skin oil made from sea turtle oil, leopard skin coats, footstools made from elephant feet, handbags of rhinoceros skin, or any products made from sperm whales.

To his credit, Devall offers a rationale behind these prohibitions: these creatures are in danger of becoming extinct. But is that all there is to it? Waller (1997:191) argues that Deep Ecology is guilty of nothing more than mild hypocrisy. Its proponents exploit our sentiments toward animals in order to advance ecocentrism, but they refuse to address the qualities in animals that give rise to these feelings in us. The absence of a clear stand on vegetarianism entails the absence of a clear stand on Deep Ecology itself because vegetarianism offers Deep Ecology an otherwise unspoken means to the latter's ends. To have no stand on vegetarianism is to have no practical stand on land use, availability of food, quality of human life and the ethics of human-nonhuman interaction — an interaction that, for all of Deep Ecology's evasions, always occurs between the particular constituents of nature. Waller (1997:195-96) thinks that Deep Ecology, as both a philosophy and a

practice, needs to match its commitment to biological diversity with a similar commitment to experiential diversity. To the extent that Deep Ecology promotes the former, it is indeed sound ecology. However, to the extent that it ignores the latter, it is not deep. I agree with this argument and as a vegetarian, I have always wondered why this aspect has not been included in the Deep Ecological debate.

4.5. SUMMARY

Notwithstanding the various critiques of Deep Ecology, it has contributed to contemporary environmental discourse in disseminating an innovative *posteriori* approach to environmental crisis, combined with basic principles that encourage *biocentric egalitarianism* and *self-realisation* (Ulrey 2010:11). Deep Ecology hopes to achieve a paradigm shift in the human perspective, from anthropocentric and parochial to a wide ecocentric way of thinking. Deep Ecology is grounded in a vision of non-exploitive science and technology, which is correlated with the cultivation of conscience (Dunstan & Swan 1993:4). Based on a biocentric view of the universe, Deep Ecology seeks to integrate scientific-philosophical-spiritual issues and place ecology at the forefront of all considerations. Deep Ecology seeks liberation from waste, excessive appetite and anxious competition. Deep Ecology seeks complexity, cooperation, adaptability, diversity, creativity and evolving consciousness. Deep Ecology is also consistent with the primary ethical teaching of all times and carries with it the banner of ‘not causing any unnecessary harm’ as an approach to *all beings, and all of life*.

Deep Ecology views nature as a cosmic unity, which bears striking similarities to concepts that are common in Asian religions. Although I still feel strongly that Deep Ecology should get rid of the term ‘unnecessary’ in its adage of not causing ‘unnecessary’ harm, it is nonetheless still my hope that Deep Ecology, as an ecological way of thinking, will continue to propagate its radical innovative conceptual apparatus, enabling it to infiltrate the interstices of the social order so that it can expand to undermine the intransigent hierarchical arrangements that hold that order in place (Code 1999:66).

Our cultural beliefs and attitudes are responsible for the environmental degradation that surrounds us. We must look inside ourselves and take responsibility for our own actions. We must ask deeper questions and forge a new sustainable way of living on this planet. According to me, this can be done if we embrace Deep Ecology because Deep Ecology, as Devall and Sessions (1985:7-8) mention, is a way of developing a new balance and harmony between individuals, communities and all of nature. Deep Ecology involves working on and looking at ourselves, of becoming more authentic and cultivating ecological consciousness, the cultivation of the insight that everything is connected. Cultivating ecological consciousness is a process of learning how to be more receptive, trusting and holistic in perception. This process involves being honest with ourselves and seeking clarity in our intuitions and then acting on clear principles. It results in taking charge of our actions, taking responsibility, practicing self-discipline and working honestly within our communities.

In conclusion, Sessions (1995a:464) notes that Naess himself mentioned that he remains an optimist for the twenty-second century. He said that even though the Deep Ecology movement is concerned with what can be done *today*, he foresees no definite victories before the twenty-second century. I am equally optimistic that people, considering the current state of our environment, will be more susceptible to embrace Deep Ecology. Yet people like Nelson (2008:209-210) are of the opinion that the various critiques against Deep Ecology have contributed to a significant consensus that Deep Ecology has reached its logical conclusion and has exhausted itself. He says that, compared to other prominent theories, Deep Ecology has not crystallised into a complete system. Nelson concedes that Deep Ecology has earned a permanent and well-deserved place in the history of environmental philosophy, and that its outlook has generated an abundance of academic articles and books in the field of environmental philosophy. This testifies to the enduring influence and importance of Deep Ecology. I am of the opinion that Deep Ecology has not exhausted itself because it is a philosophy that has much to give to people and to the planet we inhabit.

Many decades still have to pass before Naess's twenty-second century will see the light and only time will tell if Naess's words will come true or whether Nelson's view will stand fast. However, should we wait until then? According to me, we should make the decision whether we are going to change the environmental status quo now, or whether we are going to follow the way of the ostrich. In the following chapter, I will discuss how people can be motivated and/or be discouraged to embrace ideologies, with specific focus on environmental ideologies. In addition, I will show how we can motivate people to embrace Deep Ecology as an ideology.

CHAPTER 5 – THE MOTIVATIONAL FORCE DRIVING PEOPLE TO ACT ECOCENTRICALLY

5.1 INTRODUCTION

Throughout life, every human being forms his or her own unique personal philosophy by way of acquiring beliefs (made up of what we think is true) and belief systems, as discussed in Chapter 2. We do not usually realise this, but these beliefs constantly guide our thinking, our decision-making and our emotions: ultimately they shape our lives. Even though thinking is a prelude to action, it is not a prerequisite thereof because we sometimes act without thinking. Deep Ecology, as a belief system, is a relatively new way of rethinking our relationship with the earth and with one another and as a result it culminates in a new way of acting. Deep Ecology may however easily be misunderstood as merely another attempt to discover intrinsic values or to develop universal moral rules. However, the sole purpose of Deep Ecology is not to discover intrinsic values or to develop universal moral rules. It would be more acceptable to say that Deep Ecology is primarily concerned with re-shaping and re-directing human awareness. If we want to create a new world and model of society, then the old world and old model of society need to be altered or radically changed. This can only happen through a radical paradigm shift by re-shaping and re-directing human awareness.

Accordingly, I believe that a new model of society can be forged because humankind has the capacity to overcome any challenge, no matter how big, but there is mostly a prerequisite for this: people will need to fight for such a change. Why is it necessary that we create a new model of society? Why do we need to undergo a shift in our paradigms? I think that we need to move away from our predominantly instrumental inclination. Deep Ecology can instil in followers a less instrumental view of humanity and nature, and assist in forging a new model of society which is more authentic than the one we are living in. If we continue to go through life blind to the repercussions of our anthropocentric thinking and resultant actions, we will not only continue to taint our present and future cultures but

also that of our planet. This is why it is necessary to forge a new model of society; and I maintain that Deep Ecology is an adequate philosophy to embrace for this purpose.

Even though Deep Ecology seems to be winning some ground with regard to environmental preservation in the contemporary world, I maintain that more people need to be made aware of this philosophy. Moreover, it is my contention that more people should be motivated to act upon the principles as stipulated by the DEP. However, believing in a philosophy but failing to act upon it, not walking the proverbial walk and only conducting the talk, is a habit that contributes greatly to the current state of the environment. The tendency to fail to act upon a belief system and rather be a pacifist does not help at all. How can a thirst or a hunger be quenched or satisfied if an individual does not act to quench or satisfy that thirst or hunger? Even though many people tend to be pacifists and only follow their chosen theories in word, there are those who are diligent followers of what they believe in. Yet, it seems as if there is a gap between theory and action. In an insightful article, Kretz (2012) addresses the issue of bridging such a theory-action gap by exploring the problem of how to get people to act upon the theories in which they believe, and not only to cling to those theories in a passive manner. In addition, Foreman (2004:228) asks how we can get people to act according to what they believe in. This is an important aspect because even though people may embrace a particular theory, it does not logically follow that they will act according to that theory.

Following from the above, I will explore the following questions in this chapter: What exactly motivates individuals, especially the diligent ones who care about the environment? Why do some people make it a part of their lifestyle to consider and care for nature and for other people, while there are so many who fail to do this? Is it possible to alter an individual's way of thinking, specifically from an anthropocentric way of thinking to a more ecocentric way of thinking that is in harmony with Deep Ecology? If so, how may we motivate such a person to be a diligent believer?

Linked to the above, I will consider Socrates (in Kretz 2012:9) who uses the term *akrasia* when he refers to the issue of people who tend to know how to do that which is right but

still fail to act according to their knowledge. Why is this? Devall (2001:25-26) thinks that people want to do the right thing, but that they are usually thwarted by institutional constraints, by the force of habit, by a sense of despair and even by a lack of community support when it comes to the transformation of their behaviour. Patel (2014:176-177) draws our attention to another problem when he says that within the context of multiple stressors, civil society tends to be more aware of immediate tangible stresses and are motivated to act more on such stressors than on climate change. It seems that many people are living in denial and that this denial may turn into a sense of despair when confronted by certain stressors. Bearing this in mind, I will explore the issue of how to re-catalyse the energy of people whose mind-set has moved from denial to despair, in order to help them reach a point where they can respond effectively and creatively to the environmental crisis.

An aspect that we need to keep in mind when considering why some people think the way they do and act (or fail to act) the way they do, relates to individual differences in personal attitudes. Here we may recall the conception of the self. In the previous chapter I have shown how Devall and Sessions (1985:66) define the modern conception of the *self* as an isolated ego, which strives primarily for hedonistic gratification or for a narrow sense of individual salvation and how this conception differs greatly from the Deep Ecological perspective of the self. The difference may be found in the fact that Deep Ecology embraces an expansive or transpersonal sense of the self, where the concept of the self represents oneness, an organic wholeness that includes the nonhuman world. The Deep Ecological self is therefore a holistic concept. We may also recall how Fox (1990:59-68) argues that such a transpersonal sense of the self, emphasises a fundamentally different kind of self to that emphasised in the tripartite model of the psyche, a model that produces different personal attitudes. I have shown how the tripartite concept of the self (Fox 1990: 59-60) consists of the *desiring-impulse aspect of the self* (an aspect that wants immediate gratification and functions without particular regard for others, for the future, or for the constraints imposed by reality in general); the *normative-judgemental aspect of the self* (an aspect that sets down standards or expectations for our behaviour and judges us critically if we fall short of these standards or expectations) and finally the *rationalising-deciding aspect of the self* (an aspect that considers itself to be the decision maker with respect to the

three selves, mediating between the competing demands of the desiring-impulsive self, the normative-judgemental self, and the constraints imposed by reality). Anthropocentric people are mainly driven by a tripartite conception of the self (Fox 1990) or an egoistic, hedonistic gratifying conception of the self (Devall 1985) and these individual differences in personal attitudes are not conducive to the planet's environmental well-being or to the way we interact with other human beings. These differences also contribute to the behaviouristic tendencies of people when it comes to assessing their will to act in environmentally friendly ways.

Is there an alternative to the tripartite concept of the self? In fact, there is. Naess's two ultimate norms, self-realisation and biocentric equality (both considered to be prerequisites for Deep Ecology), may be considered to be an alternative conception of the self. Self-realisation implies that all things in the biosphere have an equal right to live and blossom and to reach their own individual forms of self-realisation within the larger concept of the self. In addition, Diehm (2002:29) says that the motives that fuel self-realisation are always mixed because the self and the so-called 'other' are essentially intertwined. Identification with the other provides a way of overcoming mutual exclusivity between the self and the other by transcending any split between egoism and altruism, into which many people have been indoctrinated, an observation frequently expressed by Naess (1989:175; 1993:31; 1995c:235). Through identification, people can affirm the relationships that constitute the self — if people do this then they may realise that any conduct in favour of any other entity external to the self (the environment and fellow human beings) will not exclude the flourishing of the self, but that it can be in harmony with the flourishing of the self. People will not diminish themselves if they identify with external objects. McComb (1997:12-13) argues that unless individually meaningful relationships are established between the self and nature, then a philosophy like Deep Ecology and even one's drive to participate within a movement like Deep Ecology may eventually be perceived as boring and may then face the risk of being abandoned. This is because one's will to participate will be nothing more than something egoistic without such identification with the 'other'. Self-realisation is an important aspect in this regard, but it has a formidable enemy in the form of consumerism, as will be shown in the following discussions.

If we, in the light of the aforementioned, concede that the majority of people are driven by a tripartite conception of the self; an egoistic, hedonistic gratifying conception of the self; or that they foster distorted conceptions of nature due to some form of belief which is not in unison with an ecocentric belief system, then it should be apparent why it is important to look at behaviour and how to change these ways of thinking to that of a transpersonal ecological conception of the self, so that people can identify with the greater scheme of things.

How can people be made aware of the point that their actions have long-term consequences? How can people become more responsible beings? In what follows, I will attempt to answer these questions by looking at different existing motivational theories and how they may contribute in motivating individuals not merely to act but to act responsibly.

5.2 MOTIVATION: ITS ESSENCE AND ITS THEORIES

What does the term 'motivation' imply? Eccles & Wigfield (2002:110) says that the Latin root of the word motivation means 'to move'. Hence, the study of motivation is the study of motion. A more commonly-held idea is that motivation is the biological, social, emotional, or cognitive force that compels us to act in a certain manner. According to this idea, motivation consists of the internal and external factors that stimulate desire and energy in people to be continually interested and committed to a job, a role or a subject, or to make an effort to attain a certain goal.⁸¹ The issue of setting goals is important because different types of goals motivate us differently. Individuals often have a drive to reach clearly defined goals and the attainment of these goals may be a reward in itself. It should be kept in mind that our motives may actually be complex and sometimes difficult to pinpoint. In addition, motivational efforts may also have distorted motives. This issue will be explained in my subsequent discussion on motivational theories.

⁸¹ Available at: <http://www.businessdictionary.com/definition/motivation.html> (Accessed on 15 February 2015).

Personally, I remember the importance of ascertaining the reasons why a person wanted to become a Police informant, because this played an important role in judging the strength of the information given on criminal activities. Some informants gave information because of monetary gain — they received rewards for supplying information. Other informants supplied information as a form of retaliation, but many also supplied the Police with information on criminal activities because they deemed it the moral right thing to do. The same tendency can be applied when we consider motivation. There are various reasons why people do what they do. Winter and May (2001:676-678) explore the reasons why people do what they do and why they comply with certain regulations. They argue that compliance to social and environmental regulations depend on the will and the ability of individuals. They mention three motivations for compliance:

Calculated Motivations – compliance occurs when the benefits of compliance, including averting fines or other sanctions, exceed the costs of compliance. In other words, the calculation to comply or not is based on the expected utility which involves choosing the option that has the highest return.

Normative Motivations – compliance is based on the internalised values of the individual, in other words, by their general moral principles and their evaluation of the appropriateness or value of a given regulation.

Social Motivation – compliance is driven by earning the approval and respect of significant people with whom individuals interact, irrespective whether any values have been internalised or not.

The will and ability of people to act may be the result of Winter and May's above description of motivations for compliance. However, I question their analysis. To my mind, the first motivation is too utilitarian while the last one is too egocentric, in the sense that motivation may be done from a 'means-to-an-end' perspective. In my opinion the normative motivation is more in line with a Deep Ecological perspective.

Even though there are different reasons why people act, there are also different reasons why people fail to act, or are ignorant of possible courses of action. People can move away from ignorance, but courage will be required to stand alone in life in the fight to conquer others' ignorance. Courage gives one the strength to perform moral combat for both the species and the planet. Integrity, dignity, nobility, love and life give us the courage to be ecocentric human beings. Without courage we are only conforming slaves bending to the will of others and/or of life-hating institutions (McComb 1997:18). Sometimes it is not only ignorance that is the problem; as citizens of the earth we sometimes feel powerless to change the direction of the world in which we live, especially if we think of doing it on our own. Such a feeling of powerlessness, says Conradie and Field (2002:5), is generated from the realisation that other forces seem to control the destiny of the earth and of all its creatures. Garrard (2007:372) comments on this feeling of despair when he narrates how students expressed a sense of helplessness by stating that the environmental values they acquired at university would probably be set aside or at best be reserved for private behaviour after they have left the confines of their alma mater. One of Garrard's students even said that the question is not how the environmental module influenced him, but how much the world will let him influence it. Another student related that she lost her work after she tried to introduce environmental practices in her workplace by stopping to offer plastic bags to customers. Students felt a disjunction between the values that held sway within their learning environment and the values that pertained outside it – a situation that has profound implications for any transformative pedagogy.

Even within schools and universities, environmental awareness is a low priority relative to passing examinations and other activities. This, together with the wastefulness of pedagogic institutions themselves, would not be missed by increasingly cynical students. Should pedagogical endeavours be abandoned due to a sense of helplessness and despair? I think they should definitely not be abandoned. In response to the latter, consider Hsu (2004), who conducted an interactive environmental-education course in Taiwan. He found that his interactive course indicated that a pedagogical approach actually promoted students' responsible environmental behaviour, their internal locus of control, their environmental responsibility, their intention to act, their knowledge of environmental issues, and their

perceived knowledge of and skills in using environmental action strategies. Garrard (2007:365) and Palmer (1998:133), likewise, are both convinced that such a direct personal experience with nature is by far the most significant influence on environmental thinking and awareness.

During the ACES 2015⁸² conference held recently in Japan, Smith & Gough (2015) presented a study that investigates ecocentrism in secondary schools and challenges the anthropocentric view of conserving natural resources for future humans. The study aims to reveal whether sustainability education in schools is driven by a narrow scientific focus or whether there are deep ecology perspectives also operating to solve environmental problems. The study also seeks to determine the collective thought of school communities regarding the more philosophical aspects of sustainability, as seen through the lens of Deep Ecology. Smith & Gough devised a Deep Ecology Scale (DES), which was used to measure ecocentric inclinations of the respondents, and the data showed that students were more aligned to an ecocentric philosophy than an anthropocentric one. If this is the situation in schools where they conducted their study, then there is hope.

By contrast, Kretz (2012:14-15) is of the opinion that more than just education is required to produce action. According to him, sharing knowledge inevitably leads to behaviour that reflects the responsibilities attached to the vantage point of new knowledge. Perhaps there is some truth in the claim that knowledge, behaviour and responsibility are related. Nonetheless, Goralnik and Nelson (2011:183), amongst others,⁸³ criticise a knowledge-attitude-behaviour method. According to them it cannot to be assumed that increased knowledge about nature leads to a favourable attitude toward nature, which in turn motivates action on behalf of nature. In addition, Egea & de Frutos (2013:664) takes this theory-action debate further by saying that higher levels of environmental knowledge do not necessary imply stronger effects of environmental knowledge. On the contrary, people with extensive knowledge about environmental hazards may even become insensitive to

⁸² Asian Conference of Education for Sustainability.

⁸³ For further discussions on the disjuncture between environmental knowledge and environmental behaviour, see Bickman (1972) Geller (1981); Geller, Erickson and Buttram (1983); Sia, Hungerford, and Tomera (1986); Costanzo et al. (1986); Hungerford and Volk (1990); Finger (1994); McKenzie-Mohr (2000); Kollmuss and Agyeman (2002); and Hsu (2004).

external cues for environmental preservation. If we look at a developed economy such as North America and consider their level of education, and we compare their level of education to their consumptive behavior, then the previous statement about desensitisation may hold water. Webster (2004:52) observes that when consumerism comes into conflict with such an awareness of environmentally motivated consumption-reduction, then the moralising approach of environmental education cannot stand up to the overwhelmingly persuasive force of consumerism outside of education. Webster strikes a chord in his reference to consumerism. McComb (1997:1) goes as far as to accuse the modern industrial-consumer state (which he refers to as the 'Machine') of being detrimental both to the human species and to the planet. McComb considers the 'Machine' to be a formidable enemy to self-realisation, as alluded to earlier in my research. McComb (1997:14) claims that the 'Machine' ultimately detaches the individual self from nature via its dehumanising practices and it is because of the 'Machine's' pervasiveness that very few people who reside within it attain self-realisation.

When looking at the different theories that I will be discussing, the concept of self-detachment from nature (because of the consumerist machine) should be kept in mind, because much of people's motivation is overwhelmed by consumerism. Instead of attaining self-realisation, citizens within the 'Machine' continue to live meaningless, lonely, bored lives. Such lives are driven toward environmental destruction and/or self-suicide. McComb (1997:14) says that violence and conflict, mind control, paradox and fear are the components of the 'Machine' that work toward assuring that the vital needs of the 'Machine' are met. These components lead to self-alienation and, I believe, to a resultant low sense of motivation. McComb (1997:16-17) expresses his disgust with the 'Machine' by accusing it of transforming the individual into a cripple who cannot act on his or her own volition, let alone stage a protest against the 'Machine'. The 'Machine' fills the individual with the fear of dying, the fear of the unknown, the fear of being alone, the fear of the wild, the fear of others, the fear of the self, and the fear of reaching one's full cognitive potential. As a result the individual degenerates into a new mutant life form: a walking, talking, consuming automaton.

I believe McComb has a valid point, especially if we look at contemporary consumerist societies. Can we strive towards curbing consumerist cultures? I believe so. Devall & Sessions (1985:28-29) concede that some lifestyles contribute more to cultivating ecological consciousness than others. A lifestyle that promotes personhood and self-realisation is that of voluntary simplicity. In such a lifestyle we can distinguish between *wants* (encouraged by mass-media advertising and the demands of our society to consume more in order to keep the economy growing) and *needs* (which are vital for our survival). Devall & Sessions suggest further that we should ask ourselves the following questions if we want to determine whether we are following a consumptive behaviour that is not detrimental to the environment:

- Does what I own/buy promote activity, self-reliance and involvement, or does it induce passivity and dependence?
- Are my consumption patterns satisfying or do I buy much that serves no real need?
- How is my present job and lifestyle tied to instalment payments, maintenance and repair costs and to the expectations of others?
- Do I consider the impact of my consumption patterns on other people and on the Earth?

Our convictions, values and virtues are not inborn; we learn them from our families and parents; we learn them from the cultures in which we grow up; we learn them from our peers; we learn them through education and from the various media sources that surround us and also from the various religions or spiritualities in which we are brought up or those which we embrace later in life. This does not imply that these values are appropriate and/or that they are necessarily environmentally friendly. It is important that we continuously undergo a Cartesian period of doubt, during which we reformulate the foundation upon which we have built our convictions. We can change our consumptive behaviour, we can change our views and as Joy (2000:54) says, we can enter a path towards a utopia based on philosophical altruism, but only if we explore the love and compassion that is more basic to our humanity than the will to power in capitalist, free-market economies based on the exponential growth of technology.

A related question is, can we dispel Kant's (2007:389) view that nature has been reduced by many to a mere nothing, thereby leaving only the self in all its glory? I do not think so. The conception of nature conservation as being 'out there' in the form of game reserves and marine reserves is distorted. It is a misconception that needs to be resisted by unselfish identification. People's distorted conception about this, about consumption and about every other aspect of anthropocentric behaviour may be curbed by propagating and instilling the realisation that we are part of the environment. This truth affects us in every single aspect of existence: in the water we drink, in the air we breathe, in the food we consume and even with regard to our clothes (Conradie & Field 2002:9, 11).

The responsibility to instil in people such a sense of unselfish identification with the other and a realisation that we are part of the external world is placed at the feet of practicing ethicists. Kretz (2012:10) argues that it is the task of ethicists to advance moral theories, such as self-realisation and biocentric equality. Moreover, Kretz (2012:15-16) maintains that academic ethicists are uniquely situated to help inspire and support well-grounded behavioural shifts through highlighting current, morally pressing issues, providing strategies for critical thinking, attending to emotionally appropriate responses, and facilitating methods for moral action. She says that ethicists have a moral obligation to facilitate and participate in environmental actions both in and out of the classroom, because they find themselves in positions of significant power relative to the vast majority of people. For example, to a large extent, professors can choose themes for their students to study, such as the nature of assignments, the focus of their publications, as well as the nature and extent of their public outreach. They can then be taken seriously in terms of their contributions given the extent of their education and areas of specialisation. This position of epistemic power, she says, can be used to share information through books for popular audiences, by being interviewed by reputable media sources and giving presentations to audiences which are not composed solely (or even primarily) of academics. Such a vantage point enables one to encourage and support morally defensible activism.

Even though I agree with her that the advancement of moral theories lies on the shoulders of ethicists, I also believe that every single citizen has the responsibility to acquaint

him/herself with knowledge pertaining moral theories. This should be done because immoral, depoliticised, hyper-consumptive behaviours continue to be practised, despite the clear need for significant alterations to these practices. Nobody, for example, who stands under the rule of law can justify his/her misconduct in court on the basis that they did not know that their misconduct was lawless. The law deems it the responsibility of each citizen to be up to date with the laws of the country and with any amendments to such laws as published in a Government Gazette or other relevant publication. In a similar vein, I believe it is the responsibility of every individual to be up to date with moral theories and to follow the moral and ethical path to selfhood, but people tend to be ignorant. Kretz (2012:13) says that if someone is morally motivated to end the oppression of nature, then they must denounce the social structures, assumptions and behaviours that hold in place or seek to legitimise human destruction of the planet as being morally wrong.

In addition, Kyriacou (2010:826) argues that addressing the gap between rhetoric and behaviour is complex, and so is trying to convince someone of the morality of an act – that it is immoral to treat nature and other humans without respect and identification. The complexity of morality can be approached from the perspective of either moral preferences or moral constraints. This difference is important because people pursue preferences but seek to circumvent constraints. Kyriacou (2010:827) says that individuals tend to relax informal moral norms so as to increase their utility, and they may do so through manipulating their beliefs regarding the morality of their actions. The issues of increase in utility and the relaxing of norms will be explored in more detail in subsequent discussions. It is true that little progress has been made toward sustainable solutions (Plumwood 2006; Fiala 2010; Kretz 2012). However, even though such behaviour seems to predominate, there are motivated individuals who do not relax in their morals and norms. These individuals make conscious decisions on a daily basis that they will devote considerable effort to achieve the outcomes of their moral values.

Kretz (2012:11) agrees that it is immoral to treat nature and other humans without respect and without a sense of identifying with it as mutual existing entities. According to her, such behaviour is irrational given the fact that we wish for the human species to survive in the

future. It is immoral because when we wonder why we should do what we are supposed to do, we touch on the issue of moral motivation. But what is moral motivation? The basic phenomenon of moral motivation can be given a more systematic depiction:⁸⁴

When P judges that it would be morally right to do ϕ , then P is ordinarily motivated to do ϕ ; should P later become convinced that it would be wrong to do ϕ and right to do ψ instead, then P ordinarily ceases to be motivated to do ϕ and comes to be motivated to do ψ .

Currently many people (P) are motivated to do certain things which they deem to be right (ϕ) but which are not right. I intend to convince these P's to alter their convictions and rather do that which is right (the ψ 's). There is a diversity of views of moral motivation. Kant's view on moral motivation, for example, postulates that moral motivation must be guided by an intellectual representation of the rational moral law, instead of the favoured moral affections of sentimentalists (McCarty 1993:433-434). This view differs from Hume's position, as I will explain shortly. Yet, despite Kant's opposition to sentimentalism, his rationalism does not ignore feelings⁸⁵ within intellectual or motivational attitudes. Knowledge, for example, requires a subjective condition of conviction in addition to objectively valid certainty. Kant seems to imply that an inspiring feeling irresistibly grips one's moral consciousness prior to every moral action. But a moral feeling of respect is also a necessary component of Kantian moral motivation. Kant (2003:58-59) explains that the capacity for moral feelings is essential to every moral being and, if any person is unsusceptible to this sensation, then such a person should be deemed morally dead. This explains his claim that we can know the moral feeling of respect *a priori*, instead of through introspection.

In addition, Sargentis (2012:114-115) maintains that if we employ the distinction Kant (1993:35) makes between a 'motive' and an 'incentive', then it seems that moral law is a motive rather than an incentive and what it motivates is the genesis of a feeling of respect.

⁸⁴ Available at: <http://plato.stanford.edu/entries/moral-motivation/> (Accessed on 15 February 2015).

⁸⁵ Kant uses 'feeling' (*Gefühl*) for both a capacity and faculty of the human mind, as well as for particular determinations or operations of that faculty, and for individual feelings which arise on a particular date. We can know *a priori* that moral beings have the capacity for or susceptibility to moral feelings, although we may never be certain whether any particular feeling is a moral feeling (McCarty 1993:435).

Respect is an emotion that is the effect of, and follows from, the determination of the will by the Moral Law when the latter limits the inclinations. But, in turn, the feeling of respect is, in itself, also an incentive (rather than a motive) towards moral actions.

With regard to respect, and to take this discussion further, Dillon (2010) says that animals may love or fear us, but only persons can respect and disrespect us or anything else. According to him, respect is a particular mode of apprehending an object. His use of the term implies that the person who respects something pays attention to it and perceives it differently from something that is not respected. The relevance of Dillon's observation is that if we give proper attention to an object (which is central to respect), then we attempt to see the object clearly, as it really is in its own right, and not seeing it solely through the filter of our own desires and fears, or likes and dislikes. This is in unison with the intrinsic values which Deep Ecologists emphasise. Respect, says Rawls (2000:153), is motivational: it is the recognition of something as directly determining our will without reference to what our inclinations desire. When we respect something, we heed its call, we accord it its due and we acknowledge its claim on our attention. Respect, therefore, involves deference in the most basic sense of yielding. Self-absorption and egocentric concerns give way to consideration of the object, one's motives or feelings submit to the object's reality and one is then inclined to act in obedience to the object's demands. Dillon (2010) continues to say that valuing respect is akin to esteem, admiration, veneration, reverence and honour. Ways in which to respect things may be by keeping our distance from them, helping them, praising or emulating them, obeying or abiding by them, not violating or interfering with them, protecting them, talking about them in ways that reflect their worth or status, mourning them and nurturing them.

Even though respect has cognitive dimensions (beliefs, acknowledgments, judgements, deliberations, commitments) and affective dimensions (emotions, feelings, ways of experiencing things), it is the conative dimensions (motivations, dispositions to act and forbear from acting) which are, according to me, the most important motivational aspect of respect. Radcliffe (1996:383-384) discusses this conative aspect from a Humean point of view and points out that Hume's moral theory deems certain natural traits (gratitude,

benevolence and the disposition to care for one's children) as virtues that motivate people. From Hume's position, a truly virtuous person is one who naturally possesses the traits an unbiased spectator approves of and who is naturally motivated by those qualities, but, as less than fully virtuous agents, we are at least sometimes motivated by the conclusion that certain motives are virtuous (and ought to be cultivated) and others are vicious (and ought to be avoided). Radcliffe (1996:384), however, wonders how Hume's psychology of action combines with his description of the moral sense as motivating. The answer to how the moral sense motivates is that there must be an internal state present if motivation is to take place. Radcliffe continues by saying that Hume considers feelings, which are conative states of our mind or our passions, to constitute our moral perceptions and that it enables us to distinguish between virtues and vice. Thus, in order to make a moral statement, one has to be in a motivating frame of mind and one has to possess a motive for virtuous behaviour. Radcliffe (1996:385) further argues that Hume is committed to the view that morality is inherently motivating (in other words, it motivates by itself). The thesis that morality is sufficient for motivation is a version of the view known as moral internalism⁸⁶ — this can take various forms, as seen in the distinction between agent-internalism and appraiser-internalism.

Agent-internalism holds the view that if a person ought to do an action, then that person has a motive or a reason to do it, regardless of whether he/she is aware that he/she ought to do that action and/or that he/she has a reason to do it. Here we can take Kant's insight that *ought* implies *can* (Kant 1998:A548/B576). Appraiser-internalism holds the view that motivation is internal to moral judgements in the sense that, if a person genuinely accepts or embraces a certain moral judgement, then he/she has is motivated to do what the judgement requires in the relevant situation. Radcliffe (1996:390) says that the externalist thesis, on the other hand, claims in general that moral justification and motivation are not internally or necessarily connected. In contrast to the version of appraiser-internalism, the externalist view is that one's motivation toward virtuous action or a virtuous character can

⁸⁶ Nagel (1970:7) defines internalism as the view that the presence of a motivation for acting morally is guaranteed by the truth of ethical propositions themselves. This is opposed to externalism, which holds that the necessary motivation is not supplied by ethical principles and judgements themselves, and that an additional psychological sanction is required to motivate our compliance (Radcliffe 1996:388-389).

lie in something external to the conditions under which one sees it as justified, so that an agent's realisation that an action is vicious is not sufficient to produce a motive to avoid behaving in that way. In conclusion, Radcliffe (1996:393) argues that when Hume writes about morality as an influence of our actions and affections, he is committed to the thesis that awareness of the facts that constitute virtue and vice is sufficient to give the person who is aware a motive to behave virtuously. Accordingly, it can be claimed that Hume believes that the sense of morality motivates by itself.

Furthermore, Sargentis (2012:98-100) gives a lengthy explanation of the motivational distinction between internalism and externalism.

- (a) If someone holds that moral knowledge (in the form of judgements) expresses a cognitive state of mind (such as beliefs) and that in doing so it necessarily motivates action, then such a person is a cognitivist internalist;
- (b) If someone however holds that moral knowledge expresses non-cognitive attitudes (such as desires and feelings) and that it motivates exactly because it is the expression of such conative attitudes, then such a person is a non-cognitivist internalist.

These are the two ways of being an internalist in the theory of moral motivation, of believing that moral knowledge motivates. On the other hand, however, if someone believes that motivation is exclusively a matter of a non-cognitive state (external to knowledge) which is not a condition of moral knowledge, then such a person is an externalist — knowledge is one thing and motivation is another. There are two ways of being an externalist.

- (c) If someone holds that the moral judgement, to which motivation is external, expresses a cognitive state and that in doing so it is relevant to motivation (knowledge must contribute to it *indirectly*) then such a person is a cognitivist externalist.
- (d) If someone holds the believe that moral judgements express non-cognitive attitudes which, despite being conative, cannot (because of a certain weakness or insufficiency)

move towards the corresponding action and that in order to do so they need an extra conative psychological factor, then that person is a non-cognitivist externalist.

Humeans claim that all motivation is by desire, while anti-Humeans maintain that some beliefs can motivate all by themselves. Friedrich (2013:1) is a proponent of such an anti-Humean view. He argues that Humeans have got it wrong, that some beliefs can motivate us to act without the help of desire, and that belief can rationalise motivation since rationality requires that one be motivated to act in a certain way if one believes one has most reason to act in a certain way, and it is possible to be motivated to act in a certain way because one believes one has most reason to act in a certain way. His view that some beliefs can motivate us to act without the help of desire, takes the following argumentative line:

1. Belief can motivate if and only if belief can rationalise motivation.
2. Belief can rationalise motivation if (i) for some belief p and some motivation ϕ rationality requires that one be motivated to ϕ if one believes p and (ii) an agent can be motivated to ϕ because he/she believes p and because he/she exercises his/her capacity for rational agency.
3. Rationality requires that one be motivated to ϕ if one believes one has most reason to ϕ .
4. An agent can be motivated to ϕ because he/she believes he/she has most reason to ϕ and because he/she exercises his/her capacity for rational agency.
5. Belief can rationalise motivation (from 2–4).
6. Belief can motivate (from 1 & 5).

Friedrich (2013:3) is of the opinion that the first four premises of his argument can be defended against any objections from Humeans. He thinks that there are reasons for thinking that belief does not entail motivation and it can also be shown that desires do not entail motivation. First we should consider why no belief entails motivation. Motivation is subject to many contingent influences. After a stimulating meeting or after listening to fast-paced music, our motivation to complete a task can be strong and it can ebb if we are tired

and exhausted. Moods, in particular, have a powerful influence on our motivations. If we are happy we can be motivated to do many things. Being sad can substantially weaken our motivations to do things. Full-blown depression can completely destroy motivation. All of this, it seems, can happen without our beliefs undergoing any change. Our beliefs can stay true to the evidence, while our motivations shift with our moods. Accordingly, it seems possible for an agent to have any given belief, yet lack all motivation. Secondly, with regard to why no desire entails motivation, we should suppose the desire to be rich. The desire itself does not tell us what action to take to realise the desired state of affairs – that is the function of belief, not desire. However, I may lack the belief and consequently I can have the desire yet not be motivated to do anything. Friedrich (2013:13) concludes that belief can motivate us to act.

Factors such as the intensity of people's desires or needs, the incentives or reward values of the goals and the expectations of the individuals and their peers, should all be taken into consideration when we ponder how to foster motivation in individuals. Factors such as these move us to behave in a certain way. However, I think that it is more important to realise that we can influence people's levels of motivation by focusing on certain behavioural aspects. This may be done in many different ways. Many theories have been developed over time to explain motivation. These theories suggest that certain aspects motivate us to act in the myriad ways we do. According to Hollyforde and Whiddett (2003:5), motivational theories, such as the ones that I will subsequently explore, outline a researcher's answer to the question: Why do people make the choices they make? The theories that I am discussing here are only a few from the plethora of available theories. For example, I have not considered any theories of motivation within the workplace. It is clear that workplace motivation is a common topic, considering that there is no literature to be found that specifically focuses on environmental motivation.

Nonetheless, motivation is motivation and most of the theories that I examine can be made applicable within the context of my research. I will follow the motivational theories as presented in *changingminds*.⁸⁷ However, I altered the website's list by removing some

⁸⁷ Available at: http://changingminds.org/explanations/theories/a_motivation.htm (Accessed on 07 March 2015).

theories and adding others which they excluded. I wish to point out that there is no single theory that can supply us with a fully satisfactory explanation of all human motivations. Notwithstanding this, it is my conviction that we can come to a better understanding of the motivating forces behind our actions by pondering the theories I discuss here. A brief explanation of each of the theories will be given and I will look at how each may apply to my research regarding the motivation of people to be more ecocentric beings.

1. Acquired Needs Theory: This theory⁸⁸ is also known as the Three Need Theory or the Learned Need Theory, and it describes how a person's life experiences change individual needs over a period of time. It is classified into three groups:

Achievement – achievers want to excel and would prefer recognition of their efforts, they will avoid risks and failure and their performance will entail some gain for themselves.

Affiliation – seekers of affiliation want peaceful relationships with surrounding people. They refrain from activities which will draw attention to themselves, and sufficient approval rather than justified recognition for their work is sufficient for them.

Power – people seek power in order to exercise control over others for the purpose of fulfilling personal needs or to achieve certain objectives in life. Power seekers do not expect recognition or approval because they consider themselves superior to such things. They demand direct compliance and expect that other people should agree to their decisions.

The above classification shows that people have different needs and that they lead to different preferences. These needs do not affect everybody in the same manner. Our needs are related to motivation to the extent that they can motivate us to act in a particular way. It is important that we identify people's preferential needs in order to develop a proper analysis of motivation and thereby better motivate ourselves and others toward ecologically healthy practices.

⁸⁸ Available at: <http://theories.com/index.php/?Acquired-Needs-Theory.html> (Accessed on 07 March 2015).

2. Activation Theory: This motivational theory is also known as the Arousal Theory and it postulates that humans can easily be aroused in some way or another. This arousal may then be utilised for keeping people motivated. An army is one example, where soldiers are motivated by being aroused to eliminate the enemy. Low levels of care or boredom may however lead to a lack of activation. If not enough attention is given to a problem due to a lack of interest, then this may also result in a lack of motivation. We may think of local governments who tend to place environmental infractions low on the list of priorities, resulting in a ripple effect of motivational lack. To keep people active in activities, they need to be stimulated by the newness of the task; the difficulty and challenge of the task; differentiation in activities and the uncertainty of the task-environment.⁸⁹ A lack of motivation goes hand in hand with half-heartedness and a lack of enthusiasm. Activities should be varied, they should be made interesting and they should align with the individual's goals if we want to keep people motivated.

I think that the knowledge that our existence relies on the existence of the natural environment, should provide sufficient arousal to eliminate environmental infractions. Such an arousal will, however, be too anthropocentric because it focuses on human survival. People should rather be stimulated by making it clear that each new environmental infringement should be considered to be a new occurrence, even though it is an on-going process. Every day a new tree is being destroyed, a new piece of soil, air or water despoiled, and the elimination of this enemy should arouse our motivation.

3. Attitude-Behaviour Consistency Theory: This theory⁹⁰ examines the degree to which people's opinions predict their actions. A person with a positive attitude toward protecting the environment, one who engages in the recycling of waste products and who shows high attitude-behaviour consistency, radiates a high level of motivation. The study of attitude-behaviour consistency is important because much of the usefulness of the attitude concept is derived from the idea that people's opinions help guide their actions. People's attitudes represent their evaluation of entities and it is usually considered to be logical or consistent

⁸⁹ <http://www.antiessays.com/free-essays/Activation-Theory-Of-Motivation-356323.html> (Accessed on 08 March 2015).

⁹⁰ <http://www.sage-ereference.com/abstract/socialpsychology/n34.xml> (Accessed on 08 March 2015).

for a person who holds a favourable attitude toward some object to perform favourable behaviours and not to perform unfavourable behaviours with respect to the object.

Deep Ecology contributes to addressing people's attitudes by presenting an alternative way of thinking. An alternative way of thinking brings about an alternative attitude, which results in alternative behaviour. To my mind, people's current attitudes toward the environment are unfavourable. A more favourable attitude can be adopted if people reformulate their thinking by using the Deep Ecology Platform.

4. Attribution Theory: How do we attach meaning to our behaviour? The attribution theory describes the processes by which individuals explain the causes of their behaviour and events. People's urges to attribute themselves and others in different contexts are usually a motivating factor. For example, after a newspaper or magazine has published an individual's article or letter, he or she may be motivated to engage in further writing.

Two basic kinds of attribution⁹¹ are noteworthy – internal and external attributions:

- When we explain the behaviour of others we look for enduring internal personality traits and we attribute the behaviour of a person to qualities such as their naivety, reliability or jealousy.
- When we try to explain our own behaviour we tend to make external attributions, such as situational or environmental.

When making attributions, one analyses the situation by making inferences about the dispositions of others and of oneself as inferences about the environment and how it can cause a person to behave. For the purpose of this discussion, people can be made aware of environmental infractions which may allow them to make inferences that problems have arisen. Such external attributions and the inferences made may motivate people to become predominantly ecocentric.

⁹¹ <http://www.simplypsychology.org/attribution-theory.html> (Accessed on 08 March 2015).

5. Cognitive Dissonance Theory: Cognitive dissonance occurs when an individual experiences some degree of discomfort resulting from an inconsistency between two cognitions: their views on the world around them, and their own personal feelings and actions. For example, people go through processes of reassuring themselves that they acted in the right fashion, but the feeling that a different action may have been more preferable would be inconsistent with their initial act. The difference between their feelings and their beliefs cause dissonance, so people naturally seek to reassure themselves. The theory of cognitive dissonance proposes that people have a motivational drive to reduce dissonance because dissonance is a mental strain and that they may accomplish this by changing their attitudes, beliefs, or actions, rather than facing such straining inconsistencies. I think that many people fall into this category, where they are convinced of one thing but feel or do something that is in opposition to what they are convinced of. Focus may be placed on this aspect; people may be made aware of their tendency not to act according to their beliefs. This may create a sense of dissonance which is experienced as a mental strain, and this may motivate people to reduce the presence of dissonance and to act according to what they believe in.

6. Cognitive Evaluation Theory: This theory, also referred to as CET, is a sub-theory of the self-determination theory. I would, accordingly, like to make a few observations regarding the self-determination theory before I continue. The self-determination theory⁹² suggests that people have three inherent and universal psychological needs that must be met in order for their psychological well-being to be maximised. These are:

Autonomy – Everyone has a need to feel in charge of their own actions and an internal aversion to be controlled; they must feel that they have the freedom to choose how they perform tasks.

Competence – Everyone must feel that they have the ability to perform the task adequately and control the outcome.

Relatedness – Everyone has the need to be included as part of a group.

⁹² Available at: <http://study.com/academy/lesson/self-determination-cognitive-evaluation-theories-employee-motivation.html> (Accessed on 09 March 2015).

The relevance of these three needs lies in the fact that they explain why people do certain things. If I apply the self-determination theory's three universal psychological needs to the issue of people's attitudes toward the environment, then the following situation can occur: If an environment can be created in which people's needs for autonomy, competence and relatedness can be fulfilled, then people may perform their tasks for intrinsic reasons. Intrinsically motivated people are self-determined and self-motivated. As a result, CET explains the relationship between intrinsic and extrinsic motivation. According to CET, extrinsic motivation decreases autonomy and reduces intrinsic motivation. People have a strong desire to determine their own actions, and taking away this feeling of control from a task a person enjoys doing will decrease the pleasure that person derives from the activity. For example, I enjoy building puzzles within the freedom of my own spare time and this gives me intrinsic reward. But if someone gave me a puzzle and asked me to build it on their behalf, promising to pay me on completion of the puzzle, I would no longer have the freedom to build the puzzle in my own time. I would also be given a deadline within which I would have to finish the puzzle, and worse, most probably the puzzle will not even be to my taste. In this example, the monetary reward will serve as an extrinsic reward. Will the building of this specific puzzle still be considered as an enjoyable pursuit? I do not think so.

The CET implies that rewards will result in a reduced level of intrinsic motivation and satisfaction, because rewards are perceived to impact negatively on the autonomy and competence of the individual. Social psychological research⁹³ also indicates that extrinsic rewards can lead to over-justification and a subsequent reduction in intrinsic motivation. In this regards, Cherry (2014) says that, whenever excessive external rewards for already internally rewarding behaviour are offered, it may lead to a reduction in intrinsic motivation. This phenomenon is known as the over-justification effect. Cherry does, however, concede that extrinsic motivation might be beneficial in the following situations:

- External rewards can encourage interest and participation in something the individual initially had no interest in.

⁹³ <http://www.leadership-central.com/types-of-motivation.html#axzz3QxFdLLDP> (Accessed on 09 March 2015).

- Extrinsic rewards can be used to motivate people to acquire new skills or knowledge and once these skills have been acquired, people may then become more intrinsically motivated to pursue the activity.
- External rewards can also be a source of feedback, allowing people to know when their performance has achieved a standard deserving of reinforcement.

External rewards and motivators should, therefore, not be dismissed out of hand. They should, however, be avoided in situations where the individual already finds intrinsic reward from an activity. Excessive rewards may be problematic but when used appropriately, extrinsic motivators can be a useful tool to motivate people to complete a task in which they have no internal interest, and hopefully this might foster intrinsic motivations. Cherry (2014) argues that unexpected external rewards typically do not decrease intrinsic motivation. For example, if you get good grades on a test because you enjoy learning about the subject and the teacher decides to reward you with a gift card which you can redeem at your favourite pizza place, your underlying motivation for learning about the subject will not be affected. However, this needs to be done with caution, because people sometimes learn to expect such rewards. Praise can help increase internal motivation. Offering positive praise and feedback when people do something better than others can actually improve intrinsic motivation, but intrinsic motivation may also decrease when praise is given too often. For example, if parents heap lavish praise on a child every time a simple task is completed, then that child may become less intrinsically motivated to perform the task in future.

The suggestion has been made that an emphasis on external rewards may undermine existing intrinsic motivation, while another suggestion has been made that extrinsic motivators help people to feel more competent in their abilities, thus enhancing intrinsic motivation. Accordingly, to my mind both extrinsic and intrinsic motivation should be considered as important ways of driving behaviour when it comes to ecocentric formation.

7. Crowding Theory: I decided to discuss this theory as a supplement to CET because the two theories basically go hand in hand. According to Bøtcher, Hvitved and Andersen

(2013:14-15), the overall theme in the crowding theory is how individuals respond (in terms of motivation, behaviour and performance) to external interventions, such as command systems when the perception of these interventions is taken into account. The motivation crowding theory builds on the social psychological self-determination theory (as discussed in CET) and argues that motivation should be seen as a continuum ranging from controlled to autonomous types of motivation. Intrinsic motivation is the most autonomous type of motivation, which is in contrast to the fully externally regulated controlled type of motivation, which depends solely upon the perception of a causal link between the behaviour and a desired consequence such as implicit approval or tangible rewards (Bøtcher, Hvitved and Andersen 2013:3).

In addition, Koestner et al. (2008:1201-1202) examines the relations among autonomous motivation, controlled motivation and goal progress in order to determine the relative importance of these forms of motivation with regard to the pursuit of goals. They found that autonomous motivation was substantially related to goal progress, whereas controlled motivation was not and they suggest that individuals who pursue goals should give greater attention to enhancing their autonomous motivation, rather than reducing their controlled motivation. Interventions to help people change their behaviour should therefore focus on strengthening autonomous motivation. Kyriacou (2010:823) argues that there are many and various ways in which intrinsic motivation can be crowded out by the application of selective incentives. Activities done on the basis of intrinsic motivation are done for the sake of their inherent satisfaction, rather than for some visible consequence. Intrinsically motivated people do not perform activities because of external stimulus, pressures, or rewards (Kyriacou 2010:824). According to Ryan and Deci (2000b:62), moral norms have more to do with extrinsic motivation, because people want to avoid guilt or anxiety when they do things. I do not agree with this view, though, because they are oversimplifying morality by ascribing only extrinsic motivation to it. I behave as a moral being because I want to be one, not because of any external reward. Being moral for me is the right thing to do and carries its own reward.

Frey (in Kyriacou 2010:831-833) makes some propositions about the impact of rewards or sanctions with regard to intrinsically motivated behaviour. Rewards have a large crowding-out effect. Intrinsic motivation is crowded out the more a reward is contingent on the performance desired by some actor (compared to simply giving the reward after good performance). The monetisation of rewards emphasises performance contingency and thus is likely to crowd out intrinsic motivation (for example, blood donations). The possible relationship between the intrinsic benefit from the very act of contributing and the cost of the knowledge that others free-ride on one's contribution, may also hamper intrinsic motivation. Kyriacou (2010:836-837) says that those designing selective incentives should consider that intrinsic motivation may be crowded out (a) insofar as individuals find the collective action personally interesting, (b) to the extent that they are able to participate actively in the collective decision process, (c) if no recognition is given to individuals who are strongly intrinsically motivated, (d) if negative rather than positive selective incentives are favoured, or (e) if the latter are increasingly monetised.

8. Consistency Theory: This theory uses internal values for keeping us motivated. For example, if we promise to do something, we will feel bad about not doing it. When our inner systems (beliefs, attitudes and values) support one another and when these are also supported by external evidence, then we have a comfortable state of affairs. The discomfort of cognitive dissonance occurs when things fall out of alignment, which leads us to try to achieve a maximum practical level of consistency in our world.⁹⁴ We also have a strong need to believe we are being consistent with social norms. When there is a conflict between behaviours that are consistent with inner systems and behaviours that are consistent with social norms, the potential threat of social exclusion often sways us towards the latter, even though it may cause significant inner dissonance. I think that this may be the reason why so many people are reluctant to embrace green ethics, because they fear being labelled as 'different'. Some of the strategies people utilise to achieve consistency between conflicting behaviour, which are nothing more than creating justifications, may include the following:

Denial or ignorance: I didn't see it happen / I was never told about this.

⁹⁴ http://changingminds.org/explanations/theories/consistency_theory.htm (Accessed on 11 March 2015).

Rationalisation and excuses: That was going to happen anyway.

Separation of items: I don't use my car enough to make a difference / the use of a single car will not contribute much to air pollution.

Transcendence: Nobody is perfect / others are doing it too so it's not just my fault.

Changing item: I'll be more careful next time.

Persuasion: I'm good, aren't I? / I did what was right so it wasn't my mistake.

It's human nature to make up some comforting thoughts to ease mental tensions. This is the essence of the consistency theory and its relevance to motivation may be found in the stress placed upon the fact that a particular thought is inconsistent and that we strive for consistency. If people can be made aware of this aspect, then we can motivate them (or they can motivate themselves) by preventing any cognitive dissonance or conflicting thoughts which may hamper motivation.

9. Content Theories: Content theories can also be referred to as Needs Theories, because they focus on the importance of needs that are an integral part of our motivating force. The content theory of human motivation include the following theories⁹⁵ that are applicable to this research:

- i. *Maslow's Hierarchy of Needs*: This humanistic theory of motivation is based on the idea that people have strong cognitive reasons to perform various actions. Maslow's hierarchy of needs presents five levels of needs which occur at different levels. Starting at the lowest level we are motivated to satisfy each level in an ascending order. As each level is satisfied we are then motivated to satisfy the next level in the hierarchy. In Maslow's theory we can never run out of motivation because the very top level, self-actualisation, which relates to the achievement of our full potential, can never be fully achieved
- ii. *ERG Theory*: This theory condenses Maslow's five human needs into three categories: existence, relatedness and growth, hence the label ERG. Existence is concerned with

⁹⁵ https://sielearning.tafensw.edu.au/MBA/9791F/BusinessServices/LO/1207_020138_605F_02_wi/1207_020138_605F_0204_wi.htm (Accessed on 11 March 2015).

providing our basic material requirements for existence (food, water, air, clothing, safety, physical love and affection – Maslow’s first two levels). Relatedness is the desire we have for maintaining important personal relationships (family, friends, co-workers and employers. This also implies recognition and feeling secure as part of a group or family – Maslow’s third and fourth levels). Growth refers to the intrinsic desire for personal development and self-actualisation (impelling people to make creative or productive effects on themselves and the environment, including the desire to complete meaningful tasks – Maslow’s fourth and fifth levels). While Maslow’s theory follows a one-way progression up the hierarchy, the ERG follows no such a one-way progression and acknowledges that the priority of these needs differ from person to person.

The content theories have been criticised and the following general criticisms apply to all of the content theories:

Universality – the content theories pretend to be universal theories and to apply to everyone but they fail to take account of gender, age, culture, religious or other intersecting differences.

Individual differences and stability over time – not only do the content theories ignore the significance of individual differences, but they largely fail to recognise that individual needs are constantly changing, and consequently what may motivate a person one day may not be a motivator the next. The static nature of these theories does not take account of the constantly shifting nature of the real world.

Process simplicity – the content theories assume that the connection between needs and behaviour is non-problematic. It ignores the processes that must be evaluated and implemented to achieve the desired end result. The content theories are too simplistic to account for the complexity of the real world and the complex decision-making process which individuals must make in the motivation process.

Despite the above points of criticism, I maintain that the content theory makes a major contribution to understanding motivation. Highlighting the needs required for existence is a strong motivating factor. However, this theory tends to be strongly anthropocentric.

10. Expectancy Disconfirmation Theory: The expectancy disconfirmation theory of motivation explains the behaviour process in which an individual selects one behavioural option over another, and why/how this decision is made in relation to their goal. The equation for this theory is: $M=E+I+V$ [Motivation = Expectancy + Instrumentality + Valence], where Motivation is the amount an individual will be motivated by the condition or environment they place themselves in; Expectancy refers to the person's perception that effort will result in performance; Instrumentality is the person's perception that performance will be rewarded or punished, and Valence is the perceived amount of reward or punishment that will result from the performance.

This theory relies heavily on the degree of rewards or punishment, and even though this may be a very extrinsic theory, this theory may still be made applicable to ecocentric motivation. Making people aware of the high degree of self-punishment they will bring on themselves and on other human beings if they maintain anthropocentric behaviour, may motivate them to behave ecocentrically. Ecocentrism may result in more rewards (clean air, water, healthy living environment) and may as such serve as a good motivating factor within the theory of expectancy disconfirmation.

11. Internal-external locus of control theory: This theory⁹⁶ refers to an individual's generalised expectations concerning the forces that govern rewards and punishment. Individuals with an internal locus of control view events as resulting from their own actions. People fostering an external locus of control view events as being under the control of external factors. For example, a person with an internal locus of control will attribute the failure to meet a desired goal to poor personal preparation, whereas one with an external locus of control will attribute failure to circumstances beyond the individual's control. If people feel they have no control over future outcomes they are less likely to seek solutions. The far-reaching effects of such maladaptive behaviour can have serious consequences. The loss of control can lead to motivational, emotional and cognitive deficits. If individuals have control over events, however, then they will attempt to exert that control in order to achieve a positive outcome. Locus of control has a significant effect

⁹⁶ <http://www.units.miamioh.edu/psybersite/control/overview.shtml> (Accessed on 12 March 2015).

on our daily lives. People with an external locus of control believe that their own actions do not influence future outcomes; such people are more likely to suffer from depression and other ailments because they believe their actions cannot improve their current position. This is a tendency we may observe around us, where people still believe that the little good they do for the environment will not make a difference to the problem. However, this attitude is based on a fallacy, because every recycled bottle or piece of paper contributes to the saving process of the planet. Those with an internal locus of control see the world through a more adaptive perspective and they believe that hard work and personal abilities will lead to positive outcomes. This makes them more likely to meet challenges and succeed in their future endeavours. Therefore, those that attribute a sense of personal responsibility for their future thoughts and aspirations are much better adapted to living in the social world. Emphasis should be placed on nurturing this internal locus of control and again Deep Ecology may assist in this, especially if we consider the first three norms of the Deep Ecology Platform.

12. Social learning theory: In social learning theory, behaviour is learned from the environment through the process of observational learning. Humans are active information processors and they think about the relationship between their behaviour and its consequences. Observational learning cannot occur unless cognitive processes are at work. The social learning theory emphasises the importance of observing and modelling the behaviours, attitudes, and emotional reactions of others. Bandura (1977:22) states: “Fortunately, most human behaviour is learned observationally through modelling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action”.

Social learning theory explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural, and environmental influences. The most common (and pervasive) example of a social learning situation is television commercials. Commercials suggest that drinking a certain beverage or using a particular hair shampoo will make us popular and win the admiration of attractive people. Depending upon the component processes involved (such as attention or motivation), we may model the

behaviour shown in the commercial and buy the product being advertised. What makes this theory so valid is that conditioning is taking place more and more through the emphasis placed upon environmental preservation and protection. More people are being made aware of global warming, and more people tend to embrace green technologies because celebrities and other well-known people are doing this. This theory is a good motivating theory when it comes to ecocentric motivation. Unfortunately there is a downside in that if people, and especially celebrities, continue to act anthropocentrically, then the same conditioning will continue, namely non-ecocentric behaviour.

13. Pull and Push Theory: Pull motivation is a type of motivation that can be seen as the desire to achieve a goal so badly that it seems that the goal is pulling us toward it. Pull motivation is stronger than push motivation because it is easier to be drawn to something rather than pushing yourself for your desire. Push motivation on the other hand refers to situations where people push themselves towards their goals or to achieve something, such as the desire for rest and relaxation, prestige, health and fitness, adventure and social interaction. However, with push motivation it is easy to get discouraged in the following two ways:

- Push motivation acts as willpower and people's willpower is only as strong as the desire behind the willpower.
- There may be obstacles present in the path of achieving motivation in this regard.

Fairbanks (2010:91-93) identifies four of these obstacles:

- i. Our materialistic conception of a good life – we should appreciate quality of life rather than adhering to higher standards of living, but this is in conflict with capitalism.
- ii. The entrenched individualism of Western culture – the environmentally virtuous person should avoid individualistic and anthropocentric attitudes and adopt a more humble, holistic view of our relationship to nature. This may be problematic within cultures where there is a fixation on the rich and famous and celebrity worship.

- iii. The lack of aesthetic appreciation of nature – people would rather sit at home and pursue boring activities rather than spending quality time in nature where an appreciation of the environment may be nurtured.
- iv. The predominance of social hierarchies associated with the logic of domination – an elimination of hierarchical thinking, which is linked to the domination of nature, is required.

This concludes the discussion of the theories I have identified. It must be said that not one of these motivational theories is necessarily inherently valid or invalid. The positive or negative outcomes of these may be determined by the way they are applied. It is unfortunate that even the most positive motivational theory may be hampered by certain aspects. Ally et al. (2010:41-42) postulate that approaches to decision-making, which will ultimately guide our behaviour, may be morally deficient or lacking if decisions are made on any of the following bases:

Self-interest: When self-interest becomes the only basis upon which decisions are made, and when it is linked to the moral vice/sin of selfish greed, then moral obligations are abandoned and short-term self-interests are pursued. This is an egocentric attitude where a person considers only what will benefit him/her. Such an attitude is considered to be based on a narrow, selfish and destructive individualism. Individual freedom (autonomy) needs to be balanced with personal responsibility and obligations to others. Selfish actions can be said to be both wrong in themselves (by reference to deontology), negative in their consequences to other people (by reference to teleology) and damaging to the identity and character of the wrongdoer (in terms of virtue ethics).

Group interest: People who use this approach to decision-making are concerned only with those actions which they think will benefit their own social group(s). While conceding that there is a natural desire to care for one's own family and social group, and that one has a loyalty to such groups, these loyalties become distorted and damaging to the society as a whole when they are linked to injustice and exploitation,.

Ethical emotivism: People make decisions purely on the basis of personal preferences rather than relying on reason or moral duty towards others. MacIntyre (1985:11-12) argues

that in post-modern cultures, many people no longer have a clear *telos* for their lives. Thus they resort to making decisions on the basis of emotivism. The problem of emotivism (and ethical relativism) is that it undermines itself because it cannot clearly identify what feelings of approval are being indicated; nor can it convincingly show that the meaning of a moral judgement is indeed nothing but a preference. It evades rather than dealing with pressing moral problems and it ignores significant agreements regarding moral values. However, it is true that many people in a postmodern context act as if emotive motivation were true, hence the difficulty of arriving at moral norms and judgements in life and at work. Emotivism is, furthermore, highly individualistic and incapable of motivating people to act responsibly within social contexts or assuming responsibility for the future of life on this planet.

Uncritical Obedience to Authority: Many people simply comply/agree to the demands of the powerful. It is my view that obedience is not a problem, but blind or uncritical obedience is.

These approaches to decision-making should always be kept in mind when we consider what motivates people and how we will be altering their motivation. It is indeed the task of ethicists to make people aware of these stumbling blocks to morally motivated behaviour. But as I pointed out earlier, it is also the responsibility of every citizen to acquire appropriate knowledge and acquaint themselves with the stumbling blocks and stepping stones to ecocentric moral behaviour.

5.3 MOTIVATIONAL INITIATIVES

In the previous section I presented various theories according to which motivation may be understood. In what follows I will look at some initiatives which we may adopt in order to persuade people to adopt more ecocentric behaviour. I will recollect Kretz (2009:116-117), whom I made mention of in Chapter 1, who says that there are multiple methodological reasons that motivate the ecological re-conceptualisation of the self. She mentions the following three:

- i. Thinking about the nature of ecological relations allows for a moral landscape that addresses the ecological dimensions of what it is to be human and shows how the failure of many humans to understand themselves ecologically has contributed directly to the current ecological crisis.
- ii. Thinking about the self ecologically has pragmatic benefits because it situates humans in a way that facilitates our survival and the survival of other organisms.
- iii. The ecological crisis requires new ways of motivating beneficial ecological action.

Kretz (2009:117) argues that ecological thinking/feeling needs to be made personal in the Western concept of the self, because variations in human behaviours do not keep pace with what needs to be done to change the status of our planet, not only on an environmental level but also on a social level. Becoming responsible and leading an examined life is much harder than following one's emotions or inclinations. There are many initiatives which may be followed, and these are rational initiatives which will contribute to personal enrichment and to remedying the anthropocentrism which has been identified as the underlying cause of environmental destruction.

In addition, Conradie and Field (2002:11) suggest that environmental awareness must be fostered, nurtured and developed within schools and communities. They also suggest a few strategies which may be followed in order to approach the task of fostering an environmental awareness:

- i. One may frighten people with ominous statistics concerning global environmental threats.
- ii. One may use the aesthetic creations of poets and artists to appeal to people's sense of beauty and ugliness.
- iii. One may provide strong rational arguments why caring for the environment is in people's own (long-term) best interest.
- iv. Christians may be reminded of their obedience to God's commandments to care for the environment.

- v. One may show how environmental destruction is linked to other forms of injustice – to those who are poor, to women and children and to indigenous people.

In my discussion of the pull and push theory of motivation, I referred to Fairbanks (2010:91-93), who identifies four obstacles to the push theory. She proposes some promising practical measures to address these obstacles, which I will now discuss. Fairbanks (2010:97-98) says that the well-being of the environment should receive higher priority in economic and political discussions. The public should be informed about environmental infringements and the consequences thereof, such as global warming, overpopulation, the further depletion of scarce natural resources such as clean water, oil and coal, the erosion of topsoil, the process of desertification and deforestation, and the loss of biodiversity. As many people as possible should be involved in practical community activities associated with the green movement, such as recycling and improving the energy efficiency of homes, schools, hospitals and businesses. Kretz also recommends that locally grown produce should be promoted and she suggests that more emphasis should be placed on the environmental education of the youth, starting at home and continuing through all levels of public education. Environmental virtues will have a greater chance of developing if the educational process begins at an early age. Snyder (1959:241) also emphasises the role of educating young people because this will give them pride in their culture and their residential areas.

The above point is important because, as Messersmith-Glavin (2011:20) argues, if we get to know the bioregions in which we live, then we may be in a better position to understand the natural context within which we live. We can learn and understand where our water comes from, where our waste goes and how best to live within our surroundings. People typically live in a certain area without even knowing what the ecology of the area entails. People should be stewards of the land and incorporate social ecology's emphasis on the confrontation of human forms of domination, such as racism, sexism, and heteropatriarchy. Hierarchies and forms of domination should gradually be eradicated. Messersmith-Glavin (2011:23) maintains that since human activities can change social relations, we have a responsibility to act. To act responsibly in the world is to play an active

part, which entails making choices, running risks and dirtying one's hands. In all of this a person's attitude is of cardinal importance. The issue of attitude has been discussed when I highlighted the Attitude-Behaviour Consistency Theory. As mentioned earlier, I will now look at what Childs (2014) says with regard to attitude as a motivational initiative. According to Childs we should keep a positive attitude because there is no more powerful tool for self-motivation than the right attitude. Even though we cannot always choose or control our circumstances, we can always choose our attitudes towards our circumstances. He says that if we can follow the following eight steps, then we might see a drastic improvement in our self-motivation:

- i. Start simple: Restrict motivators to those things that provided the initial spark to begin working. People will not be motivated to attempt to stop global warming by tomorrow or try to recycle a minimum of a thousand tin cans a month. This will in actual fact only demoralise the individual. Start small and simple and let the successes of those small endeavours provide motivation for future actions.
- ii. Keep good company: Make more regular encounters with positive and motivated people. Mix with equal-minded intrinsically motivated people. Anthropocentrically-minded people who are still stuck in their way of thinking may demotivate others.
- iii. Keep learning: The more one learns, the more confident one becomes in starting projects. This is important because, as mentioned earlier, it is the responsibility of each citizen of this planet to inform themselves of the facts regarding their internal and external worlds.
- iv. Stay Positive: Look for reasons for optimism even in apparently negative circumstances. Find what works to get over obstacles. A person who follows the first three steps would be highly likely to remain positive.
- v. Stop thinking: Just do. A person who lacks motivation for a particular project should begin doing something else, even something trivial, to develop the momentum to begin important tasks. In my view, people should not stop thinking, but what Childs means here is not a desertion of the cognitive function in favour of the emotive function. What is implied is that we should act and that is how we will

make a difference. Just sitting and thinking about a problem will not alleviate the problem, but actions will.

- vi. Know yourself: Keep notes on when your motivation is low and when it is high. This is part of learning to know one's inner world. The maxim of the Delphic oracle was 'Know Thyself' and many people fail to pursue this knowledge. In our late modern world, it seems as if knowledge about other people's lives is more important than knowing oneself.
- vii. Track progress: Keep a tally or a progress bar for on-going projects. When one sees a project growing, one will want to nurture it. This is a very important aspect of self-motivation. Success tends to be motivating.
- viii. Help others: Share your ideas and help friends get motivated. Seeing others do well will motivate you to do the same.

It is Childs' (2014) hope that if people can follow these eight steps then they may gradually develop the skills that will eventually become motivational habits.

In addition, Devall & Sessions (1985:38-39) suggest some direct actions that can be followed as part of motivating ourselves to becoming more ecocentric:

- i. Sensitise yourself to your environment.
- ii. Become ecologically informed about all aspects of scientific ecology.
- iii. Choose a simpler lifestyle by reducing your energy and matter consumption and waste and pollution production. Recycling is a discipline.
- iv. Environmental preservation begins in the household economy.
- v. Avoid the extrapolation-to-infinity syndrome as an excuse for not doing anything.
- vi. Become politically involved on local, regional or national levels.
- vii. Start by doing little things like not littering and being aware of the colour of the sky.
- viii. You can work on the big polluters and big problems through direct action in politics or lobbying, and through environmental education.
- ix. Don't make people feel guilty. There is plenty to do and no one can do everything.

Conradie (2008:12&17) suggests a few practical earth-keeping activities that can be practiced by Christians. These include information sessions on environmental issues, the development of outdoor activities to enhance environmental awareness, camps for youth groups outside urban areas, recycling projects, clean-up projects, indigenous church gardens and graveyard projects, tree planting campaigns, introducing ecologically sound church building concepts, vegetable gardens, urban agriculture, energy-saving mechanisms, water harvesting projects and so forth. Christians can also join the *FairClimate* programme and commit themselves to its three objectives:

- i. to reduce their use of fossil energy by changing to sustainable lifestyles,
- ii. to switch to using sustainable forms of energy, and
- iii. to pay financial compensation for emissions that exceed two tons of CO² per person.

Conradie (2008:23) continues that conservation starts at home and that people may save in the following fields of usage, thereby contributing greatly to a reduction in environmental impact:

Electricity – they can switch to solar power, switch off lights and appliances, use natural light and use better insulation.

Transport – people should think before they drive, share lifts wherever possible, drive more slowly and buy cars with fuel-efficient engines.

Shopping – people should buy only what they really need, buy local where possible and use recycled packaging.

Customers are not only instruments of buying — they can exert much pressure on shop owners whenever they see environmental infringement. According to Carballo-Penela and Castromán-Diz (2014:5) there is actually a very positive correlation between institutional shareholder pressure and environmental orientation. They found that pressure from customers and stakeholders in businesses and firms motivate environmental proactivity.

Furthermore, people can connect with an environmental group and become a volunteer, whether this is in person or via the internet. Online databases can be searched in order to learn more about planetary crises and some of these can be joined in order to make one's voice heard. Many successes have been achieved by such online movements that put pressure on governments through petitions. A great misconception, and an important threat to the environment, is the conviction that someone else will save our planet. Nothing will be achieved by people who simply sit back and think that others will perform the tasks needed. If a substantial difference is to be made to our planetary outlook, then the majority of people should pitch in and get the job done. The inspiration people need to achieve this, says Hawken (2009), is not garnered from responses of what may befall us; it resides in humanity's willingness to restore, redress, reform, rebuild, recover, reimagine and reconsider. We need to move away from the profane towards a deep sense of connectedness with the living world and forget that the planet-saving task is not possible in the time available, because it is possible. We need to be activists, not in a destructive sense, but as Taylor (2005:456-60) argues, Deep Ecology's greatest influence may be found in the diverse forms of environmental activism it inspires. Only after we have acted can we check to see if what we attempted to do was impossible or not.

Even Kretz (2012:217) is convinced that if we want to limit collective harm to nature, then activism – as a moral duty – will be required to alter destructive rules and norms. She says (2012:23) that a shift in theoretical and pedagogical approaches that inspire moral action must take ethics beyond the classroom and into the realm of activism because the threat we face is the demise of human life and the destruction of a myriad of innocent organisms. The need for immediate, ethical actions is therefore of paramount importance. Snyder (1969:92) is of the opinion that nothing less than utilising civil disobedience, outspoken criticism, protest, activism, voluntary poverty and even gentle violence, will be sufficient to solve the Deep Ecological crisis we find ourselves in. I disagree with him as regards poverty and violence of any sort. People do not need to live in poverty in order to live a green lifestyle, and violence is not an option for me. I do, however, agree that people need to take a stance

and be activists. I always recall the lone protestor, known as Tank Man,⁹⁷ who stood in a moment of self-transcendence defiantly in front of four threatening military tanks on the Tianmen Square in China. The image of this portrayal of non-violent pro-democracy protest on 5 June 1989 is considered to be one of the most iconic images of the twenty-first century. This unidentified, revolutionary man symbolises freedom and democracy. What can we do for the sake of environmental preservation, for the sake of instilling in people a sense of Deep Ecological intrinsic values?

Violence only brings about more violence, but through non-violent actions people may be made aware of certain aspects and even be motivated. Another example of non-violent activism is that of swimwear and lingerie model Leslie Rochat who had no qualms going nude in the depths of the Indian Ocean to campaign against shark culling. As a Cape Town marine conservationist, she attracted international attention with a controversial campaign in which she dangled naked on a giant hook, surrounded by more than thirty sharks. Rochat says that her show of abhorrence for aquatic traps to hook sharks was the first attempt of this kind by anyone in the world. Rochat also took off her clothes for an anti-shark-net campaign (Govender 2014:3). One does not need to pick up arms or be involved in violence to be a revolutionary: one needs simply to believe in a cause and act according to that belief. In the same manner as Tank Man, we should show our concern for the status of our planet by leaving the talk for after we have achieved success through actions.

Taylor & Zimmerman (2005:4) recall another form of activism: in the early 1980s, radical environmentalist activists such as Dave Foreman (American co-founder of Earth First!) and John Seed (Australian co-founder of the Rainforest Information Centre) conducted road shows to transform human consciousness and promote environmental action. Such events usually involved speeches and music designed to evoke or reinforce people's felt connections to nature and eventually to inspire action. They also often included photographic presentations in which they contrasted sacred intact ecosystems with degraded and defiled lands. A more recent but similar attempt to transform human

⁹⁷ <http://www.latimes.com/world/asia/la-fg-china-tiananmen-square-tank-man-20140603-story.html#> (Accessed on 05 January 2015).

consciousness and promote environmental action is conducted by NASA climate scientist Josh Willis,⁹⁸ driven by the conviction that global warming is a serious problem. He found that teaching people about it often induces despair. He then decided that what he needed to help the message go down with less hopeless anxiety was a spoonful of sugar in the form of a Second City comedy show. He created the *Lollygaggers*⁹⁹ show, in which a polar bear takes up residence with a grizzly bear because his ice cave has melted; a penguin who insists on playing music from *Saturday Night Fever* until his friends go mad because according to him there has never been as cool a decade as the 1970s; and finally a sea snail who becomes an unwilling exhibitionist after acidic ocean water dissolved her shell. This comedy show smuggles some facts about climate change to audiences under the friendly garb of family entertainment. Willis maintains that this helps people to begin thinking and to begin to accept the reality of global warming and that people will hopefully then begin to ask what can be done about it. He is also of the opinion that adults find it hardest to grasp that humans could have such a big negative impact, as if it seems impossible that humankind could be changing the entire planet's climate. He nonetheless observes that children accustomed to a constant onrush of information soak it in.

There are many initiatives that can be taken up, not only to become more ecocentric beings but to motivate ourselves and others to become such beings. Following these initiatives is not difficult: it only involves making a choice. To continue in a state of ignorance is not an option: action is what is needed and, according to me, the first step is to embrace Deep Ecology in order to become ecocentric citizens of this planet.

5.4 SUMMARY

In this chapter I explored the topics of motivation and action with regard to environmental preservation. I pointed out that the importance to locate ourselves ecologically is an inevitable part of pro-environmental motivation. People however tend to be ignorant and this ignorance is what results in environmental degradation. Changing our belief systems

⁹⁸ <http://climate.nasa.gov/news/1049> 'NASA scientist fights climate change with comedy' (Accessed on 26 November 2014).

⁹⁹ https://www.youtube.com/watch?v=TF2vZ5Q-_rY (Accessed on 26 November 2015).

may result in better self-motivation and better results may be attained if we embrace ecocentric ideologies. Pacifism will not help us to attain such goals. Many people are not motivated to set and pursue ecocentric goals, but we can re-catalyse such individuals by making them self-motivated. I have shown that this can be done by addressing the needs of achievement-, affiliation- and power seekers. People's levels of arousal may be addressed and I think that the mere knowledge of our doomed existence may provide the necessary trigger in this regard. Our opinions may furthermore be altered by embracing the Deep Ecological principles, and this may be assisted by making environmental inferences. Such inferences may motivate us to the extent that we become more aware of environmental infractions. The goal fact of not being inconsistent in our actions is also a motivating aspect to keep in mind. With this I refer to the cognitive dissonance theory and how dissonance can place strain upon our mental faculties but also to the fact that we tend to strive for consistency and this impulse should motivate us to behave ethically.

Intrinsic-extrinsic motivations are also important and have an enormous impact on self-determination. It stands to reason that people have needs, and these needs should serve as motivation when we consider our use of the resources that sustain these needs. Societal conditioning is another motivating factor. If we mingle with ecocentric beings and like-minded individuals then we may contribute to such conditioning. We are conditioned by the society we find ourselves in, as well as various media. Every now and then I read of celebrities who embrace green initiatives and this is good conditioning for those who want to mimic their idols' way of existence. Ecocentrism is also a strong pull aspect because I believe it is intrinsically the right attitude to pursue.

These forms of motivation may foster a sense of self-realisation and biocentric equality. We should also not forget the important role of pedagogic endeavours, especially in the form of direct personal experience with nature. Our moral motivation, whether approached from the Kantian or Humean point of view, needs to increase because we have seen that it is immoral to continue treating the so-called other without respect and identification. If we follow the initiatives presented and we foster, nurture and develop the other/s at every level of our existence, then we will continue to sensitise ourselves to the internal and external

worlds and thereby craft an existence in unison with the Deep Ecological philosophy. We also need, as a species, to consider the future. Kashio (2012:304) says that the psychological future is essentially related to motivation. What motivates people is the future time perspective or future orientation, which motivates present behaviour. It is true that our instincts sometimes lead us to choose short-term benefits over what's best in the long term. Sometimes the right action is to set our feelings aside in order to see the larger picture. The hero of Thomas Mann's novel, *The Confessions of Felix Krull*, said: "He who really loves the world shapes himself to please it" (Cheney 2005:121).

More and more accounts are available of people who embrace green initiatives such as solar power, wind power, erecting green buildings and pursuing green corporate responsibilities. This is good news for the planet. People can change and they are doing it, but the majority of people, according to me, are still not on the right path. Beam (2014:10) aptly observes that only the solidarity provided by a popular consensus could motivate people in a positive direction to reduce their consumption and lower their material standard of living. Hit (1999:606) thinks that it is crucial for humans to recognise and honour nonhuman nature as a world with its own independent, nonhuman reasons for being as it is. Any way of looking at nature that may help us to remember that our interests are not necessarily identical to those of other species or of the earth itself, is likely to foster responsible behaviour. We need to start caring more, not only for ourselves but for all creatures on the earth. Kretz (2009:120) discusses the issue of care, the act of being actively attentive to the other and the necessity to acknowledge and value the other as different from ourselves. If we fail to care, then we stand at risk of seeing the other as a means to an end, in terms of one's own needs, wants and desires. In the introductory part of this chapter, I referred to Foreman, (2004:228), who wondered how we can act according to our ethics; how we can start behaving in keeping with the recognition that our actions have long-term consequences and how we can become responsible moral beings.

According to Ally et al. (2010:196), morality refers to behaviour that conforms to right norms which have positive consequences for others, as well as to the current and traditional norms and values held by a society. Norms are standards of behaviour which are morally

acceptable, while values are the prioritised beliefs about right and wrong which we affirm and applaud. Ethics involves intellectual reflection about these norms and values on both an individual and collective basis. Ethics addresses both values (expressed in attitudes, beliefs, judgments and actions concerning what is good or bad, right or wrong, what ought to be done and what ought not to be done) and conduct (our interaction with other people and the way in which our actions affect other people). Ethics is therefore the study of right actions and good conduct. If we, in the light of what has been said, reflect upon the current status of our global world, then we may deduce that our world's moral-ethical status does not seem that good. Ally et al. (2010:197) says that an action is unethical if, among others, it will result in harm towards other persons, groups, society as a whole, or the environment. We as citizens of this planet are acting unethically towards other people and the natural world. For this reason it is safe for me to say that I think that it would make more ethical, moral and logical sense if we can all dream of a world in which people want to preserve life at large for its own sake, not because it happens to fulfil our needs to whichever extent.

A world where our existence and co-existence are not measured against the proficiency rate at which we can use social media networking sites such as Facebook or Twitter. Nowadays it seems like humanity want to amass hundreds of friends but it also seems to me that the interests we show in other people's lives tend to be much too superficial. Is this not typical of a small world mentality? Should we not rather be more sincere, first to ourselves and then extend that sincerity to the external world motivated by intrinsic factors? I think we should. Snyder (2007:23) makes it clear that a society that treats its natural surroundings in a harsh and exploitative way will do the same to other people. Nature and human ethics are connected. The growing expansion of ecological consciousness translates into a deeper understanding of interconnectedness in both nature and history. It is possible to develop such common understandings that may enable us to work with civility toward harmony with other creatures and beings.

Fairbanks (2010:79) says that Western virtue ethics has recently recognised nature-focused virtues. This is not surprising if we recall the discussion of how Western philosophies and religions may promote the idea that the human race is superior to nature and how this, in

turn, promotes the domination and exploitation of the environment. She thinks that the capitalist consumer culture still presents serious obstacles to the successful inculcation of any new environmental virtue. I am still convinced that Deep Ecology can counter this tendency.

According to Fairbanks (2010:90), environmental goodness includes the following virtues:

1. Respect for nature, described by Taylor (2008) as a rational attitude similar to Kant's respect for persons; not based on love or affection but rather on the recognition of the intrinsic worth of non-human life, ecological wholes such as species, ecosystems and even non-living natural objects such as rivers or mountains.
2. Virtues of non-maleficence, non-interference, fidelity, and restitution are akin to the environmentally good person. Deep Ecology links our ability to sympathise with, and care for nature with a view of the self as interconnected with nature. According to Deep Ecology, our ability to identify and empathise with other species, natural objects, and the biotic community as a whole represents the height of spiritual and moral growth.
3. Humility is another virtue through which the anthropocentric attitude, which is so commonly linked to the destruction of the environment, can be defeated.
4. Virtues of care, sympathy and love towards nature are also important within the conception of environmental goodness.
5. Simplicity is another aspect of a lifestyle of environmental goodness and Deep Ecology is perhaps the most explicit in its promotion of the virtue of simplicity.
6. Intellectual virtues of holistic and non-hierarchical thinking. In this regard Fairbanks (2010:89) says that environmental goodness rejects individualism, because it attributes moral consideration to individuals on the basis of psychological capacities such as sentience, rationality, consciousness, autonomy or having interests. Non-hierarchical thinking requires that the virtuous person reject what ecofeminists call the logic of domination.

The concept of environmental goodness is important to keep in mind. Callicot (1999:283-285), for example, argues that the various dimensions of overall wellness are thoroughly interrelated; that one cannot be emotionally well if one has unsatisfying social relationships; one cannot be intellectually well if one abuses alcohol or drugs; and one cannot be physically well if one lives in a grossly polluted environment. He says that an *ersatz* environment of metal, glass, concrete and asphalt; congested automobile traffic; drugs, poverty, homelessness and the street crime it breeds, all seriously compromise our physical, emotional and spiritual wellness. Environmental wellness is generally a necessary condition for human health and well-being: we cannot pursue personal wellness unless we also work collectively and cooperatively to ensure an improvement in our natural and fabricated environments.

Foreman, who wondered how we can act according to our ethics and become responsible moral beings and how to start behaving with the conviction that our actions have long-term consequences, answers these questions as follows (2004:228):

Consciously, deliberately, physically acting to heal ecological wounds may be a way to overcome the gulf between a land ethic and land caring. Assuming that we have to thoughtfully work to practice our ethics toward nature may lead to better behaviour. We might be able to practice our land ethic only by consciously practicing it. Physically restoring streams, pulling exotic weeds, helping with native species reintroductions, closing harmful roads—such actions may be how we become consciously responsible. We need to create a hopeful vision for the future and consciously work to gain it, not naively assume that humans will unconsciously move in the right direction.

In addition, Jenkins (2011:64) asks whether ethics can transform the foundations of conduct while working from available values and concrete problems. He thinks environmental values can improve as communities integrate science and ethics to learn from the problems that they face. Deep Ecology, as an environmental ethic and counter-narrative of human relations to their landscapes, is an alternative moral framework that I propose for altering the world's environmental problem. But why is it so difficult to move from an anthropocentric to an ecocentric worldview? Do we live in a state of denial? Many people know that their acts are destructive, but they act as if they don't know. Covy (1992:95) says

that the six major world religions all teach the same basic core beliefs: you reap what you sow and actions are more important than words. Humans with forethought and self-reflection have an ecological responsibility with regard to our interactions with ecological systems. Deep change is necessary, and this may be attained by shifts in our paradigms, values, and basic relationships. Modest modifications are not enough, consumption is still rampant, and as a result economic growth as the status quo is still placed before the environment, maybe because of the unquantifiable nature of the environment. However, sooner or later our economic systems will have to respect certain limits to growth, namely a stable population, the rationing of resources, and significantly reduced pollution (Beam 2014:2-4). But according to Qi and Zhang (2014:1-3, 10), the enforcement of environmental regulations is the weakest link in environmental protection. In the event of a conflict between economic growth and environmental protection, there is a usual lack of motivation and weak capacity to enforce environmental regulations from the side of local governments. This is essentially a collective expression of the motivation of its leaders. Motivation is therefore an important aspect to consider in the analysis of the environmental state.

In the past people practiced emancipatory politics by protesting and joining social movements because they wanted to bring about change (for example, stop the war, save the whales). More recently, people tend to turn to identity politics where people's sense of identity includes more and more a tendency to activism due to their sense of responsibility because of what was accomplished through emancipatory politics. I believe that Deep Ecology will win more and more support because it supplies a platform for self-realisation and the acknowledgement of a sense of responsibility. To bring about such a change in heart and mind will require that we follow the three stages of training: hearing with the ear; pondering in the heart and practicing with the body. This research provided the first two stages; the final stage will be the responsibility of the reader.

CHAPTER 6 – CONCLUSION

The issue of motivation, as discussed in Chapter 5, is an important aspect of the discussion of our ethical and moral duties. More than two decades ago, Cobb (1994:400) pointed out that on a hotter planet, with lost deltas and shrunken coastlines, under a more dangerous sun with less arable land, with more people and fewer species of living things, with a legacy of poisonous waste and much beauty irrevocably lost, there is still the possibility that our children's children will learn at last to live as a community among communities. Perhaps they will learn also to forgive this generation its blind commitment to ever greater consumption. But why should we place the responsibility on later generations? People should not put the burden on others to locate themselves ecologically. Ecological location is an inevitable part of pro-environmental motivation and this can only be done by way of radical paradigm shifts, by re-shaping and re-directing human awareness. Our ignorance only contributes to environmental degradation and such ignorance should not become the problem of future generations. Yeld (1997:12) points out that we should not burden later generations with an ecological debt that will condemn most of them to an even more precarious and poverty-stricken existence than that endured by tens of millions of people today.

We do indeed live in a fractured world, in which the old biotic patterns and relationships have changed with the growth of human activities and their consequences (Handel 2011:203). Although there are many people who are convinced that our consumptive habits and the ideologies driving our actions are unconnected to the state of the environment, I am convinced that we can hardly dispute Handel's conviction. Signs of human modifications to ecological structures and functions are visible everywhere around us and we only need to consult the National Aeronautics and Space Administration's (NASA's) website¹⁰⁰ on Global Climate Change – Vital Signs of the Planet, to verify this fact. Changes made to the environment through human conduct are accelerating with the rapid growth and urbanisation of the human population. Nowadays our travel behaviour is faster, cheaper and more frequent than in the past. As we move about the globe and populate it, we

¹⁰⁰ <http://climate.nasa.gov> (Accessed on 13 March 2015).

enable the displacement and removal of many species of plants, insects, and marine life and we tend to eliminate more species than are being introduced. Human development is mainly destructive and we already experience the impact of our ruinous actions as regards global warming.

In this research, I have shown how human activities have pushed essential life-support systems near or beyond critical tipping points due to growing population and per-capita consumption as promoted and upheld by a consumerist culture. I have argued extensively that the projected population will reach 9 billion people in 2050, according to the projected growth rate, is problematic. Weyler (2013:192) made a very important and valid observation that social equity, consumer lifestyles and renewable energy for 9 billion people would require about thirty times more resources than we consume today. We have already levelled half the world's forests; depleted major commercial fish stocks by about 80 percent, filled the atmosphere with carbon dioxide and drained aquifers; humanity has also turned pristine boreal lakes into black sludge pits in order to extract the dregs of Earth's once great stores of irreplaceable hydrocarbons. Species diversity is now collapsing faster than at any time in the past and I wonder how many people truly realise this. The vitality to address our behaviour for the destruction, as well as the reasons and values for not destroying the oldest, richest, most complex and productive ecosystems on the planet cannot be overemphasised. The environmental crisis is a pathological sign of a collective failure of our mind-sets and, even though I am convinced that I have successfully substantiated the factual claim regarding the planet's environmental dilapidation as not being merely speculative, I still wonder why there is such a common failure to make significant changes on the collective mind-sets of people in order to bring about the required impacts on the preservation of our planet.

Handel (2011:204) suggests that we do three things in our attempt to alleviate the pressure on the environment and the changing of people's mind-sets. He says that we must continue to publish articles, notes and ideas that apply ecological scientific principles to the changing landscape. Scientific discoveries in the field of environmental science should lead to practical applications. Secondly, new bridges must be built with other disciplines because,

whenever ecologists learn about natural processes, these processes will usually not be expressed in practice unless partnerships are built with those professions who have the authority to instil these practices in order for change to take place. Professions may include architects, landscape architects, civil engineers and so forth. Many of these bridges are already in place. For example, the Perot Museum of Nature and Science is one of the better-known so-called green-buildings. Also, Green Globes is a nationally recognised green building guidance and assessment program that operates in the United States of America. The Green Globes' rigorous assessment is also the most closely aligned certification to federal building requirements in the United States of America, but the lack of Deep Ecological thinking is reflected by the Green Globes' achievement rate, where only 12 out of 759 certified buildings in the United States of America have reached a four Globe certification. A very impressive example of green architectural designs is South Asia's first carbon-neutral hotel, known as Colombo Courtyard in Sri Lanka, which was constructed by environmental designers to perfectly capture a fusion of contemporary style with the essence of environmental design.¹⁰¹ Thirdly, there need to be a more intense focus on the development of outreach and educational modes to better incorporate restoration ecology into centres of learning and into public policy dialogue. New courses at all levels, from universities and public schools, to continuing education programs and youth activities must be encouraged. If we are to move towards a more sustainable path we need to develop a new way of understanding ourselves and our relationship with nature and accept the fact that our cultural beliefs and practices are disrupting the sustaining capacities of ecosystems.

I have shown how religious and philosophical traditions continuously shape our views, our opinions and our understanding of ourselves and the world around us. This process not only forms our behaviour and values according to which we live, but it also serves as a mirror that reflects our social reality. Philosophical and religious conceptual schemes condition us in ways that are healthy, but may also be destructive. I have argued extensively that Western religion and philosophy condition our anthropocentric attitude to a certain extent, an attitude that we learn from childhood in the manner to which we are taught to interpret the world around us and how we fit within this world. Nonetheless, I also conceded that it

¹⁰¹ http://www.colombocourtyard.com/images/carbon_neutral.pdf (Accessed on 14 March 2015).

is not religion *per se* that is the problem, because, especially in Western religions, the essence is ecocentric, but this fact has been twisted to suit humanity and as a result religion is interpreted in an anthropocentric manner and are therefore environmentally unfriendly. This is the central part of the anthropocentric argument that the majority of Western worshippers of their respective faiths miss in their understanding of their faiths. Such a predominantly Western (anthropocentric) understanding is in stark contrast to the understanding of devotees to Eastern religions such as Taoism and Buddhism, which contribute to an ecocentric way of thinking due to their religions' insight into the *nature* of things. Eastern religions grasp the understanding that there are no discrete entities, only the intermingling processes of a unified ecosystem.

Accordingly, it is important that we cultivate and stimulate good Philosophy and good theology (Deleuze & Guattari 1996:2). Neither philosophy nor theology should dichotomise us, nor should we dichotomise the world, because when this happens we are setting ourselves apart from nature and in doing so we should ask ourselves if we – perceived as being set apart from nature – have any moral responsibility toward nature. Dichotomisation is anthropocentric and I argued for a move away from anthropocentrism towards ecocentrism. However, whether Western philosophy is anthropocentric and humanity is not, or whether Western philosophy is not anthropocentric while humanity is, should not become the axis around which this argument revolves. The essence should be that we need to construct a new vision and a new way of thinking about ourselves and the world in which we live (Dunstan & Swan 1993:3).

In order to attain this, people must realise that they are part of the natural social order and that they should refrain from dominating other species or the Earth itself. The Deep Ecological principles can be followed to assist in attaining this new way of thinking because they seek a balance and harmony between individuals, communities and nature, all understood as interconnected. A disconnected ecology, says Weyler (2013:187), is not working because it is hard to save something when it is not really a thing. Nature is a process, a set of relationships among dynamic systems that are co-creative, co-evolutionary, and interdependent. Nature is a system of systems and the complexity unfolds at orders of

magnitude and in eons of time beyond our conventional awareness (Weyler 2013:190). Furthermore, Plumwood (1993:153) maintains that we must understand the self as essentially related and interdependent and that the development of the self is taking place through involvement and interaction with the other. In attempting to remedy the human-nature dualism, Plumwood (1991:18) suggests a restructuring of the human self in relation to nature and a re-conception of what it is to be human and what it is to be a self.

Moreover, Davis (2011:140) says that such a non-duality implies a heightened consciousness in which objects, persons and relationships can be perceived with greater clarity. This comes to pass as the conditioning and cognitive limitations of the ego-based separate self are dissolved, integrated and ultimately transcended. According to Lehman (2011:799) the natural environment is regarded as a part of the text in which we live and, as such, it is inseparable from us. A variety of influential thinkers, from Lynn White (1967) and Arne Naess (1989) to Val Plumwood (2002), have blamed the current ecological crisis in part on theories bringing about a separation between humans and nature. In addition, Davis (2011:144) states that such an understanding of non-duality has radical consequences for views of nature and the psyche. A non-dual view of eco-psychology goes beyond anthropocentrism *and* ecocentrism. A transpersonal understanding that is sensitive to the Earth recognises that direct contact with nature expands and develops one's maturity beyond the personal. Environmental problems then become an arena for selfless service and the phenomenal world becomes an arena for transpersonal insights and non-dual awareness. This is important to achieve because our current environmental problems are a blatant warning that our mind-sets are wrong (Davies 2014:8-9; Kretz 2009:132).

The importance of an environmental transpersonal insight and non-dual awareness, says Martin-Brown (1990:4), may be found in the lack of an ethic which values all people, other forms of life and nature. It is such a lack that makes a predatory and separatist relationship between people and between people and nature possible. Accordingly, humanity has to learn how to live an interconnected existence with nature. If we want to restore the damage we have done, then I agree with Dunstan and Swan (1993:4-9) that we will need to follow the following principles:

1. Recognise and accept the fact that we are an interdependent part of nature and that we are subject to the limitations and carrying capacity of the earth, just like any other species.
2. Cultivate biocentric rather than anthropocentric views and attitudes regarding other beings and nature by acknowledging the intrinsic value and worth of all species.
3. Ensure that the consequences of human actions are fully considered and integrated into our decision-making processes.
4. Move from a human life based on immediate gratification and short-term self-interest to a heightened awareness of and respect for the mutual interdependencies of individuals, the community and other species.
5. Reject a blind obedience to the existing paradigm of economic growth in which ever-increasing consumption is inconsistent with living on a finite planet with finite resources.
6. Focus on quality rather than quantity in human activities. The challenge is to forge a paradigm shift away from equating development with economic growth and towards a model of excellence, personal growth, sustainable creativity, ever increasing awareness and consciousness, the attainment of wisdom and respect for all other species and the carrying capacity of the land.
7. Limit global human population. The root of the problem is that there are too many people competing for finite resources. The Earth has a finite carrying capacity based on the sum of all its resident beings.
8. Take responsibility to change our attitudes and the way we conduct ourselves on the Earth because it is our responsibility to adapt to the earth, instead of expecting the earth to adapt to us.
9. Life on earth is totally dependent on energy from the sun.
10. Life is not a simple linear flow of energy.
11. We have lost our way. We desperately need to check the maps and chart a new course.

Among these principles, I have referred to the carrying capacity of the planet. In this regard Bradford (1989:25) says that the notion of carrying capacity is trivialised by reduction to

absurd statistics. He says that no one really knows what the earth's actual carrying capacity is or how much land we need in order to live in a renewable manner. Bradford questions the relevance of mega-technic projects, freeways, asbestos, nuclear power, armaments production or the automobile to that of biological carrying capacity, and he is convinced that these have only relevance to the inertia of investment, technological drift and capital accumulation.

Notwithstanding Bradford's point about the relevance of mega-technic projects, freeways, nuclear power, etc., I part company from Bradford and Jain (2011:14), who argue anthropocentrically that ecology is an issue about the people, of the people and for the people. Furthermore, I disagree with Marx (2007:730), who taught that the earth is not the product of labour and has no value and that production should therefore be ahead of environmental controls. Statements and ideologies such as these contribute to a blasé attitude toward actively being involved in the restoration of a broken planet, for the planet's sake.

In Chapter 3, I gave a lengthy discussion of the many aspects in which humanity has failed the planet: the water; climate change; the loss of biodiversity; deforestation and desertification; the acidification of the oceans; depletion of marine resources; the disruption of the phosphorus and nitrogen cycles; the increased levels in the ozone that contribute to depletion of the ozone layer, and fracking. In fact, the so-called human fingerprint of global warming itself has been detected on the earth's environment by way of its disruption of surface temperatures, humidity, oceanic water vapour and heat content, barometric pressure, precipitation, wildfires, changes in species of plants and animals, water run-off and upper atmospheric temperatures (Foster 2008:4). I emphasised humanity's failures because, as Schwartz's (1977) norm-activation theory claims, an awareness of consequences of environmental damage will compel a person who believes his or her actions can ameliorate those consequences, to feel a sense of moral obligation to act. However, to my mind, these challenges we are facing can be overcome — there is a will and a way. Deep Ecology gives us the way through adhering to its eight principles as contained within the Deep Ecological Platform.

Apart from embracing these principles, as Weyler (2013:195) suggests, people should learn from nature's ways and young people should be prepared for a world characterised by limits on cheap energy, less or no substantive economic growth, food and commodity restraints, and increased ecological pressures. Weyler says that consumers could live much more creative, productive and happy lives with a lot less stuff, a richer life which can be much simpler in means. Recall that the same is argued by Annie Leonard, in her 'The Story of Stuff'. This is actually also one of the maxims of Deep Ecology, as Beam (2014:10) points out: The first is that in order to achieve the positive benefits of a shift to the steady state – a greater appreciation of the qualitative aspects of human well-being and a “simple in means, rich in ends” ethos – a sense of social solidarity and broad commitment is necessary. Happiness does not come from consuming more goods. Happiness comes from friends, family, community, creativity, leisure, love, companionship and time spent in nature — all of which require emotional, spiritual, and intellectual effort, but modest material investment.

These are the qualities of life we should be promoting and teaching our young and eager students. Weyler (2013:195) is of the opinion that realising and negotiating with nature's limits and patterns may be the most important public dialogue of this century and humanity had better get it right because humanity may not get many more chances. This observation and that made by Bradford (1989) provide enough reason for rational human beings to heed the call of Deep Ecology. Heeding this call cannot be overemphasised. The mission of the Foundation for Deep Ecology (FDE) is to support education and advocacy on behalf of wild nature. The FDE carries out this mission primarily through publications, grant making and support of campaigns on particular issues affecting the future of nature and people.

On the point of creating an awareness, the Chinese actress Li Bing Bing, who is a Goodwill Ambassador for the United Nations Environment Programme (UNEP) as well as an Earth Hour Global Ambassador for the World Wildlife Fund (WWF), recently made her voice heard in support of the United Nations Office on Drugs and Crime (UNODC) when she appeared in a 60-second wildlife crime awareness video.¹⁰² This public service

¹⁰² <https://www.youtube.com/watch?v=I3jlt16LhPs> (Accessed on 04 December 2014).

announcement urged people to speak out against wildlife crime and it raised awareness that the buying, selling, and consuming of protected species is both illegal and finances organised crime. Each year, while countless species are driven closer to extinction, criminals generate billions of dollars from the sale of protected wildlife products. Why are campaigns like these important? On 3 March 2015, the second World Wildlife Day was held. If we look at the statistics given then we would understand the important work done by people such as Li Bing Bing. According to UNODC,¹⁰³ wildlife and forest crime has now transformed into one of the largest transnational organised criminal activities alongside trafficking in drugs, arms and human beings.

Beyond the immediate impact on the world's fauna and flora, the illegal trade in natural resources is devastating to ecosystems. Overall elephant poaching rates remained virtually unchanged in 2014 when compared to 2013, and still exceed natural elephant population growth rates, meaning an overall continued decline in elephant numbers is likely. Each year, the number of elephants killed in Africa is in the range of 20,000 to 25,000 out of a population of just 420,000 to 650,000. For forest elephants, the population loss is particularly stark: between 2002 and 2011 they declined by an estimated 62 per cent. Rhino numbers are also being significantly threatened. In 2014 alone, 1,215 rhinos were poached in South Africa (roughly one every eight hours), and with the largest remaining populations, approximately 94 per cent of rhino poaching takes place in South Africa. The involvement of organised syndicates has seen poaching rise from less than 20 in 2007 to over 1,000 in South Africa in 2013.

Other wild animals — particularly the lesser-known species — are also under threat from organised crime. The illicit traffic in live great apes is an increasingly serious threat to chimpanzees, gorillas, and bonobos in Africa and orangutans in Asia, with seizures averaging 1.3 per week since 2014. Another example is pangolins, which are among the world's most trafficked mammals with over one million animals taken from the wild in the past decade. Even the illegal trade in precious timber, such as rosewood, is highly lucrative,

¹⁰³ World Wildlife Day 2015: It's time to get serious about wildlife crime! <http://www.unodc.org/unodc/en/frontpage/2015/March/world-wildlife-day-2015-its-time-to-get-serious-about-wildlife-crime.html?ref=fs1> (Accessed on 17 March 2015).

well organised and transnational and it involves corruption. Substantial volumes of rosewood have been smuggled from Madagascar, Southeast Asia and Central America in recent years. Between June 2011 and June 2014, more than 4,800 tons of illegal rosewood that originated in Madagascar was seized by authorities in various countries in Eastern Africa and Asia. In December 2014, Hong Kong Customs made a seizure of 92 tons of non-declared Honduras rosewood arriving from Guatemala via Mexico. Illegal trade in Siamese rosewood from Southeast Asia has also escalated. It seems that humanity may be referred to as termite people, people who come into this world and nibble down all the trees, just like termites.

The mention of lesser-known species under threat of organised crime reminds me of Simon Watt's book *The Ugly Animals – We can't all be Pandas* through which he wants to make people aware of less commonly known species on the endangered list¹⁰⁴. We so easily only talk about the rhinos and elephants and pandas and tigers, but what of the plethora of other fauna and flora being threatened by extinction on a daily basis! How many people also know that a huge percentage of products in supermarkets contain palm oil and that this versatile oil may even soon power our motor vehicles? But palm oil often comes at the expense of tropical forests and the wildlife that lives in them. Kortenkamp and Moore (2001:8-9) shows that a person who does not know that over-fertilising city lawns has a negative impact on nearby waterways, would not perceive lawn fertilisation as an ecological dilemma and would not take the waterways into consideration when making decisions about applying fertiliser. Our immediate environment, our home and the identification with nonhuman living beings are largely ignored (Naess 1995c:226).

The point is that real-life dilemmas elicit different moral orientations than in the case of hypothetical dilemmas and it tends to move us to become more actively involved in that which we believe in. It is therefore imperative that citizens of this world inform themselves of the repercussions of their actions and act to prevent them. Radical environmentalists, says Taylor (2008:28), can easily be recognised by their diagnoses and prescriptions regarding environmental crises. Such diagnoses generally involve a critique of the

¹⁰⁴ <http://uglyanimalsoc.com> (Accessed on 17 March 2015).

dominant streams of occidental religion and philosophy which tend to desacralise nature and thereby result in promoting its destruction. It also involves reconnecting with nature as well as overturning the anthropocentric and dualistic beliefs that alienate people from nature by producing an ideology of human superiority.

A good example of a citizen who informed himself of the repercussions of humanity's actions and who acted to prevent them is Weyler (2013:187). He never intended to be a Greenpeace co-founder and activist, but he became an activist after looking around him and seeing that the world he lived in was diseased and that the culture he lived in was contributing to this sickness. He decided that he would not participate in this without resisting it and according to his mind such a resistance is a natural instinct. I share his views.

In addition, Weyler (2013:189) says that leaders and policymakers tend to pay lip service to environmental concerns and that all the promises to save the world keep people dangling and tend to prevent us from mobilising ourselves. Hope may indeed be a useful state of mind and something most of us cling to — the only entity left in Pandora's Box for an ailing world. However, this is not a strategy with regard to our current discussion — going beyond hope to action is necessary for our social movements if we ever want to change the world. Naess (in Belshaw 2001:279) believes that it is through the policies of the state that some principles of the Deep Ecology platform can be achieved. For example, the state can create regulations that would restrain human interference with the natural world, and the state can influentially encourage and take measures to impose a decrease in birth rates. In addition, it is the state that can implement changes in policies that would improve economic and technological structures, making them less capitalistic, materialistic, and less focused on creating increasingly higher standards of living through modernisation, industrialisation and urbanisation.

Archbishop Desmond Tutu¹⁰⁵ mentions that we can encourage more of our universities and municipalities, foundations, corporations, individuals and cultural institutions to move their money out of the problem (fossil fuels) and into the solutions (renewable energy). But is renewable energy the option to be followed? Weyler (2013:192-193) makes it clear that energy sources such as solar panels and windmills require energy and materials — iron, rare-earth metals, copper and silicon — which we mine with hydrocarbon energy (sunlight energy compacted over the last 500 million years). Weyler says that we should attempt to operate a copper mine on real-time solar energy and we will soon understand the dilemma. If we attempt to power a wasteful, consumer culture for 9 billion people in this manner, we will encounter some inconveniences. For example, all mechanical energy systems have limited lifespans. If we build enough windmills and solar panels to power a world for 9 billion people, the life cycle of the infrastructure would have to be about the same as the duration of construction, if we are lucky. In other words, to sustain such a world, we would be building and rebuilding the infrastructure forever. He says that recycling would also not save us because materials do not entirely recycle in useable form, and the percentage that does recycle requires energy to recover.

The reason human enterprise has such a poor recycling record is that more energy is required to recycle materials than to dig the original material out of the ground. Solar energy is not free. No energy transformation in the known universe is free. Materials and energy remain the necessary sources of human enterprise. We hear of new electronic efficiencies, but historically we never leave the efficiency gains in the ground. We take it out in profits. We expand. We use efficiency to consume more resources, not less. Computers were going to help us save paper but that never happened. We now use six times more paper than we did in 1960. Computers accelerated economic growth and increased paper use. Conservation strategies are the only solutions that do not require material and energy. In nature, capacity does not match desire. By starting with our desires, we have approached sustainability backwards. We have to start with the earth's productive

¹⁰⁵ <http://www.theguardian.com/commentisfree/2014/sep/21/desmond-tutu-climate-change-is-the-global-enemy> (Accessed on 18 March 2015).

capacity and then design our cultural transition based on it. Is it sustainable development? To my mind, we should rather 'develop sustainability.'

Spretnak (1987:7) says that Deep Ecology is an ecosophy that speaks the truth with great immediacy in a language that everyone can understand, many of whose pioneering members are philosophy professors drawing on ecology, ethics, philosophy and religion. Even Roszak (1992:232) is of the opinion that nothing less than a radically new standard of sanity is needed that will uproot the fundamental assumptions of industrial life. The Deep Ecology principles are a step in this direction because Deep Ecology points to a philosophy that, unlike human-centric positions, acknowledges all living things on earth as equal. This places Deep Ecology in a new realm of international relations theory, for instead of solely considering relations between humans, between states and between nations as important, Deep Ecology holds the relations between all living things as equally significant.

Forsythe (2003:80-81) says that the Deep Ecology philosophy has proven to be relevant to contemporary global society. Belshaw (2001:182) reasons that Deep Ecology has succeeded in changing both government policy and wider public consciousness on a range of environmental issues, including the biochemical industry, nuclear weapons and power. Al Gore (in Conradie 2008:32) notes that we have everything we need to get started to change this world, save perhaps political will, but political will is a renewable resource. In addition, supporters have pushed for the gradual introduction of anti-nuclear and nonviolent proposals within NATO, as well as helped shape resistance to institutions deemed to be anti-environmental, like the General Agreement on Tariffs and Trade, the International Monetary Fund and the World Bank. Finally, Deep Ecology has helped spawn countless activist groups, including Greenpeace International. Surely, these accomplishments are at least partly due to the issues that the anthropocentric worldview directly attacks and continues to expand on. It is this issue that today's societies have to deal on a first-hand basis. Ultimately, the ecocentric worldview has made its views on the nature of human-environment relations, humanity itself, the state, and international societies applicable to the environment: it is an entity that will always be a part of our global society, and an integral factor in how local, national and international communities are managed.

What makes Deep Ecology attractive is Naess' cross-cultural approach to characterising grassroots movements via platform principles that can be supported from a diversity of cultures, worldviews, and personal philosophies. What fascinates me furthermore about Deep Ecology is that it brings about a new social movement due to its new social movement theory. Beck (1992:234), when speaking about the postmodern society, the risk-society and the need for self-control and self-restraint (or rather the lack thereof), says that the age of excuses is over. He says that enabling self-criticism in all its forms is probably the only way that the mistakes that would sooner or later destroy our world can be detected in advance. This was written in the context of reflexive modernisation and Beck not only sets out a philosophically-informed sociological theory of contemporary Western societies, but also provides a framework within which environmental politics can be understood, explained and developed.

Beck claims that contemporary society is on the cusp of a transition between the current industrial society and a threatening risk society, where the latter may be viewed as the so-called morning after the industrial night (mare). A reflexive modernisation is needed, and such a world may be created through the DEP. Deep Ecology fosters reflection and broadens our involvement further than that of family and local community to an inclusive all-encompassing involvement, a sort of global consciousness through which humanity's identity may be broadened. People will relativise their identities if they construct these identities in such a global fashion. Edlich (2010:208) concurs with this view and says that when individuals engage intellectually with various discursive environmental traditions, such as bioregionalism and Deep Ecology, then individuals will become reflective environmentalists after a reconstruction of their personal identities.

From the above views, it follows that individuals will begin to consider how their actions, values and ideals are framed according to their perceptions of nature and they will perceive themselves in reference to nature, as living and breathing beings connected to the rhythms of the earth. This means they will recognise that the environment has an ecological identity.

The philosophy of Deep Ecology has the platform in place on which a change in public and corporate ecological attitudes could take place in order to slow down and ultimately stop the destruction of nature and humankind. Is it possible to develop common understandings that enable us to work with civility toward harmony with other creatures and beings? Hit (1999:612) suggests that we should endorse those concepts which foster harmony with the natural world and that we should strive to recognise our kinship with nature. At the same time he believes that we will never be able to fully realise this ideal, not as long as there is an 'I' because this implies that there is still an 'other'. Nature ought not to be seen as an object, it should rather be seen as a self, which is along the lines of the Deep Ecology position. Hit (1999:613) says that, once we realise that we are participants in the existence of all beings, then we will realise that to harm nature is to harm ourselves because nature is an extended self and is entitled to the same concern as any other person.

The Deep Ecology principles are a step in this direction. Through Deep Ecology we can encourage environmentally responsible attitudes and behaviour. We need to constantly keep the Cree proverb¹⁰⁶ mentioned in Chapter 2, into consideration. To recall, it reads:

Only when the last tree has been cut down;
Only when the last river has been poisoned;
Only when the last fish has been caught;
Only then you will find that money cannot be eaten.

This proverb can be strengthened by Chakrabarty's (2009:222) view that there are no lifeboats for the rich and the privileged to escape our shared future. Deep Ecologists and Deep Ecology may be likened to eighteenth- and nineteenth-century abolitionists. Hawken (2009) says that abolitionists were the first people to create a national and global movement to defend the rights of slaves whom they did not even know. The goal of abolitionists was considered to be a ridiculous endeavour and it was greeted with incredulity because at that time three out of every four people in the world were enslaved. Enslaving each other was what human beings had done for ages. In the twenty-first century there are people who fight for the emancipation of organisms and matter. Such an emancipatory struggle is considered

¹⁰⁶ <http://www.unitedearth.com.au/tipiwisdom.html> (Accessed on 23 September 2015).

by some people as a ridiculous endeavour because living anthropocentric lives and disrespecting themselves and the external world is what humans have done for ages. The abolitionists succeeded in their goal, as incredible as it might have seemed at the time. In the same vein, I claim that the Deep Ecologists will succeed in their goal, as incredible as it may seem for many people.

A final word, in 1922, T. S. Eliot depicted the disintegration of Western culture in his landmark poem: 'The Waste Land'. The wasteland is a place where people live inauthentic lives, blindly following the norms of their society without the conviction that comes from deeper understanding. It is my hope that every individual will pursue a deep search for not only living an authentic life but also having a deep understanding of the importance of living such an authentic life. I believe that Deep Ecology may assist us in this regard and keep us from ever ending up in a 'Waste Land'.

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