

Environmental Ethics:

**The adequacy and applicability
of extensionist approaches**

By

Richard Sivil

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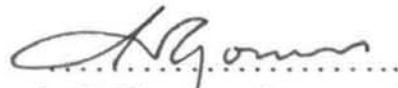
The adequacy and applicability of extensionist approaches

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Introduction

The need for an environmental ethic has arisen out of an increasing awareness that current human economic, technological, and cultural practices have consequences that are destructive to the natural world. I argue that such consequences are largely a result of an anthropocentric orientation to the world. Since such an orientation plays a substantial role in contributing to the degradation of the environment, I argue that an anthropocentric approach to ethics is logically inconsistent with the development of an environmental ethic. While an anthropocentric approach can become more environmentally informed, this does not change the fact that human interests will continue to take precedence over non-human interests.

In light of this I plead for the adoption of a non-anthropocentric approach. Since we most commonly subscribe to an anthropocentric outlook we must be prepared to re-think some of our most fundamental attitudes and values. This entails addressing questions over what has moral standing, looking into the possibility of allocating moral weight to non-humans independent of their worth to human beings.

Ethical extensionists, utilising traditional ethical formulations, argue for the extension of moral standing from individual human beings to at least some non-human individuals. Tom Regan extends moral consideration to include all mammals of a year or more; Peter Singer argues that all sentient individuals are morally considerable; and Paul Taylor claims that all teleological centres have inherent worth and thus all living individual entities are morally significant.

As they hold an almost polar opposite position to traditional anthropocentric ethics, extensionist approaches have in the past been seen to be aligned with environmental ethics. However, Callicott (1995a) argues that describing the moral status debate as a simple anthropocentric - extensionist dichotomy under-represents a further point of view. Holism, characterised by the Land Ethic of Aldo

Leopold, which is primarily concerned with the biotic community as a unified collective, should be recognised to be a third and distinct system of ethics. In the light of this third point of view, Callicott argues that the extensionist approaches are incompatible with an environmental ethic.

The purpose of this dissertation is to explore, in the light of this alleged incompatibility, the adequacy and applicability of the extensionist approaches to the formulation of an encompassing environmental ethic.

Chapter One will outline some of the major environmental issues facing us at the beginning of the twenty-first century. I will argue that the escalating human population, the current energy crisis, and the pollution of the planet, together with a host of other issues such as deforestation, the rapid extinction of species and climactic changes, collectively signal an environmental crisis of immense proportions.

In Chapter Two I will argue that, while scientific and political solutions are readily called upon to address aspects of this crisis, they generally offer short-sighted solutions. Recognising that human action lies at the heart of this crisis, it will be suggested that we need to question some of the most fundamental human values. This will highlight the importance of ethics in relation to the environmental crisis. Extensionist theories developed as a result of a growing realisation that anthropocentric approaches were not appropriate to deal with non-anthropocentric issues. By way of introducing the extensionist approaches, I will argue that an anthropocentric value system is not suitable for the development of an environmental ethic.

Searching for a suitable non-anthropocentric ethic I will explore Tom Regan's deontological approach, which argues for the equal inherent value of all subjects-of-a-life, Peter Singer's utilitarian approach, which argues that all sentient beings should have their suffering considered with the like suffering of other sentient

beings and Paul Taylor's teleological approach, which argues that all living beings possess an equal inherent worth, in Chapters Three, Four and Five respectively. Each of these key theorists marks a further move away from the restrictive human-centred value system of anthropocentric ethics. While Singer's approach predates that of Regan's I will present them in order of increasing inclusion of non-human individuals in matters of moral consideration - mammals for Regan, vertebrates for Singer and all living beings for Taylor.

In Chapter Six using Leopold's land ethic as exemplar I will introduce holism, which favours the integrity of the ecosystem over and above the interests of the individuals that exist within it. I will argue, in agreement with Callicott, that the extensionist approaches have more in common with anthropocentric approaches to ethics than they do with holistic approaches. Furthermore, I will argue that, because none of the extensionist approaches satisfies both the focus and the objectives of an environmental ethic, they are not adequate. According to Callicott, not only are they inadequate, they are also inapplicable. In contrast, Johnson (1991) argues that no singular theory is adequate but rather that a variety of approaches have degrees of applicability. Acknowledging that solutions to the current environmental crisis are essential, I will suggest that a synthesis of these contrary views can provide an encompassing environmental ethic. Along such lines I will find that while the extensionist approaches are not adequate, they can be applicable to the development of an environmental ethic.

The Environmental Crisis

In this chapter I will argue that we are currently facing an unprecedented crisis of the environment.

The *environment* may be loosely defined as that which constitutes and makes up our surroundings. We are enveloped and immersed in the natural world comprised of air, earth, waters, plants and animals, and the constructed world of artefacts. The environment is both animate and inanimate. It is not merely the resources that we use; it is also the habitat for all living species. It is the place in which we live, that which supports and gives us life. As we occur in the world, acting upon it and being acted upon, we form part of the environment.¹

There are many factors exerting negative effects on the environment - the dumping of toxic waste, non-sustainable consumption, bio-sphere damaging waste generation, nuclear waste, the decimation of the rain forests and the extinction of species, to name but a few. I will consecutively discuss the population explosion, the energy crisis and the negative effects of pollution on air, water and soil, three of the most commonly identified factors of environmental concern. I will argue that collectively these, together with other factors, place a significant strain on the environment, and as such pose a serious threat to the continuance of life.

It is estimated that it took our species *population* about 200 000 years to reach its first billion mark, in 1830. It is predicted that it will take just under 200 years to add a further eight billion people to that number (McMichael 1993: 112). In the nineteenth century the annual increase in the world population is estimated to have been around ten million people. It has been calculated that in the first decade of the twenty-first century this figure will be well over one hundred million people per

¹ For a contrasting perception of the environment refer to Fritjof Capra's *The Turning Point*, Chapter 2.

year (McMichael 1993:108). These escalating figures have little to do with natural laws, and more with socio-technological developments including inoculations against diseases, advances in medical science, clean drinking water, sewerage, and state welfare programs, to name but a few. These have all stood humanity proud in its quest to preserve and save lives. It is a noble thing that is done, but not without consequences. We are not producing more children per capita; we are merely saving more lives. This results in more people having the same number of children, amounting to more children. As a result the human population is increasing exponentially. A projection from 1992 maintained that if the world's population reached the six billion mark in 2000, it would double in size to about twelve billion people by 2040 (Merchant 1992:31).

The population crisis raises a particular concern that there will be more human beings on the planet than food to feed them all, for, as Thomas Malthus pointed out in his 1798 *Essay on the Principles of Population*, while population growth tends to increase geometrically (2, 4, 8, 16, 32 ...) the food supply only tends to increase arithmetically (1, 2, 3, 4, 5 ...). So, even if the food supply could be doubled or tripled, there is no way that it could keep up with the pace of the current population growth. While it could be argued that genetic technology could increase food supplies, there is an equally pressing demand for clean drinking water. The troubles do not end here, as "this massive population growth will multiply the destruction of farmland and forest, the contamination of the global commons (air and water), the disruption of climate and the extinction of species" (McMichael 1993:111). An imbalance in resources is inevitable, since infinite growth cannot be sustained in a finite environment.

"The longer the world procrastinates over population control, the less likely it is that ... (an) equilibrium will be attained without widespread starvation, environmental devastation, social disruption and war" (McMichael 1993:108). The seemingly simple solution is to curb population growth. However, this is not as

easy as it sounds, for issues of population control impinge on fundamental notions of human freedom (Merchant 1992:31).²

Increasing population numbers have a direct influence on the amount of *energy* that is required. This is highly problematic, for energy-intensive activities tend to overload the planet's functional capacities (McMichael 1993:98). Much of this overload occurs as a result of extracting and transporting the raw materials and in the various stages of energy production. According to the 1992 World Bank Development Report 88% of energy comes from the burning of fossil fuels, 7% from hydropower, and about 5% from nuclear power sources.³

The production of energy from *fossil fuels* entails locating large quantities of coal, oil, and natural gas - non-renewable resources produced over billions of years. These natural resources need to be mined out of the ground, a process that, on a large scale, is detrimental to whole ecosystems. The destruction of ecosystems and

² Garrett Hardin argues in his essay *The Tragedy of the Commons* that "relinquishing the freedom to breed" (Hardin 1995: 338) would be an effective means to averting global ruin. According to Hardin limiting the growth of the population does not impinge on fundamental human freedoms, rather it is "the only way we can preserve and nurture other and more precious freedoms" (Hardin 1995: 338). However, the Universal Declaration of Human Rights, Article 16, states that all men and women have the right to marry and to found a family. Thus, limiting the number of children per family can be argued to run counter to the notion of reproductive freedom as a human right. Furthermore, since the environmental crisis is a result of a host of interconnected factors such as population, rate of consumption, pollution, deforestation, nuclear waste and the extinction of species, to name but a few, a solution to the environmental crisis needs to be systemic rather than reductive (Merchant 1992: 32).

³ These statistics do not account for the use of biomass in the production of energy, which provides about 15% of the world's energy. Other sources of energy such as solar power, ocean power, geothermal power and wind power are also not accounted for (Meyers 1994:97).

natural habitats leads to the disappearance of the creatures that depend upon them for survival. Increased demands for energy have led to dwindling supplies of these natural resources, forcing developed countries to travel further afield in an attempt to locate new sources. This often has disastrous consequences, as oil-bearing ships occasionally loose their cargo, thereby polluting the oceans - not only contaminating the fish that many of us eat, but also other marine life and their habitats. A recent local example is the sinking of the oil tanker *Treasure* off the southern Cape coast in June 2000.

The production of energy from burning fossil fuels has its own negative consequences. The earth's temperature is governed by what is known as the greenhouse effect. Naturally occurring carbon dioxide, in a concentration of about 0,03 percent, and methane in the earth's atmosphere form a blanket of gases, trapping heat energy radiating out from the earth (Baarschers 1996: 111). This operates very much like the glass panes of a greenhouse, letting the sun's warmth in and keeping it in. The degree of the earth's greenhouse effect is directly determined by the amount of greenhouse gases occurring in the atmosphere. Increasing quantities of carbon dioxide emissions occurring in the atmosphere, as a result of the burning of fossil fuels, contribute to an increase in greenhouse gases, causing an increase in the earth's temperature. Due to extraneous variables calculating the potential development of the greenhouse effect is difficult. However, the general consensus within the scientific community is that global warming is a reality (Baarschers 1996: 127). As a result it is estimated that there will be dramatic changes in the global ecosystem: severe inland droughts, resultant food shortage, coastal flooding, mass extinction of species, and increased pollution in overheated cities. Conversely, it is also predicted that plant life will thrive due to increased carbon dioxide levels.

Other pollutants, such as sulphur and nitrogen that are released through the burning of fossil fuels form acidic chemicals through a process of oxidation. These collect in the atmosphere and are deposited back to Earth via various forms of

precipitation - acid rain. This water finds its way into the natural bodies of water, and increases the levels of acidity. While not directly dangerous to humans, there are some aquatic life forms that cannot tolerate high acidic levels (Baarschers 1996: 147). Not only are bodies of water affected, the decimation of vegetation has been attributed to acid rain. "Taken together, coal-fired power plants and automobiles put more acidic chemicals into the lower atmosphere than natural compensating mechanisms can handle" (Baarschers 1996: 128). Some contest this, claiming that natural quantities of acidic producing substances "are so enormous that the impact of the human contribution is questionable" (Baarschers 1996: 128). However, while volcanic and naturally occurring electrical activity have been linked to the natural formation of acidic chemicals, localised damage to vegetation and fresh water fish populations cannot as easily be explained.

Finite fossil fuel resources and high carbon dioxide emissions make the use of *hydroelectric power* clearly advantageous. Kinetic energy of falling and flowing rivers has been used since as early as the 1700s. Today falling water is used to turn turbines, which drive generators producing electricity, a seemingly environmentally friendly energy source. They are able to operate at full power 95% of the time, compared to 55% for nuclear plants and 65% for coal plants, and have life spans two to ten times those of coal and nuclear plants (Miller 1988: 302). Unfortunately naturally occurring falling water seldom has the required velocity. Dams therefore have to be built to contain larger volumes of water, thereby increasing the water force. People living in close proximity to the proposed dam site have to be relocated. As a consequent of the flooding process they are deprived of farmlands, thereby resulting in a loss of livelihood. Flooded land drowns vegetation, which decomposes to produce methane, another effective greenhouse gas, thereby adding to the greenhouse effect. Furthermore, the construction of dams entails the destruction of ecosystems and the animals that live in them - not only in the area where the dam is built, but also down the entire watershed of the river below the dam. Each year mature salmon swim back to their

hatching streams to spawn. Dams interrupt the water flow and make this journey impossible. Failing to reach their spawning grounds they do not procreate.

Nuclear power plants were developed in an attempt to provide a clean, reliable and cheap energy source for the future. The process occurs as unstable isotopes of uranium decay in the reactor core (Simpson 1990: 40). Energy is released and converted to high-temperature heat in a nuclear fission chain reaction (Miller 1988: 273). This heat is used to generate steam, which drives a turbine, which in turn drives a generator to produce electricity. All reactors have a coolant that circulates through the reactor core, removing excess heat to prevent the fuel rods from melting (Miller 1988: 273).

Although there are many safety features, it is possible for a nuclear reactor to suffer a ‘meltdown’.⁴ This is one threat nuclear energy poses to the environment. Technical malfunction or a loss of coolant can lead to the central reactor core overheating and melting the concrete and steel shields that surround the reactor vessel. Radioactive materials are then able to leak into the ground or into the immediate atmosphere in extremely concentrated amounts. The accumulation of radioactive materials in the environment contaminates the air that we breathe, the water that we drink and the food that we eat, not to mention the damage done to the non-human world. It is estimated that the cloud of radioactive materials that could be released in an accident like this could kill over ten thousand people and contaminate the environment with radioactive isotopes for over a thousand years (Miller 1988: 275).

An effect of the nuclear process is ionising radiation, which is highly dangerous and when “interacting with the body tissues can result in cells that carry DNA abnormalities and hence a predisposition to cancer and hereditary defects”

⁴ Three of the most talked about nuclear accidents are the 1979 Three Mile Island accident in America, the 1986 Chernobyl accident in Russia, and the 1999 Tokaimura accident in Japan.

(Simpson 1990:40). It is difficult to assess the health effects of human exposure to low levels of man-made radiation, due to extraneous variables such as smoking and vehicle emissions. Furthermore, "the body's natural immune system is able to withstand moderate doses of radiation from natural and man-made sources" (Simpson 1990:41). Still, the problem is that neither the human body, nor any organic body is able to withstand high levels of radiation.

Furthermore, there is the problem of nuclear waste. A 1000-megawatt reactor produces a two cubic meter volume of radioactive waste annually (Simpson 1990:49).⁵ Countries utilising this type of power are faced with the task of storing this waste. "The time it takes 50% of the particles of a radioactive element to decay is termed its 'half-life'. Exponential decay occurs randomly at each subsequent half-life of any atom at a constant 50%" (Simpson 1990:48). Some of the waste from the nuclear process has a half-life of a few minutes, whereas Uranium 238 has a half-life of 4.47 billion years. This creates a problem of storage, as the prevention of accidental release needs to be made over periods ranging from one thousand years to as much as five billion (Simpson 1990:48). This is problematic as there is still "no widely agreed upon scientific solution to how high level radioactive wastes can be stored safely for the 10 000 years currently required by EPA regulations" (Miller 1988: 279). Despite this, the nuclear industry has a relatively admirable safety record in comparison to other methods of energy production (Baarschers 1996: 113).

This does little to curb fear of nuclear power, for one pound of plutonium is potentially enough to ensure that every human on the planet will get cancer. With well over 400 nuclear power plants world wide, many in politically unstable countries on the verge of war, we have every reason to fear the worst. Added to the threat of war is the recent spate of terrorist attacks on the USA. It remains an ever-

⁵ It is estimated that an accumulated total of 84 000 tonnes of radioactive waste had been produced by 1990 (Meyers 1994: 123).

present possibility that terrorists could change their tactics from crashing planes into buildings and sending poison via the mailing system to detonating nuclear bombs.

The energy crisis is far from being solved. Estimates place energy demands in the middle of the twenty-first century at four times its present level (Baarschers 1996: 123). Because of the slow development of 'soft' energy technologies, wind and solar, this will place a significant strain on the world's available resources of fossil fuels. Combined with international pressure to reduce carbon dioxide levels⁶, nuclear energy appears to be the only option available to us at this point.

All living beings are dependent upon the earth for their survival. The *primary natural systems* - air, water, soil - make the existence of life possible. The earth's atmosphere is composed of slightly less than 80% nitrogen, and slightly more than 20% oxygen. A collection of water vapour, carbon dioxide, methane, argon, helium, and other trace gases complete the 100% (Baarschers 1996: 125). The composition of the atmosphere is maintained in a state of dynamic equilibrium by the complex and diverse array of life on this planet.

Human activity during the last few hundred years has begun to affect the composition of the *air*. Industrialisation, powered by the large-scale combustion of organic materials, has resulted in an estimated increase in carbon dioxide levels by 26% from the 1800s (Baarschers 1996: 125). As described above, the combustion of fossil fuels produces carbon dioxide, contributing to the greenhouse effect. Other gases are also increasing - the methane concentration has doubled and nitrous oxide has increased by an alarming 8% (Baarschers 1996: 125). Chlorofluorocarbon (CFC), now banned, is a synthetic gas with stable properties. This made it commonly used in industrial applications, refrigeration, aerosol cans

⁶ Delegates from 180 nations met in Bonn in 2001 to sign the Kyoto Protocol. This treaty marks a commitment to reduce the production of greenhouse gases. America, the biggest producer of carbon dioxide, refused to sign.

and Styrofoam containers. Extending seven to thirty miles above the earth is a layer of the earth's atmosphere known as the stratosphere. An important component of the stratosphere is ozone, which shields the earth from the sun's harmful ultra violet rays. CFCs drifted up to the stratosphere and broke down the ozone molecules. As a result ozone levels have been depleted, leading to increases in ultra violet ray penetration. This correlates with increases in skin cancer, diseases of the immune system, and considerable damage to food crops.

Air can be classified as polluted when chemicals build up to the point of causing harm to humans, animals, vegetation or materials (Miller 1988: 319). Air pollution occurs both at local and global levels. Ozone depletion in the stratosphere and increases in atmospheric carbon dioxide are global issues, and are both the result of industrialisation, closely linked with the consumption of energy (Baarschers 1996: 131). These present problems that affect the entire planet. Local air pollution occurs when pollutants released near the planet's surface react with one another or with oxygen. These remain airborne but localised, appearing as smog in busy city centres. Vehicle exhaust emissions, nitrogen dioxide from combustion, evaporated petroleum products, and dust from industrial processes all form a part of the soup that shrouds our cities. This form of air pollution, potentially hazardous to the population within that localised area, is correlated with severe respiratory problems.

The existence of life is also dependent on the presence of *water*. While three quarters of this planet is covered with water, only about one hundredth of a percent is fresh water (Baarschers 1996: 143). Water exists in 'compartments' in the biosphere: groundwater, comprising the water in the cracks between layers of rock; surface water, made up of rivers, lakes and the oceans; and the atmosphere, containing water vapour. Water is not static. Surface water evaporates into the atmosphere where it condenses and returns to the earth via various forms of precipitation, so that it joins once again with surface water, and seeps through cracks and crevices to mix with groundwater. Continuously travelling, sometimes as liquid, sometimes as vapour, water forms a major component of the biosphere

(Baarschers 1996: 143). Essential for survival, fresh water brings necessary chemicals into organic systems, and flushes unwanted chemicals out.

The increasing human population is placing heavy demands on available water resources (Baarschers 1996: 145). Not all of this is required for human consumption; industry also uses large volumes of fresh water in boilers, cooling machinery and the production processes itself. An approximate 250 tons of water is required to make a ton of paper, and as much as 4400 tons of fresh water to make a ton of steel (Marshall 1974: 74). Water used in industry becomes contaminated with chemicals and dirt. In the past, spent water, called effluent, was simply returned to its source in the hope that the pollutants would be diluted. Natural bodies of water do have the ability to break down complex molecules into simple substances (Baarschers 1996: 149). However, increasing quantities of effluent overtax this capacity, resulting in water pollution. Fortunately, in the developed world advances in analytic chemistry have led to considerable changes in attitudes and practices, resulting in a decrease in the dumping of effluent. This, however, has not ended the problem of water pollution because this form of pollution continues in less developed countries and air borne pollutants also contaminate water supplies, as discussed in the section on acid rain.

With ever-increasing population numbers comes a high demand for food, which has resulted in a booming farming industry. High population numbers demand high crop yields, which translate into big profits for corporations. Traditional farming techniques of crop rotation are unable to meet the demands of quantity or profit, and have largely been replaced by single crop farming, allowing for specialisation. Irrigation in agriculture utilises three quarters of all fresh water drawn from the earth (Baarschers 1996: 145). The agricultural industry uses fertilisers to replace depleted soil minerals. The presence of large quantities of organic fertiliser, in the form of cattle manure, releases ammonia, a source of air pollution, while manure components filter into the groundwater causing water pollution problems (Baarschers 1996: 148). Fertiliser contains nitrates, which are

highly soluble and thus dissolve quickly into ground water. While not potentially harmful to adults, high nitrate levels above 10 ppm have been known to cause methemoglobinemia, a condition in infants that reduces the oxygen-carrying capacity of their blood. A slow asphyxiation is the result (Baarschers 1996: 155).

Mass planting of single crops has given rise to increased insect populations. This has led to the development and use of pesticides. While pesticides were designed to poison the insects, they had unforeseeable consequences resulting in the sterilisation of the soil, contamination of groundwater, depletion of wildlife populations, and the encouragement of resistant pests (Simpson 1990:72). Depending on the amounts, pesticides such as DDT, dieldrin and aldrin can have serious effects on both human and animal health (Baarschers 1996: 148). While some pesticides are insoluble, and therefore do not pose a real threat to the contamination of our water supplies, many of them are soluble. This is where the problem lies, for treatment procedures are complicated and often expensive. Despite their wide-spread use, "most (synthetic) pesticide programmes have been decided failures in meeting long term pest control objectives and exact a high ecological cost" (Simpson 1990:72).

"Despite its importance in providing us with food ... *soil* has been one of the most abused resources" (Miller 1988: 140). It forms the foundation of all terrestrial communities, and plays an essential role in the decomposition of organic matter and the return of minerals in the nutrient cycle. Healthy soil is a complex mixture of inorganic minerals, decaying organic matter, water, air, insects, bacteria and other micro-organisms (Smith 1986: 154).⁷ It is an ecosystem in itself, and provides the nutrients necessary for plant life, which, directly or indirectly, provide food for humans and other animals (Miller 1988: 140).

⁷ One hectare of soil may contain 300 million insects; while 30 grams of soil can contain in the region of one million bacteria, 100 000 yeast cells and 50 000 bits of fungus mycelium (Meyers 1994: 22).

Modern agricultural practices overburden the soil.⁸ Continuous planting of the same crop leads to a draining of the soil's nutrients and minerals, leaving it barren. Unable to meet the increasing yield demands, the soil is fed with fertilisers. These are of the organic and inorganic variety. Organic fertilisers are of three types: animal manure, green manure and compost. These are useful in restoring soil structure, increasing organic nitrogen content, and stimulating the growth and reproduction of bacteria. Their application, however, is costly as large quantities need to be used, involving transportation and storage. As a result inorganic fertilisers have become increasingly popular as they introduce high levels of nitrates into the soil thereby increasing the yield at a portion of the cost. Excessive applications of chemical fertilisers, however diminishes the ability of the soil to hold water and thus accelerates erosion. Added to this is the eutrophication of lake and river systems, leading to the loss of fish and wildlife populations (Simpson 1990:71). There is difficulty in measuring the degree of soil contamination because the effects of pollution on soil functions and soil organisms, uptake by plants, and passage to groundwater, can be delayed or indirect (Simpson 1990:71).

Agriculture, logging, construction, mining, deforestation for the cattle industry and other human activities that remove plant cover accelerate the rate at which soil erodes. Plant roots protect the soil from excessive erosion. Exposed, bare soil is easily washed away with the rains. It is estimated that the amount of topsoil that is lost each year would fill a train of freight cars long enough to circle the planet 150 times (Miller 1988: 147). Valuable topsoil is lost, leaving bare, barren ground. Excessive erosion not only reduces the fertility of the soil, but "the resulting sediment also clogs irrigation ditches, navigable waterways, and reservoirs used to generate electric power and provide drinking water for urban areas" (Miller 1988: 146).

⁸ 2.5 cm of topsoil can take anything from 100 – 2 500 years to form. The same quantity of soil can be destroyed in as little as 10 years (Meyers 1994: 37).

There is no denying the usefulness and value of chemical products. Fortunately, the negative consequences associated with chemical use have been recognised, with the better management of chemical use and disposal becoming a common objective of industry, the scientific community and the regulatory authorities (Simpson 1990:68). This however does not diminish the fact that “the most devastating accidents in industrial history have resulted from the loss of containment of chemicals, either in their transportation or their processing” (Simpson 1990:68). The accidental release of chemicals in the manufacturing and processing stages have led to the mass poisoning of both humans and wildlife, resulting in generations of chronic ill-health (Simpson 1990:69).

The United Nations Environmental Programme (UNEP) estimated that the total world production of organic chemicals was 250 million tons annually, in 1990. This figure was predicted to double over the next decade (Simpson 1990:70). This information, together with the knowledge that matter cannot be destroyed, but that it merely reforms or degrades, has made “the intentional, incidental, or accidental release of chemicals ... (the) primary foci of environmental concern” (Simpson 1990:69). As a result, strict international standards govern the creation, transportation and use of these products.

Unfortunately, the Third World is one of the largest users of farming chemicals, pesticides and fertilisers. A major problem is that the high standards and restrictions current in the First World are either unknown or neglected in many of these countries, leading to the misuse of pesticides and other chemicals designed for agricultural purposes. This leads to water pollution, air pollution and the poor containment of hazardous chemicals (Simpson 1990: 74). Most of the legislation and controls put into place to protect humanity and the environment are not applied in these countries as the “hand-to-mouth subsistence needs of Third World peoples tends to overshadow the perceived conflicts with environmental considerations” (Simpson 1990: 75).

The resources of the planet - air, water, and soil - are finite. As the human population increases so do the demands for energy and food. These increased demands exert a strain on the planet's systems in the form of overuse and pollution.⁹ Stopping the abuse and pollution of the planet's systems is a difficult task because there is no one factor that is responsible. Rather it is a cumulative effect of a whole host of factors, which are ultimately a product of our lifestyle and outlook.

According to an ecological view of the world, the planet as a whole is a closed system.¹⁰ Atmospheric temperature, chemical composition and even the formation of the Earth's crust are a result of a homeostatic balance. Homeostasis is the self-regulating mechanism of a system that executes and monitors events essential to the existence of that system, ensuring that the system maintains a steady state (Smith 1986: 72). It is possible that the exponential growth of the human population, increased demands for energy and food, together with a host of other factors such as the testing of nuclear weapons, the excessive extinction of species¹¹ and the decimation of rain forests¹², to name but a few, could place a significant strain on the environment that could ultimately lead to changes in the overall

⁹ Garrett Hardin argues in his essay *Lifeboat Ethics: The Case Against Helping the Poor* that because the resources of the planet are finite access to them should be restricted (Hardin 1998: 444). In his opinion only developed countries should have access to them, to the detriment of poorer undeveloped countries. Ironically, it is the developed countries that consume much of the resources and create huge quantities of pollution.

¹⁰ A closed system "is one in which energy but not matter is exchanged between the system and the environment" (Smith 1986: 73).

¹¹ It is estimated that 50 –100 species disappear every day (Meyers 1994: 154).

¹² Approximately 18 million hectares of tropical forests are destroyed each year (Meyers 1994: 38).

global environment.¹³ This is cause for concern, for “the most serious potential consequence of global environmental change is the erosion of Earth’s life-support system” (McMichael 1993: xiii). This places living organisms in a tenuous position for they are entirely dependent upon the physical and biological environment. This includes humanity, for we are not separate beings living apart from nature, but rather form part of the intricate web of life (Merchant 1992: 1).

To summarise the main claims of this chapter, a host of factors are collectively placing a huge burden on the planet’s natural capacities and capabilities. Problematically, these factors are not independent of one another, but rather are linked together in a complex web of mutual reinforcement. Given the current course of action of the developing world, there is no doubt that at some point in the future the cumulative effect of these factors will overburden the environment and destroy large parts of it. Because of this, life on this planet hangs in a precarious balance.¹⁴

We cannot do much about the damage already caused. However, we should not accept that nothing could be done about the future. “The very fact that we have awakened to all of this is ... a sign of progress” (Weston 1999: 47), as no problem can be solved without first having an awareness of the problem. Purposive action

¹³ For further information refer to James Lovelock’s *Gaia, A New Look at Life on Earth*, 1987, Oxford.

¹⁴ Objections may be raised that this is an alarmist position. Environmental disasters have occurred in the past and the world has righted itself. However, such disasters have been natural and unavoidable, whereas the current crisis, which could spell a disruption of the world’s natural systems, is entirely at the hands of humanity. We are collectively acting in ways that contribute to and compound the problem. This makes the current environmental crisis a matter of moral concern. In addition, Anthony Weston, in *An Invitation to Environmental Ethics*, says “rather than requiring proof that our present course is disastrous before we change it, ... we ought to require proof that it is *not* disastrous before we embark on it” (Weston 1999: 51).

could effect purposive change. We have the opportunity to avert the possible danger and destruction that lies ahead. This signifies that we are at a turning point regarding our environmental situation, one in which, through exploring alternative solutions, we can take the initiative to address environmental issues in meaningful and useful ways. It is along these lines that we can understand the concept of an environmental crisis, a time both of danger, destruction and loss, as well as a time of assessment, innovation and transformation.

2

An Invitation to Ethics

In Chapter One I argued that we are currently facing an environmental crisis. Science and environmental policy are the most commonly accepted options to dealing with this crisis. While each has a significant contribution to make, I will argue that overemphasis on either option could easily compound the problem. Furthermore, it is short-sighted to restrict the burden of responsibility to the scientific community and governmental bodies since the environmental crisis is a consequence of collective human action. Accordingly, if we wish to adequately address the environmental crisis we must amend those actions that are destructive to the environment.

In order to facilitate a change in our actions we will need to question some fundamental human values since our actions are largely informed by our value systems. This highlights the importance of ethics in relation to the environmental situation. There are three main approaches to ethical theory – the teleological, the utilitarian and the deontological. I will argue that they are, for the most part, formulated and applied in anthropocentric ways.

It is my contention that an anthropocentric value system is inadequate to effectively deal with the environmental crisis.

Given the magnitude of the environmental crisis and the potential threat it poses to life on this planet, a ‘wait and see’ attitude is clearly not an option. One popular suggestion is to turn to *applied science*, which helps provide adequate material needs for everyone and also extends the richness of our non-material lives. Because it plays such an important and socially prominent role, it constitutes a major element of the ‘cultural filter’ through which Western society views the environment (Pepper 1996: 240).

The ideology of classical science, which is still very dominant, has developed into a dualist paradigm in which the scientific observer is separate and distinct from her observations. This has contributed to a conception of the world as consisting of independent material objects, each having independent properties; with the behaviour of the whole explainable by the behaviour of its constituent parts. Nature is viewed as separate from humanity, machinelike and reducible to basic components, which can be objectively known and predicted.¹⁵ For many people this science represents the most ‘respectable’ way to know nature and the source of absolute ‘truths’ on which to base decisions.

The dimensions of environmental issues are seldom, if ever, restricted to the specific parameters of any one discipline (Des Jardins 1997:5). Moreover, most major issues facing humanity, e.g. the population problem, the energy crisis and the pollution of the primary natural systems, stretch beyond being mere scientific problems, involving as they do, society, politics, law, human rights, economics, etc. Covering such a broad spectrum, it is evident that science, widely distinguished by the compartmentalisation of knowledge, cannot deliver absolute knowledge on global issues (McMichael 1993: 326). The task of assessing the impacts of ecological imbalances and disruptions on human and other life forms entails significantly more than the classical scientific paradigm of hypothesis formation, data collection and data analysis. Leaving environmental problems in the hands of science would, therefore, effectively result in a narrow understanding of them, and by correlation limited, short-sighted solutions to them. Furthermore, the classical science ideology asserts that “scientific knowledge equals power over nature” (Pepper 1996: 240), and that the manipulation of nature can be used for social progress. This has resulted in science being used in many modern developments, of which some are exerting a negative impact on the environment (inorganic fertilisers, pesticides, industrial processes, nuclear energy and nuclear arms, to name but a few). In the light of this, science should not be viewed as the

¹⁵ The systems view, mentioned in Chapter One, represents an alternative to this outlook.

ultimate source of hope for the future, and clearly should not be given full responsibility for addressing the environmental crisis.

Fortunately paradigm shifts are occurring within the field. Classical understandings of the world consisting of 'independent particles' are being reassessed, and replaced by a more holistic and ecologically informed understanding that all things are inseparable from the greater whole that is the universe (Pepper 1996: 247). In this sense some current scientific trends can be useful in developing a more encompassing understanding of the environment.

Another commonly accepted option for dealing with the crisis at hand is that of *environmental policy*, legislation, and regulation, which, if correctly implemented, monitored and adhered to, can prevent environmental pollution and improve the general quality of the environment (Merchant 1992: 26). Headway is being made with policies addressing environmental issues at both local and global levels.¹⁶

The close association that exists between population growth and the other environmental issues, as discussed in Chapter One, makes it apparent that one of the most important policies would be to curb population growth. This would entail a stabilisation of human numbers with a gradual levelling out at a lower figure at some point in the future (Marshall 1974: 137). Unfortunately individual governments have largely been reluctant to formulate such policies. Due to the delicate nature of the topic, it would be politically suicidal to include such policy recommendations in a party manifesto.

¹⁶ Section 24 of the South African Bill of Rights protects the environment for the benefit of present and future citizens. In addition, there is the National Environmental Management Act 107 of 1998, the Land Reform Programme of 1998 and the White Paper on Bio-diversity Conservation. Internationally there are Clean Air Acts, Water Resource Acts, Noise Abatement Acts, etc.

Policies on resource conservation and pollution are just as important as population policies. Unfortunately government cannot be isolated from the economy of the country. It therefore becomes very difficult to achieve concerted action towards resource management and protection when most political programs seem dedicated to increasing the prosperity of the individual voter and of the Gross National Product (Marshall 1974: 152). Furthermore, the effective implementation of such acts and policies often lies in the hands of local authorities and councils who have the immediate needs of the community on their agenda. Generally community 'growth and development' holds greater importance than environmental concerns.

Scientific and policy options each have distinctive roles to play in addressing the environmental crisis. Science is a useful tool for developing an understanding of the complexity of life, while policies govern and regulate human social behaviour. Acknowledging that the environmental crisis is not a simple issue, but rather a collection of complex and interconnecting issues, it would be unwise to assume that either of these options, on their own, could effectively solve the current environmental crisis. Strict reliance on either option could produce "backlashes more serious than those they were designed to remedy" (Gruen & Jamieson 1994: 7).

Furthermore, handing over the task to science or government entails a relinquishing of personal responsibility that will not make the problem go away. The point is that we all act in ways that contribute to the crisis, and thus are all responsible for what happens to the world around us. Accepting responsibility entails not only acknowledging that our individual actions contribute to the environmental crisis, but also that we are accountable for our actions. As such, we should be willing to amend or change our actions in an attempt to remedy the current situation.

Our actions, both individually and collectively, depend largely upon what we believe about what is good, what is right, and what is permissible (Pierce & Van De Veer 1995: 1). Therefore we need to ask fundamental questions about what we as human beings value, why we value the things we do, the way we should live our lives, our place in nature, and the kind of world we want to leave behind for others (Des Jardins 1997:5). This places our value system at the heart of the environmental crisis. Clearly then, placing the burden of responsibility on either science or government policy will do little to correct the situation as long as the values informing our actions remain unchanged. We can alter our attitudes and actions through questioning and changing our values, and in such a way we can begin to address the problems of the environment.

Questioning our values is an invitation to *ethics*, the branch of philosophy that seeks a reasoned examination of what custom tells us about how we ought to live (Des Jardins 1997: 16). An ethic assumes that moral norms and values govern human behaviour. It is the task of ethics to critically examine these norms. In an effort to provide a systematic and comprehensive guide to human behaviour ethical theories are formulated (Des Jardins 1997:15). These theories prescribe moral values, explaining to whom they apply and what the entailing responsibilities are, as well as providing a justification for those values and responsibilities. In no way should this suggest that ethical theories can solve the environmental crisis on their own, for “ethical and philosophical analysis done in the abstract, ignorant of science, technology, and other relevant disciplines, will not have much to contribute to the resolution of environmental problems” (Des Jardins 1997: 9). Science, legislation, and ethics need to combine forces in order to address the crisis at hand.

Ethical theories have generally been regarded as falling into three main classes: teleological, utilitarian, and deontological. Up to date examples of these, recognised as useful in addressing environmental concerns, will be explored at

length in subsequent chapters.¹⁷ The *teleological* approach that goes back to Aristotle (383 - 333 BCE) recognises that all things have a telos, a specific purpose to which they are inclined (Aristotle *Physics* II, 8). Understanding the telos allows us to understand the object or being itself. 'Goodness' is achieved when an object or thing is able to fulfil its purpose or actualise its potential (Des Jardins 1997: 22). Thomas Aquinas (1225 - 1274) further developed Aristotle's theory by synthesising teleology and Christian theology. All things natural were viewed as parts of God's divine master plan. Since God is goodness itself, and the natural order was equated with the moral order, an undisturbed nature is good (Des Jardins 1997: 22).

Utilitarianism is founded upon the writings of Jeremy Bentham (1748 - 1832) and John Stuart Mill (1806 - 1873). It provides an account of the good as that which produces the greatest good for the greatest number (Des Jardins 1997: 24). According to this account an act is ethically acceptable if its consequences are good for the greatest number of individuals, and bad if they are not. There are essentially two types of utilitarianism: hedonistic utilitarianism, and preference utilitarianism. Bentham and Mill represent the former, recognising that pleasure or the absence of pain is something we all desire, excluding deviants who prefer pain or avoid pleasure. This universal acceptance makes pleasure, for the hedonistic utilitarian, something that is objectively good (Des Jardins 1997: 25). Preference utilitarianism, on the other hand, identifies the good as the satisfaction of our desires.

Deontological ethics, founded mainly on the ethical writings of Immanuel Kant (1742 - 1804), rests upon the claim that we can only be held responsible for the things that we can control. While the consequences of our actions are largely beyond our control, the actions themselves are not. Assuming that we are rational

¹⁷ Tom Regan's approach is distinctly deontological, Peter Singer's approach utilitarian, and Paul Taylor's approach has a teleological foundation.

beings, we act freely on the basis of our rationality and the principles that we derive from it. Deontological ethics focuses on these principles and maxims. Kant argued that we act ethically whenever these principles are rationally informed and accepted by all other rational beings. A rational principle is one that is categorical and universal (Des Jardins 1997: 28). Such principles have come to be discussed in terms of rights with correlative duties. If an individual has specific moral rights, she may claim certain treatments based on those rights, and others have a duty to acknowledge those rights and the actions they prescribe.

Ethical theories offer moral criteria in order to determine how far one should extend *moral standing*. If an entity is recognised to have moral standing, its interests must be taken into account when deciding what actions are permissible (Pierce & Van De Veer 1995: 7). If an entity lacks moral standing, then its well-being and interests do not count in any morally relevant way. A value theory is *anthropocentric* when it recognises the moral standing of human beings alone.¹⁸ Humans are viewed to be “valuable in and of themselves ... (while) the non-human world is valuable only insofar as it is of value to humans” (Fox 1990: 149). Humans are seen to possess intrinsic value, while all non-humans are seen to hold only an instrumental value. Because of this, anthropocentric approaches are commonly categorised as instrumental value theories (Fox 1990: 149). Since “the base class of traditional Western ethics is coextensive with the class of human beings” (Callicott 1998: 9), in traditional Western ethics only humans are recognised to have direct moral standing. Lacking the required qualifications for

¹⁸ The term ‘anthropocentrism’ is ambiguous. It is used in a variety of ways. It is taken to mean understanding the world from a human perspective. Furthermore, it is used to refer to the understanding that humans are the most significant entities in the universe. As a result of this, humans are taken to be the centre of all value. Following accepted practice in environmental ethics, I use the term in this thesis in neither of the foregoing senses, but to refer to the view that limits moral standing, and hence direct moral consideration, to individual humans alone.

ethical consideration non-humans are treated as things or means to human ends, rather than as ends in themselves (Elliot 1995: 35). Because only human interests are taken into account, while non-human interests are entirely neglected, anthropocentric ethical approaches have been charged with “speciesism” (Singer 1990: 6) or “human chauvinism” (Callicott 1998: 9).

The three classes of ethical theories (teleological, consequential and deontological) have, for the most part, been formulated and applied in anthropocentric ways.¹⁹ While Aristotle believed that all living entities have a telos, he analysed this further into three fundamental activities or powers of life: nutrition, sensation, and thinking (Des Jardins 1997: 21). All living entities were seen to possess the first power, all animals the first two, but only human beings possess all three. These three powers were arranged hierarchically, with the power to think at the apex, thereby establishing rationality as a moral criterion. Aristotle’s teleology, specifically favouring human beings, resulted in the view that all “animals exist for the sake of man, ... for the use he can make of them as well as for the food that they provide” (Aristotle 1962: 40). Aquinas’ development of Aristotle’s teleology did little to change the human-centred moral criterion. Animals were seen to have no independent moral standing, it being accepted as ‘divine providence’ that human beings have the natural world at their disposal (Pierce & Van De Veer 1995: 15).²⁰

¹⁹ There are exceptions to this generalization - The Pythagorean tradition; Empedocles of Acragas; St. Francis of Assisi; and Jeremy Bentham all in some way recognised the place of animals in moral considerations.

²⁰ The teleology of Aristotle and Aquinas was not intended to support an ethos of abuse, since both emphasised the importance of virtues of good character. To act in a cruel or destructive manner was not encouraged since bad actions reflected that the agent had a bad character.

The hedonistic form of utilitarianism identifies pleasure as an ultimate good. This expands “the realm of moral consideration to include all things that have the capacity to feel pleasure and pain” (Des Jardins 1997: 93). Accordingly sentience becomes the moral criterion. However, this does not necessitate that the moral standing of all sentient creatures is acknowledged since it is compatible with the principle of utility to recognise differences in the quality of pleasure. This allows for certain kinds of pleasure being more desirable and more valuable than others, with pleasures of the intellect, feeling, imagination and moral sentiments being placed over pleasures of physical sensation (Cooper 1998: 198). While such a formulation does not deny that non-humans can have moral standing, its application commonly ignores the plight of non-humans since the affairs of humanity are assumed to be of greater significance.

While Kant did not deny that animals suffer, he did deny that animals are persons. Persons in this sense are understood as rational, autonomous beings, capable of formulating and pursuing their own conceptions of the good. His rule-based deontology assumed that only human beings have the ability to think rationally and therefore have moral standing. Having interests in ourselves as rational beings amounted to the view that only the interests and well-being of humans count morally. Accordingly, while it was wrong to use a person only as a means to fulfil another person’s end, because they should always (also) be recognised as being ends in themselves, it was accepted that non-persons could be used to suit the purposes of human beings.

Apart from being manifest in the formulation of traditional ethical theories, anthropocentric assumptions hold a predominant place in the *modern Western value system*. Historically, these assumptions can be traced through Western religious, scientific and philosophical traditions. Western European civilisation, although in many respects a post-Christian civilisation, is deeply influenced and impregnated by Christian values (Attfield & Dell 1998:141). Pre-scientific Christian views assumed human superiority, placing human existence at the centre

of the universe (Fox 1990: 10), with 'man' created in God's image (Genesis 1: 26), a free being responsible for his own actions. The scriptures cultivated an anthropocentric view of the world, as the Word of God instructed that we "be fruitful and multiply, and replenish the earth and subdue it" (Genesis 1: 28). This has been taken as a legitimising claim for human domination over nature. In contrast, Genesis 2: 15 puts 'man' into the Garden of Eden "to work it and take care of it". This has been interpreted to place humankind in a position of stewardship, watching over the earth for the sake of God. Accordingly, on this reading it was understood to be humanity's role to look after the Lord's creation, and not to misuse it or destroy it.

The advent of science largely undermined and altered this view. In line with the thrust of scientific development of his time, Francis Bacon (1571 - 1626) advocated scientific methodology to manipulate nature for human benefit (Merchant 1992: 46). The experimental method of the sixteenth century was reinforced by the mechanical philosophy of René Descartes, who saw that through method we could "render ourselves the masters and possessors of nature" (Haldane & Ross 1955: 119). Reduced to a clockwork machine, the natural world was seen as something to be controlled, repaired and manipulated in humanity's service. The science of Isaac Newton (1642 - 1727), resting on the assumption that matter consists of individual parts, with the whole being merely the sum of those parts, propagated a reductionistic view of the world where individual entities were seen to be independent of their context. These have culminated in a mechanistic view of a world, still dominant in the sciences today, in which nature, inert and dead, is seen to exist entirely for the fulfilment of human needs (Merchant 1992: 41,57).

Anthropocentrism, interwoven into Western intellectual development, extends beyond the realm of science to be the "single deepest and most persistent assumption of all the dominant Western philosophical, social, and political traditions since the time of the classical Greeks" (Fox 1990: 9).

Fox identifies three broad approaches to the environment arising out of anthropocentric assumptions, which in reality are not distinct and separate, but occur in a variety of combinations. The *expansionist approach* is characterised by the recognition that nature has a purely instrumental value to humans. This value is accessed through the physical transformation of the non-human natural world, by farming, mining, damming etc. Such practices create an economic value, which tends to “equate the physical transformation of ‘resources’ with economic growth” (Fox 1990: 152). Legitimising continuous expansion and exploitation, this approach relies on the idea that there is an unending supply of resources. The *conservationist approach*, like the first, recognises the economic value of natural resources through their physical transformation, while at the same time accepting the fact that there are limits to these resources. It therefore emphasises the importance of conserving natural resources, while prioritising the importance of developing the non-human natural world in the quest for financial gain. The *preservationist approach* differs from the first two in that it recognises the enjoyment and aesthetic enrichment human beings receive from an undisturbed natural world. Focusing on the psychological nourishment value of the non-human natural world, this approach stresses the importance of preserving resources in their natural states.

An anthropocentric outlook informs all three approaches. This results in a one-sided understanding of the human-nature relationship. Humans are favoured as inherently valuable, while the non-human natural world counts only in terms of its use value to human beings. As such, the lives of individual human beings are recognised to have direct moral worth, while the moral consideration of non-human entities is entirely contingent upon the interests of human individuals (Pierce & Van De Veer 1995: 9). As a result, nature is understood to have a singular role of serving humanity, while humanity is understood to have no obligations toward nature. The expansionist and conservationist approaches recognise an economic value, while the preservationist approach recognises a hedonistic, spiritual, or aesthetic value. They accept, without challenge, the

assumption that the value of the non-human natural world is entirely dependent on human needs and interests. As a consequence, human duties retain a purely human focus, thereby avoiding the possibility that humans may have duties that extend to non-humans. This can lead to viewing the non-human world, devoid of direct moral consideration, as a mere resource with a purely instrumental value of servitude, giving rise to a principle of 'total use', which sees every natural area in terms of its potential cultivation value, to be used for human ends (Zimmerman 1998: 19).

It could be argued that there is essentially nothing wrong with an anthropocentric outlook, since it is natural, even instinctual, to favour one's self and species over and above all other forms of life. However, it is problematic in that such perceptions influence our actions and dealings with the world. Limiting moral consideration to human beings has provided a rationale for the exploitation of the natural world to the extent that the well-being of life on this planet is threatened, making the continuance of a huge proportion of existing life forms "tenuous if not improbable" (Elliot 1995: 1). As such, I argue that an anthropocentric outlook has been largely responsible for the present environmental crisis (Des Jardins 1997: 93).

The philosophical discipline of ethics was said to critically examine the values that guide our behaviour. Humanity has the capacity to transform and degrade the environment. Given the consequences inherent in having such capacities, "the need for a coherent, comprehensive, rationally persuasive environmental ethic is imperative" (Pierce & Van De Veer 1995: 2). The purpose of an environmental ethic would be to provide a rational basis from which to decide how we ought and ought not to treat the environment.

The environment was defined, in the previous chapter, as the world in which we are enveloped and immersed. This includes both individual living creatures, such as plants and animals, and non-living, non-individual entities, such as rivers and

oceans, forests and velds. This vast and all-inclusive sphere shall, for conceptual clarity, be referred to as the *greater environment*.

In order to account for the moral relations that exist between humans and the greater environment, an environmental ethic should have a significantly wide range of focus. Anthropocentric approaches do not entertain the notion that non-human entities can have values independent of human needs and interests. Because of this, it could be argued that anthropocentric approaches are not encompassing enough.

In opposition, Norton argues that a weak anthropocentric approach, which emphasises the importance of 'objective' humanistic ideals, is sufficient to protect the greater environment. Because such an approach extends moral concern beyond the immediate subjective interests of the individual to include the broader interests of the entire human species, it can provide "a basis for criticism of value systems which are purely exploitative of nature" (Norton 1995: 184). I agree with Norton. Taking the collective interests of the human species into account and acknowledging that its existence is entirely dependent upon the proper functioning of the natural world will indeed take a much broader range of entities, both individuals and collectives, into account when making moral decisions. However, because weak anthropocentrism makes the continuation of human life an ultimate ethical goal, it would not extend direct moral consideration to the greater environment. Rather, it would indirectly consider only those resources, individuals and systems that are relevant to the continuation of the human species. Considering that there are fair portions of entities that are irrelevant to the continuation of human life a weak anthropocentric approach, while being significantly more inclusive than the dominant anthropocentric approach, is not encompassing enough.²¹

²¹ Norton's approach is by far the most progressive account of an anthropocentric environmental ethic that I have encountered. However, admitting this does not impinge on

In addition, because an ethic is a system of guidance it should also have specific outcomes toward which it directs its focus. Because of the newness of this area, the objectives of an environmental ethic can only be alluded to, however it would be fair to say that an environmental ethic should aim to ensure the protection and maintenance of the greater environment. It is clear that the expansionist approach, which is primarily concerned with the transformation of nature for economic return, does not meet these goals. Neither does the conservationist approach, which is similar to the expansionist approach. The preservationist approach does in principle satisfy this requirement. However, this is problematic for such preservation is based upon the needs and interests of humans, and “as human interests and needs change, so too would human uses for the environment” (Des Jardins 1997: 129). Non-human entities, held captive by the needs and interests of humans, are open to whatever fancies the interests of humans.

In light of the above, I argue that an anthropocentric value system is not adequate to the task of developing a comprehensive environmental ethic.²² It is fair to say that the success of the environmental movement is largely “a result of the power of anthropocentric arguments, for the general population began to realise that the degradation of the natural environment would have serious consequences for human health, safety, and survival” (Katz 1999: 378). However, this is insufficient when regarding the development of an environmental ethic, for the awareness raised by anthropocentric arguments is restricted to the consequences affecting

my argument, for Norton’s account is essentially non-individualistic and I am arguing for the inadequacy of anthropocentric approaches that are distinctively individualistic.

²² This is an extremely controversial claim, which will not be explored further in this paper. To do so would sidetrack me from the focus of this dissertation. The main reason for arguing for the inadequacy of an anthropocentric approach is to provide an introduction to the development of non-anthropocentric ethical approaches.

humans alone. Clearly a wider and more encompassing ethic is required, one which extends moral concern beyond human boundaries.²³

Intrinsic value theories offer a reasonable alternative to instrumental value theories. While instrumental value theories limit moral value to humans alone, intrinsic value theories maintain that in addition to humans there are at least some non-humans that have a moral value. Such a value is independent of any use or benefit that humans may derive from them (Des Jardins 1997:129). Initial attempts at constructing intrinsic value theories saw the reformulation of traditional ethical theories (teleological, utilitarian and deontological). Departing from mainstream ethical assumptions, they extended the moral criterion beyond restrictive human capacities to include ‘conscious awareness’ - animal rights champion Tom Regan; ‘sentience’ - animal liberationist Peter Singer; and the ‘good’ of all living things - biocentric ethicist Paul Taylor. In this sense they are referred to as *extensionist theories*, widening the circle of moral standing to include higher order animals, for Regan; particularly human oppressed sentient animals used in the commercial food industry, for Singer; to all wild living beings, for Taylor.

It is the task of subsequent chapters to explore these widely recognised extensionist theories in an attempt to see whether they provide an adequate basis for the development of an environmental ethic.

²³ Contrary to the views of some, a non-anthropocentric approach need not entail a misanthropic outlook.

3

Tom Regan: Morally Considering Self-Aware Beings

Tom Regan is professor of philosophy at North Carolina State University. He has won the Gandhi Award for Outstanding Contributions to the Animal Rights Movement and the Joseph Wood Krutch Medal from the Humane Society of the United States. He is a prolific writer on the subject of animal's rights. In *The Case for Animal Rights* he puts forward the case that, like humans, some animals have moral rights and hence deserve moral consideration and corresponding moral treatment.

Regan begins from the assumption that humans have a mental life (Regan 1988:18). In having a mental life, we are aware of the world around us and hence of actions that affect us. Such awareness warrants restrictions to these actions, and these restrictions manifest themselves in the form of moral theories. While different moral theories postulate different interpretations of this understanding, all traditional approaches share the common assumption that this mental life is restricted to human beings, and hence morality and moral reasoning have a meaningful place only when referring to affairs concerning humanity. Regan argues that some animals are not only conscious and sentient, but also have beliefs and desires, can make choices of preference, are capable of intentional action and are autonomous beings that have emotional lives. In light of this, Regan argues that animal consciousness is sufficiently complex to establish the claim that some conscious animals have an interest in their welfare. This is the keystone to Regan's argument. If human beings deserve moral treatment because of their mental faculties and if some animals have similar mental faculties, then some animals deserve moral treatment. Accepting that some animals have certain basic moral rights requires that we make radical changes in the ways that we treat them (Regan 1988: xii).

A thorough exposition of Regan's work will provide a foundation from which a critique can be constructed.

Regan's first step is to argue that some animals are conscious. Exploring the position of Descartes, who argued that animals lack consciousness in that they are incapable of thought (Regan 1988: 3), Regan acknowledges that there is no one reason which on its own attributes consciousness in animals. Therefore he presents a collection of reasons titled "the Cumulative Argument for Animal Consciousness" (Regan 1988: 25). The *first* reason appeals to the widespread common belief that certain animals are conscious. This is not an attempt to fallaciously appeal to popularity, nor is Regan attempting to appeal to common sense in order to guarantee the acceptability of his claim. Rather, he places the burden of proof onto those who would deny his position, leaving it to the dissenter to supply adequate reasons as to why the common sense view is misguided. A *second* reason Regan offers to attribute consciousness to some animals is that ordinary language is not distorted when talking of the mental life of animals. It does not seem at all odd to talk of a happy pig, but to say that a roll of toilet paper is content clearly strains the use of common language. In an attempt to avoid anthropomorphism an experiment was undertaken by D. O. Hebb, who sought to replace ordinary language with an objective and non-mentalistic vocabulary when describing animals. General meaning and understanding for the experimenters decreased. While this does not show that animals have a mental life, it does suggest that there is no good reason why we should not talk of animals having a mental life. A *third* reason is a response to the view that humans are different to all other animals in that they have a soul. Regan's position is that attributing consciousness to some animals is in no way an attempt to imply that they have an immortal soul. As far as he is concerned, animals can be conscious without a soul, and thus such a claim can be made independent from religious justification. A *fourth* reason is that animal interaction, with humans and with their own species members, is entirely consistent with viewing them as conscious beings. A bitch can be seen to interact with purpose and intention as she cares for and watches over her young. This hardly suggests that she has no mental faculties. The *fifth*

reason in the Cumulative Argument draws support from evolutionary theory, which views consciousness as something inherent in the evolutionary process, a shared characteristic of higher order beings. If consciousness is something that has an adaptive value, it is likely that similar animals will share similar features of adaptation. It is accepted that some animals are very similar to human beings physiologically and anatomically. It is therefore reasonable to conclude that, like human beings, some animals are conscious. The Cumulative Argument provides a theoretical basis independent of the ability to use language, for attributing consciousness to beings other than humans (Regan 1988:28). Accordingly, it is not only narrow minded to view consciousness as the sole property of human beings, but to deny consciousness in animals is an expression of human chauvinism (Regan 1988:31).

Having put forward the claim that some animals are conscious, Regan addresses the question of which animals are conscious. An animal is considered to be conscious if it satisfies reasons one through five of the Cumulative Argument. Accordingly, it is clear that many animals fall into the category of conscious beings. It is an accepted, shared belief that certain animals are conscious. This is reflected in the ordinary ways of speaking about and describing them. It is also clear that the actions of certain animals indicate a degree of consciousness. Furthermore, evolutionary theory would strongly attribute consciousness to certain animals. Consciousness is attributed to human beings on the basis of the structure and function of their physical bodies.²⁴ Given that certain animals have a very similar biology to humans, it is fair to conclude by analogy that such animals would have a degree of consciousness. This does not suggest that only the animals most like us are conscious, but rather that such animals have the strongest foundation for the attribution of consciousness (Regan 1988: 28). Regan makes no attempt to delineate where consciousness in the animal world ends. He seems

²⁴ The central nervous system carries information from the peripheral extremities up the spinal cord to the brain.

content with identifying all mammals as satisfying the five reasons of the Cumulative Argument, and therefore deems them to be conscious beings (Regan 1988: 29).²⁵ Seeing the definite delineation of consciousness as a task beyond the scope of his particular inquiry, Regan leaves it to others to argue the finer points of the attribution of consciousness.

The next task is to explore *the complexity of animal consciousness* (Regan 1988: 34). Further pursuing his human - animal analogy, Regan arrives at the assumption that if human beings are conscious and have beliefs and desires, then all animals which are similar to humans, in relevant ways, and are accepted to be conscious, should also be seen to have desires and beliefs. Drawing from the Cumulative Argument, such a view is supported by both common sense and ordinary language. The attribution of beliefs and desires in animals is logically independent of the possession of a soul, while animals' behavior is consistent with ascribing beliefs and desires to them. Finally, evolutionary theory supports the view that animals act in the way that they do because they have beliefs and desires. So, convinced of the support that the Cumulative Argument provides for this view, Regan challenges others to provide arguments to deny that animals have beliefs and desires. Regan notes that the challenge will only be met if it can be shown that a denial of beliefs and desires in animals does not necessitate a similar denial of beliefs and desires in humans. Failure to meet this challenge will provide rational justification to accept that animals do have beliefs and desires.

Two major arguments try to meet this challenge. The first claims that animals, unlike humans, do not and cannot have such beliefs and desires. The second accepts that while animals may have beliefs, because we cannot know what those beliefs are, we cannot explain their behavior by referencing 'what they believe and what they desire' (Regan 1988: 37). R. G. Frey, arguing the former, claims that while animals may very well be conscious and have needs, they cannot have

²⁵ Regan uses the term 'animal' to refer to the category of non-human mammals.

desires (Regan 1988: 38). He argues that only those individuals who have beliefs can have desires. The ability to use language is necessary for one to have beliefs, as the object of a belief is believing that a particular sentence is true (Regan 1988: 39). Since animals do not have linguistic abilities, they cannot form beliefs and therefore they cannot have corresponding desires.

Regan argues that linking the capacity to understand sentences to the ability to form beliefs is problematic. As far as Frey is concerned, it is not the case that some beliefs are about the truth of a particular sentence, but rather that all beliefs entail believing that a particular sentence is true. Accordingly, all humans who do not have the ability to understand language do not have the ability to have beliefs. Regan argues that if this is the case, then no human could ever learn a language, as beliefs are essential to language acquisition. Young children, who cannot talk, cannot yet understand sentences. According to Frey's argument this implies that all young children cannot form beliefs. However, Regan maintains, that we need to believe that what we are learning has relevance and is important, otherwise we would not learn it. Without pre-verbal beliefs we are unable to receive a linguistic education. Accordingly there have to be pre-verbal beliefs. For consistency's sake, if humans can have pre-verbal beliefs, then so can animals (Regan 1988: 46). Therefore Frey's argument does not provide a reasonable defence for the denial of the beliefs of animals.

S. Stich's approach to the complexity of animal consciousness accepts that animals may have beliefs. However, in order to say what animals believe, we need to know the content of their beliefs. The only meaningful way to describe this content would be to use concepts that are human. Stich argues that animals cannot have the same concepts as humans. Because we cannot know the content of those beliefs, we do not know what we are ascribing to them when we say they have beliefs and desires (Regan 1988: 49). Therefore the task of explaining the content of animal's beliefs is impossible.

Regan observes that Stich utilises an 'all or none' approach to understanding the concepts that inform our beliefs, which implies that animals cannot have any human concepts, and thus human beliefs. In response, Regan offers an alternative 'more or less' approach to understanding concepts. Such a view suggests that different groups and individuals can share the same concept to a greater or lesser degree (Regan 1988: 54). Assessing the two, Regan shows that the 'more or less' approach accounts for progressive sequential learning, while the 'all or none' approach does not. This makes the 'more or less' approach logically preferable over Stich's 'all or none' approach (Regan 1988: 54). Along these lines we can accept that while animals do not have all our concepts, they can have some of them and similarly, while they won't have all our beliefs, they can have some of them. However, this does not provide adequate reason to accept that animals share any human beliefs.

Regan points out that humans make choices to satisfy particular desires or to fulfil specific purposes (Regan 1988: 58). Making this choice entails a belief that the chosen item will satisfy the particular desire. This belief, grounded in the recognition that a connection exists between the satisfaction of the desire and the item to be chosen, exhibits a preference toward a particular item. Hence it is termed a preference belief, and is "one member of the set of beliefs that collectively define our concept" (Regan 1988: 58). Animal behaviour exhibits a similar ability to make choices and hence they also have preference beliefs. Given that animals have preference beliefs, and that preference beliefs are one of the classes of beliefs that define our concepts; combined with the reasonable acceptance of the 'more or less' view; it follows that animals can share a degree of our concepts, and therefore a portion of our beliefs (Regan 1988: 60).

Regan, in meeting Frey and Stich's challenge, provides rational justification to accept that animals do have beliefs and desires.

Continuing to explore the complexity of animal awareness, Regan sketches some implications that arise out of attributing preference beliefs to animals. His first step is to generalise the attribution of preference beliefs to include all animals (Regan 1988: 73). By way of transcendental argument Regan uncovers other cognitive powers that are necessary in order for animals to have preference beliefs. It is well accepted that humans are not born with ideas, rather we learn through experience.²⁶ The exhibition of a preference belief, which is a generalised belief applied to a specific situation, requires the existence of a memory from a previously relevant experience. Failure to remember would lead to an inability to form general beliefs, and thus the inability to form preference beliefs. In a similar manner the preference beliefs of animals are experientially learned, and so animals also have the faculty of memory.

Aside from the importance of memory for preference beliefs, Regan goes on to suggest that the ability to recognise is essential. This not only entails the ability to perceive individual items, but also the ability to abstract individual cases in order to form general concepts which can then be applied to particular cases. Without these abilities there could be no rational account of how animals grasp preference beliefs (Regan 1988: 74).

Having good reason to attribute preference beliefs to animals, there is good reason to attribute the ability to form general concepts. Having the ability to believe that something will satisfy a particular desire also indicates the ability to have expectations, a sense of things to come. This indicates that animals have beliefs about the future (Regan 1988: 74). Humans, who have beliefs, act intentionally with the purpose of attaining goals, which indicates an orientation to the future. The Cumulative Argument offers defensible grounds for viewing animals as having beliefs, while their actions provide a basis for us to interpret those beliefs.

²⁶ The Nature-Nurture debate comes into play here, where some are of the opinion that ideas are innate to us, while others such as Locke argue that we are born with minds of blank slate, and ideas form through experience.

Accordingly, there is no logical reason to deny that animals act intentionally to fulfil specific purposes. This suggests that mammals have a sense of the future. The ability to act in a manner that indicates intelligent intentional activity, in human terms, translates into agency. If agency can be recognised in humans according to their attributes, and animals are shown to have the same attributes, then we are in a position to view animals “as individuals who act intentionally” (Regan 1988: 75). This paves the way for recognising animals as self-conscious beings, for “intentional action is possible only for those who are self-conscious”(Regan 1988: 75).

Claiming that some animals have this degree of complexity of consciousness in no way commits one to the position that all animals are similarly conscious. Drawing support from evolutionary theory, Regan explains consciousness as existing in levels or degrees. Accordingly, some conscious animals may have a very rudimentary mental life. Acknowledging that drawing distinct lines could be highly controversial, and to draw a line for each particular case would be impractical, Regan makes the general claim that animals are not only “conscious and sentient but also have beliefs, desires, memory, a sense of the future, self-awareness, and an emotional life, and can act intentionally” (Regan 1988:77). Denying the complexity of animal consciousness was noted to be a theoretical possibility, however, it does little to move one beyond established prejudices and practices.

The problem is not settled, for while it may be reasonable to view animals as having complex mental lives, it does not suggest that this level of complexity is present at every stage of development. To set clear parameters, Regan stipulates that any human or animal of one year or more may be deemed to possess such a level of complexity (Regan 1988: 78). The specifics of the age stipulation are largely arbitrary, but it is reasonable to assume that both new-born human infants and animals neither have the capacity or the capability to hold this degree of consciousness. A further stipulation Regan makes is that such a general statement

concerning the degree of complexity of consciousness applies only to normal humans and animals, without birth defects or mental disabilities. In claiming that animals are conscious in ways similar to human beings Regan is not suggesting that animals have the same level of consciousness as human beings, but only that they have the same kind of consciousness, but different in degree.

Animals have a *welfare* as they can fare well or ill during the course of their lives (Regan 1988:82). Circumstances that are beneficial to an animal, such as sufficient food and water, support that animal in a positive way; while a lack of those necessary items negatively affects that animal's survival. For an animal to benefit from a particular set of circumstances assumes that the same animals will be around to enjoy those benefits. Thus to talk of the welfare of an animal implies the existence of an identity.²⁷ This is not an attempt to beg a moral question on the basis of identity, i.e. to conclude that the treatment of animals should be deemed wrong on the basis of the existence of an identity over time. Rather the recognition of an identity in animals, indicative of the appearance of preferences and the ability to initiate action with a view to satisfying certain desires, shows the possibility that animals not only have a physical identity, but also a psychological identity. Animals can thus be seen to be creatures with a "sophisticated mental life" (Regan 1988:83).

On such an understanding, animals can be seen to be *autonomous*. Regan's autonomy stands in contrast to Kantian autonomy which is premised on the ability to make high level moral abstractions with reasoned decisions about actions and their effects, providing rationality as the condition for recognising moral agency. Such an understanding makes the ability to act upon universally acceptable reasons a necessary feature of autonomy. Regan is doubtful that animals have the

²⁷ While plants and micro-organisms, like animals, can fare well or ill over the course of their existence, since plants and micro-organisms are not conscious in the same way that animals are they cannot have an identity. As such Regan would argue that they do not have a welfare in the same way that animals do.

attributes necessary to perform such a task, but recognises that “individuals are autonomous if they have preferences and have the ability to initiate action with a view to satisfying them” (Regan 1988:84). Understanding autonomy in this light does not take the degree of capabilities into account, as the Kantian conception does, but chooses rather to focus on the ability to initiate action in order to satisfy a particular goal.²⁸ Recognising the autonomy of animals has implications for the clear understanding of their welfare.

Exploring the notion of having an ‘interest’ in something, Regan identifies preference interests and welfare interests. Preference interests are the things we are interested in due to wants and desires, regardless of their direct benefit to us, while welfare interests are those things which are in our interest to have regardless of our desires (Regan 1988: 87). In order to have this type of interest it is essential that a being have a welfare. This serves to exclude non-autonomous beings such as lower order animals (fish, insects, etc.), plants, and non-living entities such as stones and motorised machinery. All mammals, including human beings, satisfy this requirement; so it makes sense to talk of them as having welfare interests. Since they are seen to have desires, it is intelligible to say that they have preference interests. What one is interested in may not necessarily be in one’s interest (such as high-speed racing or drug taking), and what is in one’s interest may not necessarily be what one is interested in (such as exercise and healthy eating habits).

Expanding on this, Regan explores *benefits* - those things or opportunities that contribute to the welfare of autonomous beings; and *harms* - those things or opportunities that diminish the welfare of autonomous beings. Immediate benefits

²⁸ Kantian autonomy is stronger in the sense that the ability to abstract our desires and goals is a requirement, whereas with preference autonomy the mere presence of those desires and goals is sufficient to recognize autonomy. Kantian autonomy requires the ability to think impartially if one is to possess autonomy, while preference autonomy does not (Regan 1988: 85).

are those basic biological requirements, which are necessary for all mammals, including humans, such as adequate nourishment, shelter and rest (Regan 1988: 88). These benefits constitute welfare interests. The degree to which autonomous beings fare well will depend upon the degree to which these welfare interests are met. Obviously a lack of these necessities will harm a being's welfare. Aside from biological welfare interests, there are also social and psychological interests that contribute to the full flourishing of the capacities of the being. These constitute preference interests. Generally all mammals fare well if "they get or pursue what they prefer; they take satisfaction in pursuing and getting what they prefer; and if what they pursue or obtain is in their interests" (Regan 1988:93). Regan classes harms as inflictions of suffering or deprivations of benefits, which would have made life for the individual more satisfying (Regan 1988: 94). In this regard prolonged pain or discomfort causing suffering or a restriction on a being's ability to exercise its physical, social or psychological autonomy frustrates that being and negatively affects its welfare - whether human or animal. While humans and animals are visibly different, their welfare does not differ in kind because they both have interests (Regan 1988: 116).

Exploring the difference between human beings and animals, Regan distinguishes between *moral agents and moral patients* (Regan 1988: 151). Moral agents are able to know the difference between right and wrong, are able to choose actions based upon these abilities, and are therefore accountable for their actions. Moral patients, on the other hand, lack the capabilities that would enable them to control their behavior in ways that would make them morally accountable for their actions (Regan 1988:152). Normal human adults are to be considered as moral agents, while moral patients are divided into two broad categories: those individuals who are conscious and sentient, but who lack other mental abilities; and those individuals who are conscious and sentient, and possess the other cognitive and volitional abilities (Regan 1988:153). Certain animals fall into the former category, while all mammals, infant humans and mentally handicapped persons fall into the latter category. Regan makes it clear that when he discusses moral

patients he is referring to those in the latter category. Moral patients cannot distinguish right from wrong, and in this respect they differ fundamentally from moral agents. They can however be on the receiving end of right and wrong acts of moral agents, and in this respect they are similar to moral agents.

Exploring various approaches concerning the ethical treatment of animals, Regan looks at direct and indirect duty views. *Indirect duty views* hold that the only duties we have regarding animals are those owed indirectly to other beings. Moral standing is limited to moral agents alone, and so indirect duty views are anthropocentric. Accordingly, while we have duties involving animals, we do not have duties to animals. In an attempt to uncover which view is more reasonable, Regan applies the philosophically controversial procedure of appealing to intuitions (Regan 1988: 185). This entails thinking about our pre-reflective beliefs impartially and coolly, and exploring all the relevant information, while bearing in mind the importance of being rational and consistent, followed by critical reflection (Regan 1988: 187).

Following this method, Regan develops the belief that it is wrong to kill, or to cause suffering, or to deny the opportunity for moral agents to satisfy desires that would benefit their welfare. Underlying this belief is the common unifying feature prohibiting harm. Out of this Regan actualises the *harm principle*, which maintains that we have a direct prima facie duty not to harm individuals, owed to the individual themselves (Regan 1988: 187). In questioning the scope of the harm principle, Regan recalls that animals cannot only be harmed through suffering, but also through the denial of benefits (Regan 1988: 188). Because animals can also be harmed, intuitively the harm principle should also apply to them. Regan feels that “there is no non arbitrary way to narrow the scope of this principle to exclude moral patients” (Regan 1988: 189). Regan verifies his intuition by calling up the requirements for making an ideal moral judgement, and checking the harm

principle against the criteria set out for valid moral principles.²⁹ Acceptance of the harm principle undermines the plausibility of any indirect duty view (Regan 1988: 192). From this finding he discredits all indirect duty theories, seeing that “no indirect duty view can provide us with an adequate moral theory” (Regan 1988: 193).

Direct duty views recognise that there are at least some direct duties owed to animals and are therefore not “open to the objection of moral arbitrariness fatal to all versions of indirect duty views” (Regan 1988: 195). The cruelty - kindness and act utilitarian views that Regan explores imply that an adequate account of the duties to moral patients can be provided without appealing to their rights. The cruelty - kindness view propounds that we have negative and positive duties owed directly to animals, which can be accounted for with reference to “the prohibition against cruelty and to the injunction to be kind” (Regan 1988: 196). This relies on subjective feelings in order to make moral decisions. Regan demonstrates that such prohibitions and injunctions do not provide adequate grounds on which to base such duties, as the “morality of what persons do is ... logically distinct from ... their mental states” (Regan 1988: 199).

Act utilitarianism, appealing directly to the consequences of acts alone, does not make this mistake. However, Regan finds that act utilitarianism on a whole “fails to provide an adequate basis for the stringency of the *prima facie* direct duty not to

²⁹ Regan outlines the requirements for making an *ideal moral judgment* as: conceptual clarity; openness to relevant information; rationality; impartiality, exercising justice and fairness; detachment from emotional influence; and support by valid moral principles (Regan 1988: 126). The criteria that are offered to evaluate such moral principles are, first, that any moral principle needs to be consistent in its application; second, moral principles need to be applicable to a broad range of circumstances. They should therefore cover an adequate scope. Third, in an attempt to avoid vagueness and ambiguity, which are detrimental to moral principles, such principles need to be extremely precise. Last, moral principles should conform reflectively to our intuitions (Regan 1988: 131).

harm" (Regan 1988:228), in that individuals can be justifiably harmed, provided that the aggregate gain outweighs the losses.³⁰

Furthermore, such approaches fail to offer a solid foundation for the better treatment of animals. There are no clear lines or rules in the utilitarian approach, which relies rather on the outcomes of actions to determine moral right and wrong. While utilitarianism is frequently heralded for its egalitarian approach, equality is not a formal basic principle, rather utility is, placing the outcomes of a situation over the interests of those involved. Demonstrating the inadequacy of the cruelty - kindness and act utilitarian views, Regan makes a preliminary case for the rights of moral patients (Regan 1988: 195).

Searching for the foundation to a theory that will specify the direct duties of moral patients Regan looks to the requirements of making an ideal moral judgement (see note 27). One such requirement is impartiality, understood as complying with the principle of justice in the sense that all individuals are to be given their due. Treating individuals dissimilarly, in a partial light, is therefore a failure to act in a just manner (Regan 1988:232). Regan explores utilitarian and perfectionist theories of justice and, seeing that in their respective ways they do not treat all individuals in an impartial light, finds them undesirable.

An alternative interpretation of justice is next explored, which recognises that individuals have a distinctive kind of value in and by themselves, irrespective of outside factors or circumstances. Regan refers to this as inherent value, which is held equally by all individuals, abolishing the need to establish a non-arbitrary basis for determining varying degrees of value. Inherent value is seen as something which cannot be earned, does not depend upon one's usefulness and is

³⁰Regan explores two forms of act utilitarianism: classical or hedonistic utilitarianism and preference utilitarianism, with specific reference to Peter Singer (Regan 1988: 200/206). Regan's position towards utilitarianism will be discussed in the critique of Singer's theory in the latter half of Chapter Four.

independent of being the object of someone else's interests (Regan 1988: 237). Such a value is closely linked with the notion of justice, for provided they have inherent value, moral agents are seen as equal and therefore deserving of similar treatment.

Extending his argument to include moral patients, Regan claims that restricting inherent value to moral agents alone is arbitrary (Regan 1988: 239). It has been shown that some of the harms that moral patients suffer are the same harms that moral agents suffer and accordingly it would be arbitrary to regard moral patients as not having inherent value. Furthermore, inherent value is independent of external factors or circumstances, and so it would be arbitrary to claim that people have more of it than animals because they have more fulfilling lives, or because they have specific virtues, or because they can enjoy life more. In response to the opinion that moral patients may have some inherent value, Regan states that if we recognise that inherent value is equal in moral agents then we are "rationally obliged to do the same in the case of moral patients" (Regan 1988:240), for inherent value is equally possessed, whether by moral agents or moral patients. Inherent value is therefore categorical - it is either possessed or it is not - and those who possess it do so equally.

To make the categorical call for inherent value intelligible and non-arbitrary, Regan identifies similarities between moral agents and moral patients as: beliefs and desires; perception; memory; a sense of future; sentience; an emotional life; preference and welfare interests; the ability to initiate action; and a psychological identity (Regan 1988: 243). These characteristics are encapsulated in what Regan terms the '*subject-of-a-life*' criterion (Regan 1988: 243). Inherent value is possessed equally by all subjects-of-a-life. This is independent of a being's utility, is categorical, illuminates why we have direct duties to moral agents and moral patients and why we exclude those who are merely alive.

The view of justice based on equal inherent value is on its own not a moral principle as it does not direct us to act in particular ways. Rather it informs to whom we must act. As such, Regan proposes the *respect principle*, which requires that “we are to treat those individuals who have inherent value in ways that respect their inherent value” (Regan 1988: 248). This requires the respectful treatment of all those who satisfy the subject-of-a-life criterion. It does not, however, stipulate the kind of respect that is required. Regan points out that we fail to treat individuals who have inherent value with respect when we treat them as though they have no inherent value (Regan 1988: 248). This happens when they are treated as mere receptacles of value, whenever their value is determined on the grounds of their utility to us, or when we harm them in an attempt to attain the most beneficial outcome for all concerned. The respect principle however entails more than abstaining from harming entities. It also imposes a duty to assist the victims of injustice at the hands of others (Regan 1988: 249). Following this, Regan defends the respect principle by applying the requirements for making an ideal moral judgement, making a rational case for accepting the respect principle.

Exploring the concept of rights, Regan distinguishes between *legal rights* and *moral rights* (Regan 1988: 267). Legal rights depend upon the respective governing body at any particular time and place and as such are liable to change and can differ from one state to the next. They are transitory and impermanent. Alternatively, moral rights are said to be universal. They are equal to all that they apply to and, unlike legal rights, are not determined by one person (e.g. the president) or group of persons (e.g. a legislative body), and are apt to be more permanent. Regan explains moral rights in terms of claims with duties and obligations. To have a right means to be in a position to claim something, or to assert that treatment is due to the claimant (Regan 1988: 271). To have a valid claim, one needs to have a *claim-to*, i.e. something tangible must be able to be satisfied by the person one is claiming from; and a *claim-against*, i.e. the person one is claiming against must be shown to owe one what is claimed. A claim-to requires those one claims from to act in a certain way as they are morally obligated

to do so, while a claim-against rests upon an appeal to a valid moral principle (Regan 1988: 272-273). In this sense moral rights have correlative moral duties.

Having made the case for the rational acceptance of the respect principle as a valid principle of justice (Regan 1988: 258), Regan's task is to make a case for the recognition of the basic rights of the possessors of inherent value for the respectful treatment that the respect principle prescribes (Regan 1988: 277). The respect principle, derived directly from the principle of justice, is a basic right that rests on the postulate of inherent value. Justice can be rationally claimed as something one is due or it can be claimed on one's behalf, as it is something that one is owed. It is largely uncontested that we have a right to just treatment. To make the claim to just treatment a valid one, there needs to be a claim-to and a claim-against. The demand for such a claim is validated on both counts when informed by the notion of respect - central to the respect principle. The claim-to is valid when the treatment specified accords with the respect principle and is within the powers of those we make the claim against. The claim-against is valid when those we make the claim against are clearly identified, provided the claim is supported by a valid moral principle - the respect principle. As the claim to respectful treatment is a valid claim, there is a moral right to be treated with respect.

Such a right is not meant for one person alone, but belongs to all individuals who possess inherent value. All possessors of this value have an equal right to respectful treatment. Those who have such a value can make a valid moral claim to treatment, which is respectful of the value that they have. Since moral agents and moral patients share inherent value equally, all members of both classes can claim the right to respectful treatment. "The case for recognition of the right to such treatment cannot be argued stronger or weaker in the case of moral patients than it is in the case of moral agents" (Regan 1988:279). Respectful treatment of animals, then, is not performed as an act of kindness, but rather it is their right, and justice demands it.

Clarifying the issue, Regan reiterates that the right to respectful treatment not only entails duties of non-harm, but also duties of assistance (Regan 1988: 282). This entails that we assist moral patients in getting their due, since all subjects-of-a-life are to be treated with equal respect. This makes clear sense, for “the less cognisant individuals are of their rights, the less power they have to defend them, the more we who understand and recognise their rights must do for them in defence of their rights” (Regan 1988:284). Not only are we bound to leave animals alone and not interfere with their lives, we are also bound to help them when help is needed. Secondly, while a right needs to be claimed this does not mean that in order to claim a right one need vocal capabilities. Being able to claim a right is not dependent upon the act of claiming, but rather on fulfilling the appropriate requirements of the right. Lastly, moral patients do not have duties to respect the rights of others. “Only moral agents can have duties, and this is because only these individuals have the cognitive and other abilities necessary for being held morally accountable for what they do or fail to do” (Regan 1988:285). Therefore the right to respectful treatment can only be claimed by a moral patient against a moral agent, and not against another moral patient.

The respect principle gives all individuals who have inherent value the *prima facie* right to be treated with respect. Accordingly, such a principle can never be justifiably ignored or overridden, except “in exceptional circumstances, and only when we have done all that we can reasonably be expected to do before overriding it” (Regan 1988:297). Regan states that to override such a principle requires adequate justification and an appeal to another valid moral principle (Regan 1988: 287). Adhering to the rights view means that one can never appeal to consequentialist principles of maximising the total aggregate. This serves only to negate the inherent value of the individual, treating her as mere receptacle of value, rather than recognising her as a value in-herself.

In order to override the right not to be harmed, Regan acknowledges that not all harms are equal (Regan 1988: 303). Different harms hurt the same individual in

different ways; and the same harm can hurt different individuals in different ways. When individuals are to be harmed in comparable ways and a choice needs to be made concerning a few subjects-of-a-life being harmed as opposed to many, the *miniride principle* (minimising overriding principle) applies (Regan 1988: 305). The consequentialist minimise harm principle is rejected, for the rights view cannot accept that individuals can be reduced to receptacles of value, the sum of which can be abstractly added. The miniride principle states that when faced with choosing overriding the rights of the many or overriding the rights of the few, where all those concerned will be harmed in comparable ways, we should choose to override the rights of the few (Regan 1988: 305). This decision is taken

not because the aggregate of harms that would result from this choice would be less bad than if we chose to act otherwise; it requires this because this is the choice we must make if we are to show equal respect for the inherent value of the individuals involved and if we are to count their equal rights equally (Regan 1988: 307).

In the case of non-comparable harms, where a choice needs to be made between two or more individuals, the *worse-off principle* applies, whereby the one who will be left the worst off should take preference over the others (Regan 1988: 308). The example Regan cites to illustrate is the harming of one individual badly or the minimal harming of many. Consequentialist reasoning would have the one suffer. A rights application of this principle would have the many suffer slightly.

In addition to the principles of respect, harm, miniride and worse-off, Regan proposes a fifth principle, namely the *liberty principle* (Regan 1988: 331). The liberty principle states that as subjects-of-a-life have a welfare, they are at liberty to do whatever they may to advance their welfare provided that all subjects-of-a-life are treated with respect, and there are no special conditions, even if this entails harming other innocents (Regan 1988: 332).³¹

³¹ Regan argues that human moral patients do not have the capacity to do what is right or wrong and are therefore to be considered as innocents. Similarly, non-human moral

Regan's next step is to explore some of the practical implications related to the treatment of animals, focusing specifically on animal agriculture, endangered species, and the use of animals in scientific experiments. The liberty principle appears to act as a defence against the commercial farming and eating of animals, as it could be argued that were humans not to eat meat, then humans could be made worse-off relative to any of the animals which were harmed in the process (Regan 1988: 333).³² Therefore it could be argued that we are within our rights to farm and eat meat. Exploring the possible arguments offered to justify harming farm animals (taste and culinary challenge, nutrition, habit and convenience, economic consideration, legal ownership of animals and the exclusion of certain farm animals from the rights view), Regan finds that none treat animals with the respect that they deserve. Therefore they do not justify overriding the rights of animals not to be harmed. Accordingly, the rights view sees vegetarianism as a moral obligation (Regan 1988: 351).

Frey (1983) points out that establishing the wrongness of harming an animal does not entail the wrongness of eating it. There are clear differences between those who kill animals and those who eat them. Granted, animals are killed to be eaten. However, "it is killing, not eating, which carries the moral force in the argument from killing and which is being condemned" (Frey 1983: 29). Regan would argue that recognising the rights of animals to be treated with respect entails "the related duty to defend them against those who violate their rights" (Regan 1988: 353). So while eating animals may not be morally wrong, we owe a duty to animals not to

patients, unable to do what is right or wrong, "cannot be anything but innocent" (Regan 1988: 295).

³² Regan's argument for the rights of animals is inclusive of all mammals involved in the meat industry - cows and calves, sheep and lambs, and pigs. This appears to exclude the range of birds abused by the meat industry (chickens, turkeys, ostriches etc.) However, it would be possible to extend Regan's argument of consciousness and the accompanying mental attributes and faculties to birds.

harm them and to protect them from harm. If eating animals contributes to the ongoing harm they experience, then we should not eat them.

The rights view does not recognise the moral right of groups of individuals or species "to anything, including survival" (Regan 1988: 359). The fact that an animal is the member of an endangered species confers no additional rights onto that animal. The respect principle deems that all who have inherent value must be treated with the respect that they deserve, and not be harmed. Any animal's right not to be harmed "must be weighed equitably with the rights of any others who have this right" (Regan 1988: 359). Accordingly, Regan's rights view does not offer special protection to members of endangered species.

In instances where a choice of preservation is to be made between a member of an endangered species and a member of a plentiful species, the principle of respect has to be overridden by the greater *prima facie* harm (Regan 1988:359). The minitide and worse-off principles are offered as tools to justify the overriding of the respect principle. However, these offer no solution to the endangered species predicament. If the individual from the plentiful species would be worse-off than the individual from the endangered species, then the individual from the plentiful species would be saved. A species on its own is merely a collection of individuals. Any and all individuals have the right to respectful treatment. This does not include collections of individuals, and hence the worse-off principle cannot apply. Regan makes it clear that the rights view is not adverse to efforts to save endangered species, just that it cannot ethically support it.

Regan analyses the use of animals in science in three areas: biology and medical education, toxicology testing and applied research (Regan 1988: 363). Regarding the first, he finds that the dissection of live animals for the purpose of education is unnecessary and unjust (Regan 1988: 365). The transference of knowledge does not justify the harming of animals. He does acknowledge that many of the animals used in such situations are not mammals. However, they may still be conscious and have degrees of attributes possessed by subjects-of-a-life (Regan 1988: 367).

Secondly, animals are routinely used in toxicology tests that monitor the threat of commercially manufactured products (therapeutic and non-therapeutic) for human use and consumption. These tests cause pain in the animal and as such they violate the right to respectful treatment of the laboratory animal. Neither the miniride nor the worse-off principles are applicable in this instance. Accordingly such tests are morally wrong (Regan 1988: 375). Applied science has a dominant tendency to harm animals, causing distress in the form of pain or impairing their normal functioning. The rights view does not accept the overall human benefit gained from such practices, as this simply reduces the inherent value of the animal to a utility value determined by the interests of others (Regan 1988: 384). This violates their basic rights to be treated with respect. Regan reminds us that an animal's value is independent of the goals of science (Regan 1988: 385). Accordingly the rights view, which requires a radical change in the practices of science, calls for the total abolition of animal experimentation (Regan 1988: 389).

Regan presents a clear and concise argument for the moral rights of all beings that possess inherent value. All subjects-of-a-life are argued to have inherent value. Beings that are self-conscious, purposive and aware are deemed to be subjects-of-a-life. All mammals of one year and older are argued to qualify as subjects-of-a-life. As such, all mammals are acknowledged to have moral rights. Possessing moral rights ensures that certain duties are owed to the right-holder. As such Regan's approach provides "a philosophical basis for principled objections to the worst forms of moral prejudice" (Regan 1988: 313). Such an outlook condemns the animal agricultural industry and the use of mammals in scientific experimentation. Furthermore, Regan's case for animal rights makes a commendable contribution to the extension of ethics by introducing mammalian animals into the moral sphere; thereby shifting accepted anthropocentric moral outlooks. Regan announces that "the myth of the privileged moral status of moral agents has no clothes" (Regan 1988: 280).

Aside from these positive attributes, theoretical and practical criticisms can be levelled against Regan's approach. Firstly, Frey (1983) indicates that there is a problem with grounding rights on intuitions. Regan postulates the fundamental basic right of all individuals who possess inherent value to be universal, equal, and independent of legal rights (Regan 1988: 267-8). Moral rights, not bound by legal and political institutions, precede such institutions and serve as constraints on the types of institutions that we should have (Frey 1983: 84). Being pre-institutional, such rights are natural rights. Natural rights theories are often grounded in human nature. Regan, however, grounds his rights on intuition (Regan 1988: 133). This is problematic since moral rights cannot be drawn from what is thought to be wrong, as similarly they cannot be drawn from what one desires (Frey 1983: 48). Doing so renders such an approach to be "far less a conceptual truth and much more a substantive moral judgement" (Frey 1983: 48). As such, it could be argued that this makes Regan's theory weak and open to criticism. Regan is aware of this controversy regarding appeals to intuitions, and in response prescribes a method based on rational pre-reflective thinking followed by critical reflection (Regan 1988: 187).

Secondly, Frey rejects the importance placed on rights, as "obsfucation is nearly always the result" (Frey 1983: 46). Arguing about rights leads to arguing about the moral principles that underpin the rights themselves. This is generally not constructive and leads to further argumentation as moral principles are never agreed upon - a position easily understood when one thinks of the differing opinions on issues such as capital punishment, abortion, etc. The reason for this is that the criteria for accepting moral principles are often a point of contention (Frey 1983: 50). The real moral issues then become clouded behind speculative argumentation. Accordingly, it is Frey's opinion that moral rights are "superfluous to and distracting from argument about substantive moral issues" (Frey 1983: 85). Having explored direct and indirect duty views Regan would disagree, claiming that a rights based approach is the only acceptable, non-arbitrary way to ensure the

correct moral treatment of animals. As such, he would dismiss Frey's claim that rights do not have a significant role to play in ethics.

A further area of concern is the problem of conflicting values and their resolution. While Regan's approach is egalitarian and respects the value of the individual, it does not provide any guidance for dealing with cases where values conflict (Singer 1991: 347). Regan grants the moral right to respectful treatment to all moral agents and moral patients. All who have inherent value have it equally, whether moral agent or moral patient (Regan 1988:240). This makes the assumption that moral agents and moral patients have equal moral worth and should be treated in ways that are consistent with recognising their equal possession of inherent value (Regan 1988:327).

While this assumption is logical, there is an apparent failure on Regan's part to apply it. A lifeboat example is offered to illustrate when harms may be overridden (Regan 1988: 285). On this boat are five survivors, all of equal weight. Four of them are humans, the fifth a dog. The boat is designed to hold four. To ensure that the boat does not sink, one is required to leave the boat. In terms of justice and equality, drawing straws would be the fairest option, for all five are equally innocent and have equal inherent value. Regan argues differently. The dog, according to Regan, is the one to go overboard. His decision is made on the basis of the worse-off principle, which argues that those to be made worse-off should be given preference. His reasoning is that death is a harm, and "no reasonable person would deny that the death of any of the four humans would be a greater *prima facie* loss, and thus a greater *prima facie* harm, than would be true in the case of the dog" (Regan 1988:324).

Implicit in Regan's thinking is the fact that humans get more satisfaction from life, and so the harm of death for humans is greater than the death of any non-human. This is not entirely acceptable. Regan makes it clear that all those who have equal inherent value have an equal *prima facie* right not to be harmed, but then runs

counter to his appeal to equality and impartiality by seeing death for the dog as a lesser harm. He gives no qualification to support how he determines such a position, other than to do otherwise would be "to give the dog more than his due" (Regan 1988:324). Surely death for the dog as well as for humans entails extreme suffering through drowning and the premature ending of their life, a deprivation of future welfare interests. In the above example both harms of inflictions and deprivations are allowed to occur under the rights view without successful argument, thus eroding the principle foundation upon which it was built. It is apparent that, by favouring human interests over animal interests, Regan is unable to completely relinquish anthropocentric ways of thinking.

He defends himself against the charge of speciesism by claiming that the decision to choose the dog is not made on the basis of species membership, but rather on "assessing the losses each individual faces and assessing these losses equitably" (Regan 1988:325). Two criticisms can be raised at this point. The first concerns Regan's rejection of utilitarianism. While denying the validity of appealing to consequences when making moral judgements, Regan looks to future implications in order to determine losses. In so doing he makes a direct appeal to the outcomes of actions in order to make a moral judgement, thereby appealing to consequences. Secondly, he makes an assessment of the losses to be experienced on a biased opinion that humans have greater preference interests and more to lose than any animal. Accordingly, human harm is recognised as the greater harm. Surely then, in many situations where an ecological perspective would have led to a different conclusion, human harms would be viewed as the greater harm over and above any and all other harms to other animals. Regan would contest that the lifeboat example has exceptional circumstances that justify harming the dog, which would not be there in other cases. He does not, however explore what constitutes an exceptional circumstance, nor does he give guidelines for determining when exceptional circumstances occur. This allows for many situations to be considered exceptional, thereby providing every opportunity to override the rights of animals.

Since the rights view prioritises the interests of mammalian individuals, and in particular those of humans, one is left wondering how such an approach could offer anything substantial towards addressing issues of the environment. Regan is confident that by focusing on the rights of the individual, the environment itself will be treated properly for “were we to show proper respect for the rights of the individuals, who make up the biotic community, would not the community be preserved?” (Regan 1988: 363) The respect principle states that an individual is given the respect she is due, by virtue of the inherent value she possesses. Respecting the rights of individuals entails not harming them (the harm principle). Individuals are harmed when they are deprived of their basic biological necessities (welfare interests). Individuals acquire such necessities from their physical environment. Individuals will benefit the most from their environment when it is in a healthy state. It follows that precautions should be taken not to disturb the environment for it is that very environment in which those individuals live and rely upon to live a full life. Therefore, by respecting the rights of the individual our respectful actions will permeate through to the environment in which they live.

While this seems to make sense in the abstract, the practical application of Regan’s approach has questionable outcomes. The rights view allocates moral preference to individual beings, in and by themselves. The environment is not an individual; but rather is comprised of collections of individuals together with non-individuals. There is nothing in the rights view that will acknowledge the collective whole of nature, as the rights view rejects appeals to the aggregate (Regan 1988: 362). Regan’s identification of the individual is restricted to “mentally normal mammals of a year or more” (Regan 1988: 78). This limits moral consideration to the group of mammals while neglecting many other members of the biotic community. The implication of this is that only the environments in which mammals exist would be indirectly protected, while threatened environments that contain no mammals would have no protection whatsoever (Hargrove 1992: 81).

Furthermore, since moral rights only apply to the actions of moral agents, the non-human world is deemed to be a moral-free zone. Along such lines, it makes sense

to talk of the moral rights of coyote in connection with hunters who trap and kill them. Conversely, it is ridiculous to talk of the moral rights of salmon with respect to the bears that hunt them, and similarly we have no moral duty to stop a lion from hunting a zebra. As such, where only moral patients are concerned there can be no rights or duties to be claimed, including instances when moral agents are observers (Rolston 1988: 49). This decreases Regan's category of morally considerable individuals. Considering that there are infinitely more creatures on this planet that do not fall into Regan's notion of the individual, there would be extremely large portions of the environment that would have no protection. Such a hands-off approach has grave implications for wildlife management and the biotic community at large. In many instances this would not necessarily be the best route to follow. With the prohibition of hunting, natural predators and dangerous exotics would be left uncontrolled even where control of them is required to preserve the diversity of an ecosystem (Pierce & Van De Veer 1995: 257).

A final criticism is that the rights view reduces a species to the sum of the individuals that constitute it. It is Regan's opinion that when the individual is well off, then the species is well off. However, there are occasions when what is good for the species is not necessarily good for the individual such as sickness and disease, which are potentially damaging to the individual, but offer opportunities for the species to strengthen its genetic make-up. Alternatively, there are occasions when what is good for the individual is not beneficial to the species, such as the saving of human lives, which is good for the individual concerned, however not necessarily productive for the species. Favouring the individual and neglecting species is a dangerous route to follow, for while life on this planet cannot exist without individuals, the individual cannot exist without the species. An individual member of a species is replaceable through reproduction. Killing a species permanently shuts the door on the possibility of a group of individuals ever existing again (Rolston 1988: 144). In light of this Rolston states that if killing an individual requires adequate justification to override its right to existence, then it makes "more sense to claim that one ought not to kill the species without superjustification" (Rolston 1988: 146).

Regan's rights-based approach extends the moral sphere to recognise the rights of individual animals that qualify as subjects-of-a-life. This ensures that we are duty bound to respect all conscious, self-aware beings i.e. mammals. However, extending rights from humans to include all mammals simply introduces new demands into the moral realm, while "failing to provide a consistent prescription for action" (Singer 1991: 347). Furthermore, since only certain individuals stand to benefit from such rights, non-mammalian animals, plants and non-individual entities are morally neglected. In my opinion, Regan's attempt to construct a strong position for the rights of animals is flawed by his strict reliance on the Kantian model. While a clear connection is established between self-awareness and moral treatment, it is not clear why only self-aware subjects of a life have inherent value, rather than all living beings.

Peter Singer: Morally Considering Sentient Beings

Peter Singer is the DeCamp Professor in the University Centre for Human Values, Princeton University. He is also the current president of Animal Rights International; co-founder and president of The Great Ape Project; and scientific advisor to *Aufklärung und Kritik*. His main interest is animal ethics, but he has also published books and articles on human rights, genetic engineering, infanticide, Hegel and Marx. In *Animal Liberation* Singer posits that if we value the racial and gender liberation movements of the sixties, then the liberation of animals is the next logical step (Singer 1990: viii). He challenges accepted assumptions by extending moral consideration beyond the scope of humans.

Through exploring conceptions of human equality, Singer identifies the principle of equality, according to which the interests of every being affected by an action should be “taken into account and given the same weight as the like interests of any other being” (Singer 1990: 5). Sentience, the capacity to feel pain, is identified as a prerequisite for having interests. Since animals are sentient, the interests of animals ought to be considered because they have interests and there are no justifiable reasons to exclude them from moral consideration. Looking at the practices of scientific experimentation and the animal agricultural industry, it is clear that the interests of animals are completely neglected. Accordingly, such practices are deemed to be morally reprehensible. In light of this, Singer argues that it is our moral responsibility to bring an end to animal farming by becoming vegetarians. Furthermore, while scientific experimentation is beneficial to humanity, it should only be allowed to continue provided that the experiments are so important that they would warrant the use of human babies as test subjects. Moving away from issues of pain, Singer explores the more complex issue of killing. Avoiding the charge of speciesism, the sanctity of life is defended by appealing to the category of personhood. Singer’s response to the issue of killing entails adopting a two-pronged approach, applying preference utilitarianism when

dealing with persons, and classical hedonistic utilitarianism when dealing with non-persons.

A thorough exposition of Singer's ethic will provide the foundation for a critical discussion.

In searching for an acceptable approach to ethics, Singer argues that morality should be grounded upon something broader than a relativist or self-interested point of view, which offers a weak notion of ethics with no acceptable means of addressing conflicting interests (Singer 1979: 6). This suggests that an ethic should be grounded in that which is universal (Singer 1979: 11). This does not imply that particular moral judgements are absolute and should be universally applied to every situation, since "circumstances alter causes" (Singer 1979: 11). Rather, the reason for adopting a universal point of view is that it minimises the importance of our own interests, while at the same time recognising that the interests of all relevant parties count equally. Accordingly, when making ethical decisions, the interests of all those affected by the decision to act should be considered. The choice of action is then determined by the best consequences for all those affected. This provides "a pervasive, although not conclusive, reason for taking a broadly utilitarian position" (Singer 1979: 12).

Equality among humans is a widely accepted contemporary political and ethical creed (Singer 1979: 14). All forms of racism and sexism are considered to be morally abhorrent. Recognising that differences exist between the human sexes as well as the races, it is clear that human equality is not based upon physical characteristics. Neither is it based upon moral or intellectual capacities, for there are no logically compelling reasons to assume that differences in ability justify differences in treatment (Singer 1997: 18). Equality in this sense is "a basic ethical principle, not an assertion of fact" (Singer 1979: 18). Accordingly, Singer identifies the basic *principle of equality* as the equal consideration of interests, whereby an impartial weighting of interests is given to all those who have interests

(Singer 1979: 19). The principle of equality is the only possible basis for claiming the equality of humans, as it allows one to defend a form of equality while embracing the differences that exist between humans (Singer 1979: 42).

Singer's argument for the liberation of animals is based on the claim that discriminating against beings solely on the basis of their species membership "is a form of prejudice, immoral and indefensible in the same way that discrimination on the basis of race is immoral and indefensible" (Singer 1990: 243). Singer labels this form of discrimination *speciesism*. A speciesist openly and without restraint has no problem to hurt, mistreat or kill an animal, while she would never consider performing such actions on any human individual. This is because the sanctity of life is conferred onto humans alone. The belief that only human life is inviolable is a form of speciesism (Singer 1990: 18). Singer feels that there are no good and non-arbitrary reasons to support the position that human life is more valuable than animal life. In order to avoid speciesism, we must "allow that beings who are similar in all relevant respects have a similar right to life" (Singer 1990: 19). Accepting the principle of equality as a sound moral basis for human equality, "we are also committed to accepting it as a sound moral basis for relations with those outside of our own species - the non-human animals" (Singer 1979: 48).

The principle of equality is Singer's key philosophical position with which he establishes that all animals, both human and non-human, are deserving of equal moral consideration. The equality described is not an actual equality, but rather a type of treatment that is prescribed, i.e. equality in humans is not an attempt to claim that men and women are exactly the same and are thus deserving of the same treatment. Rather differences are acknowledged and acceptable treatment is accorded in light of the similarities. Along these lines, the call for animal equality is not an absurd one, as the extension of the principle of equality from one group to another does not entail that both groups are treated in the same way, but rather that they are considered equally. "Equal consideration for different beings may lead to different treatment and different rights" (Singer 1990:2). Because it does

not dictate equal moral treatment, the principle of equality can be said to be a minimal egalitarian principle. In certain circumstances the application of this egalitarian principle could lead to unequal treatment. It must be remembered that, in such instances, unequal treatment is an attempt to produce the most egalitarian results (Singer 1979: 21).

Many would consider it absurd to include animals as members of the moral community, which is understood as a social group “composed of interacting autonomous beings where moral concepts and precepts can evolve and be understood” (Gruen 1991: 343). Accordingly, only members of the moral community are morally considerable. Humans are moral beings and therefore deserve moral consideration, while animals are not moral and therefore are beyond moral concern. Singer disagrees with the logic of this argument. It is true that human beings are moral creatures. We have the capacity to intelligently assess our actions and make choices on the basis of that assessment. As such we can be held morally accountable. It is also true that non-human beings are incapable of rational consideration or moral reflection. In this sense they cannot be held morally accountable for their actions (Singer 1990: 224). The problem lies in making the capacity to reason in moral ways a necessary requirement for being morally considered. The former is an intellectual ability and the latter entails the receipt of respectful treatment. Possession of the former implies the latter, but the latter in no way requires the former.

The principle of equality requires that our ethical concern for others ought not to depend upon what species they belong to or what abilities they possess, but on whether they have interests (Singer 1979: 49). Singer identifies one fundamental characteristic that is a prerequisite for having interests as *the capacity to suffer* (Singer 1979: 50). “If a being suffers, there can be no moral justification for disregarding that suffering or for refusing to count it equally with the like suffering of any other being” (Singer 1990:171). According to the principle of equality, a being's suffering must be counted equally with the similar sufferings of any other

being. This excludes all beings that cannot suffer, for there is nothing to take into account.³³ Singer marks sentience as the “only defensible boundary of concern for the interests of others” (Singer 1990: 8), since drawing this moral line at any other point is as arbitrary and as wrong as sexism or racism.

Those who do not extend equal moral consideration to animals are guilty of speciesism. Like racists who favour their own race while violating the interests of others, and sexists who favour their own sex in violation of others’ interests, “speciesists allow the interests of their own species to override the greater interests of members of other species” (Singer 1990: 9). Singer feels his demarcation is non-arbitrary, as those beings that are sentient are the only beings that will experience the outcomes of any particular actions. A child for example will suffer terrible pain if kicked by an adult, and the result of this action will seriously interfere with both the physical and psychological health and well being of the child. A stone, on the other hand, wildly kicked across the road will not be affected in any way, either immediately or at any point in the future. Using sentience to determine interests provides a position that does not allow the considerations of the pleasures and pains of some to be ignored over the pleasures and pains of others (Regan 1988: 201). This enables Singer to move moral consideration beyond the human sphere to include a wide range of non-human beings.³⁴

In opposition to this is the view that animals cannot suffer and hence have no interests. This comes in two forms. The *modest charge* rests upon the

³³ This is supported by Callicott, who states that “if it is pain and suffering that is the ultimate evil besetting human life, and this not in virtue of our humanity but in virtue of our animality, then it seems only fair to promote freedom from pain for those animals who share with us in this mode of experience” (Callicott 1995a: 42).

³⁴ The capacity to feel pain is attributed to a being’s biological structure - the existence of a brain, a central nervous system and a vertebral column. As such, Singer argues that because all vertebrates have the capacity to feel pain, they are all morally considerable. He draws the line of moral consideration at Amphipoda - freshwater shrimps.

understanding that animals do not and cannot suffer in the same ways that humans suffer. Animals, lacking the degree of emotion and intellect that humans possess, cannot suffer the disappointment of economic loss or the knowledge that a malignant cancer will cause an untimely death. The mental capacity of humans can, in certain circumstances “lead them to suffer more than animals would” (Singer 1979: 52).

However, an inability to suffer psychologically (highly debatable in higher order mammals) in no way implies an inability to suffer physically, nor does it mean that we can exclude non-human animals from moral consideration. Furthermore, higher mental activity does not necessitate a greater suffering on the part of humans, as an animal may suffer more through a limited understanding of what is happening to it (Singer 1990: 16). A war captive, for instance, is likely to suffer less knowing his release is contingent on the ending of the war than an animal who is caged with no understanding of why or for how long. The animal is likely to experience increased suffering and terror, being unable to distinguish between being overpowered in the attempt to confine it from an attempt to kill it. Along such lines, a being that does not have the ability to understand what is being done to it is arguably in a position to suffer more.

The *extreme charge* is that animals do not suffer at all, a view most prominent in the writings of René Descartes. Animals are seen as unconscious machines, devoid of thoughts, feelings, or a mental life (Singer 1990: 10). Descartes saw that the world was composed of two spheres: the material, physical world of extended substances, including the bodies of human beings; and the spiritual, non-physical world of consciousness. All matter in the world is part of the former category, while only human minds (and presumably God) are part of the latter category. Evidence of consciousness in humans is rationality and the ability to convey ideas through language. Descartes saw no such evidence in any other beings, concluding that only humans (and God) are of this realm. Pain is a state of consciousness and since animals are not conscious, Descartes reasons, they cannot feel pain.

In response, Singer points out that all external behavioural signals observable in humans to indicate pain can also be clearly seen in non-human animals (Singer 1990: 11). There is also conclusive proof that non-humans and humans share nervous systems that respond in similar ways when exposed to pain. Singer adopts a parsimonious approach when seeking explanations, favouring the explanation that makes the fewest assumptions. Accordingly, similar nervous systems and similar behavioural patterns can only mean that our experiences of pain are similar. Finally, evolutionary understandings of pain recognise that it has a distinctive biological usefulness as a survival technique. It would be extremely narrow-minded to assume that ours is the only species to develop it. Singer concludes, "there are no good reasons, scientific or philosophical, for denying that animals feel pain. If we do not doubt that other humans feel pain we should not doubt that other animals do so too" (Singer 1990: 15).

"Pain and suffering are bad" (Singer 1979: 54). Actions that cause pain and suffering do not take the interests of the being into account, and are therefore wrong. Accordingly, pain and suffering should be stopped or at least minimised. It becomes our moral duty to avoid inflicting pain or suffering on those who can experience it. The badness of pain depends upon its intensity and duration.³⁵ Pains of the same intensity and duration are equally bad; no matter whether humans and non-humans alike experience them. Such pain and suffering "should be prevented or minimised, irrespective of the race, sex, or species of the being that suffers" (Singer 1990: 17).³⁶ The prevention of pain and suffering is unproblematic for Singer. If one is in a position to stop the suffering of another sentient being, then one is morally bound to do so. The principle of equal consideration of pain or

³⁵ The problem of measuring pain will be discussed later in this chapter.

³⁶ This is misleading since Singer adopts a 'hands-off' approach toward wild animals, focusing entirely on domesticated and agricultural animals, which suffer the most at the hands of humanity.

pleasure is “a sufficient basis for identifying and protesting against all the major abuses of animals that human beings practise” (Singer 1990: 17).

A common response is that if suffering is bad, how can we be sure that plants cannot feel and if they do, wouldn't it be bad to eat them? If it is, then the whole of humanity is either doomed to be morally wrong in causing suffering to whatever we eat, or we are doomed to starvation by being morally right. Singer acknowledges that this question arises less out of concern for the welfare of plants and more as a response to the call to end meat eating. He rejects this question as being “weak in both fact and logic” (Singer 1990: 235). The category of suffering is extended from humans to animals on the basis of three facts. Observable behavior in the presence of pain, similarity of nervous systems, together with the evolutionary explanation of pain as a survival technique, all support an understanding that humans and animals will feel pain and discomfort in much the same way and to a greater or lesser degree. Singer sees no evidence to support that plants feel pain, either through observable behavior, nervous system or evolutionary explanation (Singer 1990: 235). Accordingly, there are no justified grounds to believe it to be so. In terms of logic, Singer claims that even if they did, we would have to decide either to eat plants or animals in order to survive. In a situation where suffering is imminent, he recommends that we choose the route that causes the least amount of suffering (Singer 1990: 236). Along such lines we should choose to eat the plants, even if they felt pain to the same degree that animals do. This is because the rearing of animals uses almost ten times as many plants as it would take to feed humans (Singer 1990: 236). Therefore, eating meat would not only cause suffering for the animals, but also for the plants used to feed them.

Looking into practices that cause pain and suffering in animals, Singer focuses on the use of animals in *scientific experimentation*. He gives a detailed account of animal experimentation by the military, psychological institutes, and cosmetic companies, offering a convincing argument that many humans are speciesists.

Singer is appalled that "many experiments inflict severe pain without the remotest prospect of significant benefits for human beings or any other animals" (Singer 1990: 36), while the harms and losses experienced by the animals are very real. Animal experimentation has turned into an industry, with money being acquired through governmental funding and profits being made through the selling of 'laboratory animals' and other specialised experimental equipment (Singer 1990: 38). This industry flourishes to the detriment of the welfare of millions of animals every year. The rationale behind many of these experiments is that a close biological correlation exists between the experimental animal and humans. These are similarities of organs, nervous system and internal structuring. However, if the experience of pain for humans is a result of their biological being and animals have a similar biology then it is impossible to deny that the animals involved also feel pain, and therefore suffer.

If suffering is bad, and experimentation causes suffering, what can be done about animal experimentation? An easy answer would be to put a stop to all pain inducing experimentation. However, this approach does not account for instances where the suffering of many could be saved by the suffering of a few. Singer is not against experimentation per se, but rather is appalled by the many senseless and meaningless experiments which cause unnecessary pain and suffering for animals. Experiments that have no purpose or serve no higher moral good, such as saving another life or creating a cure to a terrible disease, yet inflict suffering upon sentient beings, are morally deficient and therefore wrong. Those experiments, which serve no direct and urgent purpose, would therefore have to stop immediately (Singer 1990: 40). If direct benefits are to be derived from experiments then such actions could possibly be justified. Singer's position is that if "one, or even a dozen animals had to suffer in order to save thousands, I would think it right and in accordance with the principle of equal consideration of interests that they should do so" (Singer 1979: 58). Therefore he would not demand the closure of all laboratories, but would rather insist on strict regulations governing which experiments were conducted, and to what degree suffering would

be allowed. For Singer, experimentation is acceptable when it "is so important that the use of a brain-damaged human would also be justifiable" (Singer 1990: 85). Such a concession encourages the overcoming of our species bias in that we are encouraged to consider using human beings for painful experimentation, while at the same time ensuring that only the most important of experiments are done.

An even bigger display of indifference toward the suffering of non-human animals is the *animal agricultural industry*, which Singer deems to be "the most extensive exploitation of other species that has ever existed" (Singer 1990: 95). Over one hundred million cows, pigs and sheep, and over five billion chickens are slaughtered in the United States every year.³⁷ The suffering inflicted upon animals in the food industry is a natural outcome of our speciesist views, for "once we place non-human animals outside our sphere of moral consideration and treat them as things we use to satisfy our own desires, the outcome is predictable" (Singer 1990: 97).

Farming is an age-old way of living, with traditional farms conjuring images of harmonious integration between plant, animal and nature, with humans reaping the benefits of this relationship. However, times have changed. Increased population numbers have resulted in an increased demand for produce and with it the realisation of profit potential, transforming the traditional farmyard ethos into an industry of factory farms. The farming industry is competitive and new methods are constantly devised to produce food quicker and cheaper, thereby increasing profit margins. "Animals are treated like machines that convert low-priced fodder into high-priced flesh" (Singer 1990: 97). Such an ethos ensures that chickens, cattle and pigs have a miserable life from the moment they are born until their deaths. Their world is an artificial one, where surroundings, food, temperature and even light are manipulated to yield the highest possible profits. "The principle of

³⁷ It is estimated that worldwide 175 million tonnes of meat was consumed in 1990 (Meyers 1994: 32).

equal consideration of interests does not allow major interests to be sacrificed for minor interests” (Singer 1979: 55). Accordingly, the treatment of animals by the farming industry is morally reprehensible, as the minimal human interests of taste preference and profit are given more weight than the major interests of the suffering of the animals involved.

Little can be done to alter the suffering which the animals experience, for it is impossible to rear animals for profit without inflicting considerable suffering (Singer 1990: 160). The one way to challenge the atrocities which factory farming inflicts on the animals concerned is to not support the industry. Singer argues that the more people stop buying these products, the less demand there will be and the less profits there will be made. Decreases in profit and demand will slowly reduce the industry, thereby reducing the amount of suffering. Singer does not condemn the eating of animal products, for “death, though never pleasant, need not be painful” (Singer 1990: 150). However, we should not eat animal flesh unless we can be certain that it was not produced by the animal agricultural business (Singer 1979: 56). Living in urban areas, it is difficult to know the process of production i.e. whether suffering has or hasn’t been involved. To this Singer has a simple answer, don’t eat any meat or animal products - become a vegetarian.

A particular response to the closure of farms is that there would be nowhere to keep all these animals, and with no one prepared to feed them they would suffer more from starvation and exposure. Therefore, the animals are better off in the factories, where at least they are sheltered and fed. Singer acknowledges that those industry animals - cattle, sheep, pigs and chickens are not wild animals, and that they would probably not survive in the wilderness. However, the abolition of factory farms would not entail a returning of farm animals to the wild. The whole process would be gradual (Singer 1990: 227). A decrease in demand would correlate with a decrease in the market size. Fewer farms would be operational, resulting in a slow decrease in the number of factory animals being bred for these operations. In this regard the choice is “not between life on a factory farm and life

in the wild, but whether animals destined to live on factory farms and then killed for food should be born at all” (Singer 1990: 228).

A retort to this is that factory farms give these animals an opportunity to live. Surely then factory farming is not that bad, as it allows the existence of certain animals to occur, for without it they would never have been born. Singer is appalled at the suggestion that we are doing these animals a favour by ensuring their birth, only to mistreat and slaughter them. This presupposes that existence in any form is itself a benefit, rather than an existence free from suffering being a benefit. Singer is firm in his response that “to bring them into existence for a life of that kind is no benefit to them, but rather a greater harm” (Singer 1990: 229). An unborn animal is better off than an animal born into the food industry and a life of suffering. The bottom line for Singer is that actions are wrong if they cause unnecessary suffering, but they are right otherwise.

A more complex matter to apply the principle of equal consideration of interests to is that of *killing*. Suffering is offered as the determining factor of what is right and wrong. This is problematic for not all killing involves suffering - a sentient being can be killed reasonably quickly with a single fatal shot to the head, or similarly can be given an injection which puts it to sleep, where it can then be killed painlessly. Alternatively, killing could be the only means to alleviate suffering, where an injured being who is in extreme pain and in no position to receive medical assistance, could have their suffering greatly reduced by a painless and sudden death. One certainty for Singer is that the wrongness of inflicting pain and suffering on a being cannot depend on its species membership, for “the biological facts upon which the boundary of our species is drawn do not have moral significance” (Singer 1979: 76). Similarly then, the wrongness of killing cannot depend upon species membership. Accordingly, appealing to species membership cannot defend the sanctity of human life.

Searching for a solution, Singer explores the concept of *personhood*. A person is understood as a being that is rational and self-conscious (Singer 1979: 78). The characteristics of personhood, rationality and self-conscious awareness are observable through a being's behavior. Singer rejects the conviction that this places human life above the lives of other animals, as members of other species can be considered to be persons, such as primates, whales and dolphins; while some members of our own species are non-persons, such as new-born infants and some developmentally delayed humans (Singer 1979:97).³⁸ In an attempt to see if personhood carries a special value Singer contrasts persons against non-persons, finding that a being that is rational and self-conscious will have desires about the future, while a being which is merely conscious and sentient will not.

According to the *classical utilitarian* view, actions are judged by their ability to maximise pleasure and minimise pain (Singer 1979: 79). Therefore the ability to have desires about the future has no direct relevance regarding the wrongness of killing. However, it could be argued that personhood plays an indirect role in the classical utilitarian approach. Knowing that one is going to die, and hence that one's future desires are not going to be achieved, will in some way affect our happiness. Indirectly then, killing a person is, under certain conditions, more serious than killing a non-person. Specifically, this will be the case where the person knows of her impending death. Since it is most often the case that a person does not know when she is going to die (e.g. natural death, death by sudden accident, murder, or poisoning), killing, for the classical utilitarian, is not a morally reprehensible act.

Preference utilitarianism, on the other hand, sees a person's interests as synonymous with her preferences. Therefore, any "action contrary to the preferences of any being is, unless this preference is outweighed by contrary

³⁸ Singer admits that the task of determining the self-consciousness of a being is extremely difficult, but that in cases where we are unsure we should give that being the benefit of the doubt (Singer 1979: 98).

preferences, wrong” (Singer 1979: 81). Sentient beings are conscious and capable of experiencing pleasure and pain, but are non-persons if they are not rational or self-conscious. They are located in the present and as such “can properly be regarded as receptacles for experiences of pleasure and pain” (Singer 1979: 102). Death for a non-person is “the cessation of experience” (Singer 1979: 102), and as a receptacle of happiness, can be replaced with a similar being. Provided that the non-person has a pleasant life, is killed painlessly, its death does not cause any suffering to any other beings and that it is replaced with a similar being who will have a similarly pleasant life, the killing of such a being is not morally wrong (Singer 1979: 104).

In contrast, persons are not only conscious and sentient, but also rational and self-aware. They are individuals with lives of their own. They have a present that extends with desires into the future. Their lives count in ways that are unique to their being, and as such are not reducible to receptacles containing a value of happiness. Along this line, taking the life of a person is morally worse than taking the life of a non-person since persons have a concept of themselves existing into the future with desires and preferences to fulfil, while non-persons don’t (Singer 1979: 81). The preference utilitarian approach therefore provides direct reason why it is wrong to kill persons. This is not a categorical position, for utilitarianism never accounts for only one being but takes all those involved into account. Accordingly, “the preferences of the victim could sometimes be outweighed by the preferences of others” (Singer 1979: 81).

Singer adopts a dual approach to the rightness or wrongness of killing animals, since the term ‘animal’ covers such a diverse range of beings that it is improbable that one principle will apply to all (Singer 1979: 103). He suggests utilising the preference utilitarian approach when dealing with the killing of persons, and classical utilitarianism when dealing with the killing of non-persons. Killing is bad for those beings that have desires for the future, for such an act would lead to psychological suffering at the knowledge that one was not going to be able to

satisfy those desires. Furthermore, suffering would be experienced by those persons that are close to that being, for there would be future expectations and plans that would not be able to be fulfilled. In such instances killing can cause suffering of one form or the other. Accordingly, the killing of persons is morally wrong.

This approach does not apply to beings that are not capable of having preferences and desires for the future. Singer recommends the classical utilitarian approach when determining the rightness or wrongness of killing non-persons (Singer 1979: 99). In such cases the pain and suffering experienced by the being that is killed counts in conjunction with the pain and suffering experienced by those who are directly affected by the death, i.e. the being's mate, dependants and social group, to determine the wrongness of the act. However, this approach offers "no reasons for opposing killing when it is painless and no other animals are affected" (Singer 1979:99).

The animal rights view, explored in the previous chapter, allocates equal rights to all individuals. This often results in conflicts of interests that are difficult to resolve. Singer's egalitarian approach, which focuses on the equal consideration of interests, avoids this problem of conflicting interests (Gruen 1991: 347). Furthermore, by emphasising the importance of the consequences of our actions such an approach de-emphasises an adherence to strict rules and regulations. Singer's work offers insights to our dealings with non-human beings, making us aware that the interests of other beings count morally and to understand how they count morally (Johnson 1991: 193). Credit is due to Singer, whose challenge of accepted attitudes toward animals not only provided a moral foundation for the animal liberation movement (Gruen 1991: 343), but is also responsible for the growing public awareness of the atrocities of animal agriculture and animal experimentation (Regan 1988: 200). By making us aware that the concept of moral significance may appear in different forms, he has not only contributed toward

new areas of public and philosophical debate, but also to a general moral progress (Johnson 1991: 193).

Regan's criticism of the utilitarian approach is that it reduces the value of individual beings. Classical utilitarianism, applying the *principle of utility*, determines the best consequences of an action by determining the "optimum balance of pleasure over pain for everyone affected by the outcome" (Regan 1988: 200). This, combined with the principle of equality, presents a suitable option for those who feel that we should have direct duties towards animals, as it does not allow the pleasures and pains of some to be considered, while others are ignored. Each being that has interests is counted equally with the interests of the other beings involved. However, what counts is not the individual per se, but rather that in any given situation the sum of positive interests should outweigh the sum of negative interests. Therefore, the individual is reduced to a mere receptacle of interests.

Singer's utilitarian approach is unable to avoid this. Focusing on the criterion of sentience, provided that the aggregate balance of pleasure over pain is achieved, no moral wrong is committed even if a sentient being is killed. This amounts to viewing sentient beings as not inherently valuable in-themselves, but as mere receptacles of value (Regan 1988: 205). Sentient beings are not valued for their own sake, but for the pleasure and pain that they experience. With the best aggregate of pleasure over pain as ultimately important, an individual being can be replaced provided that that being is replaced with a being that is similar in every respect. Such a view has "unsavory moral implications" (Regan 1988: 206).

In an attempt to avoid reducing humans to the status of receptacles of value, Singer adopts a preference utilitarian approach when dealing with the issue of killing persons. Along these lines the consequences of an action are good when they further the preference interests of those affected. Accordingly, it is wrong to kill an individual who has preference interests "because it is an act contrary to his

or her preferences” (Regan 1988: 207). Because persons have preferences about their future, they are more than receptacles of value. This awards persons a moral status higher than that of non-persons.

However, Singer supplies no argument to support this, he merely assumes that having preference interests is better than just having the capacity to experience pleasure and pain. Furthermore, Singer’s reliance on utilitarianism enjoins him to focus on the best aggregate outcome of any situation. The interests of all those affected are counted equitably, and then balanced to find the aggregate of best possible consequences. Accordingly, a person with preferences can be morally and justifiably killed provided that such an act would “bring about the optimal aggregate balance of satisfaction of preference interests” (Regan 1988: 210). This implies that preference interests can themselves be counted. This amounts to taking preference interests as a value in-themselves, residing within the individual receptacle. Following the aggregate goal of utilitarianism, persons are just as much replaceable receptacles, given preference utilitarianism, as they are with classical utilitarianism (Regan 1988: 210).

Regan’s second major criticism is that Singer’s position “can allow for the very thing it ostensibly rules out, namely speciesism” (Regan 1988: 226). Utilitarianism, with its egalitarian principle that counts the interests of all those involved equally, appears to be the fairest and least discriminatory moral approach. However, because of the principle of utility, a distinct lack of harmony arises between “everybody’s abiding by the equality principle and everybody’s having their interests forwarded equally” (Regan 1988: 227). This principle places the maximisation of good outcomes over the equal treatment of all beings that have recognised interests. This allows for very inegalitarian results, as a minority of individuals, who are affected in significantly adverse ways, can be justifiably sacrificed provided that a majority of individuals stand to benefit. This in itself does not make Singer’s approach speciesist, for provided that the interests of all concerned are taken equally, then all stand an equal chance to benefit or lose in a

moral decision. It is for this reason that Singer introduces sentience as “the only defensible boundary of concern for the interests of others” (Singer 1979: 50), implying that all other boundaries are arbitrary allocations.

If sentience alone determined moral consideration Singer would not be guilty of speciesism, since this category includes many more being than humans. What confounds his approach is the addition of self-consciousness and rationality as criteria for determining the value of a being’s life.³⁹ This is done in an attempt to allow “beings who are similar in all relevant respects have a similar right to life” (Singer 1990: 19).⁴⁰ Offering two different sets of criteria, one to determine the value of a being’s life in issues of death and another to make choices where suffering is concerned, results in instances where persons are regarded as morally equal, while sentient non-persons are not considered morally at all. Admitting that some lives are more valuable than others implies that those beings should be more protected. While the interests of all are counted equally, this is done in ways that are detrimental to inferior beings. Consequently, sentient non-persons, seen to hold less of a value than persons, are prone to be disadvantaged during moral decision-making.

Singer would agree that in certain cases persons receive higher moral consideration than non-persons, but that the charge of speciesism is unfounded

³⁹ For Singer these criteria avoid the charge of speciesism as they are not exclusive to our own species. Because they are not speciesist, Singer feels that we can make a legitimate claim “that there are some features of certain beings which make their lives more valuable than those of other beings” (Singer 1990: 19).

⁴⁰ This places the life of a normal adult human over that of a chicken, but at the same time places the life of a monkey or a horse over that of a developmentally delayed human or an adult in an advanced state of senility. Singer’s intention is not to cheapen the lives of developmentally delayed infants and the senile, nor to make the lives of some animals overly sacrosanct. Rather, he wants to bring sentient animals into the moral sphere in order to put an end to the treatment of them as expendable items (Singer 1990: 20).

since the category of personhood extends beyond humans to include higher-order mammals. However, favouring self-consciousness and rationality “puts a premium on the wellbeing of those who can conceptualise their wellbeing needs” (Johnson 1991: 197). Such needs count morally only if a being can form preferences about them. Emphasising the ability to form preferences results in unfairly recognising the moral status of those beings that are similar to humans, while ignoring the moral status of non-human-like beings. It is clear that the bias is in favour of beings that possess human-like qualities (Johnson 1991: 197).⁴¹ Furthermore, this wrongly assumes that self-consciousness and rationality, which are sufficient conditions of moral significance, are instead necessary conditions, thereby fixing morality to suit interests which are very much our own (Johnson 1991: 198).

Singer’s species bias becomes evident when the interests of a non-human person conflicts with the interests of a human person. Lori Gruen illustrates this by applying Singer’s utilitarianism to Regan’s lifeboat example (Gruen 1991: 344). Because the utilitarian view considers all those affected, the family and friends of those on the lifeboat also need to be taken into consideration. These outside variables are removed from this thought experiment by assuming that all relatives and friends of those in the boat are either dead, or will in no way be affected by any loss. Furthermore, to avoid the complications of the pain and suffering experienced through drowning, the being to be thrown overboard will be given a lethal but painless injection. The classical utilitarian view, which aims to increase happiness and decrease pain, would throw the least happy being overboard. Since dogs are easily satisfied it would in all likelihood be the happiest of all beings in this particular situation. Humans are much harder beings to please and would, in this situation, be less happy than the dog. Therefore, it would seem obvious that the dog should remain, while the least happy human should be the unfortunate soul to die.

⁴¹ It is a fact that rational beings have “interests involving their rationality, interests that non-rational beings lack” (Johnson 1991: 198). Singer’s mistake occurs when he allocates greater moral significance to rational interests.

Singer would refuse this decision, demanding that a preference utilitarian view must be applied when dealing with issues of killing persons. Self-consciousness and rationality, the capacities of a normal human adult, are the criteria offered to determine the value of life. Since humans have the capacity for self-awareness, an ability to develop close personal relations, and the ability to plan for the future, while dogs presumably do not (or have less of a capacity), Singer would conclude that “if we have to choose between the life of a human being and the life of another animal we should choose to save the life of the human” (Singer 1990: 21). Singer would justify this decision by reminding us that, while his approach calls for the equal consideration of all beings that have interests, equal consideration does not necessarily entail equal treatment. It is clear that normal human adults will possess more of these capacities than any other being, even if that being qualifies as a person. It is therefore morally justifiable to kill the dog as opposed to any of the humans, for humans and dogs are not relevantly equal.

If this is the case, then the interests of animals “are allowed to count only when they do not clash with human interest” (Singer 1990: 212). When there is a clash of interests it is morally acceptable to treat animals in an unfavourable manner provided that such treatment brings about the best aggregate consequences for the majority of humans. This smacks of speciesism and places animals in a precarious position, for even though they may have moved into the moral sphere, they exist in a separate domain from humans.

Aside from theoretical problems, Singer’s approach presents a practical problem of measurement. Sentience is offered as the criterion for having interests. This provides an entry point for exploring the moral significance of animals. It is however problematic on two counts. The first has to do with the fact that pain is responsive – it is experienced in response to stimulation. Because of this it can only be ‘measured’ after the stimulation has occurred. Therefore, a being needs to suffer in order for us to see the wrongness of an action. Singer would respond that

since the minimisation of pain and suffering is the goal of utility the suffering of a few is acceptable provided that the majority benefits from it. The pain felt by some would alert us to the wrongness of an act. It would then be our moral duty to ensure that the act was not repeated. This would prevent the majority of individuals from suffering the same pain. This does not change the fact that a wrong has to occur in order for us to know that it is wrong.

A second concern, expressed by Johnson, is that it is “notoriously difficult to weight the comparative pleasures and pains of different people, or even the different pleasures and pains of the same person” (Johnson 1991: 186). The suffering of any human can never be objectively known as a matter of fact, but rather can only be known through observing their behavior or listening to their account of the pain. Neither observation nor verbal account is an adequate means for determining the exact amount of suffering that any human experiences. It therefore becomes impossible to compare the suffering of humans. If assessing the pains of humans is a difficult task, it can only be more so where the diverse ranges of non-humans are concerned. Since animals are unable to communicate verbally we have to determine the amount of suffering through observation alone. This relies on the assumption that all beings will exhibit the same responses to the same degrees of pain. This is absurd, for even among humans different individuals have different pain thresholds and accordingly respond to pain in different ways. Not offering an adequate means to go about weighting the sufferings of different beings renders it difficult to implement this approach successfully (Johnson 1991: 188).

A further problem with Singer’s approach is that it does not prevent species extinction. This is a result of two factors: the criterion of sentience, and the scope of moral consideration. The criterion of sentience focuses moral concern directly onto the suffering of the individual. Since a species is not a sentient being, it is clear that the demise of a species is not of moral concern. In response it could be argued that, governed by the principle of utility, actions are considered to be right

or wrong in terms of how they benefit or harm the majority of individuals. Since a species is a collection of individuals it will be preserved. However, this commits a conceptual flaw, in that a species is not simply a collection of individuals, but is the biological vehicle that contains the genetic information to ensure the continued existences of future such individuals. Singer's approach only acknowledges the sentient individual and not the biological group to which the individual belongs. Since the minimisation of suffering is his main goal, provided that the individual animals do not suffer while the species itself dies out, no major wrong is committed.

Singer's approach also does not help to prevent species extinction for another reason: the limited scope of moral consideration. According to Singer it is morally wrong to inflict needless suffering onto individual sentient beings. 'Needless suffering' in this sense is something that only humans can inflict onto other beings, making it wrong to treat them as a means to our own ends. As such, non-humans cannot commit moral wrongs. It follows that the natural suffering of animals do not fall into the scope of moral concern (Hargrove 1992: 14). Singer's attitude toward wild animals is that we should simply "stop interfering with them ... (and) leave them alone as much as we possibly can" (Singer 1990: 226). Excluding wild animals from the scope of moral concern places the species in a precarious position. Ignoring the natural suffering of the wild individual entails ignoring the plight of that individual. Left unchecked this could, in extreme cases, lead to the species population numbers diminishing to critical levels. Once a certain critical level has been reached the only way to save the species would be to intervene with specialised breeding programmes. Unfortunately, Singer's moral criterion does not consider the species as worthy of moral concern, nor does his scope make intervention morally justified in the case of wild animals.

Singer's ethic of bio-culture entails that we not only adopt a morally ignorant stance toward wild animals, but that such a stance is extended toward the natural environment. Singer maintains that we should not meddle in the affairs of nature,

as any attempt to manipulate the natural world can only cause greater ecological disasters. "We cannot and should not police nature" (Singer 1990: 226). Since the consequences of human action alone have moral significance, the natural world unaffected by human action is morally insignificant. However, it could be argued that very few places remain in the world that are not in some way affected by the dealings of humanity, since the consequences of some of our actions are not limited to specific areas, but extend globally to affect the entire biosphere of the planet.⁴² Changes in the Earth's biosphere affect changes in the ecosystems in which sentient beings live. Therefore, we should not morally ignore the natural world or the wild animals that exist in it. Singer would deny the logic of following consequences to this extent, claiming that if sentience is the criterion for moral standing and the scope of moral concern is limited to human action then the ethical focus should be limited specifically to the direct suffering of sentient beings inflicted by humans.

It is Singer's opinion that illuminating our own unnecessary cruelty toward animals makes a significant contribution. He argues that speciesist ideology is fundamentally wrong and believes that it can be challenged through exposing human actions toward animals as malicious and uncaring, by proposing new moral understandings and by practising habits that conform to our new beliefs. Adopting a utilitarian approach with sentience as the criterion of moral standing "lends itself to treating animals as objects of moral concern" (Johnson 1991: 50). Extending morality to include beings other than humans brings with it an awareness that humanity is not above the rest of the creatures that co-inhabit this planet.

It is Singer's conviction that we need to make a "radical break with more than two thousand years of Western thought about animals" (Singer 1990: 213), and that the hardest break that we will have to make is with "the assumption that human beings

⁴² These include affects of global warming, nuclear pollution and the increasing human population as discussed in Chapter Two.

come first and that any problem about animals cannot be comparable ... to problems about humans” (Singer 1990: 219).

As argued in my critique, Singer’s approach favours beings that have distinctly human characteristics – self-consciousness and rationality. While grounded on a conception of equality, Singer’s approach implies a moral hierarchy with human-like beings appearing at the top, receiving the greatest degree of moral concern. This reflects the current moral status quo. In light of the above one is left wondering whether Singer’s approach is ‘radical’ enough to break with such a pervasive and widespread attitude (Singer 1990: 230). It appears that speciesism is so deeply ingrained in our culture and understanding that if its foundations “were knocked out from under it, new foundations will be found, or else the ideological position will just hang there, defying the logical equivalent of the laws of gravity” (Singer 1990: 211).

Singer argues that the interests of all sentient beings affected by an action should be taken into account and given the same weight as the like interests of any other sentient being. This makes a positive contribution to expanding the moral sphere, through exposing the cruel and inhumane treatment of animals in the agricultural and scientific industries and by presenting a rational argument for vegetarianism. By presenting a much simpler theoretical framework, in comparison to Regan’s, Singer provides a straightforward and easy to accept approach. Ironically, the appeal of Singer’s work is rooted in that fact that “he has really put forth nothing new” (Callicott 1998: 10), demanding simply that the classical utilitarian value theory be consistently applied.

Paul Taylor: Morally Considering Living Beings

Paul W. Taylor is professor emeritus of philosophy at Brooklyn College, The City University of New York. In *Respect for Nature* Taylor presents, in response to the critical impact of human civilisation on the natural environment, a complex moral system designed to guide human actions toward wild living entities (Taylor 1986:9).

This moral system consists of three components: a belief-system, an attitude of respect and corresponding rules of conduct. The belief-system, referred to as the biocentric outlook on nature, is constituted by four core beliefs: The first is that all members of the community of life are equal; the second that the community of life is dependent upon the existence of all its members; the third that all living beings are teleological centres of life; while the final core belief denies human superiority. The biocentric outlook provides a framework that makes adopting the attitude of respect for nature intelligible. The attitude of respect for nature incorporates concepts of the good and inherent worth, and is made manifest in our actions and our character. Recognising all living things as equal beings, deserving of moral consideration, is indicative of the attitude of respect for nature. Taylor argues that the attitude of respect for nature is an ultimate moral attitude. Commitment to the attitude of respect for nature results in a commitment to whatever rules embody respect for nature. Taylor outlines four basic rules of conduct. These are the rules of nonmaleficence, noninterference, fidelity and restitutive justice. To avoid conflicts occurring between the rules, priority relations are suggested. It is Taylor's opinion that moral rules alone are insufficient to live an ethically informed life, but that standards of character are also essential. Taylor in no way attempts to suggest that his moral system should replace the system of ethics we currently use. Rather, his intention is for both systems to operate simultaneously. Accepting that conflicts of interests will arise he offers priority principles to resolve them.

Following a thorough exposition of Taylor's theory, a critique will be constructed.

Taylor establishes a general understanding of his moral system by contrasting it with traditional anthropocentric ethics. Anthropocentric ethics bestows a value onto the environment that is determined by the needs and interests of humans. Accordingly, the duties owed to the natural world are derived from the duties we owe to humans. Outside of human needs and interests nature has no value. Taylor's moral system, on the other hand, recognises an inherent value that belongs to all living beings "simply in virtue of their being members of the Earth's Community of Life" (Taylor 1986: 13). As such, the duties owed to the natural world are not determined by the duties that we owe to other human beings, but rather "arise from certain moral relations holding between ourselves and the natural world itself" (Taylor 1986: 12). Because Taylor's ethics is not grounded in human value, but on the value that all beings possess inherently, it is referred to as life-centred or *biocentric ethics*.⁴³

The first component of his moral system, the *biocentric outlook on nature*, explains the order of nature and humanity's place within that order. There are four core beliefs that constitute the biocentric outlook. The first is that human beings are equal members of the community of life. This is rooted in five realities. All living things have certain biological and physical requirements in order to survive. Thus, in order to preserve our existence and live at an optimal level of well-being we should make the biological requirements of survival our normative guides (Taylor 1986: 103). All living beings have a good toward which they strive. The good of all is subject to environmental conditions beyond our control. We are, thus, in the same existential situation as any other living being in that neither the

⁴³ Taylor distinguishes between human ethics, environmental ethics and the ethics of bioculture, firmly establishing that his biocentric approach is intended to be applied to the natural world. This excludes artificially created environments that are entirely under human control (Taylor 1986: 53-58).

realisation of our good nor the success of our existence can be guaranteed (Taylor 1986: 105). Aside from the capacities of freedom particular to humans (free will, autonomy and social freedom), all living things are free to promote and protect their own good according to the natural laws. This is a natural freedom from constraints. Therefore, we constitute a community of beings on the grounds that we share this common value (Taylor 1986: 111). Furthermore, we share a common evolutionary origin with every other living being. We are therefore the products of a structure of reality that is responsible for the creation of every other living being (Taylor 1986: 113). Lastly, humans are entirely dependent upon the rest of the living world, while the rest of the world relies on humanity for nothing (Taylor 1986: 114). It is therefore misguided to conceive of ourselves as separately existing beings. These five truths should make us realise that we are one with the rest of creation, equal members of the community of life.

Secondly, the community of life is integrally dependent upon the existence of all its members. No community is an independent unit (Taylor 1986: 117). The survival of any single being or population group is not only dependent on the physical conditions of its immediate environment, but also on the relationships that exist between the beings that constitute that environment. Interactions among groups of individuals and their physical environment are part of an intricately woven web. The different ecosystems that constitute the community of life fit together in ways such that if one is radically changed, structural changes will necessarily occur in others. This is not to suggest that the biocentric outlook is holistic or organicist in nature, since such views offer no account of the individual's place in the community of life other than how its pursuit of the good contributes to the overall functioning and well-being of the system (Taylor 1986: 118). Instead, Taylor views the natural world as being ethically relevant through the existence of the individuals that constitute the natural environment.

Thirdly, all living beings are recognised to be teleological centres of life, pursuing their own particular good in ways specific to their particular natures. By

teleological centre Taylor means a being's internal functioning and external activities that are "all goal-orientated, having the constant tendency to maintain the organism's existence through time and to enable it to successfully perform those biological operations whereby it reproduces its kind and continuously adapts to changing environmental events and conditions" (Taylor 1986: 121-122). Each living being has a unique life of its own, and carries out its life functions according to the nature of its species (Taylor 1986: 120). Such beings have a good because they exhibit organised behaviour. Accordingly, both conscious and unconscious beings can be teleological centres of life, with a particular way of responding to the environment and interacting with other organisms. This definition of a teleological centre of life excludes computers and machines, which aspire to achieve ends or goals that are not purposes of their own, but includes all plants and animals (Taylor 1986: 124). Objective openness to the existence and unique nature of all living beings results in the ability to see the life of any living being as being the same as ours. Accordingly, if we can accept that humans possess inherent worth, then we can only agree that all living beings do so too (Taylor 1986: 128).

The fourth core belief, the most important element for taking the attitude of respect for nature, is a total rejection of the superiority of the human species. Taylor explores two commonly accepted arguments for the superiority of humans and finds them to be unsound. One claim to human superiority is based on the fact that human beings are different from other beings, possessing rationality, autonomy and free will. These abilities are judged to be desirable and good. Taylor argues that using standards based on human goods to judge non-humans commits a category mistake, since entities can only be judged correctly if they fall within the scope of the standard being used. Therefore, "one cannot validly argue that humans are morally superior beings on the grounds that they possess, while others lack, the capacity to be a moral agent" (Taylor 1986: 132). A second claim to human superiority is made on the grounds that humans possess a greater inherent worth than any other being, therefore human interests deserve priority over the interests of any other beings. Exploring arguments from the Greek, Christian and

Cartesian traditions, as well as a contemporary argument supporting this claim, Taylor finds that all four are based upon similar conceptual confusions (Taylor 1986: 135-151). This makes them unacceptable as they are based on unsound reasoning.

That a conclusion is supported by an unsound argument does not automatically imply the conclusion is false. The transition from the groundlessness of human superiority to its denial is achieved by accepting the first three core beliefs of the biocentric outlook on nature (Taylor 1986: 153). Human superiority is denied since it “does not fit coherently into the view of nature and life contained in the first three elements of the biocentric outlook” (Taylor 1986: 154). According to the conceptual framework of the biocentric outlook the idea of human superiority is an unreasonable and irrational bias in our own favour (Taylor 1986: 155). Rejecting the idea of human superiority supports *the principle of species impartiality*, which counts every species as the same as any other species, with every being possessing the same degree of inherent worth.

Taylor offers two reasons for accepting the biocentric outlook on nature. The first tries to show that the biocentric outlook satisfies basic criteria, while the second argues for the rational acceptance of such criteria. The outlook “exemplifies a set of properties that satisfy certain classical, well established criteria for judging the acceptability of philosophical world views” (Taylor 1986: 158). The biocentric outlook provides a comprehensive and encompassing view of the world, which excludes no living being from its explanation. The four core beliefs work together in a mutually reinforcing and systematic way, with no inconsistencies among them. The ideas and concepts of the biocentric outlook can be stated with clarity (Taylor 1986: 160), while its content is supported by empirical facts that are dependent on and shaped by the physical and biological sciences. However, the fact that it fulfils certain required criteria does not necessitate the acceptance of the biocentric outlook. Rather what is shown is that it meets the standard criteria for judging the acceptability of a world-view (Taylor 1986: 161). A world-view is

understood as a belief-system that provides a generalised concept of reality. To accept a world-view with good grounds one needs to be a competent evaluator. Rationality, being factually informed with sufficient empirical knowledge and having a heightened awareness of reality, are outlined as necessary aspects of being a competent evaluator (Taylor 1986: 163). Taylor finds that ideally competent evaluators would use the established criteria as tests for the overall adequacy of a world-view, therefore concluding that the biocentric outlook can be judged to be an acceptable world-view (Taylor 1986: 166).

Accepting the biocentric outlook on nature, constituted by the four core beliefs, provides us with a map for understanding the natural world, explaining our biological nature and describing the ecological situation. It also helps to increase our awareness of the world around us and encourages ethical impartiality. Furthermore, the biocentric outlook, which views all beings as equal members of one community and promotes the idea that each living thing has a good of its own, supports the adoption of the second component - the attitude of respect for nature.

Understanding the *attitude of respect for nature* requires understanding two concepts: the good of a being, and the inherent worth of a being (Taylor 1986: 60). A being can be said to have a *good* of its own if it makes sense to say that something is productive or counterproductive for that particular being (Taylor 1986: 61). What is productive for a being is that which contributes towards or safeguards its good. What is counterproductive for a being is that which is detrimental to its good. A being's good can therefore be either advanced or hindered. Benefits bring about or preserve conditions that are favourable to a being, while harms create unfavourable conditions or remove favourable conditions. Terms such as favourable and unfavourable apply only to beings whose well-being can be advanced or reduced. Since it is only meaningful to say this of beings that have a good of their own, an entity's well-being is synonymous with its good (Taylor 1986: 62).

It is commonly accepted that beings that have a good of their own have to have interests, goals or ends toward which they aim. Taylor identifies clear differences between a being having interests in something and something that is in a particular being's interest. Having interests in something amounts to the subjective valuations of a conscious being, and are merely apparent goods (Taylor 1986: 64). Conversely, something that is in a being's interest is an objective fact that contributes to the overall well-being of that being, such as the nutritive and environmental conditions necessary for growth and reproduction. This is a true good.⁴⁴ Taylor's theory of respect for nature is concerned only with notions of the true good. Since both plants and animals can be treated in ways that are either favourable or unfavourable to their existence, their well-being can be either harmed or benefited. Since well-being is synonymous with the idea of the good, Taylor's theory accepts that all plants and animals, however different they appear to human beings, are beings that have a good of their own (Taylor 1986: 66).⁴⁵

To have the attitude of respect for nature "is to regard the wild plants and animals of the Earth's natural ecosystems as possessing *inherent worth*" (Taylor 1986:

⁴⁴ Taylor's distinction between apparent goods and true goods is similar to Regan's distinction between preference interests and welfare interests.

⁴⁵ The conditions that constitute a particular being's good depend entirely upon the category of species the being belongs to, for what is good for one species may be detrimental to another. Taylor uses this to extend the idea of the good from individuals to the good of species and biotic communities. However, this is merely a statistical extension, since the population or community as a unit is not recognised to have a good of its own, but rather is constituted by the good of its members. Accordingly, the good of a species or community is "determined by the median distribution point of the good of its individual members" (Taylor 1986: 69). The range of application of the good therefore applies directly to individual beings, and statistically to populations and ecosystems (Taylor 1986: 71).

71).⁴⁶ Respect is conferred onto these beings because they are recognised to possess inherent worth. Inherent worth may therefore be thought of as “the fundamental value-presupposition of the attitude of respect” (Taylor 1986: 71). In order for moral agents to recognise the ethical rightness or wrongness of treating a being in a particular way, they need to recognise that that being has inherent worth. To explain inherent worth, Taylor contrasts it with notions of intrinsic value and inherent value. Intrinsic value is described to be a positive value attributed to a satisfaction producing experience for a conscious being. This is commonly accepted to be a practical or commercial value that is conferred by humans onto non-human entities. Inherent value is given to objects or places that are aesthetically or culturally enriching. Such objects or places do not have a use or commercial value, but hold a deeper spiritual value. This value, however, still relies upon the subjective valuations of conscious beings.

Unlike the above, inherent worth is independent of being valued by conscious beings, and is independent of its usefulness to any other being (Taylor 1986: 75). To assert that a being has inherent worth entails two moral judgements: that it is deserving of moral consideration; and that moral agents have a duty to protect and further the good of such a being, for its own sake (Taylor 1986: 75). Furthermore, the concept of inherent worth is independent of any system of merit (Taylor 1986: 76). As a consequence all beings that possess inherent worth are accepted to do so equally. Accordingly, any being that is accepted to have inherent worth holds the same moral status as every other being, humans included. It is therefore wrong to use any being that has inherent worth merely as a means to any human end. To do so would conflict with the inherent worth that the being possesses. Accepting the inherent worth of all living beings makes the protection and promotion of the good of each being that has inherent worth an ultimate good. Therefore, it is a matter of

⁴⁶ The range of application of the concept of inherent worth determines the sort of beings that are to be morally considered. According to Taylor all living beings, plants and animals, have inherent worth. This is the only coherent way of viewing them given the acceptance of the biocentric outlook (Taylor 1986: 80).

moral principle that moral agents consider the good of all beings that possess inherent worth.⁴⁷

The attitude of respect for nature is made manifest in the way that we act and in the kind of people that we are (Taylor 1986: 80). General respect for nature is shown when actions are performed “out of consideration and concern for the good of wild living things” (Taylor 1986: 84). It is essential that the intentions of the action are directed toward the benefit of wild beings, with the goal to preserve them in their natural state. These actions must be performed as a matter of moral principle and not out of a desire to fulfil one’s own interests, or out of feelings of love or care (Taylor 1986: 85).⁴⁸ Only when the aim of preserving and protecting wild beings has an ethical significance can it be said to express the attitude of respect for nature (Taylor 1986: 86). “Our character expresses respect for nature when it enables us to see clearly what those duties, obligations and responsibilities are and to carry out their requirements in difficult and complex situations” (Taylor 1986: 88). We are able to do this by possessing a set of dispositions.⁴⁹ It is thus

⁴⁷ This appears to suggest that it would be wrong not only to eat animals but also plants - for plants and animals possess the same inherent worth as human beings. This seems to place human survival in a precarious position. Taylor addresses this by claiming that, for purposes of survival, it is acceptable for humans to eat other living beings. To do otherwise would be to give those other beings more inherent worth than humans (Taylor 1986: 293). However, since a vegetarian diet consumes fewer beings than an omnivorous diet it, is morally preferable.

⁴⁸ Subjective feelings interfere with the ability to treat all living beings in an impartial light.

⁴⁹ These dispositions are classified into four types, each constituting an aspect of the attitude of respect. The *valuational dimension* is the disposition one has to confer judgements of worth onto all wild living things, regarding them as being possessors of inherent worth. The *conative dimension* is the disposition to aim at avoiding harming natural living things and to preserve their existence. The *practical dimension* is the disposition one has to act according to certain reasons. This encompasses the ability to

that the attitude of respect for nature is expressed both in the conduct and the character of the moral agent.

The attitude of respect for nature is a *moral attitude*. Such an attitude does not depend upon subjective feelings, but rather depends upon the adoption of a valid system of ethical norms (Taylor 1986: 91). As a moral attitude respect for nature will always assume priority over any other social or cultural norms, since “actions inconsistent with respect for nature can never be justified on non-moral grounds” (Taylor 1986: 92). Not only is the attitude of respect for nature a moral attitude, it is also an ultimate attitude. A derivative moral attitude is specific and derivable from a more general moral attitude. An ultimate moral attitude serves as the ground for all derivative attitudes, and it cannot be explained with reference to an even more general attitude. The attitude of respect for nature is an ultimate moral attitude, as it is a basic moral attitude from which all specific attitudes of respect toward nature are derived. It is not grounded within a higher moral attitude; neither can it be justified by appealing to a more fundamental moral principle or commitment (Taylor 1986: 98).⁵⁰

evaluate, make decisions and to exercise strength of will. Having the attitude of respect for nature requires that we act in certain ways and for certain reasons. The *affective dimension* is the disposition to have emotions or feelings. This allows us to feel pleased when nature is treated in a respectful manner, and displeased when it is not (Taylor 1986: 80-84).

⁵⁰ This poses a problem for its justification, since all moral reasons are themselves grounded upon the ultimate attitude of which they are derivatives. However, adopting the attitude of respect for nature involves a commitment to the validity of a whole ethical system. In order to justify the attitude, the validity of the whole ethical system that embodies it needs to be shown (Taylor 1986: 98). Taylor achieves this by expounding the belief-system, the biocentric outlook, which underlies the attitude of respect for nature and by attempting to demonstrate that it is acceptable to moral agents.

The third component of Taylor's biocentric ethic is the accompanying *moral rules* that guide human action toward the environment. These are informed by the attitude of respect for nature and include both rules of right conduct and standards of good character (Taylor 1986: 169).

Rules of Conduct specify the general kinds of action that we should or should not perform. These rules can be overruled provided that there is suitable justification supported by an appeal to valid moral reasons (Taylor 1986: 171). As such they are only *prima facie* and not absolute. The *Rule of Nonmaleficence* states that we have a duty not to harm or destroy any being that has a good of its own (Taylor 1986: 172). The fundamental principle behind this rule is that we should not harm those things that do not cause us harm.

The *Rule of Noninterference* instructs us to respect the freedom of living beings. This requires that we refrain from restricting their freedom. Adherence to this rule manifests itself as respect for the integrity of nature (Taylor 1986: 176). Consequently, we are required to show disinterest regarding naturally occurring events. Observing disinterest in the natural world requires that we be impartial to all living beings and not favour one species over another (Taylor 1986: 178).

The *Rule of Fidelity* requires that we do not deceive or betray the trust that individual beings place in us (Taylor 1986: 197). This makes it wrong to capture beings with the purpose of harming or killing them.⁵¹ To do so is to treat individuals as if they possess no inherent worth or less inherent worth than humans and is thus incompatible with the attitude of respect for nature (Taylor 1986: 182). The only instance where infidelity is morally acceptable is when the being that is deceived stands to benefit from the act of infidelity (Taylor 1986: 184).

⁵¹ This includes fishing, hunting and trapping, all of which are practices that deceive beings in an attempt to benefit the deceiver.

The *Rule of Restitutive Justice* instructs us to restore the balance when a moral rule is broken (Taylor 1986: 186). When a valid moral rule is broken, a wrong is committed. This rule requires that the wronged being be compensated in an attempt to restore, promote or protect its good. This includes instances where the violation was morally justified.⁵² Taylor acknowledges that these rules do not offer an exhaustive account of our moral duties. Because of this, we are instructed to allow the attitude of respect for nature to inform our actions as “right actions are always actions that express the attitude of respect for nature” (Taylor 1986: 171).

In instances where the application of the rules results in conflicting duties, priority relations are suggested (Taylor 1986: 170). Taylor does this by identifying the sources of conflict between the rules and then assigning comparative weights according to their ethical importance (Taylor 1986: 193). The rule of noninterference does not conflict with the rule of nonmaleficence since a hands-off approach to the natural world will not result in any harm being caused. Acts of fidelity and of restitutive justice can often conflict with the duty not to harm. In upholding the attitude of respect for nature, Taylor feels that the duty of nonmaleficence should outweigh the duties of fidelity and restitutive justice (Taylor 1986: 193). Conflicts that occur between the duty to noninterference and the duty to fidelity are less simple. While the rule of noninterference guides us to leave wild animals alone and the rule of fidelity requires us to foster and support bonds of trust between animals and humans, there are instances where trust needs to be broken in order to maintain noninterference. Similarly, there are instances where the duty to not interfere can be overridden by the duty to fidelity. In such ambiguous instances fidelity should take precedence over noninterference, provided that: trust cannot be sustained without interference; the interference is minimised; no serious harm is caused by the interference; and that those beings

⁵² Any act of harm has to be balanced by an act of good. The larger the harm, the larger the required benefit. Since “the perpetrating of a harm calls for the producing of a benefit” (Taylor 1986: 191), where the wronged being cannot be compensated, e.g. because it is no longer living, another being should be compensated in its place.

interfered with experience positive benefits (Taylor 1986: 196). Concerning restitutive justice, it is often the case that balance cannot be restored without interfering. In such instances, restitutive justice is allowed to outweigh the duty to noninterference provided that no unacceptable harm is caused (Taylor 1986: 196). Finally, in instances where there is conflict between fidelity and restitutive justice, restitutive justice outweighs fidelity, provided that sufficient good is brought about and no serious harm is inflicted on the being whose trust is broken (Taylor 1986: 197).

Living an ethically informed life toward the environment is not only achieved by conforming to a set of rules, we are also required to develop certain *standards of character*. The attitude of respect for nature is evident in one's character when one has developed the necessary virtues that "enable one to deliberate and act consistently with the four rules of duty" (Taylor 1986: 199). Taylor argues that the development of such virtues is morally obligatory on two grounds. Firstly, they are necessary for correct moral conduct. Having the dispositions that make up a virtuous character is necessary to deliberate clearly about the best course of action. Since certain acts are obligatory, and certain virtues are necessary in order to perform those acts, it follows that the development of those virtues is morally obligatory (Taylor 1986: 214). Secondly, we are not morally complete until our inner character aligns perfectly with our external practice (Taylor 1986: 215). It is our duty to become fuller moral agents.⁵³ Accordingly, attaining the necessary virtues is morally obligatory in itself. While being completely virtuous is beyond the reach of ordinary human beings, the will to develop and improve one's goodness of moral character, thereby improving one's moral self, is of utmost importance. This is something that cannot be forced upon another but can only be

⁵³ Moral agents have the capacity to act morally. This entails, among other things, the ability to: make moral judgements; consider moral possibilities; make moral decisions on the basis of well thought out reasons; and carry out moral decisions in a decisive manner (Taylor 1986: 14).

achieved through autonomous decision. There is no true commitment to rules of conduct, unless the will to commit comes from within.

When one adopts the attitude of respect for nature activities such as cutting down natural forests, draining swamps or destroying fresh-water ecosystems will not be engaged in lightly. Acknowledging the inherent worth of all beings results in acknowledging the importance of their interests. This often leads to moral dilemmas since there is no set way to determine whose interests should be given priority. One of the difficulties in dealing with competing claims is that humans are said to have moral rights while plants and animals do not.⁵⁴ This appears to suggest that they hold a position of moral priority. Taylor rejects this, since possessing moral rights does not support the right to exploit non-humans for human benefits, nor does it imply that non-humans have less inherent worth than humans (Taylor 1986: 261). Moral rights merely presuppose a relationship of equality among right-holders that in no way implies a relationship of inequality between right-holders and non-right holders (Taylor 1986: 261).

In order to deal with competing interest claims, Taylor develops a set of five *priority principles* designed to operate as moral guides. The *Principle of Self-Defence* states that it is permissible for moral agents to protect themselves against harmful beings that are not moral agents (Taylor 1986: 264). In instances where harm is imminent we are justified to use only the minimum amount of force required, provided that no other option is available, to prevent that harm from occurring. This principle does not justify the harming of beings that do not cause us harm.

⁵⁴ Taylor deliberately omits the notion of plant and animal rights from his environmental ethic, since he feels that everything which a valid system of rights could achieve can be similarly accomplished by adopting the ideas of respect for nature and recognising the inherent worth of living beings. Adopting the attitude of respect for nature provides “a solid basis for rejecting any human-centered viewpoint that would justify an exploitative attitude toward the Earth’s wild creatures” (Taylor 1986: 226).

The Principle of Proportionality applies to cases where the basic interests of non-humans conflict with the non-basic interests of humans. Basic interests are those primary goods or necessary conditions that are required for the proper maintenance and development of a being. Non-basic interests are “the particular ends we consider worth seeking and the means we consider best for achieving them that make up our individual value systems” (Taylor 1986: 273). Non-basic interests are of two types. There are those which are essentially incompatible with the attitude of respect for nature. They deny the inherent worth of non-human individuals and accordingly treat them purely as instrumental means to human ends. Conversely, there are those non-basic interests that are not in themselves incompatible with the attitude of respect for nature, but have consequences that are (Taylor 1986: 276). The principle of proportionality concerns itself with the first kind of non-basic human interest. In instances where the basic interests of non-humans conflicts with this kind of non-basic human interest, “greater weight is to be given to basic than to non-basic interests” (Taylor 1986: 278). As such the basic interests of non-humans take precedence over the non-basic interests of humans.

The Principle of Minimum Wrong applies to situations where the non-basic interests of humans, that are in themselves compatible with the attitude of respect for nature, conflict with the basic interests of non-humans. These non-basic interests play a significant role in the development of civilised life and the good of individual moral agents (Taylor 1986: 281). In such instances, when the satisfying of the non-basic interest is so important that even those who have adopted the attitude of respect for nature would choose the non-basic interest over the basic interests of non-humans, it is permissible to do so (Taylor 1986: 283). Two constraints apply. Firstly, that as little harm and destruction is caused to the natural world as possible and secondly, that there is no better alternative available by which those non-basic interests can be attained.

The Principle of Distributive Justice applies to cases where the basic interests of humans conflict with the basic interests of non-humans. According to this principle, all basic interests carry an equal weight, and so the basic interests of all beings should be given equal consideration. Accordingly, we are required to share the resources of Earth, and recognise the right to existence of all beings. However, clashes are unavoidable. Instances of human subsistence are a case in point. Where killing wild plants and animals is necessary for human survival it is morally permissible to do so (Taylor 1986: 293). This is an extremely difficult principle to apply since “even the fairest methods of distribution cannot guarantee perfect equality of treatment” (Taylor 1986: 292).

Because of this, Taylor offers *The Principle of Restitutive Justice* that applies whenever the principles of minimum wrong and distributive justice have been applied. This principle ensures that some form of compensation is delivered to balance out the resulting injustice. Two guidelines are offered: the greater the harm, the greater the compensation; and the health of the community or ecosystem is more important than the good of the individual, since the good of all individuals is dependent upon the health of the ecosystem (Taylor 1986: 305). Taylor is aware that there will be complex instances where solutions will not be attained by appealing to these priority principles alone. In such cases we are required to appeal to “the ethical ideal that underlies and inspires the whole structure of priority relations” (Taylor 1986: 264). This ideal is described by the biocentric outlook and informed by the attitude of respect for nature.

Taylor’s biocentrism marks a radical shift in the extensionist approaches. The works of Regan and Singer draw heavily on previously articulated theories in an effort to provide acceptable ethical frameworks to support their respective ethical opinions. A negative consequence of this is that they inadvertently adopt the principles and concepts of the theory that they extend, theories that are inherently anthropocentric, resulting in a narrowness of focus and application. This explains why their theories are disposed to acknowledge the moral standing of higher order

animals only and tend, in instances of conflicting interests, to favour human interests over the interests of other beings with moral standing. Furthermore, by drawing from theories that focus on the individual alone, these extensionist theories have retained an entirely individualistic focus. The environment as a whole is not an individual being, and therefore exists in a realm beyond the sphere of moral concern and consideration. This results in an inability to provide adequate normative guidance on purely environmental issues (Des Jardins 1997: 125-26).

In contrast, Taylor attempts to construct a systematic and comprehensive ethic of the environment. Because of this, his biocentric ethic has a much wider range of focus and application than the theories proposed by Regan and Singer. Arguing for the equal inherent worth of all living beings, Taylor commits his ethic to a non-anthropocentric approach that does not favour any species. This is supported and informed by the four basic beliefs of the biocentric outlook. Accordingly, in matters of ethical concern, all living beings are to be given equal moral consideration. While Taylor's approach, like those of Regan and Singer, is essentially individualistic, his outlook recognises that the good of the individual depends upon a healthy environment and that the community of life as a whole is integrally dependent upon the existence of all its members. As such, Taylor's biocentrism recognises the ethical relevance of the natural world through the existence of the individuals that constitute it.

In addition, the approaches of Regan and Singer focus on the criteria of moral consideration, and how we ought to act toward morally eligible beings. Their ethics amounts to an articulation of rules to guide our behaviour toward particular beings (Des Jardins 1997: 133). These theorists make the assumption that moral agents, as rational beings, will automatically follow their prescriptions provided that they are rationally justified. Taylor, on the other hand, by including the fundamental attitude of respect that we should adopt, not only places an emphasis on what we should do, but also on the kind of person we should be. This presents a fuller, more encompassing ethic not only of rules and duties, but also of personal

According to Dlamini (homosexuality in the African context) he explores the different definitions people globally have with definitions of what homosexuality is.

Homosexuality a sexual attraction to (or sexual relations with) persons of the same sex (oxford dictionary). It can be biological in the case that the person is born with or it can be a learned behavior. Homosexual is a word sometimes used to describe men being sexually and emotionally attracted to men and women being sexually and emotionally attracted to women. This word has a very clinical feel and sound to it and is therefore not commonly used in everyday speech. It is much more common to hear people speak about gay people or gay men and lesbian women. This experience of same-sex orientation can be described as same-gender attraction (Marcionis & Plummer).

Biologically, homosexuality is genetically controlled whereby in males there is a female chromosome resulting in feminine behavior or outcome. This can have implication in the hormone levels, instead of testosterone there is a female concentration because of biological factors e.g. a hermaphrodite. Although some argue that homosexuality has no biological origin, the issue is still debatable.

In a study done to showcase the attitudes of racism on homophobia (Christian ethics today- Issue 040 Volume 8 No 3 June 2002) a young white boy said he knows what's its like to be black because he was a homosexual and therefore this showcased the kind of attitudes that he had received from society. Comparing homosexuality can be compared with racism as members of society display prejudice attitudes towards homosexuality regardless of the origin or understanding of the behavior. In Marcionis & Plummer (sociology) prejudice, racism, and stereotype are linked in that they are all based on the ideas of ethnocentrism. Prejudice and discrimination are said to reinforce each other in that hate is the core outlook. People tend to discriminate homosexuals, calling them names and go on to add biblical notion of creation of Adam and Eve not Steve proving ignorance of lacking knowledge. According to Desmond Tutu, not only is homophobia inhuman but it is also unchristian and so he says its an evil act to deny homosexuals freedom to practice they behavior it is not evil being homosexual. Countries like Zimbabwe favor homophobic attacks and some actually have punishment so harsh that it results in death penalties for practicing or being seen portraying homosexual behavior.

A lot of criticism has been focused on homosexuality being unAfrican, this is however not the case according to sociological and anthropological research. In *homosexuality in the African context*- Dlamini he explores the existence of homosexuality in African culture to prove that it did not come from the western culture nor did it come from colonial damage. Within the African culture homosexual behavior is traced back to the periods of migrant laborers where young boys were made makhotis by the working men for sexual benefit since they were away from their wives and contact with women was minimal. We also see this homosexual behavior being admired in the games that children used to play, where in the case of mother and father they would often use the same sex parents. When missionaries came to Africa, they preached ideas that were against homosexual behavior saying that it is a sin, meaning that they were trying to change the state of sexuality amongst the natives.

character. This heralds a shift in the philosophical perspective on ethics, which avoids a narrow-minded understanding of the moral agent as a purely rational being, by recognising the important role that the character of the moral agent plays in relation to making ethical decisions.

Advantages aside, Landman identifies a conceptual problem with the notion of inherent worth. Extending the moral community to include insects, plants, and micro-organisms is problematic because, for a being to be valuable and therefore have moral standing, it is essential that it have feelings of well being. Any experience will be subjectively pleasant or unpleasant for a sentient being. This will be positively or negatively valued by the experiential being. The particular kind of experience benefits or harms the sentient being in ways that matter to it. "Each sentient being is therefore valuable in itself, whether or not it is valued by other valuers" (Landman 1995: 12). Since only sentient beings can be valuable in themselves, they are the only beings that are deserving of moral consideration. Accordingly, non-sentient beings, such as insects, plants and micro-organisms only possess a value in relation to the valuations of sentient beings. Taylor would respond that inherent worth is bestowed directly onto beings that have a good of their own. Since the good of a being does not depend upon the capacity to feel pain, the possession of inherent worth does not require that a being has to have interests or that it must take an interest in its own life (Taylor 1995: 127). Accordingly, Taylor feels justified in proclaiming that all living beings have inherent worth.

Inherent worth, for Taylor, is independent of either the intrinsic or instrumental valuations of a human valuer and is independent of the good it can contribute to any conscious being (Taylor 1986: 75). In reaction to this Landman argues that it is contradictory to talk of a valuer-independent value since all value is dependent upon a valuer in two ways, either a being is a centre of value itself, and therefore valuable to itself, or something is valued by a valuer (Landman 1995: 14). Callicott would agree with Landman that value is entirely dependent on the

valuations of a valuer. However, in support of Taylor, it is his contention that while entities have a value because of a valuer it is possible for those entities to be valued for themselves, independent of the needs and interests of the valuer (Callicott 1995: 45). In this regard we can accept Taylor's notion of inherent worth as being independent of the needs and interests of a valuer.

There is also a practical problem of counting the worth of every living being. Taylor's approach recognises the equal inherent worth in all living beings. To say that all beings possess a worth equal to ours "means that we owe duties to them that are *prima facie* as stringent as those we owe to our fellow humans" (Taylor 1986: 152). While this is a commendable egalitarian proposition it appears to present a practical impossibility, for moral agents would have to count the inherent worth of all those affected by their actions. Since Taylor argues for the inherent worth of all living beings, we would have to consider the consequences of our actions not only for other humans, but also for animals, insects, plants and micro-organisms. This would require a "level of attention and care beyond the abilities of most people" (Des Jardins 1997: 142).

Taylor would respond that, because his approach is not grounded on a principle of utility, the counting of value is not central to determining good ethical conduct. Rather, the attitude of respect for nature should be used to guide our actions. While this denies the need to count the inherent worth of every life affected by an action, it does not diminish moral agents' responsibility to consider which lives will be affected by their actions, which course of action is the best to pursue and how best to compensate those individuals that are harmed or interfered with.

French points out that, while Taylor's egalitarian approach rejects the idea of human superiority and is committed to species impartiality, his priority principles allow for situations where it is morally acceptable for humans to kill non-humans (French 1995: 40).

The principle of self-defence is intended to be “species-blind” (Taylor 1986: 265). However, while it does not favour any one dangerous species over another it is apparent that this principle privileges moral agents over moral patients⁵⁵, since it justifies the killing of harmful moral patients but not of harmful moral agents. Clearly humanity is favoured over and above other beings. Taylor would disagree with this since the category of moral agents includes more than humans alone. While this is true, it does not change the fact that almost all humans are moral agents and most non-humans are moral patients, thereby providing “wide-ranging justification for acts by humans that harm animals, micro-organisms and plants” (French 1995: 49).

The principle of proportionality maintains “greater weight is to be given to basic than non-basic interests, no matter what species, human or other, the competing claims arise from” (Taylor 1986: 278). This appears to be a fair principle, placing the immediate biological and environmental needs of all beings over and above the psychological and cultural needs of humans. Taylor then goes on to suggest the principle of minimum wrong, which holds that certain highly valued non-basic human interests have a greater weight than the basic interests of non-humans (French 1995: 49). This implies that there are some non-basic human interests that are more important than the basic interests of non-humans. This places non-humans in a precarious position as their basic needs are trumped by certain non-basic human needs.

Taylor would respond that only non-basic human interests that further the social and cultural interests of humanity are to be regarded as more important than the basic interests of non-human beings. However, “if non-basic interests can outweigh basic interests, then the distinction between basic and non-basic is rendered deeply problematic” (French 1995: 50). In addition, Taylor propounds a theory

⁵⁵ A moral patient is “any being that can be treated rightly or wrongly and toward whom moral agents can have duties and responsibilities” (Taylor 1986: 17). Humans can be both moral agents and moral patients.

that is grounded upon the equal inherent worth of all beings. As such humans are recognised to carry the same worth as all other living beings. Things become problematic when human culture is introduced as carrying moral weight, when what determines human culture is human interests, which themselves are said to carry no more weight than those of plants and animals. This implies that “human culture has especially weighty normative value, but human life does not” (French 1995: 50).

The principle of distributive justice maintains that the basic interests of all beings are equal. This egalitarian principle is contradicted by the principle of self-defence, which favours basic human interests over non-human basic interests; and the principle of minimum wrong, which favours some human non-basic interests over the basic interests of non-humans. So, while the principle of distributive justice demands that an equal proportion of available resources be shared among all beings with inherent worth, Taylor justifies the harming and killing of non-humans to prevent harm to moral agents, to guarantee the human food supply and for the development of the human civilisation. Accordingly, it is clear that Taylor does not include plants and animals in the equal distribution of resources.

Together these concerns make the scope of Taylor’s biocentric approach unclear. While stressing moral equality, informed by the principle of impartiality, Taylor “regularly formulates his principles so as to justify all sorts of cases in which humans may kill or injure animals and plants” (French 1995: 50). Insisting on principles that do not practically govern moral judgement about concrete duty “purchases little normative work at high cost in conceptual contribution” (French 1995: 57). Accordingly, when faced with concrete conflicts between anthropocentric and biocentric ethics there is no clarity “about the moral grounding of our final, concrete, normative weightings” (French 1995: 50).

Taylor’s approach can also be criticised for being incapable of preventing the extinction of species. Since only individuals are recognised as having a good of

their own, Taylor's biocentric ethics is unable to extend moral concern beyond the individual to include the species. In response, it could be argued that the second core belief of the biocentric outlook acknowledges the interconnectedness of the biotic community – that all beings are essential to the continued existence of the integrity of the system. Along such lines the significance of the species as a whole would be recognised and adequately protected. While this is true, Taylor specifically denies that a species can be a moral subject, since it is merely a "class name, and classes themselves have no good of their own, only their members do" (Taylor 1986: 69n5). A species, for Taylor, is simply a collection of individuals. Because of this the good of a species is reduced to a statistical recognition of the good of the individuals that constitute it (Taylor 1986: 69). Accordingly, maintaining the good of the individual ensures the good of the species. Unfortunately this represents an over-simplification of the category of species. Unlike an abstract class, it can be argued that a species can evolve, develop into new species, "become endangered, go extinct, and have interests distinct from the interests of their members" (Sterba 1995: 192). Since a species can be benefited or harmed in ways different from its individual members, it makes sense to say that the species has a well-being that is distinct from the well-being of its individual members. Hence a species can be said to have a good of its own. Excluding the species from moral consideration Taylor's approach "does not recognise inherent worth in enough entities to ground an environmental ethic adequately" (Johnson 1991: 183).

It is similarly apparent that Taylor's approach excludes the non-living component in natural ecosystems from moral consideration. Natural systems are regarded to have an ethical relevance based upon the recognition of the inherent worth of the individual beings that exist within them (Taylor 1986: 18). This is problematic as it reduces the environment to a collection of individuals, thereby neglecting the complexity of the interrelationships that exist between individual beings and ignoring the vital role that the biosphere plays in relation to the individuals and the communities that exist within it. Such reduction is a dangerous oversimplification,

for the environment is far more than the sum of the individuals that occur within it. Failure to recognise the complexity of the natural environment could result in actions that are not only directly damaging to ecosystems but that also impact indirectly on the individuals that exist within them.

Taylor would respond that by adopting the attitude of respect for nature one's intentions and actions would be "directed toward not interfering with or harming animals and plants in natural ecosystems and to preserving their wild status for its own sake" (Taylor 1986: 85). This amounts to a hands-off approach, supported by the rule of non-interference. This would ensure that nature would remain untouched, thereby reducing any possible negative human impact on the natural environment. However, in certain instances non-intervention could lead to greater ecological damage. If, for example, a certain species of predator was allowed to flourish unchecked, its population numbers could spiral out of control. Allowing the predator species to become prolific could result in its prey species becoming extinct. Surely in such cases "it is in the interest of certain wild species and their environments that humans intervene periodically to maintain a balance" (Sterba 1995: 203).

Taylor argues that all living beings have inherent worth and are thus deserving of moral consideration. By expanding the scope of moral standing to including all living beings and by recognising the interconnectedness of ecosystems and the beings that exist within them, the natural world gains an ethical significance in a way that was not achieved by other extensionist approaches. Problematically, by constructing a criterion that acknowledges the moral standing of individuals alone, non-individual entities such as species, habitats and ecosystems are morally unconsiderable as entities in their own right. Taylor creates a strong base for his approach by formulating his theory in terms of Aristotelian character ethics. However, emphasising standards of good character and the right kind of attitude negates the need for having a comprehensive system of rules. As such, Taylor's

attempt at combining a system of character ethics with a complex system of rules appears somewhat excessive.

6

Evaluating the Extensionist Approaches

As argued in Chapter One, we are currently facing an environmental crisis of immense proportions. Traditional anthropocentric approaches to ethics do not extend moral standing beyond the human realm. This has resulted in the non-human world being valued for its instrumental, economic, and aesthetic potential alone. Because of this I argued that an anthropocentric approach is inadequate to address the current environmental crisis.

It would seem plausible that “progress could be made in ending the environmental crisis by challenging anthropocentric ethical norms and extending moral consideration to non-human beings” (Zimmerman 1998: 3). Following this line of thought, two general approaches have developed: an extensionist approach and a holistic approach. The first seeks to extend moral consideration beyond human individuals to include at least some non-human individuals, while the second, adopting an ecological understanding of the world, argues for the moral consideration of wholes - species, ecosystems and the biosphere. In an effort to investigate the first approach thoroughly, I explored the approaches of the main proponents of extensionist theories viz. Regan, Singer and Taylor, who argue for the moral inclusion of mammals, vertebrates, and all living things respectively. In order to establish an understanding of the second, holistic approach, I will outline the *land ethic* of Aldo Leopold (1995). Following this, I will compare and contrast anthropocentric, extensionist and holistic approaches in an effort to expose the similarities and differences that exist between them. This will show that the extensionist approaches have much in common with anthropocentric approaches, which leads Callicott to conclude that the extensionist approaches are incompatible with an environmental ethic.

It is the task of this chapter to explore, in the light of this claim, the adequacy and applicability of the extensionist approaches.

Ecologist Aldo Leopold (1887-1948) is widely held to be the founding father of environmental ethics for proposing the *land ethic* (Callicott 1995a: 30). Leopold understands an ethic to be a mode of guidance that rests on the premise that the individual is a member of a community. Our natural instinct is to compete against others for survival. To counter this an ethic promotes co-operation with other individuals in the community (Leopold 1995: 143). Anthropocentric approaches limit the moral community to human individuals, while extensionist approaches argue for the inclusion of at least some non-human individuals in the moral community. Leopold recognised that traditional approaches to ethics ignore the human-environment relationship, leaving it for the most part to be characterised in economic terms. Property is generally understood as a private possession, its disposal determined by economic advantage rather than by morality (Leopold 1995: 142). Leopold argues that it is wrong to view land as property, as it is not a commodity that belongs to us, but rather a community to which we belong (Pierce & Van de Veer 1995: 110).

The notion of land as community is informed by the *land pyramid*. Sun energy is seen to flow through the biotic circuit. The base layer of this circuit is soil, which supports plant life, on which insects feed. Small animals, such as birds and rodents, subsist on the plants and insects, larger creatures on them, and so on, with large carnivorous animals at the apex. "Each successive layer depends on those below it for food and often for other services, and each in turn furnishes food and services to those above" (Leopold 1995: 147). Lines of dependency for food and services are called food chains. Each species represents one link in many chains. The land pyramid is constituted by a complex tangle of food chains and its proper functioning "depends upon the co-operation and competition of its diverse parts" (Leopold 1995: 147). According to this conception land "is a fountain of energy flowing through a circuit of soils, plants, and animals" (Leopold 1995: 147). The land pyramid conveys three basic ideas: the land is not simply soil; indigenous plants and animals are essential for the continuation of a healthy energy circuit;

and the manipulation of nature by humans is very different from evolutionary changes (Leopold 1995: 148). Because the land is comprised of complexly interconnected relations, change in one part of the circuit entail adjustments in many other parts.

The land ethic “simply enlarges the boundaries of the community to include soil, waters, plants, and animals, or collectively: the land” (Leopold 1995: 143). Because the land is recognised to be a member of the community Leopold would argue that it should be morally considerable. Furthermore, since the land is integral to the successful functioning of the entire community Leopold asserts that the rightness of actions should be determined on the basis of their contribution to the overall functioning of the land and wrong if they affect it negatively.⁵⁶ This is evident when he states that “a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise” (Leopold 1995: 150). As such, the land ethic effectively revises the role of humans in nature, from owner and dominator to member and equal subject.

⁵⁶ Since the primary focus of Leopold’s holistic approach is the integrity of the biotic community, it is commonly understood that the interests of the individual are subordinate to the interests of the biotic community. Because the land ethic would justify the sacrificing of an individual for the good of the biotic community, Tom Regan charges holism with environmental fascism (Regan 1988: 362). In defence of holism, it is argued that Regan’s case for the rights of animals, which locates moral standing in the individual alone, is an equally extreme position (Johnson 1991: 176). Furthermore, the preservation of the individual is “pre-empted by the preservation of the integrity, stability, and beauty of the biotic community” (Callicott 1995b: 155). Respect for the community implies a respect for all the members of the community. As such the land ethic can be said to have “a holistic as well as an individualistic cast” (Callicott 1995b: 155), providing a well-formed theoretical basis for including members of the biotic community and the biotic community itself.

For Leopold this ethical outlook is “an evolutionary possibility and an ecological necessity” (Leopold 1995: 143). It is possible, since human psychological and cognitive capacities are sufficiently advanced to conceptualise and accept it, and necessary, since humanity has the collective power to “destroy the integrity, diversity, and stability of the environing and supporting economy of nature” (Callicott 1995b: 155).

Because the extensionist theories expand the moral sphere to include at least some non-human individuals it was assumed that they were allies with holistic approaches to the environment. In reaction, J. Baird Callicott (1995a), in “Animal Liberation: A Triangular Affair”, argues that anthropocentric ethics and extensionist approaches have more in common with one another than either have with an environmental ethic (Callicott 1995a: 57).

Extensionist and holistic approaches are similar in that they extend moral consideration beyond the human realm to include non-humans. The former extends moral consideration to mammals, vertebrates and all living beings, in the cases of Regan, Singer and Taylor respectively, while the latter places direct moral consideration onto natural systems (Callicott 1995a: 31). Furthermore, both approaches see the extension of ethics from humans to non-humans as a progression in the unfolding of human consciousness. For animal liberationists, the quest to attain animal equality is the next great challenge in the liberation struggle. For Leopold extending ethics to include the land is a part of our moral development (Leopold 1995: 143).

The most notable difference between extensionist and holistic approaches is that different theoretical foundations inform them. Extensionist approaches are grounded in an atomistic understanding of the world. Individual entities are recognised to be independent of one another, each pursuing its own specific interests. Communities and groups are understood simply as collectives of individuals. Moral consideration is therefore directed specifically at the individual.

Acts are right or wrong depending on how they affect individuals who have moral standing. In contrast, holistic approaches are grounded in an ecologically informed view of the world. Relationships between entities and the natural environment are recognised to be of utmost significance. The individual exists within and contributes to the system. The system in turn sustains the existence of the individual. Because the system is essential to the existence of the individual and supports many different types of individuals, it is given a higher ethical priority than the individual. The optimal functioning of the biotic community is “the ultimate measure of the moral value, the rightness or wrongness, of action” (Callicott 1995a: 39).

A second notable difference that can be drawn between extensionist and holistic approaches concerns the allocation of value. Extensionist approaches limit value considerations to the individual alone, while holistic approaches confer value directly onto the whole system rather than onto the parts that exist within the system. Furthermore, extensionist approaches, as we have seen in the preceding chapters, bestow this value equally onto all individuals that are recognised to have moral standing. Conversely, holists, such as Leopold, who acknowledge the primacy of the well-being of the biotic whole, only attribute value to individual beings in terms of the contribution that they make to the functioning of the biotic community. Accordingly, the value that individual beings possess will vary from species to species - a bird from an endangered species would be given a higher value than a bird from a common variety since species diversity enhances the evolutionary potential of the biotic community. In certain cases, value could also vary between individuals of the same species. For example, a conservationist who works to preserve the natural environment would have a higher value because of her contribution to the biotic community in comparison to the businessperson who does not contribute to the development of the biotic community.

Thirdly, because these two approaches have different theoretical foundations, and therefore allocate value to different entities and in different ways, they propound

different visions of the cosmos. Extensionist approaches argue for the moral equality of all individuals with moral standing. Emphasising care and concern for all morally considerable individuals, extensionist approaches project a cosmic vision of interspecies harmony, governed by respect for other beings. This is problematic in that such a vision denies the Darwinian explanation of life as a struggle for existence, where the survival of a being is ensured only at the expense of another. In light of this, extensionist approaches can be seen as misguided attempts to widen "the anti-natural prophylactic ethos of comfort and soft pleasure" (Callicott 1995a: 55) from humans to non-humans. Holistic approaches, on the other hand, are more concerned with the natural functioning of the environment, and accordingly support a cosmic vision that celebrates all things natural and wild. They would therefore demand that restrictions be placed on the human commercial and domestic spheres (Callicott 1995a: 54).

Finally, different cosmic visions result in different outlooks and attitudes toward wild nature. The extensionist approaches of Regan and Singer concern themselves with the treatment of animals by humans. Since most unfair treatment of animals by humans occurs in the agricultural industry and scientific laboratories these approaches focus their attention onto domestic animals. A consequence of their moral focus is that they ignore the plight of wild animals and nature. Because the functioning of the biotic community is of primary importance for the holists, wild animals and indigenous plants occupy a place of importance within the biotic community which domestic animals do not. In this sense, Taylor's approach, which is primarily concerned with the treatment of wild plants and animals, shares a kinship with holism. According to holism domesticated animals are man made artefacts, unnatural and potentially ruinous to the biotic community (Callicott 1995a: 50). Therefore, such an approach would hold an attitude of indifference toward the plight of domestic animals, choosing to focus on the health of the whole biotic community instead.

In light of the above, the similarities that exist between extensionist and holistic approaches appear to be “rather superficial and to conceal substrata of thought and value which are not at all similar” (Callicott 1995a: 34). This being the case, it would be interesting to highlight the differences and similarities that exist between extensionist and anthropocentric approaches.

It has been shown that the principal difference between the theories of Regan, Singer and Taylor and their anthropocentric predecessors “lies in the choice of the ethically enfranchising property or characteristic” (Callicott 1998: 12-13). While traditional theorists propounded characteristics exclusive to humans, Regan, Singer, and Taylor have developed theirs to include human beings as well as a range of non-humans, thereby extending moral standing beyond traditional boundaries.

As has been remarked in previous sections of this thesis, a common feature of both extensionist and anthropocentric approaches is that their theoretical foundations are largely informed by an atomistic understanding of the world. As a result individual beings alone are recognised to be of moral significance. The atomistic paradigm ensures that certain groups of individuals are included in the moral sphere, while others are excluded. Even Taylor’s biocentrism, which “stretches this familiar pattern of moral reasoning to its limit” (Callicott 1998: 13) by including all living individuals, excludes non-individual natural entities such as species, ecosystems and the biosphere. While the extensionist approaches have provided new issues to debate and discuss, the fact that they subscribe to the same basic reductive paradigm as anthropocentric approaches results in the blind acceptance and re-entrenchment of basic underlying moral principles.

Extending moral consideration beyond the human sphere makes the extensionist approaches theoretically non-anthropocentric. However, all three extensionist approaches, when faced with situations that require moral decision making, favour human interests over non-human interests. The fact that Regan draws his line of

moral consideration at conscious, self-aware animals allows him to include all mammals into the moral sphere. However, "to equate having interests with awareness of interests ... is to bias our understanding of what it means to have interests in a mentalistic and, hence, a biologically parochial way" (Fox 1990: 166). This amounts to replacing prereflexive human chauvinism with rational self-conscious human chauvinism. Accordingly, Regan is guilty of favouring distinctly human capacities.

Singer adopts the Benthamite criterion of sentience in an attempt to avoid the charge of speciesism, and to include all vertebrates in the moral sphere. Unfortunately he contradicts his non-anthropocentric position by adding rationality and self-consciousness as relevant criteria when dealing with issues of death. This places a premium on human-like capacities, unfairly favouring those beings that are most similar to humans, while the moral status of non-human-like beings is disadvantaged or completely ignored. This allows the interests of animals "to count only when they do not clash with human interests" (Singer 1990: 212).

Taylor attempts to avoid this charge by committing his approach to the principle of species impartiality. His moral criterion includes all beings that have a welfare. This allows him to extend moral consideration to all living beings. Despite this orientation to the living world, Taylor constructs moral principles that frequently allow human interests to take priority over non-human interests. Because all three extensionist approaches favour - to a greater or lesser degree - human interests over non-human interests, they can be charged with having an anthropocentric bias.

In this chapter I have emphasised the similarities that exist between extensionist and anthropocentric approaches. Nevertheless, it would be wrong to conclude that, since an anthropocentric approach is inadequate to an environmental ethic, extensionist approaches are similarly inadequate. To do so would falsely stretch the claim of similarity to one of identity.

To say that an ethical approach is adequate to an environmental ethic implies that it is capable in and by itself of fulfilling the role of an environmental ethic. An environmental ethic is understood to be a systematic account of the moral relations between humans and their environment (Des Jardins 1997: 9). The environment was defined as the world in which we are enveloped and immersed, including both individual living creatures and non-living, non-individual entities. This all-inclusive sphere was earlier referred to as the 'greater environment'. In order to account for the moral relations that exist between humans and the greater environment, an environmental ethic should have a sufficiently wide focus. This will ensure that it provides a suitable basis from which to evaluate and guide ethical behaviour toward all entities that exist in and constitute the environment. Furthermore, because an ethic is a system of guidance, an environmental ethic should have outcomes that would ensure the protection and maintenance of the greater environment. For an ethical approach to fulfil the role of an environmental ethic, it makes sense to demand that it reflect both the focus and the objectives of an environmental ethic.

The extensionist approaches make a concerted effort to extend moral consideration from humans to at least some non-humans. In this regard they can be said to be congruous with the focus of an environmental ethic.

However, because all three extensionist approaches limit their focus to the needs and interests of morally considerable individuals, those non-individual entities that form part of the greater environment are not morally considered. Because of this, it could be argued that the extensionist approaches are not encompassing enough.

Regan would disagree; arguing that if the individual is given moral consideration, then the environment in which the individual exists will also be considered (Regan 1988: 363). His line of argument is easy to follow. Morally considerable

individuals should not be harmed.⁵⁷ Individuals require certain basic biological necessities from the environment in order to survive. Individuals will benefit the most from their environment when it is in a healthy state. It follows then that we have a moral duty not to disturb the environment, for it is that very environment in which those individuals live and rely upon to live a full life.

While this argument has considerable merit, it does not guarantee the moral consideration of the greater environment. Regan limits his moral consideration to mentally normal mammals. This ensures that the habitats in which mammals exist would receive indirect moral consideration, and would therefore be preserved. Taking into account that there are infinitely more creatures on this planet than mammals, there would be extremely large portions of the environment that would not be considered at all. (New Zealand, for example, has no indigenous mammals, except for two bat species.) Regan's approach is thus not encompassing enough.

Singer offers a significantly broader moral criterion that includes all vertebrates. As such, the habitats that support all vertebrates would be indirectly considered. Since there are significantly more vertebrates than mammals, a greater portion of the environment would be morally considered. However, because Singer is chiefly interested in the commercial dealings of humans toward animals, he presents what can be termed an ethic of bio-culture. Focussing on domestic animals alone, Singer's approach offers less of a moral account for the greater environment than Regan's.

In contrast to Singer, Taylor's biocentrism focuses entirely on human interactions in natural environments and completely ignores the domestic sphere. Because it recognises the inherent worth of all living beings and the dependency of the individual on the environment, it can be argued that Taylor's approach is more encompassing than the approaches of Regan and Singer. While this is true, it must be remembered that Taylor prescribes the rule of non-interference, making it a

⁵⁷ Singer and Taylor would support this statement as well.

moral duty to refrain from intervening in nature where direct human interaction has not occurred.⁵⁸ While there is strong agreement that we should try to preserve at least a portion of the natural world from substantial human interference, it is short-sighted to assume that nature, even in its wildest state, is beyond the influence of human activity. Non-interference then is not necessarily the best option to provide a basis from which to protect the greater environment.

Theoretical focus aside, it is important to remember that the purpose of an ethic is to provide a guide for behaviour with the aim of achieving morally desirable outcomes. It was suggested that an environmental ethic should aim at preventing the manipulation and destruction of individual entities and natural systems. An assessment of the adequacy of the extensionist approaches will, therefore, only be complete if it explores the consequences of their application.

While the approaches of Regan, Singer and Taylor appear to be theoretically enlightened in comparison to anthropocentric systems of ethics, inasmuch as they argue for the moral inclusion of at least some non-human beings, all three approaches have been shown to have an unstated moral bias in favour of humanity. Human interests tend, in many instances, to take precedence over non-human interests. As such, when applied to situations where moral decisions need to be made concerning the greater environment it is probable that these approaches would in many cases lead to results that favour human interests. As the current environmental crisis is largely the result of an outlook that prioritises human interests, it can be argued that the application of the extensionist approaches could lead to consequences that are similarly destructive to the greater environment.

Arguing for the moral consideration of individual entities effectively excludes non-individual entities from moral consideration. Informed by an atomistic

⁵⁸ It would be fair to claim that all three extensionist approaches support, to a greater or lesser degree, a general hands-off approach to the natural environment.

understanding of the world, the extensionist approaches acknowledge the interests of the individual alone. Regan's approach recognises the inherent value of self-aware individuals; Singer's approach the moral standing of sentient individuals; and Taylor's approach the inherent worth of all living individuals. Because species are regarded to be simply collections of individuals, they are not recognised to have interests apart from the interests of the individuals that constitute them. Thus, no direct moral significance is conferred onto them, thereby providing no moral grounds for the preservation of species.

This is problematic, for a species is not necessarily the same as a collection of individuals. To be a member of a particular species is not simply a matter of having certain characteristics and properties, but entails "being of a particular complex genetic lineage" (Johnson 1991: 155). Viewed in this way a species can be seen as "an ongoing genetic lineage sequentially embodied in different organisms" (Johnson 1991: 156). Consequently, it is not only the individual that counts in the evolutionary scheme of things, but also the species because "it is a dynamic life form maintained over time by an informed genetic flow" (Rolston 1988: 143). As such, the individual can be seen as the token and the species as the type, and "the type is more important than the token" (Rolston 1988: 143). Along such lines, killing an individual need not be too serious a matter if it is replaceable through reproduction. However, causing a species to go extinct permanently ends the possibility of a particular group of individuals ever existing again.

Since evolution occurs through existing species and their variety of genetic information, the greater the genetic variation, the more evolutionary possibilities there are. The extinction of a species not only means the end of life for a group of individuals, it also entails the end of a particular generative process. Thus, the extinction of species results in a diminished gene pool, and accordingly less evolutionary possibilities. Because they are unable to offer moral recourse to protect species from extinction, accepting the extensionist approaches is likely to contribute to the destruction of the greater environment.

In response, an extensionist could argue that species extinction would not occur provided that the good of the individual is maintained. This is a short-sighted response since a species is inseparable from the ecosystem in which it exists. It is determined by and depends upon its environmental niche. Accordingly, saving the lives of individual entities is not going to preserve the species if the habitats in which those species exist are destroyed. In order to effectively save a species, the system in which the species occurs needs to be preserved.

None of the extensionist approaches provide direct moral grounds for the preservation of the habitats and ecosystems in which species and their individual members exist. Regan's approach, when dealing with issues that involve both morally considerable individuals and the environment, will always favour the interests of individuals, treating the environment as a warehouse of resources. The environment counts only in so far as it benefits the morally considerable individual. Beyond the satisfaction of the needs and interests of such individuals the environment has no moral value. As such, Regan's approach does not appear to provide an adequate basis on which to develop an environmental ethic. This comes as no surprise, for Regan states that his rights based approach and an ethics of the environment "are like oil and water: they don't mix" (Regan 1988:362).

Singer's approach recognises the moral standing of sentient beings alone. The environment is not a sentient being and so the interests of the environment are of no moral concern. This translates into a hands-off approach to the natural world. Considering the potentially devastating consequences that may arise as a result of the escalating human population, the increasing demands for energy resources and the pollution of the planet's natural systems, this is definitely not the best way to deal with the current environmental crisis. Furthermore, considering that Singer's approach treats morally considerable beings as replaceable items, it provides no arguments against also treating the environment as a replaceable item. Singer's view would give us no reason to oppose the replacement of the natural world with a synthetic one, in which real trees are substituted with plastic ones, provided that the aggregate suffering of sentient beings was not increased.

While Taylor's biocentric approach can be commended for recognising that all living beings are directly dependent on the environment for their survival, and that the integrity of nature plays a significant role in determining the rightness of actions, the understanding of eco-systems propounded by it is dangerously simplistic. Because inherent worth is bestowed onto entities that exhibit organised behaviour alone, ecosystems are not recognised to have any inherent worth. Rather, the moral status of ecosystems is reduced to a mere statistical representation of the goods of the individuals that exist within them. Whether or not ecosystems have morally considerable interests is highly debatable. That ecosystems are greater than the sum of the individuals that exist within them is not. Failing to recognise the complexity of the natural environment could result in consequences that are not only directly damaging to ecosystems, but also indirectly damaging to the individuals that exist within them.

Above I have shown that, while all three extensionist approaches satisfy the requirement that an environmental ethic should extend the focus of moral concern beyond the human realm, neither Regan's nor Singer's approach offers a focus that is encompassing enough. Taylor's approach, on the other hand, includes all living beings and in this regard can be said to have a significantly encompassing focus. Looking into their applications, it is evident that none of the extensionist approaches would meet the objectives of an environmental ethic. Because they are biased in favour of humanity, do not provide a moral account for the preservation of species and do not provide an independent moral account for ecosystems it is highly doubtful that they would prevent the manipulation and destruction of the vast variety of individual entities and natural systems that constitute the greater environment. Since none of the extensionist approaches satisfies both the focus and aim of an environmental ethic, none of them fulfils the role of an

environmental ethic. Therefore, the extensionist approaches are inadequate to an environmental ethic.⁵⁹

This supports Callicott's argument, which acknowledges that while extensionist approaches are compatible with an anthropocentric approach they are incommensurate with an environmental ethic. Because extensionist approaches are incompatible with an environmental ethic, and because environmental concerns are less of an issue involving individual living beings, and more of an issue pertaining to species, ecosystems and the entire planetary biosphere, it is Callicott's contention that extensionist approaches are "utterly unpracticable" (Callicott 1995a: 58). Thus, Callicott would argue that extensionist approaches are not only inadequate, but that they are also inapplicable to an environmental ethic.

In contrast to Callicott, who asserts that an ethic that recognises the moral standing of individuals is incompatible with an ethic that attributes moral value to wholes, Lawrence Johnson argues that it is possible to "develop a coherent ethical scheme to serve as a common foundation for the ethical dealings with other humans, with non-human individuals, and with ecosystems and other environmental wholes" (Johnson 1991: 230). Exploring both individualistic and holistic approaches, Johnson finds that anthropocentric and extensionist approaches, while advocating different kinds of treatment, agree that the interests of morally considerable individuals are significant (Johnson 1991: 97), while holistic approaches argue that non-individual entities have interests that are morally significant (Johnson 1991: 148). From this he concludes that the consideration of well-being interests is a shared feature of all three approaches.⁶⁰ As such, Johnson argues that

⁵⁹ While Norton would oppose my claim concerning the inadequacy of an anthropocentric environmental ethic, he would agree with me that the extensionist approaches are not adequately suited to an environmental ethic, for "an adequate environmental ethic *must not* be limited to the considerations of individual interest" (Norton 1995: 187).

⁶⁰ Interests, in both senses are understood to be "a function of ... well-being needs" (Johnson 1991: 141).

individualistic and holistic approaches are not so different. While this common ground of interests provides the theoretical link to join these different approaches together, it does not necessitate that the conflicting interests of diverse entities will be effectively and consistently dealt with (Johnson 1991: 235).

Johnson acknowledges that while there are clear differences between the demands of individualistic and holistic theories, since both support vastly different and often conflicting interests, “there is no need to absorb the former into the latter, or to reduce the latter to the former” (Johnson 1991: 238). To do either would negate important factors and thus lead to moral short-sightedness, since “atomism or holism on its own, either one without the other is not only incomplete, it is incoherent” (Johnson 1991: 239). Adopting a pragmatic approach,⁶¹ Johnson is less concerned with developing a unified theory of ethics than he is with finding practical solutions to current environmental problems. Accordingly, his aim is not to develop an absolute standard of reference from which one can determine right or wrong actions, but rather to creatively mediate between the various conflicting value claims (Parker 1996: 27). In order to do so it is essential to recognise the moral significance of all things that have well-being interests (Johnson 1991: 238). This is not to suggest that the interests of individuals and wholes are equal, but rather that interests exist on more than one level. These different levels of interest are not only understood to be interdependent, but also “distinct and not irreducible” (Johnson 1991: 243). Thus the interests of individuals as well as wholes are both morally significant. Because these different interests will not

⁶¹ Pragmatism, as a school of thought, developed in reaction to traditional absolutist concepts of epistemology, metaphysics and value theory. It demands a refocusing on what actually exists, rather than on what philosophical theory suggests that we should find (Parker 1996: 23). As a result a pragmatic approach to ethics “maintains that no set of ethical concepts can be the absolute foundation for evaluating the rightness of our actions” (Parker 1996: 26). According to a pragmatic ethical account there can be no ultimate list of virtues and moral principles, or an account of good that can deal with every practical situation adequately.

always be compatible, conflicts of interests will arise. In resolving such conflicts of interests, Johnson acknowledges that in some instances the interests of the individual will take priority over the interests of the biotic community, while in other instances the interests of the biotic community will take priority over the interests of individuals (Johnson 1991: 241).

Such an approach would seem to warrant a complex set of principles in order to determine the priority of the different interests. True to the pragmatic outlook, which states that “every situation must be appraised on its own distinct terms” (Parker 1996: 33), Johnson does not offer any. Since a pragmatic approach does not attempt to diminish the conflicts that exist amongst various parties with opposing interests, it does not try to provide a simple means for determining which interests take preference over others. In this regard Johnson’s approach does not commit the mistake made by Taylor, who, in attempting to provide a complex hierarchy of rules, succeeds merely in presenting a cumbersome approach which “purchases little normative work at high cost in conceptual contribution” (French 1995: 57).

Because Johnson’s approach does not reduce the complexity of the world to a single unified explanation, it remains open to a wide field of explanation and understanding, allowing for the application of a range of established ethical theories. Along such lines, the approaches of both Singer and Regan are recognised to offer valuable insights that can be applied to dealings between humans and some non-humans (Johnson 1991: 192). They contribute to the broadening of our ethical horizons, expanding our awareness that the interests of both human and non-human count morally, while simultaneously helping us to understand why and how they count (Johnson 1991: 193).

Singer’s utilitarianism de-emphasises the importance of following rules, and helps us to direct our thoughts onto the consequences of our actions. In addition, it

provides an ethical frame of reference for dealing with animals in artificially constructed and controlled environments.

Regan's deontology, on the other hand, reminds us that the interests of morally considerable beings should not be infringed by appealing to the principle of utility. It also provides a strong ethical framework from which we can demand certain rights for animals. However, since the ethical entitlement of animals is the philosophical goal of both Regan and Singer, the application of their approaches would be irrelevant, and therefore inapplicable, in affairs that do not directly involve human actions toward morally considerable animals.

Taylor's approach has considerable merit in that it stresses the importance of cultivating an attitude of respect toward nature. Johnson maintains that such an attitude will only help us find practical solutions if we are aware of the complexity of existence, together with the vast array of interests. Taylor's biocentric outlook provides an extensive framework to inform such awareness. Because Taylor argues for the inherent worth of all living individuals, his approach has a wider applicability than the approaches of Regan and Singer. However, because it focuses on the inherent worth of individuals alone it neglects to account, morally, for the larger biotic community. As such its application would be limited to instances where the interests of humans conflict with the interests of individual plants and animals.

It is apparent that Callicott and Johnson propose contrary views. Callicott, following a monistic outlook, assumes that a single unified ethical theory is necessary to provide an effective and coherent means for dealing with competing value claims. Accordingly, he claims that only holistic approaches to environmental ethics are adequate and because the extensionist approaches are inadequate, they are also inapplicable. Johnson, on the other hand, adopts a pluralistic outlook that assumes that a multiplicity of ethical approaches can legitimately coexist, since the plurality of moral truths cannot be reduced into a

unifying principle (Des Jardins 1997: 252). Accordingly, he argues that, while no single approach on its own is adequate as an environmental ethic, the extensionist approaches are applicable provided that they are relevant to the situations to which they are applied. This being the case, it appears that to answer the question whether the extensionist approaches are applicable to an environmental ethic, we will have to resolve the debate between moral monists and moral pluralists. This option would indeed provide an answer that either the extensionist approaches are not applicable, if Callicott's view is supported, or that they are applicable, if Johnson's view is supported.

Bearing in mind the scale and severity of the environmental crisis and acknowledging that both views make valuable contributions to the field of environmental ethics, it is my contention that a choice does not have to be made. Rather the two views can be synthesised in a coherent and useful way.

Acknowledging the interests of the biotic whole in no way entails a denial of the interests of the individuals that exist within the biota. The biosphere is the collective environment that contains all living and non-living entities. However, it is not separate from those individuals, for they all contribute in their own ways to its continued functioning (Wilson 1995). Since the biosphere is neither reducible to the aggregate of all living individuals, nor a separate entity, it can be said to have interests that are neither separate from nor reducible to the aggregate interests of all living individuals (Johnson 1991: 265). Thus, to claim that ecosystems have interests that count, in no way implies that those are the only interests that count. Therefore, Leopold's claim that acts are determined to be right or wrong regarding how they affect the integrity of the biotic community should by no means be taken as an exhaustive definition of right and wrong (Johnson 1991: 177).

The land ethic is well suited to deal with matters concerning the greater biotic community. However, because it is primarily concerned with the biotic whole, it does not provide a comprehensive moral account and is not appropriate for dealing

with conflicting interests between individuals. Since a system of ethics is intended to guide human action, and human action affects both individuals and biotic wholes, it follows that where holistic approaches are inapplicable individualistic approaches should be applied. Accordingly, accepting Leopold's holistic approach should in no way imply a denial of other ethical approaches.

This is not to suggest that the various approaches have an equal level of moral authority. Rather, the different approaches should be allocated varying degrees of moral authority, according to their scope and applicability. Along such lines, atomistic approaches are directly applicable to situations involving individuals. However, since atomistic approaches focus on the individual alone, and since human action has a general tendency to have consequences that extend beyond the immediate realm of the individual, their level of moral authority cannot extend beyond the moral consideration of the individual. In this regard it makes sense to have an encompassing moral framework from which to regulate and moderate all ethical decisions. A larger more encompassing and environmentally aware framework should approve the final moral decision. This will ensure that we will act in such a way that the consequences of our actions are not detrimental to the greater environment. Because of the broadness of scope of the holistic approach, it makes sense that the land ethic should assume this informative and authoritative role to guide our moral actions.⁶²

Callicott affirms the adequacy of the land ethic and denies the adequacy and applicability of the extensionist approaches, while Johnson denies the adequacy of any single approach and accepts the applicability of all approaches. Above I sketched a system whereby it is possible to synthesise these seemingly opposing

⁶² Norton, who is clearly an anthropocentrist, in a loose sense of the word, but not an individualist, expresses a similar idea. He recognises that, while human interests are important, preserving the complexity and diversity of the biological world are more so, since these constitute the overall context that is life. It is essential to preserve this context since major changes in the larger systems could lead to major disruptions in human activities (Norton 1991: 189).

views in a manner that does not reduce them to pluralistic relativism. Accordingly, it is possible to accept the land ethic as providing an encompassing ethical outlook to direct our actions toward the overall functioning of the biotic community, while at the same time acknowledging that the extensionist approaches are applicable to situations that involve conflicts between morally considerable individuals.

The aim of this thesis was to examine the adequacy and applicability of the extensionist approaches to an environmental ethic. I conclude that none of them is in itself sufficient to address the concerns of the greater environment. Only a holistic approach, such as Leopold's, which takes the integrity of the biotic community as a moral guide is suitable to deal with issues of global reach such as pollution, destruction of the rain forests, species extinction, etc. However, this does not mean that the extensionist approaches have no role to play in the environmental arena. Because holism neglects to consider the smaller parts that make up the whole, the individual is by-and-large neglected. It is here that the extensionist approaches have a role to play, ensuring the moral consideration of individual beings. And it is along such lines that I can conclude that while extensionist approaches are not adequate, they can be applicable.

Conclusion

There can be no denying that, collectively, human action has devastating consequences for the greater environment. If we do not change the ways in which we act, it is highly probable that the planet Earth, as we currently know it, could be forever lost. While I accept that the planet may have regenerative capacities I am also of the opinion that such capacities can easily be overloaded and exceeded.

Any living entity is biologically equipped to regenerate its physical being over the natural period of its life span. By this I am not referring to the ability to procreate but rather the capacity the living body has to maintain its internal balance through the process of homeostasis. Any living entity is constantly exposed to changing external conditions, such as fluctuating temperatures, availability of food and water, various bacteria and viruses, etc. An entity's biological system responds to these conditions, by constantly making internal adjustments, through a system of feedback loops. In such a manner it is able to perpetuate its existence in the face of adversity. However, this capacity is not unlimited. Sometimes the external conditions are so extreme that the biological system is unable to maintain its normal balance. In such instances the internal balance is offset to the point that the organism weakens and dies.

This analogy is not an attempt to suggest that the Earth is a living organism but rather that, like biological beings, it is a system that has a tendency to maintain some form of equilibrium. Atmospheric pressure, temperature and chemical composition of the soil, air and waters have maintained fairly constant levels over the last few thousand years. However, if humanity continues to pollute and destroy the natural world at the rate that it currently is, it is possible that we may cause too much damage, inflict too many altered conditions for the planet to maintain its current balance. If this occurs, the equilibrium may shift and settle well beyond current boundaries, resulting in severe negative implications for many of the living entities that rely upon the planet Earth for their existence.

Our actions are informed by our perceptions of the world, our understanding of it and our place in it. If we wish to change our actions it follows that we need to change our perceptions. The way that we understand the world is informed by a host of influences: cultural and religious beliefs, political and economic practices, moral values, habits, experiences and so forth. This being the case, if we wish to transform our perceptions it makes sense that we question our most basic assumptions. The quest for an environmental ethic facilitates this process in that we are required to question our value systems, attitudes and moral outlooks.

Traditional approaches to ethics were shown to be, for the most part, anthropocentric. Anthropocentric approaches to ethics are characterised by a distinctly human-centred value system. Humans are viewed to be valuable in-themselves, and are thus seen to possess intrinsic value, while the non-human world is viewed to have a human-dependent value only. According to this view the only duties owed to the environment are indirect, derived from human interests. Since only human interests are acknowledged to count in morally significant ways, nature is often treated purely as a resource to serve short-term human interests.

Some protagonists of anthropocentric views argue that by appealing to the rights and interests of future generations the long-term environmental concerns of the ecologically minded would be sufficiently protected. It is an accepted fact that the natural world is the result of an ongoing process spanning millions of years. Destroying a natural environment brings an end to a continuity that can never be replaced. Since value increases with scarcity, the less there is of a certain item, the more valuable it becomes. The natural world is shrinking at a phenomenal rate. It is therefore acceptable, in anthropocentric terms, to talk of the natural world as our 'heritage', which we need to preserve for the use of future generations.

Aside from instrumental and economic considerations, there are also aesthetic and spiritual considerations. We preserve and cherish great works of art because of their cultural, aesthetic and spiritual significance. Accordingly, we bestow an

intrinsic value onto them. In similar ways we can receive aesthetic pleasure and spiritual upliftment from being in nature. If we destroy natural wilderness today we deny future generations the opportunity of aesthetically and spiritually enriching experiences. Therefore, we should preserve nature. In these ways “a human-centred ethic can be the basis of powerful arguments for what we might call ‘environmental values’” (Singer 2000: 93).

Such an appeal is indeed a viable means for transforming a focus on immediate short-term human interests to include more long-term human interests, since focusing on the needs of future generations will promote the adoption of conservationist and preservationist attitudes. However, conserving and preserving the natural environment for the benefit of humans alone “represents not only a deluded but also a dangerous orientation toward the world” (Fox 1990: 13). It is delusional in that such an approach incorrectly assumes that humans belong to a category that is separate from the rest of the natural world. There is sufficient empirical evidence to support the perspective that we are biological ‘equals’ with other species. We are governed by the same basic needs of survival (food, water, safety and security), we rely on the same environment to fulfil these basic needs, failure to obtain these basic needs results in death, and we are driven by the desire to procreate. Furthermore, we are all products of the same evolutionary process. This is in no way an attempt to deny human uniqueness. However, while we have capacities and capabilities that make us distinctly human, other species are also unique in their own ways. Any attempt to collectively assimilate non-humans to the category of inferior humans succeeds only in degrading their existence by failing to respect them for the capacities and capabilities unique to their being (Fox 1990: 15).

Grounding the conservation and preservation of the natural world on a purely anthropocentric value system is dangerous, in that only those entities recognised to be of value to humans are preserved, while non-valuable entities are neglected, manipulated or completely destroyed. Anthropocentric approaches are largely

informed by an atomistic understanding of the world. Such an outlook places primacy on the individual entity as an isolated unit. As such, a lack of value is characteristic not only of non-human individuals, but also of entire ecosystems (Leopold 1995: 146). Inasmuch as a large proportion of entities, individuals as well as species and biotic communities, are not recognised to have any economic, aesthetic or spiritual value, they would not be preserved. This is problematic in that the valued parts of the biota require the non-valued parts in order to function successfully. While it could be argued that anthropocentric dealings with the natural world are neither unnatural nor unethical there can be no denying that the scope and rate of human environmental impacts are at a critical level (Callicott 1993: 15).

In the body of the thesis, I argued that an anthropocentric approach is inadequate as an environmental ethic. *Firstly*, anthropocentric assumptions were shown to be largely responsible for the current environmental crisis. The perception that value is located in and emanates from humanity has resulted in the understanding that human life is the ultimate value. This has directly contributed to enlarging the human population. Increasing population numbers together with the material demands of modern society place ever increasing demands on energy and food supplies. This is not to say that every improvement in the standard of living is necessarily wasteful of energy or polluting to the planet, but rather it is the cumulative effect of these improvements that is damaging to the environment. The abuses facing the greater environment as a result of the energy crisis and the food demand are clearly manifestations of anthropocentric views that treat the natural environment merely as a resource, an instrument for human ends. *Secondly*, because the environmental crisis stretches beyond mere human concerns to include all living and non-living entities that exist on this planet, it was recommended that an environmental ethic should have a sufficiently wide focus. Anthropocentric approaches are not encompassing enough because they recognise the moral standing of humans alone. *Thirdly*, it was suggested that an environmental ethic should have outcomes that benefit the greater environment. Anthropocentric

approaches are only concerned with human interests. A morality that attributes intrinsic value to humanity alone, serves humanity alone. Accordingly, such an approach has outcomes that favour humans to the detriment of the greater environment. In light of this it has been suggested that “the environmental crisis will not be resolved until we break with tradition and acknowledge that non-human nature also has moral standing” (Varner 1998: 5).

Ethical extensionist theories challenge the anthropocentric outlook by arguing for the inclusion of at least some non-humans into the moral sphere. Regan, following a classical rights based approach, argues that self-aware animals are subjects-of-a-life. Subjects-of-a-life are inherently valuable and are therefore deserving of moral consideration. While Regan’s ethic essentially extends moral consideration only as far as mammals, arguing for their rights ensures that we are morally bound to protect their interests. Singer, following the utilitarian approach of Jeremy Bentham, argues that the capacity to suffer is morally significant. He therefore argues for the moral consideration of all sentient beings. This extends the sphere of ethics beyond the realm proposed by Regan, to include all vertebrates. Singer does, however, limit the right to life to beings that are capable of forming preferences about their futures, thereby effectively excluding most sentient animals and some humans (Elliot 1995: 9). Taylor, proffering a strong version of biocentrism, argues that all living beings have a good of their own, a goal to which they strive. Having a good is synonymous with well-being. Beings that have a well-being are inherently valuable. Inherent worth is possessed equally, and so all living beings deserve equal moral consideration.

While extensionist approaches argue for the inclusion of at least some non-humans into the moral sphere, like anthropocentric approaches they argue that the duties and responsibilities owed to the environment are determined by the interests of morally considerable individuals. As such, it is argued that they perpetuate the basic reductive assumptions of the anthropocentric paradigm (Rodman 1977: 95).

In an attempt to develop a new paradigm and approach to the environmental situation most environmental ethicists have turned to the science of ecology, which recognises the importance of the systems in which individual organisms exist. Out of an ecological understanding holistic approaches to ethics have developed, which, in contrast to traditional anthropocentric and extensionist approaches, de-emphasise the value of the individual living organism in favour of extending moral consideration to interconnected wholes - species, ecosystems and the biosphere. According to such accounts the environment is owed direct moral consideration, independent of the interests of individual beings that exist within it. Primarily concerned with the biotic community as a unified collective, this represents a distinct system of ethics, which is different from anthropocentric and extensionist approaches both in theory and application.

Callicott argues that the extensionist approaches are not adequate to an environmental ethic, since they have much in common with anthropocentric approaches and anthropocentric approaches are inadequate to an environmental ethic. I argued that the extensionist approaches are inadequate to an environmental ethic on the grounds that none of them satisfy the requirements that an environmental ethic should have, namely an encompassing focus together with outcomes that protect and benefit the greater environment.

Adopting a monistic outlook, Callicott argues not only that the extensionist approaches are inadequate to an environmental ethic, but also that they are inapplicable. In order to explore the applicability of the extensionist approaches from an alternative perspective I introduced Johnson, a moral pluralist and environmental pragmatist, who argues that, while no approach on its own is adequate to an environmental ethic, all approaches have degrees of applicability.

I suggested that these contrary positions could be synthesised in such a manner as to retain the fundamental supposition of each. Because the environment is such a vast and all-inclusive sphere I suggested that an environmental ethic should have

an informative framework to ensure that we do not choose actions that have consequences that are detrimental to the environment. Since a holistic outlook is concerned with the integrity of the whole system it was reasonable to assume that such an outlook is well suited to this task. However, since holism concerns itself with the biotic whole alone it tends to neglect the individual. Accordingly, I proposed that, guided by a holistic outlook, the individualistic approaches could be applied provided that they are relevant to the particular moral situation. To this end, Regan's approach is useful when defending the rights of mammals; Singer's approach has practical merit when dealing with the mistreatment of domesticated animals in the agricultural and scientific industries; while Taylor's approach is applicable in instances where human interests conflict with the interests of wild non-human individuals.

This is not to suggest that such a system would function successfully as a comprehensive environmental ethic. One of the major difficulties would be that monistic approaches, which are fairly rigid and intolerant of other views, would have to be applied in pragmatic ways, which demand flexibility and tolerance in working towards achieving common goals. However, this presents no immediate cause for concern since the development of a comprehensive environmental ethic is beyond the scope of this thesis.

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