PART I

ORIGIN AND DEVELOPMENT OF ENVIRONMENTAL PHILOSOPHY
Chapter-I

Contemporary Environmentalism

"If environmental philosophy is going to be useful in the environmental movement, it has to make sense to activists; it must give them conceptual tools and arguments with which to fight ecological degradation." (Arne Naess)

Present civilisation is faced with a myriad of problems, the most alarming being the pollution of environment and depletion of Nature. Darwin’s theory of evolution and contemporary interdisciplinary science of ecology has made it clear that every thing and being on the Earth is connected to everything else, and that the balance of Nature depends upon the eco-systemic co-operations, and so any major or rapid man-made change in a natural system is likely to be detrimental to the health of that system. But, due to our arrogant and unscrupulous behaviour to the environment, the over-all balance of Nature is seriously disturbed. Ecological findings, like that of Rachel Carson’s revelation of pesticide-pollution through Silent Spring (1962), have already demonstrated that unless we act differently and immediately, doomsday will not be very far.

Being faced with such an imminent eco-catastrophe, responsible thinkers from diverse spheres of life—both academics and activists—has come forward to tackle this problem. Contemporary philosophers, especially moral philosophers, have responded as well. They have been concerned with the moral grounds for protecting the non-human animals, the moral foundations for codes and laws protecting endangered species and the ethical basis for preserving and restoring the environment. Moral philosophers, to
be precise, environmental moral philosophers, have come forward to review our traditional views towards Nature and corresponding normative codes. They have found that our traditional (western) Nature-views and normative principles have neither been eco-friendly nor morally adequate. They fail to rise above the anthropocentric moral framework, which takes human interests to be only intrinsically valuable while the rest of non-human Nature is regarded valuable so far as it serves human purpose only. They find such ethics as hailing speciesism, the position that is based on species-discrimination, which exhibits our moral blindness and shallowness of heart towards the non-human Nature, and this attitude goes against any healthy environmentalism. It seems, unless and until we overcome this speciesism and accept a holistic position in which a living organism or a plant species or a landscape is regarded as having value in itself, we would not really feel direct moral obligation to save them. Thus environmental ethics has been most concerned with the moral grounds for the welfare of non-human animals, the moral foundations for laws protecting endangered species and the ethical basis for preserving and restoring the balance of environment. A genuine ecological ethics demands that, as we are inseparably connected to other things and beings, the Nature be regarded as intrinsically or inherently valuable, irrespective of their usefulness to the human species.

Although the concern for Nature is not completely new, it has undergone conspicuous neglect in the circles of philosophy for a long time. Even the so called philosophy of science has concentrated on scientific concepts and methods rather than on that of integrated Nature. Moral, social or political philosophy has given more emphasis on the social environment than on natural environment. As a matter of fact, no branch of main-stream
western philosophy seems to have historically been hospitable to environmental values and the conservation of Nature.

Only with the advent of 'applied ethics movement' environmental ethics and philosophy has come to the fore as a sub-discipline of philosophy. Newly burgeoned environmental ethics is that discipline which studies the normative theories and principles of the relationship of human beings to, and also the value and moral status of, the environment and its nonhuman contents. It concerns not only just our behaviours to the environment but also the normative theories as applicable to them. It also involves our views on Nature, value theories, our ontological position on this Earth and that of the non-human animals and plants, and the so called inanimate Nature.

As we all know, ethics or moral philosophy is a rational inquiry for standards of right and wrong, good and bad in respect of our conduct and character. It involves systematising, defending, and recommending concepts of right and wrong behaviours. Contemporary philosophers usually divide ethics into three levels: normative ethics, metaethics, and applied ethics. Normative ethics takes up the task of developing adequate moral standards by which we can judge our actions as good or bad, or as right or wrong. In other words, this sub-discipline of moral philosophy keeps itself primarily satisfied with formulating valid norms for human conducts, and evaluating them according to the norms adopted. This may also involve articulating good habits that we should acquire, the duties that we should follow, or the consequences of our behaviour on others. Metaethics, on the other hand, aims at linguistic and conceptual analysis of basic moral concepts, judgments and arguments. It investigates, e.g., where our ethical principles come from, and what they really mean: Are they mere social inventions? Do they involve
more than expressions of our individual emotions? Are the moral judgments prescriptive? Metaethical answers to these questions focus on the issues of the role of reason in ethical judgments, the meaning of moral concepts and judgement, their universality or the will of God. And, applied ethics, on the other side, involves that level of moral inquiry as applied to practical situations, examining specific controversial moral issues that contemporary societies face, and these are bio-medical issues like the morality of abortion, infanticide, surrogacy, etc., socio-political issues like terrorism or nuclear warfare, destituteness and affluence, globalization of culture, capital punishment, moral issues related to business, media and professions, environmental concerns and animal rights. By using the conceptual tools of traditional normative ethics, and sometimes of metaethics, applied ethics tries to resolve these controversial issues based on the particularity and contextuality of the problems. And the branch of applied ethics which studies the norms and principles of the relationship of human beings to the environment is regarded as environmental ethics.

Environmental ethics is sometimes defined as a kind of approach to environmental issues which finds independent value to be located not only in the interests of sentient creatures, which can feel pleasure and pain, but also in natural living creatures in general, or in the natural world in general. Most of the contemporary environmentalists admit independent value to all living and non-living beings. But all are not speaking in the same tone.

One of the most important issues in environmental matters is the distinction between instrumental value and intrinsic value of the beings and things in the environment. Instrumental value is value assigned to something because of its usefulness as a means to an end. For example, certain grasse
have instrumental value for cows who feed on them, since feeding on the grass is a means to survival for the cows. But this does not seem to be the case with all kinds of value – for instance, being alive itself. We do not value lives for any reasons beyond themselves, we do not regard preserving our life as a means to some other end but rather as an end in itself. Value of this sort is non-instrumental value or intrinsic/inherent value. So, one central question in environmental ethics is: ‘What is considered to be valuable, and from where does such value come?’ A number of different issues and concerns are raised by this question.

The discussion of intrinsic/inherent value inevitably raises a question about the origin of such value. Is it created by human beings, or is it something already in existence in the world, which human beings recognise rather than bring it into being? This has given rise to a debate among environmental ethicists, sometimes called the dispute between value subjectivists and value objectivists. Value subjectivists argue that intrinsic value is something which humans create and attach to their own lives, the lives of other people, and/or to particular states of affairs or perhaps to qualities such as harmony. Value objectivists, on the other hand, think that intrinsic value is not something which humans create, but something already there are in the world. And the third question concerns the location of such intrinsic value for both subjectivists and objectivists. Here, a wider array of answers has been advocated. These include attributes of individual living beings, such as consciousness, sentience, the ability to flourish and more abstract qualities such as diversity, richness, naturalness and balance.

Different types of answers to these questions have been offered by leading environmental ethicists. J. Baird Callicott argues that all values are subjective, human created (anthropogenic) but this does not mean they must
be human centered (anthropocentric). Hargrove offers a variant of this view. Holmes Rolston III, an U.S.-based theologian, on the otherhand, upholds that value in Nature is objective, and it is located as in individuals, so also in species, ecosystems, and evolutionary processes. For this reason, the natural world objectively contains intrinsic/inherent value. Keekok Lee has sought to reconcile elements of such arguments. She argues that we need to think of different varieties of intrinsic/inherent value: ‘articulated’ intrinsic value, which is created and possessed by humans alone and ‘mutely enacted’ intrinsic/inherent value, which appears in the natural world.

Another area of debate arrives therewith, but it is more directly ethical. How should human beings act in the non-human natural world, given the conclusions of value theory? How does one make ethical decisions where perceived values come into conflict? An environmental ethical edifice must, like any other ethical construction, be built on value theory. However, while it is only just possible that two philosophers with the same value theory might make different practical ethical responses, it is quite likely that two philosophers with different underlying value theories might draw similar practical ethical conclusion.

Anyhow, the scope of environmental ethics is as extensive as its sphere: the realm of actions, policies, and lifestyles which impact on the natural environmental, together with their context and their consequences and the principles and attitudes with underlie these actions, lifestyles, and polices. It may be extended as long as human action can exercise any kind of impact, and as long as something of value remains on which significant impact can be made. Contemporary environmental ethics also studies the past traditions which often underlie environmental values and which often turns out to supply limits to possible change in ethical attitudes or resources for such.
change. The rediscovery of past ways of life, philosophies and cultures may also facilitate us in our present endeavour.

Let us come to the present scenario. It needs no reiteration that environmental issues, like depletion of ozone layer, green-house effects, global warming, loss of bio-diversity, impact of destruction of forests, extinction of species, population-explosion, poverty or third-world debt, etc. constitute significant part of contemporary world of thought. And philosophers and ethicists have the duty to mould adequate world-view through which the problems are to be seen, and suggest norms by which our interactions with the environment are to be judged. Environmental ethics thus comes out as the systematic study of normative theories and principles related to human interactions with the natural environment as to their contexts and consequences. And environmental ethics should find virtue in saving and recycling natural resources, and vice in extravagance and unnecessary consumption.

Anyhow, the questioning and rethinking of the relationship of human beings with the natural environment over the last fifty years reflected an already wide-spread perception in the 1960s that the late twentieth century faced a 'population explosion' that gives a serious threat to the environment. In 1968 Stanford ecologist Paul Ehrlich, published *The Population Bomb* warning us how the growth of human population threaten the viability of planetary life-support systems. Among the accessible work that has first drawn attention to a sense of crisis was Rachel Carson's *Silent Spring* (1963), which consisted of a number of essays earlier published in the *New Yorker* magazine detailing how pesticides, such as DDT, concentrate through the food chain. It first warned of the dangers to humans and to
wildlife from toxic pesticide residues, which kindled the spark of environmental ethics. Carson recorded her protest against human control of Nature by reiterating that ‘the control of Nature’ is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that Nature exists for the convenience of man. On the other side, the historian Lynn White, Jr. published an essay in one of the most important journals *Science* in 1967 on the historical roots of the environmental crisis, where he argues that the main strands of Judeo-Christian thinking had encouraged the overexploitation of Nature by maintaining the superiority of humans over all other forms of life on the Earth, and by depicting all of Nature as created for the use of humans.

White’s contention is that the *Bible* itself and the works of the Church Fathers support the anthropocentric perspective to the effect that humans are the only beings that matter on this Earth. This anthropocentric perspective has helped to direct the modern science and technology to exploit Nature, for human purposes, of course. White is careful to note that some minority traditions within Christianity provide an antidote of stewardship to the ‘arrogance’ of a mainstream tradition of anthropocentric speciesism. But most of the environmentalists hold that the whole question of the environmental crisis is fundamentally a crisis of the West’s anthropocentric philosophical and religious orientations and values.

But, as early as 1949, the American forester Aldo Leopold advocated an appreciation and conservation of things and beings ‘natural, wild and free’. Leopold's *A Sand County Almanac* (1949) argued for the adoption of a Land Ethic. By the term ‘Land’ Leopold does not merely mean soil, rather it symbolizes the ecological concept of community, which includes all of its components, soil, waters, plants, animals, etc. That the Land is to be loved
and respected is obviously a genuine extension of ethics. He holds the principle that a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It would not be right if it tends otherwise. Leopold’s attempt to extend our moral concern to cover the natural environment and its nonhuman contents draws explicit attention of the later environmentalists. In 1971 the first conference on environmental philosophy was held at the University of Georgia, USA. Just two years later Richard Routley published his paper ‘Is there a Need for a New, an Environmental Ethic?’ which advocates clearly for a new ethic. He hints at the anthropocentrism imbedded in what he called the ‘dominant Western view’, or ‘the Western superethic’, is in effect ‘human chauvinism’. This, he argued, is just another form of class chauvinism, which is simply based on blind class loyalty or prejudice, and thus unjustifiably discriminates against those outside the privileged class. In his Last Man argument, Routley asks us to imagine a hypothetical situation in which the ‘last man’, surviving a world catastrophe, acted to ensure the elimination of all other living things and the destruction of all the landscapes after his demise. From the human chauvinistic perspective, the last man would do nothing morally wrong if he does it, since his destructive act in question would not cause any damage to the interests and well-being of humans, who would by then have disappeared. According to Routley, the non-human living things, whose destruction is to be ensured by the ‘last man’, have intrinsic value, a kind of value independent of their usefulness for humans. Based on this intuition, Routley concludes that the main tradition of Western moral thinking is unable to allow the recognition that natural things have intrinsic/inherent value, and that the tradition required overhaul of a significant kind.
John Passmore, however, does not favour a completely new ethic. In his *Man's Responsibility for Nature* published in 1974, he argues that the Judeo-Christian tradition of thought about Nature, despite being predominantly 'despotic', contains resources for regarding humans as 'stewards' or 'perfectors' of God's creation. Any change in attitudes to our natural surroundings, he argued, would have to resonate and have some continuity with the very tradition which had legitimised our practices so far.

Anyhow, Charles Darwin's theory of Evolution has taught us to recognise the interdependence of living species in the late 19th century. As we have noted, such a proposal for an extension of ethics to cover all the species of the living systems of the Earth first emerged in the 50's of the last century through Aldo Leopold's *A Sand County Almanac*. Later with the paradigm shift—from the concept of Nature as *static equilibrium* to the concept of Nature as *flux*—another version of holistic, ecological philosophy expresses itself in 1973 through the proposal of 'Deep Ecology' by the Norwegian philosopher Arne Naess, a professor at University of Oslo. It helped us to overcome what he calls 'shallow ecology' movement by pointing out its anthropocentric bias, and rejecting the biblical idea of humans as authoritarian guardian of the Nature.

Another great environmentalist Holmes Rolston-III, comes forward to argue that the protection of species, ecosystem, natural processes, etc. is also a moral duty. It would be wrong, he maintains, to eliminate a rare butterfly species simply to increase the monetary value of specimens already held by collectors. He argues that every organism has a good of its own and is thus a holder of value. A species is a form of life that defends it and thus has value. The ecosystem, or the biosphere as a whole, is a life-sustaining process. Ethical attention should focus on an ecosystem not as an individual but
rather as an interconnected matrix within which life evolves and continues to develop. Meanwhile, Christopher Stone, a professor of law at the University of Southern California, proposed that trees and other natural objects should have at least the same standing in law as corporations. In his paper ‘Should Trees Have Standing? (1972) he argues that environmental issues be litigated before the court in the name of inanimate objects about to be despoiled.

Reacting to Stone's proposal, Jöel Feinberg, later known as animal right-theorist, raised a serious problem in 1974. Only items that have interests, Feinberg argued, can be regarded as having legal standing and, likewise, moral standing. The movement for animal liberation and animal rights, which emerged strongly in the 1970s, can be thought of as a socio-political movement aimed at representing the previously neglected interests of animals. Such an approach is called individualist consequentialism. It covers a spectrum of positions broadly in the utilitarian tradition initiated by Bentham and Mill. The aim of ethical behaviour is at the best consequences. For individualist consequentialism, the unit of ethical concern is always an individual organism rather than, for instance, the ecosystem or the species. While the individual organism is the unit of ethical concern, it is the state of affairs within the organism itself, which generates value. In consequentialist systems, it is always states of affairs, rather than things in themselves that are valuable. Actually, the movement for animal liberation and/or animal rights, which also emerged in the 1970s, can be thought of as a political movement aimed at representing the previously neglected interests of some animals. Peter Singer advocates that all humans are equal, as they all have interests of not being hurt unprovoked. He adopted Bentham’s principle of pleasure and pain, in other words, sentience, as the criterion for moral
considerability, and argued that animals, who have the capacity to suffer, owe to us moral consideration. Singer is an advocate of vegetarianism for purely moral reason, but even this basic practical implication of the ethical enfranchisement of animals is suspect on purely utilitarian grounds. We might raise animals in comfort, and we can slaughter them painlessly, and then enjoy their flesh. Such consideration as these led Tom Regan to counter Singer’s animal liberation ethic. According to Regan, each animal, who is ‘subject of a life’, which from its own view-point may be better or worse, has ‘inherent value’ and, therefore, should be given moral consideration. Regan’s position thus trumps the principle of utility that roughly directs us to do whatever would produce a greater balance of pleasure over pain. For Singer and Regan, the ethical entitlement of animals is a philosophical goal in and of itself. But lower animals and plants are altogether left out of the scope of moral consideration. In the same way, they say nothing about the non-living parts of ecosystem about which environmentalists are so deeply concerned. That is why a major portion of environmentalists consider animal issues as going against environmental conservation.

But the classical version of Biocentricism showed a deeper concern for the whole biotic community. Paul Taylor, the most important advocate of biocentrism, suggested in ‘The Ethics of Respect for Nature’ (1981) developed an individualist deontological approach to environmental ethics. He argued that all organisms are teleological centers of life, pursuing their own good in their own way. This telos gives each individual organism inherent worth, and this inherent worth is equally possessed by all living organisms, since each of them has a telos and a good of its own, a good which is as vital to it as a human good is to a human. He argued for four basic principles of duty to the nonhuman natural world: non-maleficence,
non-interference, fidelity, and restitutive justice. In addition to these, he suggests five priority principles for resolving situations of conflict: self-defense, proportionality, minimum wrong, distributive justice, and restitutive justice. Like Albert Schweitzer, he considered the will to live as an impulse to self-realisation, which is found in all living things. And as such, the taking of any life, however necessary, is wrong and generates a burden of guilt and responsibility.

The endeavour to bring out journals in this field of environmental ethics and philosophy then started. The first major journal, *Environmental Ethics*, is founded at the University of New Mexico in 1979, with Eugene C. Hargrove as the editor-in-chief and Holmes Rolston-III as the Associate Editor. Another important journal *Environmental Values* gets based at the University of Lancaster. Other journals contributing to environmentalism are also founded during the 1990s, and these include *Worldviews: Environment, Culture, Religion* first published in 1997 and *Ethics, Place, and Environment* in 1998; in the US *Ethics and the Environment* in 1996 and *Philosophy and Geography* in 1997, *The Trumpeter* in 1983. Besides, works in this field are also found in mainstream journals of philosophy. In 1990 Rolston-III founded the *International Society for Environmental Ethics* (ISEE), of which he became the President and Newsletter Editor, with Laura Westra of the University of Windsor, Ontario as the Secretary. The society organises sessions of environmental philosophy and ethics round the year all over the world, and it has a worldwide array of representatives.

The late Henry Odera Oruka became the founding director of an Ecophilosophy Center at Nairobi, Kenya and organised in Nairobi a World Conference of Philosophy on the themes of *Environment, Development, and their Philosophical Bearing* in 1991. A further example is the International

As a matter of fact, from the mid-1980, research, publications and teaching environmental ethics began. Several universities began to offer courses in environmental ethics, most notably Colorado State University and the University of North Texas in the USA, while Lancaster University in the UK began to offer MA courses on environmental values and philosophy. By the end of twentieth century, environmental ethics expanded worldwide, and most universities began to offer courses on environmental philosophy.

On the political front, the rise of environmental or ‘green’ parties in Europe in the 1980s was accompanied by almost immediate schisms between groups known as ‘realists’ versus ‘fundamentalists’. The ‘realists’ stood for ‘reform environmentalism’, working with business and government to soften the impact of pollution and resource depletion especially on fragile ecosystems or endangered species. The ‘fundies’, on the other hand, argued for radical change, the setting of stringent new priorities, and even the overthrow of capitalism and liberal individualism, which were taken as the major ideological causes of anthropogenic environmental devastation.

Anyhow, Arne Naess, who introduced the terms ‘Deep Ecology’ and ‘Ecosophy’ into environmental literature, based his article of 1973 in *Inquiry* on a talk he gave in Bucharest in 1972 at the Third World Future Research Conference. In that talk Naess discussed the longer-range background of the ecology movement and its connection with respect for Nature and the inherent worth of other beings. A series of literature then followed. Deep environmentalism gradually appeared to be the leading Nature-philosophy
on the basic of diverse literature produced by Naess and his followers. Rejecting anthropocentric speciesism, Naess spoke of deeper concerns of cosmic interrelationship, biospheric egalitarianism, diversity and symbiosis, and local autonomy. Biospheric egalitarianism, one of his seven principles, was modified in the 1980s to the weaker claim that the flourishing of both human and non-human life has value in itself. At the same time, declared that his own favoured ecological philosophy ‘Ecosophy T’, as he called it after the name of his Tvergastein mountain cabin, is only one of several possible foundations for a personal environmental ethic. Deep ecology ceased to be a specific doctrine, but instead became a radical ‘platform’, of eight simple points, on which Naess hoped all deep green thinkers could agree. The platform was conceived as establishing a middle ground, between underlying philosophical or religion orientations, and the practical principles for activism. Thus the Deep Ecological gradually becomes a radical environmental movement with pluralistic orientation.

A further tribute to the development of environmental ethics has been made by works which are called social ecology. Some thinkers hold that present ecological problems cannot be adequately understood, without resolutely dealing with problems within societies. Social ecology takes the major obstacle to social and natural evolution to be the long history of human attempts to dominate others and to conquer even Nature itself. One of the most distinctive theories advanced by Murray Bookchin is the view that the human urge to dominate Nature results in human domination of other humans. Other social ecologists have focused more particularly on the importance of such factors as the co-modification of reality in an economistic society, the pervasiveness of the historical legacy of patriarchal-authoritarian values, and even the significance of fundamental ontological
realities inherent in the human condition. Bookchin's social ecology recommends that we use our gifts of sociability, communication and intelligence as if we were ‘Nature rendered conscious’, instead of turning them against the very source and origin from which such gifts derive. Oppression of Nature should be replaced by a richer form of life devoted to nature's preservation. Still, another tribute is Eco-Feminism, according to which the logic of domination over nature is the same as the domination of women by men. It holds that both the exploitation of women and of nature result from patriarchal oppressions. It further contends that women, due to their distinctive biological and social roles, have an innate concern for the nature. Karen J. Warren, e.g., speaks of three significant features of oppressive conceptual framework: value-hierarchical thinking, value-dualism and logic of domination. By the mid 1970s, feminist writers had raised the issue of whether patriarchal modes of thinking encouraged not only widespread inferiorising and colonizing of women, but also of coloured people, animals and Nature. Sheila Collins (1974), for instance, argued that male-dominated culture or patriarchy is supported by four interlocking pillars: sexism, racism, class exploitation, and ecological destruction. To emphasise the importance of feminism to the environmental movement and various other liberation movements, some writers, such as Ynestra King, argue that the domination of women by men is the original form of domination in human society, from which all other hierarchies -- of rank, class, and political power -- flow. Human domination of Nature is a concrete example.

This is our humble submission on the development of contemporary environmentalism.
Notes and References:

In writing this chapter we have taken help mainly of the following sources:

Chapter--II

Traditional Anthropocentrism and Speciesism

"People have seen themselves as placed, not just at the relative centre of a particular life, but at the relative centre of everything. The centrality of MAN has been pretty steadily conceived, both in the west and in many other traditions, not as an illusion of perspective, imposed on us by our starting point, but as an objective fact, and indeed an essential fact, about the whole universe." (Mary Midgley)

The term ‘anthropocentrism’ comes from the Greek words ‘anthropos’ (ἄνθρωπος) and ‘kentron’ (κέντρον). ‘Anthropos’ means ‘human being’ and ‘kentron’ means ‘center’. So, literally, anthropocentrism means human-centredness. As a matter of fact, it refers to the traditional belief that humans are at the center of the universe. As a moral theory, anthropocentrism takes human interests to be intrinsically valuable, and upholds that only human interests deserve moral consideration. According to this view-point, the non-human nature acquires value in so far as it serves human purposes. In this way anthropocentrism makes ethics solely a human enterprise. And in environmental philosophy it stands for the attitudes, values or practices which promote human interests, even at the expense of the basic, crucial needs and interests of other species or the Nature in general. To illustrate, if I hit a man or woman without sufficient provocation, my conduct would be judged as morally bad or wrong. But my behaviour would not likewise be condemned in itself wrong if I kill a goat for flesh!

There are various crucial implications of the anthropocentric view, which strongly influence the ways in which humans interpret their relationships with other species and ecosystems. We may distinguish between two forms
of anthropocentrism: *absolute* anthropocentrism and *relative* anthropocentrism:

a) The anthropocentric view suggests that only humans have intrinsic value, and it assigns absolutely no value for non-human species. This is what we might call anthropocentrism in an absolutist sense. Needless to mention, this view of *absolute* anthropocentrism permits us any kind of treatment for non-human animals and nature in general.

b) The anthropocentric view suggests that humans have greater intrinsic value than other species. This position can be characterised as *relative* anthropocentrism. A result of this attitude is that any species that are of potential use to humans can be a ‘resource’ to be exploited. This use often occurs in an unsustainable fashion that results in degradation, sometimes to the point of extinction of the biological resource, as has occurred with the dodo, great auk, and other animals.

These two positions have the following implications:

i) The view that humans have greater intrinsic value than other species also influences ethical judgments about interactions with other organisms. These ethics are often used to legitimise treating other species in ways that would be considered morally unacceptable if humans were similarly treated. For example, animals are often treated very cruelly during the normal course of events in medical research and agriculture. This prejudiced treatment of other species has been labeled ‘speciesism’ by ethicists.

ii) Another implication of the anthropocentric view is the belief that humans rank at the acme of the natural evolutionary progression of species and of life. This belief is in contrast to the modern biological interpretation of evolution, which suggests that no species is ‘higher’
than any others, although some clearly have a more ancient evolutionary lineage, or may occur as relatively simple life forms.

The individual, cultural, and technological skills of humans are among the attributes that make their species, *Homo sapiens*, special and different. The qualities of humans have empowered their species to a degree that no other species has achieved during the evolutionary history of life on Earth, and this has been possible through the development of social systems and technologies. This technological power has helped humans to become the most successful species on Earth. This success is indicated by the increasing amount of Earth’s biological and environmental resources that are being appropriated to sustain the human species.

In spite of all these success stories, there are clear but ominous signals that the extensive exploitation of the environment by humans is causing serious ecological degradation and a diminished carrying capacity to sustain people, numerous other species, and many types of natural ecosystems. If this environmental deterioration proves to be catastrophic, then all the success stories of the human species would turn out to be really a short-term phenomenon!

Anthropocentrism has been discussed by most of the environmentalists, and it is well-said that critiquing anthropocentrism is at the bottom of the burgeoning of contemporary environmental philosophy. Anthropocentric world view has been identified as a theoretical root cause of the ecological crisis we are now facing. Actually, it has been considered problematic concept of contemporary environmentalism. The critiquing of anthropocentrism draw attention to a systematic bias in traditional Western
attitudes to the non-human world. Val Plumwood has argued that anthropocentrism plays an analogous role in green theory to androcentrism in feminist theory and ethnocentrism in anti-racist theory. Plumwood calls human-centredness ‘anthrocentrism’ to emphasise this parallel.

Anthropocentrism has its defenders too. Thinkers, who defend anthropocentrism, point out that maintenance of a healthy, sustainable environment is necessary for human well-being as opposed for its own sake. The problem with such a ‘shallow’ viewpoint is not that it is human centered, but that they do not properly consider enough in what that well-being consists. According to this view, we need to develop an enlightened, fortified anthropocentric notion of human interests and thereby to replace the dominant short-term, sectional and self-regarding conception.

One of the first extended philosophical essays addressing environmental concern, John Passmore’s Man's Responsibility for Nature has been repeatedly criticised by defenders of contemporary environmentalism because of its anthropocentrism, often claimed to be constitutive of traditional moral thought. Anyhow, the anthropocentric perspective influences ethical judgments about interactions with other organisms, be they animals or plants. This view-point is often used to legitimise treating other species in ways that would be considered morally unacceptable if humans were similarly treated. For example, animals are often treated very cruelly during the normal course of events in medical research and agriculture. But we cannot threat human being in that way.

Traditional justifications for anthropocentrism are associated with emphasising some distinctive characteristics of humans—such as having an
immortal soul or mind, rationality, or sophisticated language—that set them apart from the rest of Nature including animals, and thus making ethics exclusively an human affair. In other words, traditional philosophers have emphasised on some very distinctive characteristics of humans, such as rationality, capacity of using sophisticated language, and the like, which set them apart from non-human Nature. Consequently, ethics has been exclusively human affair.

If we take a look through the time, we would find that we are habituated to think in anthropocentric terms from the very early time. One important source of support for this view is the great Chain of Being, which can be traced from Plato and Aristotle through Plotinus to Aquinas, who ordered types of being according to their degree of perfection: descending from God, through the angels to humans, with animals and plants below them. The ethical offshoot of this viewpoint is that less perfect beings may be subordinated to more perfect ones. And from the very ancient times (western) moral philosophers have been thinking in the line that humans have a prerogative to rule over, and use, other creatures and the rest of the Nature as they see fit for their own purpose.

Religious sources too underpinned this anthropocentric idea: in particular, the Judaic-Christian doctrine of creation has fostered the belief that humans were made in the image of God and they share in God's transcendence of Nature and that the whole natural order was created for their sake. Such religious views have tended to emphasise upon the uniqueness of human beings as the following story of Genesis 1:27-8 of the Bible states:

"God created man in his own image, in the image of God created he him; male and female created he them. And God bless them, and
God said to them, Be fruitful, and multiply, and replenish the Earth, and subdue it: and have dominion over fish of the sea, and over fowl of the air, and over every living thing that moveth upon the earth.”

It may here be reminded that early some hunter-gatherer societies, such as the Innu and many animist religions, have lacked a definitive notion of humanity and they have seen non-human animals and plants as part with humans. But the view that humans are uniquely rational being, and that this constitutes their greatest perfection, is emphasised by theologian Thomas Aquinas. Some evangelical Christians are, however, critical of taking such anthropocentric view-point defying a Christ-centered or God-centered worldview. They see this as a core societal problem. According to them, humanity placing its own interests and desires ahead of the teachings of the Bible leads to rampant selfishness and behaviours viewed as sinful.

It has been suggested from some quarters that the use of the word ‘dominion’ in the story of Genesis, where God allegedly gives man dominion over all creatures is controversial. Some consider this to be a flawed translation of a word meaning ‘stewardship’, but it persists as the most common translation. In the 1985 CBC series ‘A Planet For the Taking’, Dr. David Suzuki explored the Old Testament roots of anthropocentrism. In his book Pale Blue Dot, author Dr. Carl Sagan also reflects on what he perceives to be the conceitedness and pettiness of anthropocentrism, specifically associating the doctrine with religious belief.

Anyhow, even in granting human dominion over other creatures, it is sometimes argued, God did not intend to disregard the attendant obligation of responsible stewardship. But the environmental philosophers, like
Stephen Schwarzschild, observed that the Christian theory of creation does not teach us to love and care for the Nature, rather it indirectly encourages us to hate and dominate over the non-human world. Historian Lynn White, Jr., while searching for the historical roots of our ecological crisis, observes that our culture, including science and technology, has grown out of such a nonsensitive Christian attitude towards Nature. This attitude—'We are superior to nature, contemptuous of it, willing to use it for our slightest whim.'— is 'almost universally held not only by Christians and neo-Christians but also by those who fondly regard themselves as post-Christians.' We have to 'reject the Christian axiom that nature has no reason for existence save to serve man.'

There are also secular sources of anthropocentric thought. Protagoras, an ancient Greek philosopher declared: 'Man is the measure of all things.' In the present context this relativism can be taken to refer to mean that whatever truths—scientific or moral—we acquire are valid for humans only. Sophocles in his tragedy Antigone proclaimed, 'Wonders are many on earth, and the greatest of these is man...He is the lord of all things living; birds of the air, beast of the field, all creatures of sea and land.'

The crucial argument is that only humans participate in ethical deliberations. Whether or not this is due to man's unique capacity for moral agency, the fact remains that other creatures as having any moral obligation, either towards one another or towards humans. It makes little sense to say that a cat does moral wrong in tormenting a mouse, since we do not suppose that a cat has a moral sense. Since only humans are moral agents, having moral obligations, and non-humans have no moral sense, it is hardly possible to evoke the Golden Rule—'Do unto others as you have them do unto you.' Mutuality hinted is absent here, and the other party is so constitutionally
different as to render the necessary comparison impossible. Because of this radical asymmetry, it is argued, anthropocentrism is justified.

Someone may think that it is only the unenlightened or less-enlightened ancient thinkers who held this view-point. But a comprehensive scrutiny shows that such a thought is not correct; since even the so called enlightened, modern thinkers subscribe to this view, some of them have come forward to adduce arguments in favour of anthropocentrism.

Renaissance thinkers as well upheld such moral human-centrednes in moral discourse. M. Ficino, one of the greatest Italian authors, proclaims: 'Man not only makes use of the elements, but also adorn them...man who provides generally for all things, both living and lifeless, is a kind of God.' Manetti in his *The Dignity and Excellence of Man* states: 'Nothing in the world can be found that is worthy of more admiration than man.' Most of the modern thinkers, including philosophers, upheld the same anthropocentric position. The list of philosophers, who upheld this view, ranges from Kant to Nietzsche through Marx. Immanuel Kant upholds, 'Man is the ultimate purpose of creation here on Earth'. Marx boldly spines, 'The whole of what world history is nothing but the creation of man by human labour.' Marx upholds this position and argues that what distinguishes the worst architect from the best of bees is that the architect raises his structure in imagination before he erects it in reality. Nietzsche thinks that humanity was near 'perfect' and that the position of humanity with regard to other animals has to be reconsidered.  

The theory of evolution first gives a blow to such a human chauvinism. Eminent evolutionary biologist Ernst Mayr contends that anthropocentrism and belief in evolution by natural selection are mutually exclusive. To put
the same thing in other words, we may say the Darwinian story of biological evolution rejects the so called notion of progress on anthropocentric line and replaces it with directionless change, subverting thereby the conception of human superiority on a biological scale toward perfection. Evolution by natural selection undermines the idea that humans are the culmination and ultimate beneficiaries of all Nature. Of course, to say that anthropocentrism necessarily dissolves in the rising tide of evolutionary theory is to ignore the ways in which humanity plays an intriguing role in evolution.

In his article *Anthropocentrism: A Modern Version* W.H. Murdy, while supporting anthropocentrism as a valid and necessary point of view for mankind to adopt for consideration of his place in Nature, remarks that our current ecological problems do not stem from an anthropocentric attitude *per se*, but from one too narrowly conceived. Anthropocentrism is consistent with a philosophy that affirms the essential interrelatedness of things and that values all items in Nature since no event is without some effect on the whole of which we are parts. The ecological crisis is viewed as an inevitable crisis in human evolution. Knowledge becomes cumulative through cultures. 'A crisis occurs when our knowledge of Nature, which determines our power to exploit Nature, exceeds our knowledge of how to use knowledge for our own survival and for improvement in the quality of our lives.' An anthropocentric belief in the value, meaningfulness, and creative potential of the human phenomenon is considered a necessary motivating factor to participatory evolution which, in turn, may be requisite to the future survival of the human species and its cultural values.

Murdy, as a matter of fact, attempts to integrate these two conflicting phenomena of anthropocentricity and the theory of evolution by arguing that
the evolution of anthropocentrism itself and the Darwinian theory only marks a shift from an old version of anthropocentrism to a new, modern version. Such a rethinking of the matter can help us to understand human centeredness within the Darwinian story of evolution.

Nevertheless, we consider speciesist anthropocentrism as a sheer human chauvinism, which negatively underpins our relationship with the non-human world. Such an intellectual mind-set leads us to a moral discourse that initiates and creates preferences and cements attitudes, in favour of anthropocentricity. And when this is misplaced, then the entire intellectual and moral pursuit of ours becomes problematic.

Anyhow, if we try to put the matter of development of anthropocentrism in thematic terms, we would find more or less five strands of thought facilitating such a view-point. These are some like the following:

(i) the distinction between the mental and the physical,
(ii) the individual Nature of existence,
(iii) the dichotomy between humanity and Nature,
(iv) the use and value of Nature, and
(v) the domination over Nature.

Let us now see how these strands of thought have been instrumental in integrating anthropocentricity.

(i) The distinction between the physical and the mental
The early rationalists, such as Plato and Pythagoras, laid the foundation of the distinction between the physical and the mental via two belief systems. First, they believed in the separation of the immortal soul from the mortal body. Second, Pythagoras and Plato did not give much importance on
sensation or empirical observation as a source of knowledge. They took abstract reason as the source of cognition. This is just the opposite position taken by philosophers, like Aristotle and Kant, who value both the importance of reason and the senses, along with the reality of empirical world. Plato thought that soul or mind is distinct from the physical. And it is this Platonic view of physical world stemming from the separation between spirit and material world came to be dominant in early western society after the birth of Christ.

Later in the seventeenth century, Rene Descartes, who is regarded as the father of modern philosophy, divided reality into two distinct substances: mind and matter, and argued for a complete dualism of mind and body, and with this the dichotomy between the mental and the physical was completely cemented.11 With his method of doubt, he established his own identity from his ability to think: ‘I think, therefore I am’ (cogito ergo sum). Everything outside this cogito is seen having only a questionable existence. This has put the natural order from the human that enjoys spiritual or mental existence. Descartes believed that Nature consists of only tangible qualities, like size and weight, and so lacks any intrinsic value.

(ii) The individual nature of existence
A corollary that comes out from the Cartesian philosophy is: existence means only distinctive individual existence. Of course, this idea has its old root in ancient Greece. Pythagoras holds that all things are composed of numbers. Democritus and other atomists further contend that not only are all things composed by numbers, all of them are isolated, individual units. They think that everything is made of atoms, which are solid and insular. This thinking is repeated in Greek and Roman period of Stoicism.
The concept of atomic individualism assumed larger relevance with the general percepts of Christianity. It repeats itself again with a religious emphasis during the Reformation. Later this idea of abstract individualism spills into other aspects of social and scientific discourse. In the discipline of sociology Thomas Hobbes picks up this idea and argues that society is nothing more than self-interested atomistic individuals. This idea creeps into science through great scientists, like Isaac Newton and Galileo Galilei. Their quantitative approach towards Nature, in other words, their mathematisation of Nature, has influenced integrating individualism. Galileo declares that studies should be restricted to the essential properties of shapes, numbers, and movements which could be measured and thus quantified as irreducible and stubborn facts. Newton also proposes such a theory to explain the motion of the planets, the moon, and comets down to the smallest detail, as well as the flow of tides and other phenomena related to gravity.

Descartes gives a philosophic validation to this metaphysics of individualism through his philosophical method and ontological assumptions. The highest point for philosophical individualism comes out through his principle ego cogito cogitatum. He took ego cogito to be truly insular, and everything exists outside it having only doubtable existence. This notion of individualism continues through philosophers like Locke, Rousseau, and Leibniz. Locke interprets natural law as a claim on indefeasible rights inherent in each individual. Rousseau depends heavily upon this systematic individualism preached by Locke. Leibniz’s ontology of monads is also an extreme version of individualism.

The importance of the individual continues to remain on the centre-stage in liberalist thinking. Both in French and Scottish Enlightenment it
becomes a central feature; it dominates the eighteenth century England, the American Constitution, and the French encyclopedists. Individualism is supported by philosophers such as Hegel, Kant, Nietzsche, Kierkegaard, and some contemporary liberal philosophers, such as John Rawls, Ronald Dworkin, and Robert Nozick. All this integrates the ontology of individual nature, just in opposition of ecological principle of interdependence.

(iii) The dichotomy between humanity and Nature
The distinction between humanity and Nature has been based on humanity's unique characteristics like rationality. Linked to the assertion that only humans are rational is the assumption that only humans can communicate. This dualistic principle has been put forward by many philosophers, such as Aristotle, Aquinas, Ficino, Locke, Schopenhauer, Pascal, Pufendorf, Rousseau, Kant, Hobbes, Descartes, Hegel, Nietzsche, and Wittgenstein. 13

Another justification for the distinction between humanity and the rest of the natural world, including animals, is our moral behavior. Humans see the behaviour of beasts as predominantly irrational, physical or violent, which humans resemble when they are wicked. Socrates argues that the most virtuous human being is the one who most fully transcends their animal and vegetative nature.

The ability to use tools or modify and change the environment also constitutes another justification for this division between humanity and Nature. Marx and Engels contribute to this idea. Both argue that only man produces when he is free from physical need. A group of thinkers has based the distinction between humanity and animals on religious grounds. Aquinas, for example, argues that man is created in the image of God. Descartes also holds that man has an immortal soul. This idea of Great
Chain of Being put God at the apex of the universe, with humanity second, and the natural world below humanity.

(iv) The use and value of Nature

The theory of social progress involving the use of the natural world by humanity is the fourth factor of the anthropocentric position. This derives from the belief that labour is the only valuable factor in production. Marx and his followers reiterate that the natural stuff in which no human labour is objectivised has no value. Likewise, a modern liberalist, John Locke, suggests that in natural state, Nature is almost worthless. There is no value on raw land until it was improved, and that labour is the chief factor in any value assessment. Adam Smith also thinks that labour is the real measure of the exchangeable value of all commodities. Marxist and liberal views thus see Nature devoid of any inherent value; they admit only instrumental value for Nature.

(v) The domination over Nature

Another constitutive factor of anthropocentrism is the notion of mastery over Nature. This notion has developed from ancient time of Greek philosophy. Aristotle suggests that Nature has made all animals for the sake of man. Epictetus expresses similar type of view. Cicero declares that the produce of the earth is designed for those who make use of it, and though some beasts may rob us of a small part, it does follow that the earth produces it for humans.

Then, in the Enlightenment era of industrial revolution, Francis Bacon comes out to advocate this idea of domination. He says that our main objective is to make Nature serve the business and convenience of men. His basic argument is that scientific knowledge is technological power over Nature. He did not hesitate to declare that in near future humanity would
subdue 'nature with all her children, to bind to service, and to make her slave'.\textsuperscript{14} Kant's view is not very different: as Nature is not self-conscious, it is merely a means to an end, and that end is humanity. Johann Gottlieb Fichte put the last nail on the coffin: 'I will be the Lord of Nature, and she shall be my servant. I will influence her according to the measure of my capacity, but she will have no influence on me.'\textsuperscript{15} This view of mastering the Nature has been the mainstream thought, including philosophy. Everything has thus been determined for 'unrestricted' human interests. And the only aim left to humanity is to conquer and dominate the Nature!

These are five main strands of thought which have been instrumental in the development of the anthropocentric position. A result of this attitude is that any species that are of potential use to humans can be a 'resource' to be exploited. This use often occurs in an unsustainable fashion that results in degradation, sometimes to the point of extinction of the biological resource, as has occurred with the dodo, great auk, and other animals.

It may be noted that this domination over Nature has been debated by the ecofeminists in terms of engendered social structure of patriarchy. They argue that the control of Nature is the multifaceted dominance relationship that stems from culturally embedded attitudes of masculine gender bias. The domination of the male over the female and the dominance of human over the Nature are entwined processes, the inferiorising of the female taking reinforcement from the view that women partake more fully of Nature than man, and the degrading manipulation of Nature taking legitimacy from its characterisation as women. The feminists identify patriarchy as the most significant constrain upon the fulfillment of human potential. Patriarchy is a gender-privileging system of power relations that is subtly embedded within dominant social structures, at all social levels, across almost all cultures, and
sustained throughout history. The explanation for its tenacity is to be found, not in overt discrimination, but within conceptual frameworks that systematically deny access and justice to women.

...Speciesism

It needs no further mention that natural scientific findings of ecology have undermined man's view of himself as the centre of the universe: i.e., anthropocentrism. These findings have instead demonstrated that man is a product of natural evolutionary process, having considerable affinities with other creatures. As such, man has vulnerable dependence on ecological conditions of existence. The human is seen as occupying no special position on this planet, and this naturally calls into question his prerogative to use non-human resources in whatever way they like. This also draws widespread moral intuitions that some higher animals are somehow similar to humans and that other natural part of inanimate nature has value in itself, that is, which we call inherent value.

As a matter of fact, contemporary environmental philosophy has developed through critiquing traditional anthropocentrism. The principled objections to anthropocentrism find increasing applications in practice. Many human practices are criticised on this ground, including those involve cruelty to animals, destruction of habitats, endangering species, and disturbing ecosystemic balances. Most of the present day environmentalists see anthropocentrism as human chauvinism, with narrowness of concern that is comparable to sexual, racial or national chauvinism. Such a paradigmatic Nature-view has gone against a healthy human relationship to the environment. Human beings indulge in satisfying their own interest, even
trivial non-basic interest, at the expense of the life of animal and destroying ecological balances. The most significant trend of present-day environmentalism is to rise above this misguided viewpoint, and this means, among other things, focusing on loci of value other than humans.

Anyhow, Tim Hayward in his *Political Theory and Ecological Values* sees this anthropocentric view from a little different perspective. He considers anthropocentrism to be a misunderstood problem. He holds that the attempt to overcome anthropocentrism surfaces from the Enlightenment era. The basic idea of Enlightenment points to the direction that the right way to live is to seek progress, through the development of greater insights, from a narrow, self-absorbed perspective to a wider and more inclusive perspective.

Although it may sound odd, anthropocentrism, according to Hayward, appears to be unavoidable in some respects. Anyone's view of the world is shaped and limited by their position and way of being within it. From the perspective of any particular being or species there are real respects in which they are at the centre of it. Humans have no choice but to think as humans, to see through their own eyes. This is what Frederick Ferre calls 'perspectival anthropocentrism' and it is inescapable. Not only that, human-centeredness may in some respects be positively desirable. Just as the term 'self-centered' has been used figuratively in the past to describe well-organised, balanced people, so being human-centered may mean having a well-balanced conception of what it means to be human and of how humans take their place in the world. Human-centeredness may in this sense be desirable. As various philosophers and psychologists have pointed out, self-love, properly understood, can be considered a precondition of loving others. It could be maintained that only if humans know how to treat their
fellow humans decently, they would begin to be able to treat members of other species decently.  

But, Hayward declares that what is really wrong with moral anthropocentrism is the speciesism and human chauvinism embedded in it. Although these terms are sometimes treated as equivalents of 'anthropocentrism' in the environmental literature, it is important, according to Hayward, to distinguish between them, since they are not univocal. 'Speciesism' is a term coined on analogy with sexism and racism. It means arbitrary discrimination on the basis of species-membership. It is however possible to discriminate between human and non-human being without being speciesist. One can take a legitimate interest in other members of one's own species without this necessarily being to the detriment of members of other species. But it would be morally wrong if we give preference to interests of member of our own species over the interests of members of other species for morally arbitrary reasons. It is wrong in the human case to inflict avoidable physical sufferings because humans are sentient beings. In the same way, cruel and degrading treatment of animals should be condemned as speciesist. As long as they are considered in terms of their instrumental value to humans, they are not considered 'for their own sake' – that is, in terms of their own good or interests. It is worth noting here that the problem lies not with the giving of instrumental consideration as such to nonhuman beings, but in according them only instrumental value. In and of itself, instrumental consideration of other beings is not always opposed to their well-being. But if we give them only instrumental value, we are doing something which is objectionable.

Let us now come to human chauvinism. Human chauvinism is appropriately predicated of attempts to specify relevant differences in ways
that invariably favour humans. A human chauvinist could quite consistently accept that the moral arbitrariness of speciesism as always wrong and yet persists in denying claims of relevant similarities between humans and other species. Other animals may not be regarded 'worthy of respect', as they allegedly lack certain features, like rationality, language and subjectivity, which we take as essential of being worthy of moral respect. Anyhow, we do not like to put much emphasis on the distinction between chauvinism and speciesism, and like to analyse the wrongness of anthropocentrism in terms of speciesism.

As Donald A. Graft puts it, 'Speciesism is discrimination, prejudice, or differential treatment justified by consideration of species membership.' It supposes that moral status of an entity derives from consideration of species membership only. Jeremy Bentham in his *Introduction to the Principles of Morals and Legislation* first argued in 1789 against speciesism, though he did not use the term. The term is coined by British psychologist Richard D. Ryder in 1973 to denote a prejudice based on physical differences. "I use the word 'speciesism'," he explained two years later, "to describe the widespread discrimination that is practised by man against other species. Speciesism overlooks or underestimates the similarities between the discriminator and those discriminated against." As we see, this attitude of speciesism is understood on an analogy with racism and sexism. Racism is a prejudice based on race membership, while sexism is prejudice based on sex-identity.

The term 'speciesism' is used mostly by advocates of animal rights, who believe that it is irrational or morally incorrect to regard animals (at least sentient ones) as mere objects or property. The view is motivated by an acceptance of Darwinism—and its logical corollary— which suggests that
humans as they are today have evolved from animals which are their lesser evolved earlier forms. Moral philosophers, like Tom Regan and Peter Singer, argued against speciesism. Regan believes that all animals have inherent rights and that we cannot assign them a lesser value because of a perceived lack of rationality, while assigning a higher value to infants and the mentally impaired solely on the grounds of their being members of the supposedly superior human species. Singer's philosophical arguments against speciesism are based on the principle of equal consideration of interests.

It is interesting to note that we find some philosophers and scientists in defence of Speciesism: Carl Cohen, a Professor of Philosophy at the Residential College of the University of Michigan, does not hesitate to write: "I am a speciesist. Speciesism is not merely plausible; it is essential for right conduct, because those who will not make the morally relevant distinctions among species are almost certain, in consequence, to misapprehend their true obligations."21 Jeffrey Alan Gray, British psychologist at Oxford, similarly writes: "I would guess that the view that human beings matter to other human beings more than animals do is, to say the least, widespread. At any rate, I wish to defend speciesism..."22 Anyhow, if we go through such defender we will find that they are based on the argument that humans have the right to exploit other species to preserve and protect their own species.'

The excuses generally adduced to justify speciesist practices are varied and numerous. Some of these are:

- Animals cannot talk.
- Animals cannot make claims.
- Animals are not rational.
Only humans can have right.
Morals are exclusively human construction, and so to try to apply morality to non-human world is meaningless; and so on and so forth.

In view of the diverse range of possible differences of treatment that might follow from speciesism. We should be cautious in accepting one single overriding reason in justifying all speciesist practices. A speciesist, for example, who speaks of moral significance of reasoning must offer a relevant threshold for reasoning ability at which moral consideration comes into play as well as he has to supply objective measurement scheme by which performance to the threshold can be meaningfully determined. John Tuohey, a moral philosopher asserts that the logic behind charges of speciesism fails to hold up, and he goes on to argue that, although it has been popularly appealing, it is philosophically flawed. Tuohey contends, even though the animal rights movement has got a significant progress, no one has offered a clear and compelling argument for the equality of species.23

Likewise, feminist moral philosopher Nel Noddings has criticised Peter Singer's arguments against speciesism for being too simplistic and failing to take into account the context of species preference as context of racism and sexism which have taken into account the context of discrimination against humans. Some people, who work for racial or sexual equality, have taken such comparisons between speciesism and racism or sexism to be insulting. The universal civil rights movement and the women's movements—both of these social movements have been initiated and driven by members of the dispossessed and excluded groups themselves, not by benevolent men or white people acting on their behalf. Both movements are built precisely around the idea of reclaiming and reasserting a shared humanity in the face
of a society that had deprived it and denied it. No civil rights activist or feminist ever argued, "We're sentient beings too!" They argued, "We're fully human too!" Noddings then holds that animal liberation doctrine, far from extending this humanist impulse, has directly undermined it.\textsuperscript{24}

As already noted, Carl Cohen argues that racism and sexism are wrong because there are no relevant differences between the sexes or races. Between man and animals however, there are significant differences. As the latter do not qualify for Kantian personhood, they should have no rights. Animal rights advocates, of course, point out that there are many humans who do not qualify for Kantian personhood, and yet have rights, and so this cannot be taken as a morally relevant difference.\textsuperscript{25}

Another thinker Camilla Kronqvist sympathizes with Singer's aims, but does not accept his arguments. According to her, to say that our morality depends on attending to someone's pleasure and pain also seems to be a pretty crude description of what it is to be a moral being. She comes to the conclusion: "I also find it highly unlikely that a polar bear would care for my interests of leading a long, healthy life if it decided to have me for lunch, and I wonder if I would have time to present it with Singer's arguments when it started to carry out this intention."\textsuperscript{26} Singer however responds to Kronqvist and contends that the fact that animals are not moral agents does not prevent them from being moral patients, just as humans who are not moral agents remain moral patients, so that their ability to be harmed remains the characteristic that should be taken into consideration.

Anyhow, Buddhism, despite its reputation for respect for animals, explicitly accords humans a higher status in the progression of reincarnation.
Animals may be reincarnated as humans, but only humans can achieve enlightenment. Another point was put forward by Felipe Fernández-Armesto who reminds us that early hunter-gatherer societies, such as the Innu and many animist religions, lacked a concept of humanity and have placed non human animals and plants on an equal footing with humans.

We may, however, distinguish among three major forms of speciesism based on justifying reasons adduced: raw speciesism, strong speciesism and weak speciesism.

Raw speciesism appeals simply to species membership, and nothing else. Its supporters just contend: whether one views human as animals or not, the fact remains that non-humans are, in fact, non-human. They declare, 'They're just animals and animals are animals, humans are humans!' Due to total lack of plausible justifying reasons, it may safely be said, the raw speciesist doctrine does not carry any rational or moral weight to be explored into. Raw speciesism is not rationally or morally defensible.

Strong speciesism, on the other hand, makes appeal to species membership, but it supplies additional considerations with the intent to show why the species boundary is so relevant in discriminating between humans and non-humans. There are, more or less, four arguments that are generally adduced in favour of strong speciesism.

First, the biological argument, which supports the strong speciesim by pointing to additional considerations related to biological competition between species or genes. For example, someone may argue that human species has an inherent right to compete with and exploit other species to preserve and protect the human species. Moral status then becomes limited to the members of human species only. If someone contends to generalize
the scope of moral status, that should be no problem; but that would be limited within that species only!

The main criticism against such argument concerns the absence of unanimity on the concept of species. Species is generally defined in some such language as that, if two animals cannot interbreed to produce viable off-spring, then they are different species. But it may be mentioned as a counter-example that lion and tiger are regarded as two separate species, even though they can interbreed. On the other hand, a species of owl-monkey contains several groups that cannot interbreed! Now, if the concept of species is itself problematic, how can it bear the great moral weight of such a crucial discrimination?

Second, the importance argument, that comes to the effect that humans are much more important than non-humans. For example we allowed to experiment on primates or any other animals because human are more important. We also accept that our greater importance allows us to kill and eat animals. But, in practice, we do not always consider humans to be more important than animals. For example, humans in United States spend billions of dollars per year on their pets, rather than an effort to assist the millions of humans suffering throughout the world. Given these views, the promoter of the importance argument is force to retreat to raw speciesism, to disavow speciesism and embrace utilitarianism, and to assert another similar strong speciesist argument to the third argument.

Third is the special relation argument, which goes in this direction that a mother, e.g., being faced with the choice of saving one of two children from a fire, one of whom is her own child, chooses her own child. J.A.Gray argues that no one would find it morally repugnant if the mother chooses her own child to save. So, a special relation between humans, like that between
that the mother and the child, that justifies our choosing to benefit humans at the expense of animal.

And the fourth argument is related to the *Divine Command theory*. It simply declares that the practice of speciesism is morally acceptable as God approves of this. If the millions of people claim that their God tell them that we all must respect the rights of animals by not eating them, and so on, how can they be discredited?

Weak speciesism, on the other hand, involves the appeal to contingent facts regarding traits of the parties concerned for its justification. A supporter may argue that a certain level of rationality is necessary for claiming moral status, and as animals do not have such a level of rationality, they do not merit moral status. The traits that have been used to ground weak speciesist doctrine are however varied. For example, it has been contended that in order to merit moral status a being must have desires and preferences, be self-aware, be rational, be sentient, have a soul, and so on. But some philosophers make a distinction between ‘moral agents’ and ‘moral patients’. By virtue of the possession of the sophisticated conceptual ability to bring moral principles to bear in, by freely deciding what to do and what not to do, normal adult human beings become moral agents. Moral patients lack such an ability. Human infants, young children, mentally retarded people are instances of moral patienthood. Now, if these deficient humans are given moral treatment, then why not another category of ‘moral patients’, viz., animals, be accorded some moral treatment?

Many positions, such as Singer’s utilitarianism, Regan’s rights theory, and Ryder’s sentientism, reject anthropocentric or speciesist viewpoint. Anthropocentric assumptions are challenged also by modern science, which casts a less exalted light on the humans’ place within Nature. Darwin’s
theory of Origin of Species as natural selection, provided evidence to refute the idea that non-human nature exists to serve man, arguing that natural selection cannot possibly produce any modification in a species exclusively for the good of another species.

Another way to overcome speciesist anthropocentrism is the recognition of special value of life. This is the focus of biocentrism, which widens the scope of concern to include not only animate creatures, but all living entities, including plants. Robin Attfield, e.g., argued that trees share many capacities with sentient creatures, such as respiration, ingestion, growth, self-maintenance, and reproduction. The value of ecosystems is another antidote to anthropocentrism. This directs us to an Ecocentricism that casts the ethical net more widely, extending moral consideration to ecosystemic balance as a whole.

Notes and Reference

5. Ibid, p. 14
17. Frederick Ferre, ‘Personalistic Organicism: Paradox or Paradigm?’, *Philosophy and the Natural Environment*, *op. cit.,* p. 72
18. Tim Hayward, *Political Theory and Ecological Values*, *op. cit.,* p.46


25. Carl Cohen, 'The Case for the Use of Animals in Biomedical Research', op. cit., p. 868

26. Camilla Kronqvist, 'Speciesism – Argument for Whom?', Article: Ethics, Agency & Love for Bryn Browne, Department of Philosophy, University of Wales Lampeter, pp.4-5


In writing this chapter we have also taken help of our paper (authored jointly with my supervisor) 'Critiquing Anthropocentrism and Contemporary Environmental Ethics' published in Philosophy and the Life-World, Vidyasagar University Journal of Philosophy, Medinipur, Vol.12 (2009-10)
Anthropocentrism has been identified by the majority of contemporary environmentalists as one of the roots or theoretical causes of the present eco-crisis. To say the truth, contemporary environmental ethics has set out its journey by questioning this problematic tradition of anthropocentrism. It is a systematic bias in traditional western attitude to the non-human world or the Nature in general. There have, however, recently developed some important views rejecting this attitude, and this development has strongly influenced the ways in which humans interpret their relationship with other species, ecosystems and with the Nature in general. One such world-view that we find in contemporary environmental philosophy is Biocentrism. Biocentrism considers all living beings to have moral value and humans to be one among innumerable species of organisms that live on the Earth.

'Biocentrism' (from Greek: βίος, bio, 'life'; and κέντρον, kentron, 'center') is a term that has several meanings but is often defined as the belief that all forms of life are morally valuable, and that humanity is not the center of existence. Biocentric positions advocate a focus on the well-being of all forms of life in the consideration of ecological, political, and economic issues. Biocentrism in this sense is opposed to anthropocentrism, which represents the traditional belief that human beings and human society are, or should be, the central focus of existence. Biocentrism also refers to the
scientific position that life and consciousness form the basis of observable reality and thus serves as the basis of the universe itself.

Anyhow, while anthropocentrism argues in favour of a world-view centering solely on humans and recognises value only in human beings, biocentrism regards every living being in the Nature as having intrinsic value. This latter view asserts that we have an obligation to the whole biotic community. The central claim of biocentrism is that our moral obligation extends beyond humans to include all living beings. This obligation is direct, not merely indirect obligation to the living beings *via* our obligation to humans. We are morally obliged, e.g., to preserve endangered species, not only because present and future humans would find lives of diminished value unless we do that, but because they are living beings with intrinsic value that demands our moral respect.

Paul Taylor is the champion of this biocentric view of Nature, to whom we owe for its classical version. Taylor's is the most comprehensive attempt to articulate and defend a biocentric position in environmental matters. But the first life-centered concern in western ethics is found, perhaps, in Albert Schweitzer’s *Civilization and Ethics* published in 1923. His biocentric point of view is illustrated in terms of 'reverence for life'. He sees this as stemming from a fundamental 'will-to-live' inherent in all living beings. In self-conscious beings, like us, this will-to-live establishes a drive towards both self-realization and empathy with other living things. He formulates his world-view in this way: 'I am life which wills to live, and I exist in the midst of life which wills to live'.¹ Just in my own will-to-live there is a yearning for more life, the same obtains in all the will-to-live around me equally, whether it express itself or remains unvoiced. According to Schweitzer, all
life is sacred and we should live accordingly, keeping in mind that each and every living being is inherently valuable ‘will-to-live’. In Nature one form of life falls prey upon another. But, human consciousness holds an awareness of, and sympathy for, the will of other beings to live. As a moral human being he strives to rise above from this predator-prey relation so far as it is possible. Actually, as living beings with moral consciousness, we are not only concerned with our own life but also for the lives of other living beings and the environment in which we live in. According to him, ‘It is good to maintain and cherish life; it is evil to destroy and check life.’ We have to choose to live up to this moral conscience; and our world-view must derive from this life-view, not vice-versa. Respect for life, overcoming coarser impulses and hollow doctrines, leads the individual to live in the service of other people and of every living creature. In contemplation of the will-to-life, respect for the life of others becomes the highest principle and the defining purpose of humanity.

The fundamental principles of morality which we seek as a necessity for thought is not, according to Schweitzer, a matter of galvanizing the traditional moral views and norms, but also of expanding and extending the moral horizon. Morality, accordingly, is in its unqualified form extended responsibility with regard to anything living. He writes: “A man is really ethical only when he obeys the constraint laid on him to help all life which he is able to succour, and when he goes out of his way to avoid injuring anything living. He does not ask for how far this or that life deserves sympathy as valuable in itself, nor does he ask how far it is capable of feeling. To him life as such is sacred.”

Anyhow, Taylor’s biocentric world-view first comes to the fore with the publication of the article, ‘The Ethics of Respect for Nature’ in
Environmental Ethics in 1981. It was then followed by a full-fledged book titled *Respect for Nature: A Theory of Environmental Ethics* in the year 1986. The core of Taylor’s position is the claim that all living beings have inherent value and as such, they merit moral respect. He contends that to say that an entity has a good of its own is simply to say that, without reference to any other entity, it can be benefited or harmed. This good is ‘objective’, in the sense that it is independent of what any conscious being happens to think about it. Anyhow, to say that each living thing has a good of their own or something has inherent worth, according to Taylor, is to invoke two principles: the principle of *moral consideration* and the principle of *intrinsic value*.

The principle of *moral consideration* means that every living being that has a good of its own merits moral consideration. The principle of *intrinsic value* states that the realisation of the good of an individual is intrinsically or inherently valuable. This means that its good is *prima facie* worthy of being preserved or promoted as an end in itself and for the sake of the entity whose good it is. The combination of these two principles constitutes the fundamental moral attitude which Taylor calls ‘respect for Nature’.

Respect for Nature, accordingly, signifies a life-centered world-view of environmental philosophy. This ethics of respect for Nature has three basic elements: a belief system, an ultimate moral outlook, and a set of rules of duty and standards of character. These elements are connected with each other in the following manner. The belief system underlying this attitude of respect for Nature is called ‘the biocentric outlook’ on Nature. According to Taylor, the belief system provides a certain outlook on Nature which supports and makes intelligible an autonomous agent’s adopting, as an ultimate moral attitude, the attitude of respect for Nature. Living things and
beings are viewed as the appropriate objects of the attitude of respect, and are, accordingly, regarded as entities possessing inherent worth. One then places intrinsic value on the promotion and protection of their good. As a consequence of this, one makes a moral commitment to abide by a set of rules of duty and to fulfill certain standards of good character.5

This ethics of respect for Nature is symmetrical with a system of human ethics grounded on 'respect for person'. This has three aspects: first, a conception of oneself and others as persons, as centers of autonomous choice. Second, there is an attitude of respect for person as person. It is adopted as an ultimate moral attitude in which every person is regarded as having inherent worth or human dignity. Third, there is an ethical system of duties which are acknowledged to be owed by everyone to everyone. These duties are forms of conduct in which public recognition is given to each individual’s inherent worth as a person.

Accordingly, the bio-centric outlook on Nature implies all these four things:

(1) Humans are members of the earth’s community of life on the same terms as all the non-human members are.

(2) The earth’s natural ecosystems are seen as a complex web of interconnected and interdependent elements.

(3) Each individual organism is conceived of as a teleological, pursuing its own good in its own way.

(4) Humans are not superior to any other living thing.

Of course, while formulating such a bio-egalitarianism, Taylor takes cognizance of the fact of our being an animal species to be a fundamental feature of our existence. He and his supporters do not deny the differences between ourselves and other species, but they wish to keep in the forefront of our consciousness the fact that, in relation to our planet’s natural
ecosystems, we are but one species population among many others. Each animal and plant is like us in having a good, a telos of its own. Although our human good (e.g., of value and significance of human life, including the exercise of individual autonomy in choosing our own particular value-system) is not exactly similar to the good of a non-human animal or plant, it cannot be maintained that their good can go without the biological necessities for survival and physical health.

To accept the biocentric outlook and regard ourselves and our place in the world from its perspective is to see the whole natural order of the Earth’s biosphere as a complex but unified web of interconnected organisms, objects, and events. The ecological relationship between any community of living things and their environment forms an organic whole of functionally interdependent parts. Such dynamic, but at the same time, relatively stable structures such as food-chains, predator-prey relations, plant succession in a forest, are self-regulating energy-recycling mechanisms that preserve the equilibrium of the whole.

And as such, while we think of the well-being of the biotic communities—of humans, animals and plants, we should be careful for the ecological equilibrium. When one views the realm of Nature from this biocentric perspective, one should never forget that in the long run the integrity of the entire biosphere of our planet is essential to the realisation of the good of its constituent communities of life, both human and non-human. This holistic view of the Earth’s ecological systems, according to Taylor, does not by itself constitute a moral norm. These are facts of biological reality, rather a set of casual connections put forth in empirical terms. Its ethical implications for our treatment of the natural environmental lie entirely in the fact that our knowledge of these casual connections is an
essential means to fulfilling the ends we set for ourselves in adopting the attitude of respect for Nature.

Taylor reiterates that each individual organism is to be conceived of as a teleological center of life. The organism comes to mean something to one as a unique, irreplaceable individual. The final culmination of this process is the achievement of a genuine understanding of the biocentric point of view and, with that understanding an ability would crop up to take that point of view. Conceiving of a living being as a center of life, one is able to look at the world from its perspective.

Understanding living beings as teleological centers of life does not necessitate associating them with human characteristics. We need not consider all of them as having consciousness like us. Some of them may be aware of the world around them and others may not. Nor need we deny that different kinds and levels of awareness are exemplified when consciousness in some form or other is present. But, be they conscious or not, all are equal teleological center of life in the sense that each is a unified system of goal-oriented activities directed toward their preservation and well-being.

The denial of human superiority, which is an important component of the biocentric outlook on Nature, is the single most important idea in establishing the justifiability of the attitude of respect for Nature. The concept of human superiority derives from anthropocentric point of view, that is, from a point of view in which the interests of human species only are taken as the standard of judgment. All we need to do is to look at the capacities of non-human animals from the standpoint of their interests to overcome superiority.

Another key exponent of biocentrism is Robin Attfield. He takes, beyond living organisms, trees as example of non-sentient life and seeks to
examine whether and why they might also be morally considerable. He maintains trees have a good of their own, but this fact is necessary, not sufficient to show they merit moral consideration. While Taylor appeals to the rational and scientific merits of the biocentrism in support of the moral status of trees, Attfield appeals to analogy with morally significant human interests, such as the interests that derive from their capacities for nutrition, growth, and respiration.

Other important differences between Attfield and Taylor may be put in this way: first, Attfield does not hold all lives to be equally worthwhile and so morally important, as Taylor thinks. Secondly, Attfield is not egalitarian even with regard to those lives that are owed moral consideration. He refers to their diversity in capacities, and takes it to explain the diversity in the amount consideration that different beings are owed. In comparison with humans and other sentient animals, plants’ interests, for example, count for much less. As a matter of fact, Attfield admits some degree of respect for all life, but denies that the interests of non-sentient life are so important as those of the sentient.

Again, about the moral standing of the holistic entities, like ecosystems, Attfield holds that these life-support systems have vital importance, they are not valuable in themselves. It becomes evident that Attfield agrees with Taylor, at least in two counts: first, no entity without ‘good’ of their own merit moral respect on their own; and, secondly, moral considerability will be limited to individuals only.

Anyhow, Christopher Stone, a professor of law at the University of Southern California, proposes that trees and other natural objects should have at least the same standing in law as corporations. He argues that if trees, forests and mountains could be given standing in law then they could
be represented on their own rights in courts. Moreover, like any other 'legal person', these natural things could become beneficiaries of compensation if it could be shown that they had suffered compensatory injury through human activity. Needless to say, this would allow conservation interests, community needs, etc. to be meaningfully represented in court of law.

Kenneth Goodpaster in his article ‘On Being Morally Considerable’ examines the question ‘What sort of entities must be taken into account in making moral decisions?’ His answer is ‘living things’, because they have interests, that is, things that they need. Goodpaster does not claim that we cannot kill plants, or even animals, for food, nor that we cannot do research on them, nor that we cannot protect ourselves against harm from them. What he means is that we must consider the interests of other living things when we are making decisions that would affect them. He is suggesting that an organism, which lacks the psychological wherewithal to take an interest in anything, still has things which are in its interests. For instance, my pot-plants do not take any interest in being watered. But it is in their interests that I do so. Accordingly, in terms of moral considerability, it is welfare interests that matter. Each of the plants and other non-sentient organisms too has a well-being.⁹

But it should also be kept in mind that he favours the inclusion of holistic entities, like biosphere, in his later writing ‘From Egoism to Environmentalism’. Here he lends support to Leopold’s ideas of ‘integrity, stability and beauty of the biotic community’. He, of course, acknowledges that for this, we have to extend the moral horizon, and go beyond individualism in moral discourse.

Biocentric view-point is also present in John Rodman’s taxonomy of environmental thought. John Rodman in his famous paper ‘The Liberation of
Nature’ speaks of three components of environmental concern: (i) a theory of value that recognises intrinsic value in Nature without engaging in mere extensionism; (ii) a metaphysics that takes account of the reality and importance of relationships and systems as well as of individuals; (iii) an ethics that ‘includes such duties as non-interference with natural processes, resistance to human acts and policies that violate the non-interference principle....and a style of co-inhabitation that involves the knowledgeable, respectful, and restrained use of nature’\(^\text{10}\), for one ought not to treat with disrespect or use as a mere means anything that has a telos or end of its own.

According to Rodman, all the first three categories of environmental thought will be rendered obsolete with the realisation of ecological sensibility. But even then, the position of ecological sensibility derives primarily from the category of moral extensionism, in which he places Singer’s Animal Liberation to be an example. Rodman’ view thus comes closer to advocacy of the criterion of sentience, the view we take up just now.

...**Sentientism**

The extension of the moral principle of equality towards non-human beings, especially to the relatively higher, sentient ones, was widely debated at the end of the 1970s. Some moral philosophers refer to the notion of rights and argued that animals, like humans, have certain basic rights, which we should take into consideration. Some others, although they refrain themselves from directly using the notion of rights, speak of animal liberation and animal welfare. All these mean that there are human actions which are simply unacceptable, and that humans should respect animals’ interests. Eighteenth
century English philosopher, Jeremy Bentham first upheld that the interests of every living being having interest are to be taken into account and treated at par with similar interests of other beings like us. As he put it, ‘The question is not, Can they reason? nor Can they talk? but Can they suffer?’ This claim for equality for animals has sometimes been compared with the movements of black liberation, gay liberation, feminism, and the like.

According to Bentham, the logic of the demand for equality should not stop with humans. If a being suffers, there can be no justification for refusing to take that suffering into moral consideration. We should count it equally with like suffering of any other being. Rather than regarding them as inferior to human beings because of their inability to reason, etc. He applies moral principle of utilitarianism to the interests of sentient animals. Accordingly, as animals suffer, can feel pleasure and pain, their sentience is morally relevant. The ethical theory of utilitarianism states that an action is right if its results are superior to those of any other alternative action. The guiding principle is to generate greater possible balance happiness in the world.

Utilitarianism is, no doubt, a powerful moral norm, that has been exploited by many philosophers in demonstrating moral considerability of animals. Rather than claiming absolute ‘rights’ of animals and Nature, many environmentalists instead contend that any moral program which maximises utility is supportable. As animals can suffer, their interests should also be taken into account when judging the morality of a human action aimed at them. But it should here be kept in mind that animals cannot be equal with humans in intelligence and abilities, in rationality, in capacity for leadership, etc. and, as such, one cannot claim equality in all respects at par with humans.
Anyhow, the classical utilitarians, like Bentham, who shaped much of the philosophical debates in the nineteenth century, are in effect sentientist in their moral theory, but they did not take animals’ moral standing as a separate issue to be dealt with very seriously. It is the contemporary moral philosophers, such as Peter Singer, Jöel Feinberg, and Tom Regan, who put forward the matter with utmost seriousness. The term ‘sentience’ means the capacity of feeling pleasure and pain, and as such, sentientist refers to a philosopher who takes this capacity as criterion for moral considerability. Anyhow, John Rodman appears to have first used the term ‘sentientism’ to refer to that mode of ethics which restricts moral standing only to the living beings who can feel pain and pleasure.

Peter Singer’s Animal Liberation: Towards an End to Men’s Inhumanity to Animals, which is based on utilitarianism, has become the ‘holy book’ of animal liberation movement, and for this reason, the term ‘animal liberation’ has become closely associated with Singer’s views. He claims that all animals are equal as they all have interests. He wonders how could this go unnoticed that this applies also to non-human animals, who also have lives that can go well or badly, can suffer and hence have interest that we can affect!¹¹

Singer has two key ideas of justification for equality of consideration: First, he adopted Bentham’s pleasure and pain principle, argued for sentience, and in particular, the capacity to suffer as criterion of moral consideration. Animals feel pain, and this fact makes them moral subjects. Animals who can suffer have an interest in avoiding pain. And pain in a non-human animal is no different in moral significance from pain in a human being. Second, he has his principle of equal consideration of like interests. All entities, which have capacity to suffer, have interests in avoiding pain.
and suffering, and they are to be taken as having equal moral standing. This does not, of course, mean equal treatment. Interests are not identical across living beings. And so equal consideration for different beings may lead to different treatment.\textsuperscript{14}

The grounds for inferring that animals can feel pain are nearly as good as the ground for inferring the same for other humans. Nearly, because there is one important behavioral sign that humans have, and no non-human have—and that is sophisticated language. This has long been regarded as an important distinction between man and other animals. But this distinction, argues Singer, is not relevant to the question of how animals ought to be treated, unless it is linked to the issue of whether animals suffer. The link, according to Singer, has been attempted in two ways.

First, stemming from philosophical thought associated with Wittgenstein, who maintains that we cannot meaningfully attribute states of consciousness to beings without language. This position seems to the animal ethicists very implausible one. States, like pain, are more primitive than either of these, and they seem nothing to do with language. Singer refers to Michael Peters who argued that the basic signals we use to convey pain, fear, sexual arousal, and so on, are not specific to our species.\textsuperscript{15} So there is no reason to believe that a creature without language cannot suffer. The second link is the best evidence that we can have that another creature is in pain is when he tells us that he is. But, according to Singer, the assertion 'I am in pain' is not really the best possible evidence that the speaker is in pain because he might be lying.

Anyhow, let us stop for a moment to consider, how do we know that animals can feel pain? We can never directly experience the pain of another being, whether that is in human or in animal. But animals in pain behave in
much the same way as human do, and their overt behavior is sufficient justification for the belief that they feel pain. We also can point to the fact that the nervous systems of all vertebrates, especially of birds and mammals, are fundamentally similar. This anatomical parallel makes it likely that the capacity of animals to feel pain and pleasure is similar to our own.¹⁴ Based on this, along with other considerations, Singer claims that the capacity for consciousness of pleasure and pain would, all by itself, suffice to give an animal moral standing.

A potentially more stringent sentientist position is proposed by moral and political philosopher Jöel Feinberg. In his famous essay ‘The Rights of Animals and Unborn Generations’ argues that while it make sense to attribute rights to some non-human animals and to future generations of humans, neither plants, species, nor ecosystems are plausible candidates for rights. Accordingly, this capacity of having interests ‘presupposes at least rudimentary cognitive equipment’. He goes on to write: “Interests are compounded somehow out of desires and aims—both of which presuppose something like beliefs, or cognitive awareness...Mere brute longings unmediated by beliefs, cognitive—longings for one knows one knows not what—might be a primitive form of consciousness...but they are altogether different from the sort of thing we mean by ‘desire’, especially when we speak of human beings.”¹⁷ Thus, on his view, in order to have right, an entity must be capable of consciously aiming at—thinking about—things in its future.

Feinberg’s proposal drew a wide attention during 1970s and 1980s, as it preached a conception of the relationship between rights and interests, and at the same time related it with the criterion of sentience. This conception, perhaps, led Christopher D. Stone to come out in favour of the rights for
trees. Anyhow, many environmentalists hold that Feinberg’s proposal is not well-suited to a genuine environmental ethics, as it refuses to include non-sentient entities, like species and eco-systems in its fold.

A third proponent of sentientism is Tom Regan. He characterised a truly environmental ethics in an article entitled ‘The Nature and Possibility of Environmental Ethics’ in the celebrated journal *Environmental Ethics* (1981), as one in which ‘all conscious beings and some non-conscious beings held to have moral standing’. Although Regan, like Singer and Feinberg, takes sentience to be of moral significance, he does not refer his case to utilitarianism as source. He embraces a sentientist but deontological rights view, labeling Aldo Leopold’s ‘Land Ethic’ as ‘environmental fascism’. Regan argued for the need for a more rights-based focus than could be found within Singer’s *Animal Liberation*. According to Regan, it is not possible to argue convincingly the case for animal rights unless they are held to possess a right to life. Regan accords moral standing to those animals who are subjects of life. Beings that meet the criterion, however, are ends in themselves and possess inherent worth, and on this ground they can be said to possess rights.

In the book *The Case for Animal Rights*, Regan says that ‘having moral right’ is an all or nothing thing; to ‘have rights’ at all is to have a blanket right not to be significantly harmed in any way. His argument for extending to animals a blanket right not to be harmed has two parts. First, he argues that recognising this blanket right in human is the essence of respecting them as individuals. Second, he argues that any non-speciesist explanation of why very nearly all human beings deserve to be treated with this kind of individual respect will imply that many animals deserve the same. In particular, Regan argues that what he calls the ‘subject of a life criterion’
best explains the scope of moral rights among humans, and implies that at least all normal adult mammals, and probably all normal adult birds, deserve similar respect. To be a subject of a life, in Regan’s sense, is to have a conscious well-being which is tied to having one’s conscious desire for one’s future.\(^{20}\)

Obviously, Regan’s view, like that of Feinberg’s, seems to be even more restrictive than Singer’s. For Singer, the bare capacity to feel pleasure or pain gives an entity moral standing. According to Regan and Feinberg, however, something more is required: the capacity to consciously desire things in one’s future. It is in term of one’s desire for the future, rather than bare consciousness of pain, that we should give moral consideration to any entity.

However, according to Gary Varner, if environmental philosophy were defined as that discipline that attributes moral standing to non-conscious entities as well, then it would be an analytic truth that no form of sentientism could be an ‘environmental ethic’. To say, any version of holism demonstrates that neither form of sentientism would be ‘adequate’ as an environmental ethics. Three kinds of reason may be given to this effect:\(^{21}\) First, the range of policy goals for preserving the health or integrity of ecosystems, sentientist ethics cannot support these goals as fully as holistic ethics could. Second, in certain hypothetical situations (like the ‘last man’ case) a sentientist ethic conflicts with the intuitions of a holistic environmental philosopher. Third, it is that because environmental philosophers are directly concerned with preserving holistic entities, such as species and ecosystems, the conceptual machinery of traditional ethical theory is ill-suited to capturing the general value framework of environmental philosophers.
The most widely discussed in this connection is J. Baird Callicott’s 1980-paper ‘Animal Liberation: A Triangular Affairs’, contributing to the widespread impression among students in this field that sentient ethics must be an inadequate basis for an environmental ethics. Callicott draws between the implications of sentientist ethics and the Land Ethic of Aldo Leopold on practical issues in very stark terms. He says that the Land Ethic would permit, or even require, hunting of animals to protect the local environment, implying that animal liberationists should oppose hunting even in such situations. The Land Ethic sees that predators as critically important members of the biotic community, but sentientists condemn them as ‘merciless, wanton, and incorrigible murderers’. Animal liberationists advocate vegetarianism, but Callicott argues that universal vegetarianism probably would produce an environmentally catastrophic population increase!

Australian philosopher Richard Routley (Sylvan) (1973) gives a good example in order to show that sentientism is environmentally inadequate. It goes by the name ‘last man’ case that is used in his paper ‘Is there a Need for a New, an Environmental Ethic?’ He argues that sentientism and anthropocentrism are environmentally inadequate, because neither would have anything negative to say about cases where the last man destroys an insentient organism, species, or ecosystem. The actions of the ‘last man’ do not adversely affect him and cannot adversely affect other humans, and an anthropocentrist has no grounds for saying that any morally significant harm has been done. A sentientist would have to give the same analysis of the case in which the ‘last man’ destroys an organism, species, or ecosystem without affecting any sentient beings.
To say the truth, most biocentric positions are presented within the framework of conventional ethical theories. Attfield, for example, takes a consequentialist position. Taylor’s position draws extensively on both Kant and Aristotle. The ethics of animal liberation or animal rights and biocentrism are both individualistic in that their various moral concerns are directed towards individuals only, not towards ecological wholes, such as species, populations, biotic communities, and ecosystems. None of these is sentient, a subject-of-a-life, or a teleological-center-of-life, but the preservation of these collective entities is a major concern for contemporary environmentalists. Moreover, the goals of animal liberationists, such as the reduction of animal suffering and death, may conflict with the goals of environmentalists. For example, the preservation of the integrity of an ecosystem may require the culling of feral animals or of some indigenous populations that threaten to destroy fragile habitats. So there are disputes about whether the ethics of animal liberation is a proper branch of environmental ethics.\(^22\)

As we see, the critics have suggested that it is not possible to generate an adequate environmental ethics by extending the range of contemporary theories to this biocentric way, because these theories have evolved to articulate moral claims that arise on an analogy to human cases, and are inherently anthropocentric and individualistic. They are thus less than well-suited to articulate the moral claims of non-humans, particularly those who are extremely unlike human individuals.
Notes and Reference:


2. Ibid

3. Ibid, p.133


6. Ibid


18. *Ibid*


21. *Ibid*

Chapter-IV

Ecocentrism and the Land Ethic

"A human being is part of the whole, called by us 'Universe', a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest, a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty." (Albert Einstein)

Biocentrism gives us an account of environmental ethics, according to which our ethical obligations extend to individual living beings. But the non-living part of Nature or the abiotic features of the non-human world are equally vital for the life and well-being of living beings. They are not recognised as intrinsically or inherently valuable, having moral significance on their own in biocentric environmental philosophy. But the claim that only living individuals are morally significant is said to be underpinned by a view of the world as populated by diverse discrete individuals, whose relations are contingent and external. This world-view is unfavorably contrasted with one that illuminates the various relationships of interdependence as the science of ecology demonstrates. Contemporary ecological findings have clearly illustrated that the division of the biotic and the abiotic is merely an abstraction. As such, the whole Nature, both the biotic and the abiotic, the animate and the inanimate parts, is to be recognized as valuable. This recognition has finally led us to the position of Ecocentrism.

Ecocentrism is that holistic environmental theory, according to which not only living beings, but the whole universe, including the abiotic parts of Nature, is worthy of moral consideration. This way of understanding the
Nature typically develops from the conviction that ecology plays a primary role in our understanding of Nature and valuing of it. Contemporary science of ecology emphasizes the importance, not of individual organisms, but of the inter-relationships between organisms and the environment. Ecocentrism maintains that an adequate eco-ethic must include our relations with ecological systems, processes, along with non-living natural objects. The environmentalists, who subscribe to ecocentrism, contend that these things have inherent—and not mere instrumental—value. And so they owe direct moral obligation from us. The supporters of ecocentrism naturally tend to resist the biocentrist’s exclusive concern for living individual organisms.

An early version of the ecocentric view is found in Aldo Leopold’s ‘Land Ethic’. Aldo Leopold is an American forester who is regarded as the first most influential figure in the development of an ecocentric environmental philosophy. He feels as early as in 1949 the need for a new ethic, an ‘ethic dealing with man’s relation to the land and to the animals and plants.’¹ He christened it as ‘Land Ethic’, which aims at the boundaries of the community to include in its fold soil, water, plants, and animals, or collectively, the Land.² Land ethic is designed to change the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.³ This view effects a rethinking of traditional ethics in the light of the science of ecology.

In his A Sand County Almanac Leopold argued for an extension of ethics: not only that ethics will be concerned with the relation between individuals and between the individual and society, but also would deal with man’s relation to the Land and to the animals and plants. And the Land should be respected as a biological community to which we all belong.⁴ This
extension of ethics, according to Leopold, is actually a process in ecological evolution, whose sequences may be described in ecological as well as in philosophical terms. An ethic, ecologically considered, is a limitation of freedom of action in the struggle for existence. Philosophically, an ethic is a differentiation of the social from anti-social conducts. These are not separate but two definitions of one thing. The thing has its origin in the tendency of interdependent individuals or groups to evolve mode of co-operations, which the ecologist calls 'symbiosis'.

Accordingly, all individual things, including humans, are members of 'the ecological community'. The community is characterised by countless interdependencies of each member and its health is characterised by the continuity of its integrity and stability. Anyhow, we find three elements of the Land Ethic that attract philosophical thinking. First, the Land Ethic offers a comprehensive view-point. It appears to offer a decision process and normative guidance for environmental and ecological issues. Second, it can avoid the counterintuitive conclusions. We do not actually need to be concerned with insignificant issues, like killing a mosquito or cutting a tree, our primary concern should be the continued healthy functioning of the whole system. It is ethically permissible to kill individual animals, if needed, so long as the integrity, stability, and beauty of the animal population are preserved. Third, the Land Ethic is non-anthropocentric, in the sense that it does not accord humans any privileged status in the ecological community.

J. Baird Callicott, the most dedicated exponent of Leopold's Land Ethic, argues that Leopold's attempt for an extension of ethics may be traced back even to the traditional moral philosophy, classically articulated in the eighteenth century by David Hume and Adam Smith, in which ethics are shown to be rooted precisely in altruistic feelings, like benevolence,
sympathy, and loyalty.\textsuperscript{5} And the chronology of this development of ethics from Hume and Smith to the Land Ethic is delineated by Callicott. The Land Ethic, as he sees, is the next step in the Darwinian society-ethics. Basically, as he explains, Leopold takes over Darwin’s recipe for the origin and development of ethics, and add an ecological ingredient, namely the ‘community’ concept, to it. Charles Darwin, in turn, might have taken over a sentiment-based theory of ethics from Hume and Smith. Leopold, however, does not seem to have studied Hume or Smith, and the fact that he never cites them in his writings may be taken as evidence for this. But he surely did read Darwin and allude the Land Ethic to Darwin’s account of the origin and development of ethics. Thus the philosophical foundations and pedigree of his Land Ethic are traceable through Darwin to the sentiment-based ethical theories of Hume and Smith.\textsuperscript{6}

Anyhow, the Land Ethic, in Callicott’s view, is a value theory, but this is such a theory which does not seem to accept the notion of intrinsic value as is presently understood, for Leopold’s value is sourced into human feelings and sentiments. Callicott here follows David Hume, for whom, morality is grounded in feeling, not merely in reason, but admits moral value for the collective entities, such as species, ecosystems, etc. Following Leopold, Callicott criticises the individualistic approach in general for it fails to accommodate conservation concerns for ecological wholes.

Such a position is supported by Kenneth Goodpaster in his ‘From Egoism to Environmentalism’. In his early move Goodpaster held that being alive is the only plausible and non-arbitrary criterion of moral considerability. But later he comes to maintain that a genuine environmental ethics should acknowledge Leopold’s concern for the integrity, stability, and beauty of the biotic community. He feels a need to take seriously the
possibility that to be worthy of moral respect, a unified system may not only be composed of cells and body tissues, but may also be composed of humans and non-human animals, plants, and bacteria. This will involve exploring or developing modes of ethical thinking that are not only oriented around concern for individuals but also for entities, like ecosystems, etc.  

Anyhow, Leopold, as Callicott explains, held that view that the Earth’s linked communities of life can actuate the moral sentiments of affection, respect, love, sympathy, as noticed by both Hume and Darwin. Leopold then, develops a concept of community to summarise Darwin’s natural history of ethics. All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. This community concept of Land Ethic changes our perception of Land as having only instrumental value in favour of something with value in itself. In addition to that, it also changes the role of human being from conqueror of the land community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.

Obviously, Leopold tends to depict the Land community as a living thing. The characteristics of the Land determine the fact quite as potently as the characteristics of the man who lived on it. So it would be deemed unethical—rather wrong—to regard the environment as our slave, just as some hundred years ago we came to regard as wrong to treat other human beings as slaves.

For Leopold, the perception of Land and the life it sustains as constituting a large and complex entity functioning through interactions of its components is the outstanding discovery of the twentieth century. Mankind’s technological capacity has caused it to lose sight of this discovery, with the result that some entire species has been, and are still
being, extirpated. This would continue, and ecological disharmony would gain momentum, unless a change in attitude could be effected.\textsuperscript{8} Leopold, therefore, summarised his moral prescription in this way: ‘A thing is right when he tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.’\textsuperscript{10}

Obviously, the focus of Leopold’s Land Ethic is upon ecosystemic integrity. As Johnson points out, the focus upon larger interdependencies rather than individual life units thus results in behavioral prescriptions that differ from those advanced by the sentientists, like Singer and Regan. For Leopold, the passing of a complex ecosystem or an entire species is more deplorable than the passing of an individual organism, and as such, ethical injunctions should be so shaped. This focus is gradually sharpened. The insights of scientific ecology supply a capacity to view the natural environment as a community and with this we have an eco-centric environmental ethics. Much emphasis is placed upon the communal implications of the ‘land community’. All contemporary forms of life are represented to be kin, relatives, members of one extended family. All are equal members in good standing of one society or community, the biotic community or global ecosystem.\textsuperscript{9}

This is an ethics to supplement and guide us to see the Land community as a living thing, or what Leopold calls ‘a biotic mechanism’. He first sketches the pyramid as a symbol of Land, and later develops some of its implications in terms of land-use. The energy flows through a circuit which is represented by a pyramid consisting of layers. The bottom layer is the soil, then a plant layer that rests on the soil, insect layer on the plants, a bird and rodent layer on the insects, and so on up through various higher animal groups. Each successive layer depends upon those below it for food. This
line of dependency for food and other services are called food-chain. The pyramid of this food-chain is very complex as to seem disorderly, yet the stability of the system proves it to be a highly organised structure. Its functioning depends on the co-operation and competition of its diverse parts.

This sketch of Land as an energy circuit conveys three basic ideas: i) The Land is not merely soil. It is a fountain of energy flowing through a circuit of soils, plants, and animals. Food-chains are the living channels which conduct energy upward; death and decay return it to the soil. ii) The native plants and animals keep the energy circuit open; others may or may not. iii) That man-made changes are of a different order than evolutionary changes, and have effects more comprehensive than is intended or foreseen. Nevertheless, biota seem to differ in their capacity to sustain violent conversions. Leopold takes an example in Western Europe, that some large animals are lost, swampy forests have become meadows or plough-land, many new plants and animals are introduced, some of which escape as pests, the remaining natives are greatly changed in distribution and abundance.

The Land Ethic, then, reflects the existence of an ecological conscience, and this, in turn, reflects a conviction of individual responsibility for the health of the Land. Health is the capacity of the Land for self-renewal. According to Leopold, conservation is our effort to understand and preserve this capacity. But what it means as the health of the Land is sometimes confusing. Leopold differentiates two groups of people from the point of view of how they see the Land in terms of A-B cleavage. If forestry is taken as the field, Group A regards the Land as soil and its function as commodity-production. It is quite content to grow trees, like cabbages, with cellulose as the basic forest community. Another group B regards the Land
as biota, and its function as something broader. Group A sees the Land as agronomy or in economic sense, while Group B prefers natural reproduction on principle. Group B is worried about a whole series of secondary forest functions: wildlife, recreation, watersheds, wilderness areas. According to Leopold, Group B feels the stirrings of an ecological conscience.

This holism of Land Ethic is the supreme deontological principle. In this theory, the earth's biotic community *per se* is the sole locus of intrinsic value, whereas the value of its individual members is instrumental and dependent on their contribution to the ‘integrity, stability, and beauty’ of the larger community. There are three reasons to adopt this ethical holism in regard to ecological communities. First, ethical holism is the most practical approach to adopt while making decision concerning resource management. History supplies a lot of evidences that when we think only in terms of individual plants, and animals, we adopt misinformed land management policies. Second, this ethical holism is implied by an epistemological holism implicit in ecology. Epistemological holism follows from the claim that an adequate understanding of ecology can come only from holistic, or functional, explanations. Third, ethical holism acknowledges the metaphysical reality of ecological wholes. Leopold says that it is possible to regard the Earth’s parts, such as soil, rivers, sky, etc, as organs, or parts as a coordinated whole.

Anyhow, a straightforward implication of this version of the Land Ethic is that an individual member of the biotic community ought to be sacrificed whenever that is needed for the protection of the holistic good of the community. But, to be consistent, the same point should also apply to human individuals because they are also members of the biotic community.
Not surprisingly, this imminent misanthropy implied by Land-ethical holism has been widely criticized and regarded as a reductio of the position.\textsuperscript{13}

Sentientist Tom Regan, for example, has condemned the holistic Land Ethic's disregard of the rights of the individuals as ‘environmental fascism’. Australian Philosopher H.J. McCloskey said that there is a real problem in attributing a coherent meaning to Leopold’s statement, one that exhibits his Land Ethic as representing a major advance in ethics rather than a retrogression to a morality of a kind held by various primitive people.\textsuperscript{14} Echoing McCloskey, Attfield went out of his way to impugn the philosophical respectability of the Land Ethic. Some philosophers regard it ‘dangerous nonsense’. Frederick Ferré echoes the same concern in much more clear terms: “Anything we could do to exterminate excess people...would be morally “right”! To refrain from such extermination would be “wrong”!...Taken as a guide for human culture, the Land Ethic—despite the best intentions of its supporters—would lead toward classical fascism, the submergence of the individual person in the glorification of the collectivity, race, tribe, or nation.”\textsuperscript{15}

Obviously, if the Land Ethic implies such a monstrous consequence, it should be summarily rejected. But this apprehension is hardly true. A minute reflection would reveal that those philosophers who make such allegation are seen more interested to quote Leopold than to explore and see its theoretical framework, i.e., foundational principles and premises which lead, by compelling argument, to the moral precepts of Land Ethic.\textsuperscript{16} They fail to see that Leopold does not advance the Land Ethic as an the only alternative to traditional human ethics. He refers to different stages of the development of ethics as ‘accretions’, that means, ‘increase by external additions or accumulations’. It is true that he bases his ethic on the theoretical
foundations that he found in Darwin, who speaks of evolutionary social ethics. But it should as well be kept in mind that with the advent of a new stage in the process of accretions, the old stages are not erased or totally rejected. The duties—to preserve its integrity, stability, and beauty—attendant upon us as members of the biotic community do not cancel or replace the duties, e.g., to respect human rights, attendant on us as members of the human community.

It is, however, true that Leopold himself hardly provided us a systematic ethical theory or framework to support his ethical ideas concerning the environment. But, nevertheless, his views presented a challenge and opportunity for moral theorists to preserve the integrity, stability and beauty of the biosphere. This holism of Land Ethic has come out as the first paradigm of an environmental ethics. But with a paradigm shift of ecology from the notion of static equilibrium to the notion of Nature as dynamic flux, Leopold’s proposal seems outdated. But commentators, like Callicott, hold that recent development of paradigm shift from ‘the balance of Nature’ to the ‘flux of Nature’ may necessitate some revision, but does not make it invalid. The moral prescription of the Land Ethic is to be made dynamic in the light of development of ecology. Here also we should keep in mind that Leopold did acknowledge the change of the natural environment, but he thought of it as very slow. He thought of it primarily on a very slow evolutionary temporal scale. According to Callicott, we may thus make some revisions of famous formula in the following way: ‘A thing is right when it tends to disturb the biotic community only at normal spatial and temporal scales. It is wrong when it tends otherwise.’

Karen J. Warren, generally referred to as an eco-feminist, reiterates in his essay The Philosophical Foundation of a New Land Ethic that Leopold’s
Land Ethic is an ethic that makes 'the land itself'—and not just its instrumental, useful, utilitarian, efficient value to humans—valuable in its own right. He presumes four radical truths in Leopold’s Land Ethic: First, humans are co-members of the ecological community. This is perhaps, on Warren’s judgment, the most important contribution of Leopold’s Land Ethic, since it requires that we re-conceive humans as ecological beings, and not merely rational self-interested persons. Second, an ethical relationship to the Land requires both rational and emotional ingredients. We can be ethical only in relation to something we can see, feel, understand, love or have faith in. The evolution of a Land Ethic is an intellectual as well as an emotional process. Third, an ethical relationship to the Land cannot exist without the development of an ‘ecological conscience’. Obligations have no meaning without conscience, and the problem we face is the extension of the social conscience from people to the Land. Fostering a Land Ethic is intimately interconnected with changing people’s ‘loyalties, affections, and convictions’ to love and respect the Land. Fourthly, Leopold articulated as moral maxim the ethical principle most often associated with him—his definition of a ‘Land Ethic’. 18

Before closing discussion on ecocentrism, it is necessary to make a journey through the view of Holmes Rolston III. Although Rolston III is sometimes projected as a supporter of biocentrism, he argues for greater weight to collective entities, like species, ecosystem, etc. He contends that an ecological consciousness requires an unprecedented mix of science and conscience, of biology and ethics. According to him, there is moral value in all parts of Nature, and so we have no escape from moral responsibilities. Not only animals, but all trees and plants, species, ecosystems, etc. have moral worth, and so attract our moral consideration. Rolston strongly
upholds that ecological wholes, like species, merit moral respects, in addition to that owed to the individual members of the species. He introduces the notion of ‘objective good’: all living things as having objective ‘good-of-their-kind’. Plants do not have a subjective life, he contends, like a higher animal or a human being. But they have objective lives, and when we utter ‘Let flowers live!’ we indirectly refer to an evaluative system that conserves good of its own kind and, in the absence of evidence to the contrary, is really good. He writes: “An organism is a spontaneous, self-maintaining system, sustaining and reproducing itself, executing its programme, making a way through the world....[DNA-coded information] gives the organism a telos, ‘end’ a kind of (non-felt) goal....The DNA is thus a logical set, not less than a biological set, informed as well as formed.”\textsuperscript{19} He, of course, admits that all organisms are not moral agents like us, but that fact does not free us from moral responsibility towards them. In defense of our obligation to species, he iterates, although species exists only as instantiated in individuals, they are as real as individual members. That there are specific forms of life historically maintained in their environments over time is almost as certain as anything else we believe about our mundane world. Similarly, ecosystems generate and support life, enhance situated fitness, and allow congruent beings to evolve in their places with sufficient containment. In this sense, an ecosystem is the fundamental unit of any survival, and so we must give it a moral thought. He explains that some values are anthropogenic, some are biogenic, and again, some are in the natural systems. Value is there across the whole continuum, though it increases in the emergent climax. It should be kept in mind that human evaluators are among its products. Values may, accordingly, be objective, as are subjective. A little thought will reveal that
any ecological system is a value-transformer, where form and being, process and reality, fact and value are inseparably joined. He upholds that ecosystems, as the generators and perpetuator of life, have a kind of value that he describes as ‘systemic’.

Such value is not any instrumental value, which uses something as a means to an end. Neither is it intrinsic, which is worthwhile in itself. E.g., a warbler does not survive to be eaten by a falcon—it defends its own life as an end in itself. A life is thus important intrinsically or inherently, without further contributory reference. As a matter of fact, neither terminology is satisfactory in a genuine environmental discourse. An ecosystem has value in itself, it does not have any value for itself. It is value-producer, but not a value-owner. Different ecological systems, though of instrumentally valuable as fountains of life, are equally valuable in themselves. This value can neither be explained as intrinsic, as though the system defend some unified form of life. And so Rolston calls this ‘systemic value’.

According to Ned Hettinger and Bill Throop, although Rolston’s ecocentrism relies on a number of values that systemically make nature valuable, ecosystem integrity and stability are central among them. What Hettinger and Throop mean to say is that as the theory of stability and integrity has been rejected by majority of contemporary ecologists, who take instead an ecology of instability to be true, the foundation of ecocentric ethics, like that of Leopold, seem to be very shaky. They explain, an eco-ethic based on the balance of nature does not corroborate with the most of the insights of recent ecologists. They rather support an ‘ecology of instability’ and contend that disturbance is the norm for many ecosystems and that some systems of Nature do not tend towards the so called stable and integrate states. The ecology of stability, on which the eco-ethics, like Land
Ethic, etc. are based, tends to view natural systems as integrated, stable wholes and mature equilibrium states. It admits that natural systems do undergo some changes, such as fluctuations in the populations of predator and prey, but usually such changes are regular and so often predictable. According to this view, the loss of species upsets the eco-systemic balance and often results in a decline in ecosystem stability. Thus it sees ecosystemic integrity, stability, and diversity are closely inter-related phenomena.

The ecology of instability, on the other hand, argues that disturbance is the norm for many ecosystems, and that natural systems typically do not tend toward mature, stable, and integrated states. Contemporary ecologists no longer assume a tight correlation between stability and diversity. They take Nature as in a continuous change, a flux. With flux taken to be the norm on a variety of levels, it becomes more difficult to interpret natural systems as well-integrated. Michael Soulé, for example, thinks it positively dangerous to emphasize the equilibrial, self-regulating, stability producing tendency of ecosystems.  

With this paradigm shift in ecology--from the notion of static equilibrium to the notion of Nature as dynamic flux--we find another form of ecocentric ethics, called Deep Ecology, propounded by Arne Naess, the Norwegian philosopher and climber. His distinction between ‘shallow’ and ‘Deep’ environmental movements, introduced in the early 1970s, signifies a radical move. To avoid repetition, we reserve Naess’s ecocentric theory for the following chapters. We shall begin Part-II with a discussion on ‘Ecology’.
Notes and References


2. Ibid.


13. Ibid


22. Ibid, p. 190.