

Chapter 4

Approaches to Environmental Ethics

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Approaches to Environmental Ethics

Today, environmental problems occupy a substantial part of the international agenda. The prospective precautions against such issues have led scientists to carry out research in related fields. Almost all studies inevitably point out “human” as the primary actor in both the prevention and the emergence of problems (Duran, 2021; Erten, 2008), which prompts scientists exploring the field of environmental education to sought answers to some fundamental questions: “How can people become environmentally conscious?”, “What does environmental awareness mean?”, “How can people adopt environmentally friendly behaviors?”, “What is the relationship between environmentally sensitive behaviors and attitudes towards environmental knowledge and the environment itself?”, “Do people have an ethical sense of their environments?”, and “What kind of dilemmas exist in such ethical sense?” (Erten, 2008). This section expands ethical understandings to find answers to the questions above.

Ethics

People tend to use the term “ethics” in two different ways. In its purest form, ethics is a set of standards (among other factors) we utilize to determine our acts. It is prescriptive in the sense that it tells us what we should or should not do and what values we should adopt. It also helps us evaluate whether something is good or bad, right or wrong. Ethics explains why anything is important to us; it is concerned with how and why we value certain things and what actions appropriately reflect those values (Nelson, 2002). It leads us to question the concepts “good” and “bad” and attempts to identify which behavior is good or right - bad or wrong - and to keep people away from bad or wrong behaviors regarding their relations with each other or their environments. It also encourages people to exhibit good and righteous behaviors. In other words, ethics prevent and limit people from doing whatever they want (Ergun & Cobanoglu, 2012) by drawing a framework for which rules must be followed to be a good person (Smith, 2018). Ethics symbolizes a compass and indicates the right directions on the road (Mahmutoglu, 2009).

Environmental Ethics

In the modern age, the world is described as a “big village;” thus, what happens in any part of the world becomes a phenomenon concerning humanity (Birden, 2016; Goz,

2011). In this sense, environmental issues have unfortunately taken place among the most important problems of humanity. Yet, it is not prudent to assert that states, communities, and organizations have responsibilities for such problems at diverse scales (see Figure 1).

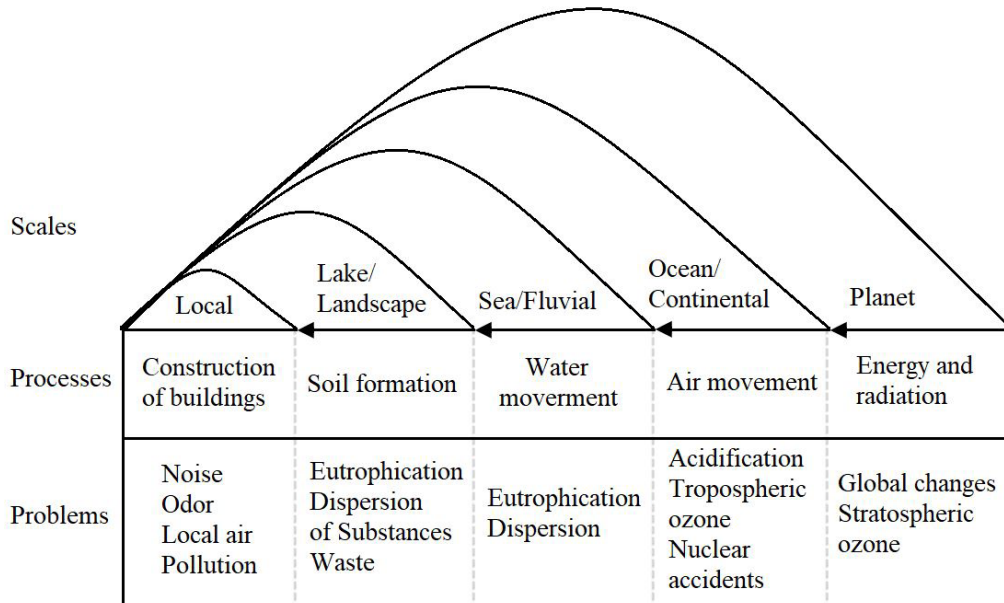


Figure 1. Geographical Scales of Environmental Problems; Processes and Problems Characteristic for Local, Regional, Fluvial, Continental and Planetary Scales

The large and small environmental problems have proven that the environment should be preserved and improved (Basci Namli & Sever, 2018; Kayaer, 2013). Accordingly, some philosophical ideas and approaches have been proposed to solve these problems (Kayaer, 2013) since environmental problems are fundamentally philosophical and ethical issues by their nature (Nelson, 2002). In this respect, environmental ethics has emerged as a significant discipline due to increasing environmental problems and natural crises in recent years (Omay, 2019). Along with environmental problems (e.g., land exploitation, biodiversity loss, and pollution), ethical issues underlying them also come to the fore. In addition, complex philosophical concepts underlie conflicts over what we should do with the land, how we should value other species, and what policies we should enact to reduce pollution (Nelson, 2002).

Environmental ethics scrutinizes the relationships between humans and their ecological environments (Akkoyunlu Ertan, 1998; Ergun & Cobanoglu, 2012; Palmer et al., 2014; Sandler, 2013) and deals with the values in these relationships (Omay, 2019). It suggests people ask about which of their environmental behaviors are good and which are bad, adopt good behaviors, and avoid bad ones, which inevitably imposes limits to people's behaviors in their relationships with the environment (Ergun & Cobanoglu, 2012). In addition, it is concerned with shaping the human-nature relationship within social values and rules and human responsibilities regarding the questions starting with "what" and

“who” (Karaca, 2007). A good many environmental issues, such as the conservation of endangered species, sustainable resource management, use of genetically modified crops, greenhouse gas reduction, population growth, and chemical pollution, are considered to be ethical subjects as well as economic or legal issues. Therefore, it is essential to assess the related policies and practices in terms of what is right and good, in addition to what is efficient or what fits specific purposes (Palmer et. al., 2014).

Environmental ethics is a part of applied ethics that examines the moral basis of our responsibility towards the environment. In this context, it seeks answers to the following fundamental questions (Naess, 1973):

What are the obligations of humans towards the natural world?

How are the benefits and fees resulting from complying with these obligations distributed?

What policies and institutional structures should be established to implement such obligations?

Bourdeau (2004) has brought specific answers to these questions. Regarding the first question, he states that we have obligations that impose quantitative and qualitative limits on our exploitation of nature. For the second question, he cites the argument of international justice and equality. Also, he responds to the question, “Can we say that developing countries are entitled to compensation for the exploitation of their natural resources by industrialized countries, both in terms of product and waste disposal?” For the third question, he questions whether there is a need for a worldwide structure beyond the existing regulations such as national and EU policies and international conventions.

Yang (2006) groups the features of environmental ethics under five headings. First, environmental ethics has a broad scope. It does not only include people in ethical concerns but also extends it to include animals and nature – the biosphere – as well as future generations, both now and beyond the immediate future. Second, environmental ethics is interdisciplinary. It has overlapping aspects with disciplines such as environmental policy, environmental economics, and environmental sciences. The different perspectives and methodologies of these disciplines make noteworthy contributions to environmental ethics; disciplines reinforce, influence, and support each other. Third, environmental ethics is plural. Since the day it appeared, it has always been a field where different ideas and perspectives compete. Anthropocentrism, animal liberation/rights theory, biocentrism, and ecocentrism all provide unique and somewhat plausible ethical justifications for environmental protection. All these have different approaches with broadly same goals and agree that protecting the environment is everyone’s duty. Fourth, environmental ethics is global. The ecological crisis is a global problem because it is impossible to draw national borders for environmental pollution. To cope with the

global environmental crisis, people must agree on certain values and cooperate at the personal, national, regional, multinational, and global levels since no country can solve the problem alone. Finally, environmental ethics is revolutionary. At the intellectual level, environmental ethics challenges the dominant and deeply rooted anthropocentrism of modern mainstream ethics and extends the object of our mission to future generations and non-humans (Yang, 2006).

Approaches

Increasing environmental awareness and social movements in the 1960s shifted the public interest to questions underscoring the ethical dimension of people's relationship with nature. In these years, several theorists thought that traditional ethical theories were unable to suggest satisfying explanations for such a relationship. Thus, the motivation for early studies in environmental ethics was the desire to formulate ethical theories that would better explain our moral obligations to the natural world. The inadequacy of traditional ethical theories was initially attributed to anthropocentrism, the assumption that humans and/or their interests are morally important on their own, whereas everything else is morally important only to the extent that it affects humans and/or their interests. According to early theorists, it cannot be claimed that humans have direct moral obligations to the natural world since morality is understood only as a matter of human obligations to one another. Therefore, such view/s focus on only one aspect of humans' relationship with the natural world and fail to capture the other dimensions. This situation can be explained by Richard Routley's "Last Man" argument. Routley establishes a hypothetical scenario where a disaster has killed all the other people in the world so that only one person survived. He then asks the question: If this person were to die too, and before he died, he had to press a button that would destroy life on Earth on his last breath, would it be morally wrong for him to do so? Routley proposes that anthropocentric theories will fail to explain why it would be morally wrong to push the button under these circumstances. If moral obligations arise from human interests, the moral obligations disappear when humans and their interests cease. In other words, if the natural world has value only insofar as it serves human interests, then it has no value when it stops serving human interests, and so there is nothing wrong with destroying it. However, the fact that the natural world has value independent of humans and/or their interests and that people have moral obligations at this point brings up environmental ethics rather than ethics for the use of the environment (McShane, 2009).

Professional environmental ethics emerged in 1970 with the increasing interest in the environment thanks to the effect of Earth Day. Many environmentalists were influenced by Aldo Leopold's "Land Ethic" and drew attention to the philosophical foundations of environmental problems. These environmentalists opposed instrumental arguments for nature conservation and even thought that these arguments are part of the problem.

Thus, they turned to the examination of non-human-centered intrinsic value arguments. Although the term “non-human-centered” causes some problems in definitions, the concepts “anthropocentric” and “instrumental” become synonymous. The non-human-centered intrinsic value theory is also examined both objectively and subjectively. While Paul Taylor and Holmes Rolston III are the proponents of objectivist theories of intrinsic value (Hargrove, 1992), J. Baird Callicott adopts a subjectivist standing (Ozer, 2017). The objectivist theory of intrinsic value argues that non-human beings have an intrinsic value even if humans do not value them. On the other hand, subjectivist theory draws attention to the necessity of being valued by people (Hargrove, 1992). The concepts “instrumental value” and “intrinsic value” are associated with the concepts “protection” and “conservation.” Is it right here to “protect” nature or to “conserve” it? In other words, should we protect nature for our needs? Or should we conserve nature and its components for its intrinsic value, without any benefit? Those who state that nature should be protected in line with human needs attribute instrumental value to nature and its components (Ozer, 2018). How to understand instrumental value has been the subject of little debate in environmental philosophy. In general terms, the instrumental value of an asset is the value it has to the point of being a means for another asset to achieve its goals. All the objects surrounding humans have an instrumental value, like musicians’ instruments as a means of making music or the equipment that doctors have for diagnosing diseases or performing surgery. Simply a shovel is a tool for someone to dig a hole. It is possible to list the types of nature’s instrumental values by human purposes as follows (Callicott, 2012):

1. Nature is valuable to humans as a source of various materials that we consume in various ways (e.g., food, fuel).
2. Nature is valuable to humans for its various services (e.g., nitrogen fixation).
3. Nature is valuable to humans as a source of aesthetic experience (e.g., wide sky, amber grain waves). It is also a source of inspiration (e.g., the solitude of the desert, the expanse of the ocean).
4. Nature is valuable to humans as an object of scientific studies.

Instrumental value is the value that something has as a means of achieving a desirable or valuable purpose. Different environmental assets have different types of instrumental value. For example, a plant species may have medicinal value, while another may not. An environmental asset may have different instrumental values to different people (or appraisers). For example, a rock face is instrumentally valuable to people who enjoy rock climbing (Sandler, 2012). On the other hand, those arguing that nature should be conserved, whether it is beneficial or not, without serving any purpose, attribute intrinsic value to nature, not instrumental. This approach proposes that nature and its non-human

components are valuable on their own (Ozer, 2018). Regarding something as intrinsically valuable is to regard it as necessarily valuable in and for itself, whereas regarding it as instrumentally valuable is to consider it conditionally valuable to something else with intrinsic value (Burchett, 2014). O’Neil (1992) understands intrinsic value in three different senses. First, intrinsic value is expressed as a synonym for non-instrumental value. An object has instrumental value as long as it is a means to another end. Yet, an object has intrinsic value if it is an end in itself. Second, intrinsic value refers to the value of an object simply because of its ‘intrinsic properties.’ Third, intrinsic value is used synonymously with ‘objective value,’ meaning the value of an object regardless of those valuing it. This approach rejects the subjectivist view arguing the source of value of something is found in those who value it - in their attitudes, preferences.

Approaches to environmental ethics have emerged based on people’s environmental perspectives mentioned above. These approaches are expanded under three headings: anthropocentric, biocentric, and ecocentric (see Figure 2).

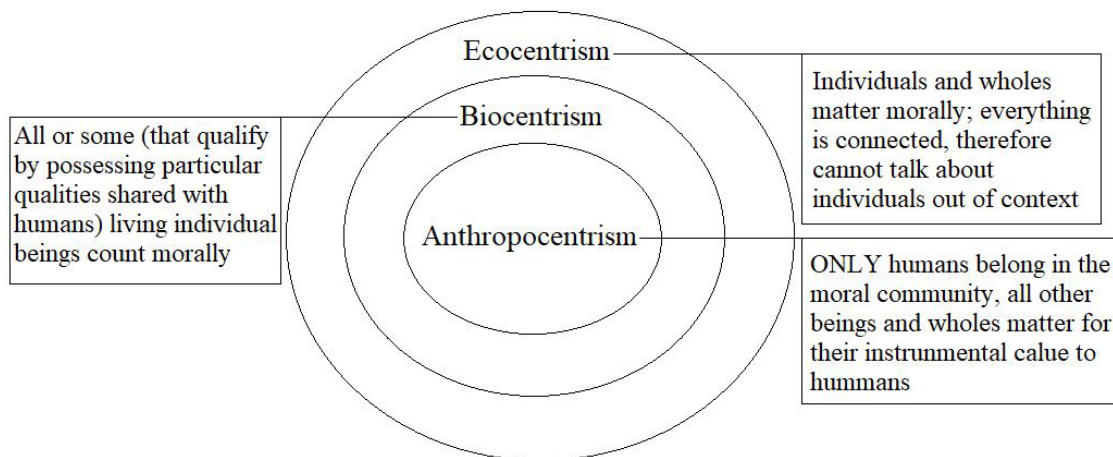


Figure 2. Moral Community in Approaches to Environmental Ethics

Anthropocentric Approaches

Anthropocentrism consists of the words “antro” (human) and “centrism” (center) (Oakley, 2007). Thus, etymologically, anthropocentrism means “human-centered.” As such, it refers to the belief or worldview that humans are at the center of the universe. Anthropocentrism is enerally seen as the main cause of today’s eco-crisis, overpopulation, and endangered species (Sarkar, 2012).



Figure 3. Anthropocentrism

Definitions for anthropocentrism are given below (Oakley, 2007)

“A human-centered perspective” (Adams & Donovan, 1999, p. 4)
“Vested interests in the prospects of our own species; any moral perspective that takes humans as central or paradigmatic” (Benton, 1993, p. 75)
“Any view that magnifies the importance of humans in the cosmos; for example, seeing it as created for our benefit” (Blackburn, 2005, p. 17)
“The attitude that humans are the most important beings in the universe” (Brute Ethics, 2006)
“To place humanity and human interests at the center of value” (Katz, 1997, p. 122)
(anthropocentric): “considering humans as the center of existence” (Oxford Canadian Dictionary, 2006, p. 32)
“Drawing frames at the human species frontier” (Plumwood, 1997, p. 328)
“Human chauvinism: the idea that humans are the crown of creation, the source of all values, and the measure of all things” (Seed, 2000, p. 1)
“The ‘human superiority complex’ that sees humans as superior or the apex of all life forms” (Smith, p. 2)
“The view that humans are primary and central in the order of things” (Steiner, 2005, p. 1)

Anthropocentric ethics argues that only people have moral values (Gansmo Jakobsen, 2017). It emphasizes that the natural environment does not have an intrinsic (non-instrumental, non-derivative) value beyond humans (Kelbessa, 2005). Accordingly, the value of nature is measured by the benefits it provides and the happiness it gives to humans. To increase such benefits and happiness, it is considered legitimate for humans to do everything and utilize nature as they wish (Ozdemir, 1998). As a bias against other life forms, anthropocentrism does not accept that we, humans, are a part of these life forms and that they are a part of us (Drengson & Inoue, 1995).

The argument of mutual respect obligation presupposes a moral community that includes (potentially) all humans (but until recently excluding all non-human organisms) (Traer, 2019). Anthropocentrism regards humans as the most important life form and views other life forms as important only to the extent that they have a desirable effect on humans. Besides, anthropocentric ethics adopts a moral evaluation of nature because degrading or protecting nature can in turn harm or benefit people, respectively. In this understanding, for example, clearing rainforests is considered wrong because it contains potential treatments for human diseases (Kortenkamp & Moore, 2001). The anthropocentric view assumes the environment acts as a repository for raw materials beyond a holistic system; however, it ignores its situation of producing and supporting life and hosting the relations between all elements is not taken into account (Kirkpinar Ozsoy & Cini, 2020).

Anthropocentric people’s motivation for protecting the environment is to increase their quality of life and maintain human life; the environment should be protected as long as it is for the benefit of humans. Environmental problems should only be prevented and resolved as they threaten human health. Besides, natural resources need to be used economically so that future generations do not have environmental problems.

Anthropocentric attitudes are based on utilitarian philosophy (Erten, 2007; Erten & Aydogdu, 2011).

Examples of anthropocentric approaches include stewardship, enlightened anthropocentrism, weak anthropocentrism, reformist anthropocentrism, and modern anthropocentrism.

Stewardship

John Passmore refers his belief in humans' responsibility to nature to Plato's Phaedrus who states, "It is always the responsibility of the animate to take care of the inanimate," and the neo-Platonian Iamblichus, who deduced from this passage that humans were sent to Earth by God to "rule the things in the world" and care for them in the name of God (Passmore, 1974, as cited in Attfield, 2016). Passmore argues that there is no need for new environmental ethics; values are always anthropocentric and created by humans (Passmore, 1974, as cited in Vena, 2009). From this point of view, he states that humans can serve and steward animals in a compassionate way, even if it is for their own interests; therefore, they can lead a life in harmony with animals (Tont, 1996). Stewardship supports the myth that humans can control and, thus, "rule" nature. Yet, it is likely to create new problems rather than settling old ones. It assumes that humans have a God-given responsibility to rule, develop, dominate, subjugate, or direct the world (Vena, 2009). The steward humans, as Passmore puts forward, are the ones fulfilling their responsibilities towards nature. While they fulfill these responsibilities, they are not affected by the intrinsic value of nature. In other words, they do not fulfill their responsibilities just because they respect the intrinsic value of nature or nature deserves it. Instead, they perform these responsibilities to make nature perfect for themselves (Akalin, 2019; Ertan, 2004). The stewardship proposes limiting the freedom of humans to act in their interactions with nature, after experiencing a period of excessive intervention in nature, overhunting for the benefit of humanity until several species are almost extinct, and indiscriminateness (Akalin, 2019). At the same time, Passmore states that environmental problems have reached an irreversible point and that an excessive consumer lifestyle cannot be maintained. However, he does not accept that this situation is caused by humans' hostile behaviors towards nature (Tont, 1996).

Enlightened Anthropocentrism

It is an ethical approach raised by Rene Dubos. Dubos (1973) reminds us that we must avoid placing humans in a predominant role over nature, but we cannot escape anthropocentrism. He also states that humans must love nature for their own sake and managing nature effectively (as cited in Scapple, 1998). According to enlightened anthropocentrism, there is no need for a new non-anthropocentric ethical model to solve environmental problems. Enlightened anthropocentrism argues that humans have the

right to utilize the environment as they wish but assumes that the long-term interests of current and future generations require protecting the environment or ecological balances (Akalin, 2019).

Weak Anthropocentrism

Norton argues that we need constraints on traditional anthropocentric behaviors to regulate consumption habits instead of a new theory. This approach argues that nature should be protected without ignoring the needs and interests of people (Norton, 1984; Ozer, 2018) and criticizes nature-exploiting value systems. In addition, he asserted that although environmental problems are largely human-induced, it is also human beings who need to take responsibility for resolving these problems. In a world where humans exist, the protection of nature should again be realized by human involvement. The participation of the majority of humans can also be achieved not with a strict nature-centered perspective that equates humans with any component of nature but with a weak anthropocentric approach emphasizing the necessity of protecting nature for the sake of the existence of humans. In the weak anthropocentric approach, nature is valued only in its relationship with humans, which may take forms other than instrumental ones such as aesthetic, educational, or restorative (Norton, 1984).

Reformist Anthropocentrism

The reformist anthropocentric movement considers living beings that can suffer and, thus, values non-human beings too. This approach aims to prevent people from inflicting pain on living beings without any reason, distinguishing the reformist anthropocentric approach from other anthropocentric approaches. Bad behaviors towards animals will find humans as well, which may be explained by Immanuel Kant's statements in his article "Duties to Animals and Spirits" in "Lecture on Ethics" that one's mistreating a dog will increase the likelihood of mistreating other people. From this point of view, it is wrong to mistreat and despise animals not because of their intrinsic values but instrumental values. Animals continuing their lives in better conditions can serve humans more efficiently (Akalin, 2019).

Modern Anthropocentrism

Biologist W.H. Murdy states that it is anthropocentric to value the factors making us uniquely humans, seek to preserve and enhance these factors, and counteract the anti-human forces that threaten to reduce or destroy them. Nature other than humans will not act to protect human values; it is under humans' responsibility. Modern anthropocentrism is proposed as a valid and necessary perspective that humanity should adopt to assess its place in nature. Our current ecological problems arise not from an anthropocentric attitude per se but a too narrowly conceived one. Anthropocentrism is consistent with

a philosophy that values all elements in nature. Valuing assets in nature for human interest is to consider them to be means of human survival or well-being, which is an anthropocentric perspective. As an instance, phytoplanktons become valuable when we recognize the key role of these organisms in providing free oxygen. Yet, continuous learning may lead to such awareness that no event in nature has an impact on the whole of which we are a part; therefore, we must value all elements in nature. The foundation of modern anthropocentrism is the recognition that an individual's well-being depends on the well-being of both their social group and the ecological system (Murdy, 1975).

Biocentric Approaches

Two closely related terms are commonly used under the non-anthropocentric umbrella: “biocentrism,” which recognizes the intrinsic value of all living beings, and “ecocentrism,” which emphasizes the intrinsic value of interrelated ecological systems, including humans (Quinn et. al., 2016). A group of non-anthropocentric environmental ethicists suggests that ethics should be expanded to include all living beings (Kelbessa, 2005).

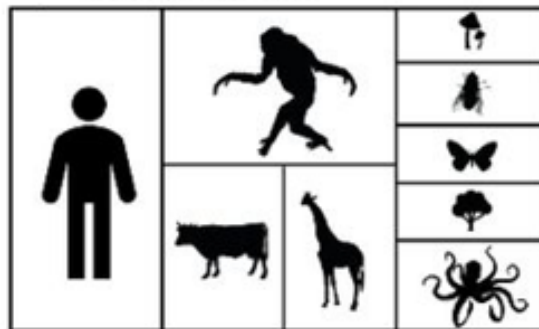


Figure 4. Biocentrism

Biocentric approaches expand the boundaries of moral importance to include other members of the biotic community, namely plants and animals. Besides, some philosophers advocate the principle of biocentric egalitarianism, in which humans are not only a part of nature but an equal part of it. Biocentrists also value ecosystems, but they do so on the grounds that protecting ecosystems will allow the protection of plants and animals (Karsli & Kurt, 2019; Thompson, 1998).

Biocentrism is a view contending that all living organisms should be respected (Ergun & Cobanoğlu, 2012; Rolston, 2012). It is sometimes understood as naturalistic or non-anthropocentric ethics. Opponents of anthropocentric views emphasize that the root cause of the ecological crisis and bad behaviors towards non-human creatures is the tradition of interpreting the world and nature with upon anthropocentric perspective. In general, biocentrism refers to the ethics of respect for life and focuses on all living beings, including plants, microbes, and animals. In this approach, only humans or

superior animals that can suffer are not central to ethics. The key question here is not “Can it suffer?” but “Is it alive?” (Rolston, 2012).

Among the biocentric approaches, respect for life, respect for nature, the Gaia hypothesis, and the animal rights theory are discussed below.

The Ethics of Respect for Life

It is an approach raised as an alternative to limiting environmental ethics to animals only. It adopts the view that all living beings on Earth have the right to self-actualization, just like human beings. It is, therefore, the life that must be glorified. Reagen and Schweitzer lead the way of this approach (Ozdemir, 2017). Albert Schweitzer expresses the concepts of good and bad as preserving and promoting life and destroying or hindering it, respectively. Schweitzer considers the preservation and promotion of life and any attempts to increase the possibilities in life to be the essence of goodness. On the other hand, destroying, harming, and hindering the promotion of life are the essence of evil. Schweitzer’s “Respect for Life” encompasses all living creatures, rejecting the view that only humans have value and importance. This approach embodies compassion for all living beings, love for life, sympathy, empathy, peace, and the power of forgiveness (Armstrong & Boetzler, 1993, as cited in Ozyol, 2013). Love is a significant component of respect for life since the disposition of all living beings is fertilized with love (Schweitzer, 1966, as cited in Eren, 2015). Schweitzer rejects the anthropocentric value understandings and puts all living beings on the basis of his approach. Whereas he finds life sacred, he accepts that it may be necessary to kill in some cases to survive. In the case of ending a life, it is needed to have a clear thought about the necessity of this act. For example, a scientist conducting experiments on animals should question whether it is vital to kill an animal during the research (Armstrong & Boetzler, 1993, as cited in Ozyol, 2013). The respect for life extends the moral community to include all living beings, especially animals; however, inanimate objects are not included in this scope. In this approach, inanimate elements are valuable to living beings only for their benefit. It is an example of a non-strict and individualistic biocentric approach (Ertan, 2004).

The Ethics of Respect for Nature

Paul Taylor is another representative of biocentric ethics. While similar to Schweitzer’s views, Taylor offers more robust justifications for the valuation of life. Respect for nature examines the relationships between humans and other living beings and accepts that all living organisms have an intrinsic value. In this approach, all living organisms are good in their own right simply because they exist; it cannot be considered whether they have any value to humans (Des Jardins, 2013). Taylor distinguished his standing from anthropocentric approaches, thanks to the view that respecting the rights of animals and plants is as important as respecting the rights of humans (Keles & Ertan, 2002).

The Greek word “telos,” meaning “purpose” or “goal,” is a concept central to Aristotle’s philosophy of life. According to Aristotle, all living beings (and many inanimate objects) have a telos. In Taylor’s biocentric view, neither the human telos is superior to the telos of any other creature nor vice versa. Besides, environmental ethics provides a framework of principles that allows us to broaden our moral sensibilities regarding the broader association of animals, plants, and even geological features known as biomes or ecosystems in environmental science (Gudorf & Huchingson, 2010).

Humans’ duties to respect the harmony of natural ecosystems, protect endangered species, and prevent environmental pollution stem from the fact that there are always ways to help wild species populations survive and maintain a healthy life in a natural environment. Such obligations arise from recognizing their innate values; this approach always advocates that a living being has intrinsic value. Each organism, population of species, and community deserves well-being, and the well-being of a non-human organism occurs to the extent that it is strong and healthy. It has all the capacities it needs to successfully cope with its environment and, thus, survive throughout the various stages of its life cycle. Humans can help or hinder the well-being of a living being. For example, trees may be harmed by human actions or offer benefits to them.

Another point is intrinsic value. Since each living being is a being with its own good, it must be considered (principle of moral consideration). Moreover, regardless of what type of being it is, if it is a community member in natural ecosystems, the realization of its well-being indicates that it is intrinsically valuable (the intrinsic value principle). Once any organism, species population, or community is recognized as an entity of intrinsic value, it is no longer treated as though it were merely an object or as something whose entire value lies in being a means of the well-being of another. The duties owed to wild organisms, species populations, and communities in natural ecosystems are based on their intrinsic values (Taylor, 1981).

Respect for nature encompasses four fundamental concepts (Yilmaz, 2014):

1. Not doing evil corresponds to not doing bad things to any organism and avoiding any behavior and action that will cause harm. It is primarily the responsibility of humans.
2. Non-interference means not interfering or restricting the freedom of the entire ecosystem and the living beings in it, not depriving them of their health and food.
3. Loyalty condemns evil behaviors, betrayal, or deception to living beings in nature because such behaviors will be disrespectful to nature. Accordingly, all kinds of hunting should be questioned.

4. Restorative justice refers to that a living being does not have the right to kill another or itself. It is predicted that the one harming the justice will compensate for the damage.

The Gaia Hypothesis

The Gaia hypothesis was first proposed by James Lovelock, a British atmospheric chemist, in 1969 and supported by the microbiologist Lynn Margulis (Lovelock et al., 2004). In 1965, while working as part of NASA's planetary exploration team, Lovelock thought that an atmospheric analysis could be used to detect life on Mars. He also wondered what kept Earth's chemically unstable atmosphere stable, so suitable for life, and alive. Besides, the climate had always been tolerable, despite a 30% increase in sunlight since the Earth's formation. Such considerations led Lovelock to the hypothesis that living organisms regulate the atmosphere in their own interests, and he suggested the novelist William Golding Gaia as a name for this view. According to this view, Earth does not just host life but also is, in a way, life or organism itself (Lovelock, 2003).

Although the idea that Earth is a living being has quite ancient roots in Western thought, James Lovelock made the modern expression of the idea through the Gaia hypothesis in the mid-1970s. In fact, he believes that the planet creates a self-regulating environment that is also alive. Just as there is no point in valuing or respecting a brain cell or liver separately from the whole organism to which it depends for life, a proper approach to environmental ethics requires the whole world to be valued. Since humans, conceived of brain cells in the hypothesis, are the only morally conscious members of this community, they have a unique ability to restrain themselves in a way that is consistent with the continuing well-being of Earth being to which they belong. Such propositions have given rise to what might be termed the planet's consciousness in ethical accountability and capacity to feel pain and happiness. In short, Earth is recognized as a superior being with the rights that smaller beings have. For many philosophers, the Gaia hypothesis refers to the Earth's capacity to purify itself from destructive elements, just as a simpler organism that can eliminate potentially toxic liquid and solid wastes and attempts to eradicate cancers and infections (Nash, 1989).

The below are the fundamental concepts of the Gaia hypothesis (Lovelock et al., 2004):

1. Earth is the only living ecosystem powered mostly by solar energy.
2. Individual species and ecosystems function like organs of a body.
3. Humans have no exclusive place or role in Gaia.
4. Gaia is a system with many regulators.

5. The sole purpose is the tendency to maintain homeostasis.
6. Gaia is the result of evolution and works opportunistically
7. Organisms produce and maintain the current composition of the reactive gases of the atmosphere, surface temperature, and acidity/alkalinity.
8. Organisms may depend on minerals or produce them in their bodies, which is a fact that somewhat blurs the distinctions between animate and inanimate things.

Animal Rights Theory

Regan (1986) sees himself as an animal rights advocate as part of the animal rights movement. The movement has a number of goals, listed below:

- Complete abolition of the use of animals in science,
- Complete abolition of commercial animal agriculture,
- Complete abolition of commercial and sports hunting and traps.

Regan also disagrees with people advocating animal rights but supporting traditional animal husbandry while finding factory farming to be wrong and with those arguing that toxicity tests of cosmetic products on animals violate animal rights but that this is not the case in cancer research, and even he finds these thoughts wrong. He states that how animals are treated is not a detail that varies from case to case. In addition, he criticizes the system that regards animals as resources to be consumed or exploited for sports or money since anybody considering animals to be resources will not be worried about their loneliness, pain, and death. The perspective that animals exist for humans makes them insignificant if they do not benefit humans in any way (Regan, 1986).

As animal rights gained national attention in the late 1970s and 1980s, the issues raised by the movement largely concerned animals recruited in product testing and research, which might be due to the unquestioned acceptance of speciesism. In speciesism, humans tolerate atrocities if applied to members of other species that would offend if done to members of their own species. Speciesism allows researchers to see the animals on which they experiment not as living beings, suffering from pain but as ordinary equipment, laboratory tools. The exploitation of laboratory animals is part of the larger speciesism problem and is unlikely to be eradicated until speciesism itself is eliminated. “You say we’re cruel because we shoot deer,” the hunters say. “But you eat meat. What’s the difference other than you pay someone else to kill it for you?” “You oppose killing animals to dress their skin,” the furriers say, “but you wear leather shoes.” Experimenters may ask why people should object to killing animals to advance knowledge, although

they accept killing animals to appeal to their tastes, and they may point out that if the objection is purely for pain, animals killed for food cannot live without suffering either. Bullfighting enthusiasts may argue that the death of a bull delights thousands of onlookers but that its death in a slaughterhouse gives pleasure to the few who eat it, and eventually, the bull in the arena may suffer more severe pain than the one in the slaughterhouse but is better treated for most of its life. Yet, a clear ethical principle has been established that can identify which practices affecting animals are right and which are wrong. This principle is that the interests of all animals should be considered equally. The principle of equal consideration of interests requires being vegetarian. At the same time, it is necessary to abandon animal products that cause the killing or suffering of animals. For example, one should not wear fur or buy leather products. In addition, this principle asserts that the difference between chicken and corn, which will benefit people, is “feeling pain.” At this point, someone will surely ask, “How do we know that plants do not feel pain?” However, there is no reliable evidence that plants can feel pleasure or pain. Although unlikely, let’s suppose that researchers have found evidence that plants do feel pain. If we have to suffer or starve, then we have to choose the less bad option. Probably because plants suffer less than animals, it is better to eat plants than animals (Singer, 2002).

The basis of biocentric ethics relies on the common capacities of humans and animals. However, this is not the case for insentient beings. In this sense, the problem of the limits of biocentrism is a question that is not easy to answer for Singer (Unsalan, 2019).

Ecocentric Approaches

Many environmental ethics supporters are uncomfortable with the philosophies of Singer and Regan. They do not see the focus on animals much better than the traditional moralists’ obsession with humans. These critics agree that environmental ethics will require better treatment of animals, but such concern for animals stems from greater concern for nature. Yet, Singer and Regan think quite the opposite: their concern for nature stems from their concern for animals (Jamieson, 2008).



Figure 5. Ecocentrism

Beyond biocentric ones, the transition to ecocentric approaches appeared in important environmental conventions at the end of the twentieth century. Preambles of these conventions utter that nature/species/ecosystems have an intrinsic value (e.g., the 1992 Convention on Biological Diversity, the 1982 World Nature Declaration, the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitats (Wilkinson, 2005)).

Land ethic and deep ecology among ecocentric approaches are explained in this section.

Land Ethic

Globalized environmental problems, such as global climate change, ozone layer depletion, global warming, decrease in biodiversity, acid rains, and deforestation, threaten Earth, which elevates the importance of Aldo Leopold's thoughts, who bring a new perspective to environmental ethics in preventing and eliminating these problems (Akkoyunlu Ertan 2015). The most important factor driving Leopold to philosophy was that he concluded that being conscious is not enough to protect the environment (Firat, 2003).

Leopold reveals the "Land Ethic" by retelling the story of Odysseus, who hanged a dozen of his female slaves for uselessness after returning from the Trojan War. In this story, Odysseus' action was not considered unethical or inappropriate, as slaves were properties of nobles. However, since then, ethics has evolved to a point where moral stance covers all people. The "Land Ethic" is Leopold's call to extend ethics to include soil, plants, and animals. The land is understood as pure property, like the slaves of Odysseus. People had privileges on lands but no obligations. An ecological understanding of land refutes Locke's view of land as property. This understanding mandates that land should no longer be treated as just an asset, a dead object that can be used and shaped however humans want. Instead, land should be viewed as a living organism that can be healthy or unhealthy, injured or killed (Des Jardins, 2013). Leopold unveiled the essence of his understanding with the words, "The land is not just land; it is a fountain of energy flowing through a circuit composed of plants and animals." Leopold uses the concepts of "biotic pyramid" or "land pyramid" to explain the mechanism in the land. Accordingly, plants absorb the energy from the sun to get the energy they need. The energy passes through a circuit called biota, which can be represented by a pyramid of layers. The bottom layer of the pyramid is soil. It continues with a layer of vegetation on the soil, a layer of insects on plants, a layer of birds and rodents on insects, and various animal groups until it extends at the apex to larger carnivores. The fact that the elements in the land pyramid are in harmony ensures that the functioning continues healthily (Leopold, 1968).

The Land Ethic recognizes inanimate nature elements, namely the land (Tont, 1996). It sees human being not as the ruler of the planet, but only as a member of the community

connected to land (Ardogan, 2019). The Land Ethic should not be regarded from a purely philosophical point of view. Nor should it be considered a technical phenomenon that concerns agriculturalists or soil scientists; it concerns all humanity. The utilitarian perspective, where land is seen as an environment where food products are obtained, has begun to change because land contains and maintains biodiversity and regulates climate, water, and nutrient cycles. From this point of view, no living being on Earth can be considered independent of the effects of human beings and natural land dynamics since the lives and future of all living beings largely depend on the health of our land resources and the quantity and quality of the services offered by land (Temiz & Turgay, 2020).

Deep Ecology

The problems that may arise due to current and future harm to organisms inevitably have an ethical dimension. When it comes to answering the question of which living beings are superior in terms of better living, there are those claiming all living organisms, as well as those pointing out species, ecosystems, or the whole biosphere. Consequently, the concept of deep ecology has emerged within the efforts to find answers to such questions (Ozyol, 2013).

Rachel Carson’s book *Silent Spring* introduced the deep ecology approach in 1962. Carson’s thoughts are deemed important in guiding the deep ecology approach. However, Leopold’s idea of land ethic formed the basis and was a source of inspiration for this approach (Session, 1995, as cited in Demir, 2020). Besides, Arne Naess became influential in the systematization of deep ecology by distinguishing shallow and deep approaches at the Conference on the Future of the Third World held in 1972. Shallow ecology values assets in nature for their instrumental value, while deep ecology appreciates their intrinsic values. Any asset in nature cannot be valued in terms of its value for human use. Every living being is a member of Earth; that is why it has value. When considered in terms of human benefit and/or use, it is likely to reduce the diversity and number of plants that are not useful in fields, such as agriculture and medicine; thus, creating a relationship of exploitation and oppression (Demir, 2020). The table below presents the distinction between shallow and deep ecology (Tamkoc, 1994).

Shallow Ecology Formulation	Deep Ecology Formulation
1. Diversity in nature is a valuable resource for humans.	1. Diversity in nature is a valuable resource in itself.
2. It is nonsense to mention values that are not for human beings.	2. Considering “value” only to be value for humans is a racial bias.
3. Plant species are valuable because they are used to benefit humans, medicine, and agriculture.	3. Plant species should be protected because their values are in their essence.

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|--|--|
| 4. Pollution must be stopped if and only it affects economic growth | 4. Stopping pollution must come before economic development. |
| 5. Population growth in developing countries endanger the ecological balance. | 5. The increase in the world population endanger the ecological balance. However, the populations and behaviors of developed countries are more dangerous. |
| 6. "Resource" refers to a helpful resource for humans. | 6. "Resource" means the source for all life. |
| 7. Humans cannot accept a large-scale regression in their standards of living. | 7. People should not settle for the decline in the standard of living of the overdeveloped nations but the decline in the general quality of life. |
| 8. Nature is cruel, and it should be. | 8. Humans are cruel and need not be. |
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Naess (2005, pp. 7-9) compared shallow and deep ecology considering pollution, resources, population, cultural diversity and appropriate technology, land and sea ethics, and education and science.

Pollution:

Shallow ecology: The technology aims to purify air and water and spread pollution more evenly. Laws limit pollution. The polluting industries are preferably exported to developing countries.

Deep ecology: It considers pollution from a biospheric perspective; thus, it focuses not on the effects of pollution on human health but life as a whole, including the habitats of all species and systems. For example, instead of investigating trees that tolerate acidity in acid rains, it puts the struggle against the economy and technology that creates this situation. It fosters the view that exporting pollution is not only a crime against humanity but also against life.

Resources:

Shallow ecology: In this view, Earth's resources belong to those who have the technology to exploit them. Animals, plants, and natural assets are valuable to the extent that they are useful to humans. They can be destroyed by indifference unless they are for human use.

Deep ecology: No natural object is considered just a resource. Emphasis is placed on an ecosystem approach rather than considering only isolated life forms or local situations.

Population:

Shallow ecology: An increase in the number of humans is considered a value in itself or economically profitable. Severe reductions in wildlife forms tend to be accepted as long as species are not driven to extinction, despite the destruction of wildlife habitats caused by increased human populations.

Deep ecology: Extreme pressures on living conditions are considered to result from the explosion of the human population. Pressure from industrial societies is an important factor, and population reduction should be a high priority in developing countries as well as in these societies. It is recognized that there should be a long-term reduction in the human population through moderate but persistent political and economic measures.

Cultural diversity and appropriate technology:

Shallow ecology: Industrialization as in the West is recognized as a target for developing countries. Universal adoption of Western technology does not adversely affect cultural diversity in today's non-industrial societies.

Deep ecology: Cultural diversity is the human-level equivalent of the biological richness and diversity of life forms. Industrial societies should place a high priority on cultural anthropology in education. The impact of Western technology on non-industrialized countries should be restricted.

Land and sea ethics:

Shallow ecology: Lands, ecosystems, rivers, and other wholes of nature are fragmented, and larger units are not taken into account. These parts are considered the properties and resources of individuals, organizations, or governments. Conditions, such as reducing land or groundwater quality, are seen as a loss to humans.

Deep ecology: Earth does not belong to humans. The lands, rivers, and fauna and flora of any country and the surrounding sea are not the properties of the citizens of that country. Humans live only on the land, using resources to meet their vital needs. Humans can surrender if their non-vital needs clash with the vital needs of non-human life forms.

Education and science:

Shallow ecology: As global economic growth makes further disruption inevitable, there will likely be a need for manipulative technology. Scientific attempts should continue to prioritize positive sciences, requiring high educational standards and intense competition in related learning areas in positive sciences.

Deep ecology: Education should focus on increased sensitivity to non-consumption

goods and products that are consumable for all, provided that reasonable ecological policies are adopted. Besides, there should be a shift from positive sciences to social sciences.

Naess (2005) outlined eight basic principles regarding deep ecology.

1. The well-being and development of human and non-human life on Earth have value in themselves. Their values are independent of the usefulness of the non-human world for human purposes.

Ecological processes on the planet must remain intact, as a whole. “The world environment must remain ‘natural’” (Gary Snyder). The term life is used in a broad and non-technical way, not as it is known in the literature but also for rivers (watersheds), landscapes, and ecosystems that biologists classify as “non-living.” Slogans, such as “Let the river live” expressed by supporters of deep ecology, may be examples of the meaning of this term.

2. The richness and diversity of life forms contribute to the relationship of these values and are considered “values” in themselves.

Species of plants and animals characterized as simple, lower, or primitive mainly contribute to the richness and diversity of life. They have value in themselves and should not be seen as steps towards higher or rational ways of life.

3. Humans have no right to reduce this richness and diversity except to meet their vital needs.

The term vital need is left ambiguous. Along with differences in climate and related factors, differences in the currently existing structures of societies should be considered (e.g., the Inuit need snowmobiles today to meet their vital needs; the same cannot be said for tourists).

4. The development of human life and cultures is in line with the significant reduction of the human population. The development of non-human life also requires such a reduction.

Humans in developed countries cannot be expected to reduce their excessive intervention in the non-human world to a moderate level overnight. It will take time and strategic efforts to stabilize and reduce the human population.

5. The current human intervention in the non-human world is excessive, and the situation is rapidly deteriorating.

Humans have changed the world and will likely continue to do so. Yet, what is at issue is the nature and scope of such interference. The struggle to protect and expand wild or near-wild areas should continue and focus on the overall ecological functions of these areas.

6. Therefore, policies must be changed; these policies will affect fundamental economic, technological, and ideological structures. The resulting situation will be somewhat different from the current one.

Economic growth conceived and practiced by industrial states today is incompatible with principles 1-5. There is little overlap between ideal forms of sustainable economic growth and current policies of industrial societies. Moreover, the concept of “sustainable” is still human-oriented. Although there are expressions, such as “self-determination,” “local community,” and “think globally, act locally,” uttered within societies, global action is required for profound changes.

7. Ideological change will mainly be towards the valorizing quality of life (being with an intrinsic value) rather than adhering to increasingly higher standards of living. There will be a deep awareness of the difference between great and sublime.

Some economists criticize the term quality of life for being vague. What is important to quality of life cannot be adequately measured and need not be.

8. Those who agree with the above are obliged, directly or indirectly, to attempt to implement the necessary changes. It is this principle that emphasizes the importance of deep inquiry as a process of following/developing/legislation of other principles.

Of course, there are various opinions on points such as “What should be done first?” “What should be done next?” “What is most urgent?” “What is not urgent but necessary?”.

Naess calls anyone who endorses these principles a “supporter” of the deep ecology movement. Naess emphasizes that those who support these principles can do so from a wide variety of different ultimate views. Just as birds build different kinds of nests in different habitats, human cultures growing by respecting the values of their ecological spheres have developed various forms of practices, technologies, and social orders (Drengson & Inoue, 1995).


In general, deep ecology is based on the principle of biospheric equality (Naess, 1973). Accordingly, every being on Earth has the right to live equally and realize themselves (Sakaci, 2013; Smith, 2018); therefore, they have an equal intrinsic value. However, no instrumental value can be attributed to them (Sakaci, 2013). On the other hand, deep ecology is criticized for the equality principle, which includes the effort to equalize all beings. In addition, deep ecologists’ describing primitive cultures as ideal habitats is another subject of criticism. While appraising primitive cultures as the most suitable society for environmental ethics, it is thought that all of these societies do not have an environmentalist ethical understanding in the sense advocated by deep ecologists (Yayli & Celik, 2011).

Environmental ethics approaches are examined under anthropocentric, biocentric, and ecocentric approaches. Below is a comparison of these approaches.

Anthropocentrism	Biocentrism	Ecocentrism
Anthropocentrism is the belief that considers human beings are the most important entity in the universe or earth	Biocentrism is the belief that all living beings have an inherent value	Ecocentrism is the belief that considers ecosystems including both living and non-living components have inherent value
HUMAN BEINGS		
Humans have greater intrinsic value than other species	Humans do not have a more inherent value than other species	Humans do not have more inherent value than other things
SYSTEM		
Human centered	Centered on all living organisms	Nature or ecosystem centered


To summarize these approaches, anthropocentric approaches adopt the understanding of protecting the environment as long as it benefits people. Biocentric ones also attach importance to other living beings other than humans and propose that these beings have value. Ecocentric approaches, on the other hand, argue that all living and non-living assets are valuable.

Eco-Friendly Person Activities



Students are divided into groups. Each group is given the text below and asked to read the text. They are expected to find an answer to the question at the end of the text.

The village, where you work as an administrator, hosts dozens of species and has walking paths. Wild monkeys, which are among these living species and roam freely on the walking paths, are very popular among tourists visiting the village. Tourists feed the monkeys they encounter on the walking paths with the food they bring with them. Over time, this situation has made monkeys addicted to these foods, and they have begun to demand foods from humans. In cases where humans do not want to share their foods with the monkeys, from time to time, they try to capture these foods. A new one of these events occurred at the end of this week, and a monkey trying to capture the fruit from a family's little child on the walking path caused the child to be afraid. The father, who saw his child crying, took the monkey away from there.



As the village administrator, you need to find a solution to this issue. What is your solution?

Groups are asked to present their solutions to the problem. Then, group discussions help identify which of these solutions is an effective one. Then, the solutions may be classified according to anthropocentric, biocentric, and eccentric ethical understandings.

Figure 6. Comparison of these Approaches to Environmental Ethics

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