



# Technological Impact on natural Environment and Ethical Perspective

**Bijay Kumar Sarkar**

**[Abstract:** The Recent technologies and their application have enormously effect on natural environment. These effects are therefore demoralizing. Scholars and ethicists regarding the case have described technology as alienating: making humans lose their connection with fellow beings and nature, besides causing environmental degradation. Now environmental degradation is threatening humanity and it is challenge to overcome by reducing or increasing technological use. The paper attempts to prove that humans need to adopt the ethics of *anthropoholism*, which sees the environment as having inherent value and humans as caretakers of the environment. Anthropoholism is the idea that human beings are a part of nature and that he cannot exist independently of the environment, hence technological tools should be developed and applied with the *live and let live* attitude towards the environment.]

**Introduction:** Since humans learned to make stone tools two million years ago, technology has been serving as a catalyst for positive global growth. We all know that technology can do some wonderful things. Sustained technological advancement is essential for the development of our species. And, as history has shown us, technology can have profound implications for our future. However, there's also the **negative impact of technology on the environment** that we cannot fail to consider. No doubt, the technology has a great negative effect on natural environment. The technologists always try to provide better one than present situation. They either improve human performances by simply working more and at a faster rate or create possibilities and options that did not previously exist. They make special possibilities for interacting with the world and the environment by applying calculations to information processing and thus form a new field for social dealings. In the process, technology has generated new ethical challenges in many areas of contemporary human life. The problem made by technology became more obvious at the outset of the industrial era 1760 to 1840 when humans started exploiting nature wildly for selfish purposes. This attitude has caused environmental degradation; and accordingly "anthropocentric" orientation permitted and drove humans to follow unfair, destructive and wasteful applications of technology on the environment for selfish purposes. Hence, we the people have become persistent, devastating and abusive to the natural environment. There is an urgent need to reevaluate man's uses of technological machines. Obviously, challenges like this raises serious ethical concerns. In particular, this work discerns serious conflict between humanity and nonhuman nature. Technological advancement is allowing humans to take out natural resources for their benefits to the harm of the environment, as humans often consider

nature as an inexhaustible resource to be exploited basically for human use. We the people are now deeply concerned with frequent changes in the climate and with the increasing global warming haunting the present-day world. Technologists, scientists, sociologists and economists have attempted and are still attempting to contribute their quota in overcoming this crisis. Philosophers also are framing environmental ethics through to make solution. This leads to the emergence of the field of environmental ethics, which seeks to regulate and guide the human-nature relationship. Some ethicists are worried about this principle and have interpreted it as privileging human beings over other non-humans in certain situations which amount to going back to the very anthropocentric connotation that biocentrism seeks to avoid. Ecocentrism came with another dimension of non-anthropocentrism, which holds that “the biosphere as an interconnected whole has moral standing” (van de Veer, Pierce, 2003: 178). Hence, eco-centrism is said to be a holistic environmental theory, according to which not only living beings but the whole ecosystem so, the ethics of *anthropoholism* is a sustainable mechanism for environmental ethics and environmental sustainability. *Anthropoholism* seeks to bridge the gap between the two seemingly opposed worldviews anthropocentrism and holistic ethics.

**Technological effects:** The term *technology* is derived from two Greek words ---- *techne* and *logos*. *Techne* means art, craft, skill or the way, or manner by which a thing is gained. *Logos*, on the other hand, means word, the utterance by which inward thought is expressed, or a saying. So, literally, *technology* implies discourse or words about the way things are “gained” (Jensen 2010). When most people speak of technology today, it means more than just discourse about means of something “gained”. The evolution of human society is described as a series of fundamental technological innovations. Humans often glorify the heroic inventors and their spectacular innovations. Through technological innovations, the tendency to leave visible scars after the earth’s resources have plundered is one thing that sets aside humans from other species in the environment. The environment can be seen as the surroundings in which an animal, plant or person lives and operates. From a historic perspective, humans have always affected the environment as they rely on the earth’s resources to sustain life. For example the issue of genetic engineering and biotechnology, where gene transplantation is done as a lifesaving option for people with severe ailments, such as --- heart, lungs, liver, kidney, etc. diseases. In the blind race for the achievement of worldly desire humanity has gradually cultivated an intense, individualistic outlook and attitude against the famous dictum: *live and let to live*. There is enough in the world to satisfy man’s needs but not his greed. Humanity’s relentless march towards scientific and techno-logical development has marred his caring attitude towards nature.

The environmental costs of consumer technology do not end there. These products also pose a problem at the end of their useful lives. A small proportion of old electronic devices are recycled. However, the vast majority ends up in landfill sites or burned in dumps. These dumps are usually located out of sight, around some of the planet’s poorest and most vulnerable people. Obviously, this not only endangers human health but also impacts the environment in a range of hugely negative ways. Only around one-fifth of e-waste generated globally is currently

formally recycled. Millions around the world are believed to work unofficially to recycle the precious materials which smart phones and other such devices need. These people are often exposed to dangerous working environments, and the surrounding environment can also be put at threat. But while e-waste is currently a massive threat to our environment, it could also be viewed as a massive opportunity. Precious metals and other minerals and metals in e-waste can be reclaimed, one of the many. Many useful materials can be reclaimed through careful recycling processes. By reclaiming them, rather than digging up more, we can reduce both the waste and the environmental harm associated with collecting new materials. This will offer us both environmental and economic benefits. The twenty-first century is marked by ecological, scientific and technological development, on one hand, and this technological development has caused serious environmental problems on the other. The major reason behind this environmental crisis is the rapacious exploitation of the earth's natural resources, speedy rate of urbanization and industrialization with the use of technology. Estimating the rapid rate of environmental degradation due to interference of man with nature, R. Dassman, in a witty response, argues that "the human race is like an ape with a hand grenade. Nobody can say when he will pull the pin of the grenade and the whole world will be destroyed" (Singh 1991: 329). R. Dassman's proposition seems true because of the rapid pace of industrialization since the dawn of the industrial revolution has raised the material standard of living of the people at the cost of the balanced natural environment. The adverse effect of rapid industrialization has led to severe environmental pollution which has ruined man's delicate relationship with nature. Reckless plundering of forest cover, the collapse of land for drilling of oil, excavation of land for mining, excessive withdrawal of groundwater for an industrial purpose has its fatal effects on the environment. Production of poisonous gases, industrial wastes released from human volcanoes (industrial chimneys) toxic chemicals, aerosols, polluted water, smoke and ashes are many of some undesirable harmful elements released due to industrialization. Discharge of several other toxic gases, smoke and aerosols into the atmosphere from human volcanoes pollutes the air humans breathe bringing about severe environmental problems. Such harmful elements explained above pollute the environment imperiling human health as well as the well-being of the environment. The hydrological environment presents a waning scenario wherein the stagnant water of the lakes and ponds is contaminated due to the release and dumping of industrial effluents and wastes resulting in the death and disease of the aquatic ecosystem. Some of the products of the chemical industry, e.g. different types of fertilizers, pesticides and insecticides applied to the soil and crops to enhance and hasten agricultural production reaches the food chain of a human and animal population indirectly bringing about their fatal disease and death.

The intensive burning of fossil fuels, forest and rapacious exploitation of forest-cover in the name of industrialization has augmented the attention of carbon-dioxide content of the environment. As this gas traps much of the earthly radiation, a rise in the magnitude of carbon-dioxide levels in the atmosphere leads to global warming which in turn causes a major shift in weather patterns, with rainfall increasing in some parts, droughts in another and hurricanes becoming stronger and frequent. The rapid pace of modernization and industrialization has led to greater utilization of fire extinguishers refrigerators; air conditioners and spray can dispensers emitting

halos and chlorofluorocarbons. Jet planes flying through the atmosphere releases nitrogen oxide. These gases released into the atmosphere are harmful in the sense that they deplete the stratospheric ozone layer which plays a vital role in filtering and absorbing the ultra-violet rays of the sun. The creation of ozone holes in the industrial hubs increases the incidence of skin cancer chiefly among the white skinned masses. Releases of sulphur dioxide from the industries bring about “acid rain” which is very harmful to the plant, animal and human life. Noise pollution, especially in the vicinity of industrial centers, cars and other technological products, is a serious form of environmental disturbance. It even affects the human brain, auditory mechanism and sometimes causes hypertension. The modern man is bewildered as he has to fulfill his needs and unwanted desires by the acceleration of productions through the adoption of scientific techniques, on the one hand, while, on the other hand, he ought to be conscious about the irreparable environmental damages caused by such techniques. When natural resources are depleted at a faster rate due to innovations without any sustainable attitude and ethical worldview in place, there will be environmental disequilibrium and crisis will certainly occur. Besides these when animals and plants are lost without replacements to keep the ecosystem a life, which will also constitute an environmental crisis (Osuala, Nyok, 2020). The environmental crisis will always be a major problem facing the earth as long as man continues to recklessly exploit the earth for his own benefits, for humanity’s demands on natural resources exceed nature’s capacity to regenerate on its own time cycles.

**Ethicists views:** The apprehension for environment is not finally new to humans, but it can be supposed that it has undergone obviously a disregard in the circle of philosophy for a long time. Even the philosophy of science has concentrated on scientific concepts and methods rather than on integrated nature. Social and political philosophy has also given more emphasis on the social environment than on the natural environment. None of the branches of main stream of philosophy, e.g. metaphysics, epistemology and ethics, has historically been hospitable to the issue of environment and its values. Only with the advent of the applied philosophy movement, environmental ethics has come out as a sub-discipline of philosophy. Environmental ethics argues that morality should be extended to include the relationship between human being and natural environment. It is the discipline that studies the theories and principles of the relationship of human beings to, and also the value and moral status of, the environment and its non-human contents (Akpan, Leonard, 2018). It concerns not only human behavior, but also the normative theories and principles as applied to the conservation and survival of the environment. Naturally, it thus involves human views on nature, value theories, human’s position on this earth, of the non-human animals and plants and the “non-living nature”. With all these, environmental ethics and philosophy have set out its journey. 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 in general. Moral philosophers, to be precise, environmental moral philosophers, have come forward to review humans’ traditional views towards nature and corresponding normative codes. Many of them have found out that traditional views and normative principles have neither been eco-friendly nor been morally adequate. They say it

fails to rise above the anthropocentric moral framework which takes human interests to be only intrinsically, and morally valuable, while the rest of non-human nature is regarded valuable, as long as it serves a human purpose only. Contemporary environmental philosophers regard anthropocentric ethics as hailing speciesism, the position that is based on species-discrimination, which exhibits human moral blindness and shallowness of heart to-wards the non-human nature (Bassey, Pimaro, 2019). Needless to say, this attitude goes against any healthy environmentalism. It seems that unless and until human overcome this speciesism and accept a holistic position in which a living organism or a plant species or a landscape is regarded as having some value in itself, humans would not feel a direct moral obligation to save them.

In 1971, the First Conference on Environmental Philosophy was held at the University of Georgia of USA. Two years later, Richard Routley (1973) published his paper, which advocated clearly for a new ethic against the dominant Western worldview of *anthropocentrism* (Beall 2015). L. White, also concurring with R. Routley's sentiment, averred that the whole question of the environmental crisis was a crisis of the West's anthropocentric philosophical, religious orientations and values (Whitney 2013). R. Fisher (2010: 3) defines *anthropocentrism* as "the assumption that man is the centre of all things", thus, it is also known as human-centeredness. The focus of anthropocentrism is humans and their interests. Anthropocentrism can also be said to be the view that humans alone are superior beings, the only beings with a moral status, are at the centre of the universe and, lastly, all other beings in the environment exist for an instrumental purpose to man. This implies that since anthropocentrism means human-centeredness, anthropocentric bias has helped humans' direct modern science and technology to exploit nature, for selfish purposes.

I. Kant thinks *only* humans have goals; R. Paden extends it to *all* sentient beings that possess goal-oriented behavior, making them morally relevant to the environment. Although this research admits that eco-centrists have inspired many radical environmental groups, e.g. the Earth Liberation, and Front and Earth First, it should be noted that eco-centrist ideology has often provided a weak foundation for policies governing human interactions with the non-human environment, most especially in the agricultural do-main. This research also strongly based on the presumption that the well-being of the Earth's present and future biotic systems strongly rests on human actions, specifically, policy-based action, which is human-cantered and this becomes one of the major flaws of eco-centrism.

Judging from the foregoing, this research deduces that one fundamental problem in contemporary environmentalism comes from an ideological divide in principle – the divide between the anthropocentricists, i.e. human-centred (those who regard nature as a mere means to human ends) and the non-anthropocentricists, i.e. non-human-cantered (those who decries humans' impact on what they believe seems untouched, intrinsically valuable nature). Thus, this research suggests that when the basic tenets of both schools of thought are being probed, it be-comes apparent that the divide is unnecessary as both are necessary for environmental conservation. The reason for this is not far-fetched as any attempt to construct a completely non-anthropocentric value scheme is likely not only to be arbitrary but also will be projecting certain values which are selected by a human course.

This human centeredness goes against any attempt to wipe out anthropocentrism from any theory in environmental ethics. Here in the statement has made some philosophers attempt to humanize environmental worldview to show these basic phenomena. Some philosophers, e.g. B. Norton (1984), A. Light, E. Katz (2003) and E. C. Hargrove (1992), argue that humans do not need a new non-anthropocentric environmental ethics for environmental conservation. B. Norton (1984) specifically argues that non-anthropocentric perspectives are conceptually flawed because they advance the idea that all anthropocentric perspectives are of harm to the environment. B. Norton goes on to underscore that the commonly perceived gap between anthropocentrists and non anthropocentrists is largely overstated, claiming that both philosophies embrace values that essentially depend on the long term health of ecological systems.

In providing a way forward, B. Norton (1984) then introduced the concept of *weak anthropocentrism* into environmental literature as against the conventional anthropocentric stance he considered strong. Thus, he became critical of the traditional notion of the term *anthropocentrism*, arguing that anthropocentrism has often been seen from one angle but must be seen from two angles: strong anthropocentrism and weak anthropocentrism. To B. Norton (1984), *strong anthropocentrism* holds that all valuations are described by reference to *human felt preferences*, which comprises any occurring human inclinations, whether it is being “rational” or not. What this implies is that *strong anthropocentrism* is the traditional notion of anthropocentrism that is geared towards fulfilling any “human felt” desires, inclinations, and preferences to the detriment of the environment, hence not environmentally or environment friendly. In contrast, weak anthropocentrism discards possibly irrational “felt preferences” and accepts only rationally “considered preferences” as relevant. Thus, *weak anthropocentrism* tries to put into consideration humans’ felt preferences, thereby taking environmental conservation into account before attempting to fulfill them. To explain this in bare terms, *weak anthropocentrism* sees humans as the centre of moral concerns like *strong anthropocentrism* but considers environmental conservation in its deliberations and actions. For instance, the first principle of the *Rio Declaration Conference* states that: “Human beings are at the centre of concerns”; though the major motive of the conference was to draw attention to the in-creasing aggregate of environmental problems the world faces and to seek solutions. Here, *weak anthropocentrism* can be seen as a position which provides sufficient reasons for the protection of nature, despite holding on to an ideology of humans being at the centre of moral concerns.

So, here it is aware that (weak) anthropocentric explanations on why the interests of humans are always before the interests of non-humans are not al-ways convincing enough. One of such reasons is that many ethicists are worried that in the case of conflict of interests, the *weak anthropocentrism* will automatically take sides with humans’ interests, not with the non-humans’. Such an ideology can be rightly accused of speciesist behavior because preference is given to the members of the human species at the expense of other species for morally arbitrary reasons. The eco-centrists would argue that if it is wrong to inflict avoidable physical suffering on humans as they are sentient beings, then it would surely be morally arbitrary to impose avoidable suffering on

other sentient beings. For this reason, giving special preference to human species against other sentient beings is condemned as speciesist. This is one of the major problems inherent in B. Norton's *weak anthropocentrism*.

Consequently the above criticism, in an earlier by the present researchers has been attempted to reconstruct the concept of *weak anthropocentrism* to mean those human-centered approaches that help for environmental conservation. Since human beings have a tendency to rate the things around them, they are prone to protect what they consider as valuable, and this capacity for valuation can help humans extend values to nonhuman parts of nature. Expressing a similar line of thought even more candidly, R. de George (1994: 23-24) emphasizes that "considered preferences extending morality, which is a human institution to the land, to animals, to species, is something that we humans can do. And in extending our ethics in this way, all we are extending is a human ethic. Ethics must place humans at the centre, at least in the sense that ethics is a human institution".

Here it is argued that *weak anthropocentrism* is not enough for environmental conservation because as B. Norton suggests, an adequate environmental ethic must be holistic.

The reasons, among others, gave birth to *anthropoholism*, environmental ethics, which is hinged on the reformed *weak anthropocentrism* and the holistic environmental framework *Anthropoholism* is defined as "the ethical worldview that acknowledges man's value in conservation and his role in the ecosystem but holds that despite his position, man is just a part of nature, such that he cannot exist independently of the environment" (Bassey 2019: *Anthropoholism* reveals environmental ethics, which recognized the intrinsic worth and moral standing of all beings in nature while at the same time acknowledging the unique place of humanity as caring for nature in the universe. The four basic principles of anthropoholism are listed below-----

- i. Humans are members of the earth's community of life on the same terms as all the non-human members are;
- ii. The earth's natural ecosystems are seen as a complex web of interconnected and interdependent elements;
- iii. Each organism is conceived of as a teleological centre of life, pursuing its good in its way;
- iv. Humans are important, not superior to any other beings in the environment.

These four basic principles demonstrate the importance of man to both environmental conservation and environmental ethics, while also alluding to the fact that humanity is in a connected *whole* with all other existence in the environment. The place of man cannot be thrown away because morality is necessarily a human institution hence, human beings must necessarily be at the centre of morality. Also, any environmental ethics or environmental sustainability theory just like *anthropoholism* which accepts human beings at the centre of morality must recognize the idea that non-human beings have a value of their own and hence have moral standing. Furthermore, *anthropoholism* as an ethical view rejects any attempt to put at par human *moral worth* and that of nonhuman beings. This follows from the argument that if humanity has a responsibility to care, tend and is being regarded as the "chief priest" of nature, it then follows that some higher moral worth should be

afforded. However, it should be cautioned that this higher moral worth does not imply a supreme position or make humans more important than all other beings in the environment. This can be explained with the analogy of a “complex building” i.e. environment, where tenants live. Among these tenants, that is different species of beings is one tenant who serves as a caretaker. Though, all individuals or different species of beings have equal rights to live in this home i.e. environment, as they pay the same rent and live by the rules and regulations laid down by the owner of the building. However, the tenant-caretaker, we the humans, with more responsibility and duty has more moral worth. Moral worth is defined by B. Herman (1981: 375) as “an action required by duty and has as its primary motive the motive of duty”. Following B. Her-man’s (1981) definition, this paper avers that though all tenants i.e. species in the building or environment are duty bound to uphold the laid down principles of the building, the caretaker has more *moral worth* because of the delegated responsibility as they are responsible for looking after individuals, assets, at the request of an owner. Following the above, *anthropoholistic* ethical view establishes that when humans operate on a higher pedestal of responsibility, i.e. wisdom, the possibility of this wisdom devolving into better treatment of nature is enhanced. The ethics of *anthropoholism* emphasizes that such sensibility recognizable in humanity rationality will help lead humanity into harmony with nonhuman nature, and fellow human beings, both present and future generations. It is also important to point out that ethics is not a matter of taste; it must be a self-evident truth analogous to the reasoning of mathematics or logic. This self-evident truth should cut across all worldviews and should be universal before it can be advocated as authentic environmental ethics. The present author believes that humans adopting the ethics of *anthropoholism* will provide an ethical, logical and effective means of addressing environmental issues. It neither separates humans from nature, but alludes to the moral importance of human. Anthropoholism does not morally justify human abuses of natural resources but rather advances the notion of humans as a part of the natural world while giving assigned value to the ecological health of nonhuman natural systems.

**Sustainable Development:** It can be argued from the position of this work that morality is agent-based and therefore humans must be morally responsible to the environment. In the specific sense of furthering anthropoholistic environmental ethics, this aspect of the communalistic principle helps to put under check human-nonhuman nature conflicts by keeping to the barest least excessive competition by humans over natural resources. In essence, the inevitability of human use of nonhuman nature for their purpose is recognized but is also furthered under the guide of a moral system, which operates on the principles of need rather than the desire for gathering. Besides, the communalistic or holistic principle ensures communal responsibility towards nonhuman nature. Human beings are obligated by a moral system to be accountable to their God, to nature and to the community in their interaction with nonhuman nature. The principle of stewardship embodies an approach of caring for nonhuman nature. It is further beached on a concern for future generations. *Our Common Future* defines environmental sustainable development as “a process in which the exploitation of resources, the course of investments, the orientation of technological development and institutional change all in harmony, and enhance both the current and future probable to meet human needs and aspirations” (Roberts 2010: 57).

Sustainable development is said to be the growth that meets the needs of the present without compromising the capacity of future generations to meet their needs. Everything we the people need for our survival depends on the natural environment. Environmental sustainability makes the conditions with which both humans and nature can exist in productive harmony with one another while still being able to maintain social and economic requirements. Sustainable development is commonly understood to require a balanced pursuit of three goods: ecological health, social equity and economic welfare. It is grounded on the ethical commitment to the well-being not only of the present generation population but also the well-being and enhanced opportunities of the future generation. Sustainable development is about ethics because it calls on present people not only to consider the condition of the current impoverished population but also the potential condition of future populations who are the responsibility of production and consumption patterns today. Environmental ethics is interlinked with a sustainable environment and development as a whole. It teaches humans to be healthy and reciprocal to the global environment and development. The ethics of *anthropoholism* is in line with environmental sustainability because it involves rational acceptance of not only human's limitations as human beings but also a call on human beings to make certain sacrifices for the good of both nonhuman nature and its species-being. Actually, this will demand radical changes in human attitudes towards nonhuman nature, moderation in consumption mannerism and generally in human lifestyles. This is premised on the overall understanding that sustainable fulfillment of human needs is inextricably connected with sustainability in ecological balance; hence nature provides the material context within which human needs are fulfilled.

We the people cannot deny the fact that technology needs ethics as new emerging technologies to give humans additional power to act, which implies that humans need to make choices they did not have to make before. While, in the past, human actions were involuntarily constrained by egocentric weakness and this has led the earth to a state of environmental degradation. In view of so much technological power at disposal, humans have to learn how to be voluntarily constrained by their judgment: their ethics, if the environment must be sustained. Positive change requires big shifts to be made not only by producing companies, but also by governments, authorities, and individuals. Appropriate legislation can force the hands of tech companies (and consumers) and be an agent of good when it comes to the environment.

**Conclusion:** It is possible for us to significantly reduce the significant harm that technology does to our environment. As consumers, we often have more power than we believe to make a positive impact. After all, if we buy products, they will keep being made. By withdrawing our financial support from companies who refuse to make things better, we can be part of creating a more sustainable future. Humans ought not to make the world a less pleasant place for future generation than they have inherited from their ancestors by dumping wastes into rivers, lakes and oceans, cutting down forests indiscriminately and polluting the atmosphere with noxious gases. As temporary inhabitants of this planet, human beings do have certain duties to perform for future generations such as not to pollute the atmosphere, to protect threatened plant and animal species, to preserve the beauty of the wilderness areas, and artistic treasures of earlier human civilizations.

**Reference:**

1. Akpan B. S., Leonard, N., 2018: *Environmental ethics: from philosophy to movement*. "Bulletin Social Economic and Humanitarian Research".
2. Akpan O., 2013: *Man or the Machines – Who is in Control? A Revaluation through Philosophical Buffers*. "Interactions in the History of Philosophy. PHILHIST'13 Conference Proceedings".
3. Asuquo G., 2020: *Live and Let Live: Making Sense of Samuel Bassey's 'Anthropoholism' as Ethics for Environmental Management*. "Cogito – Multidisciplinary Research Journal".
4. Aunger R., 2010: *Types of technology*. "Technological Forecasting and Social Change".
5. Bankole-Medina K., 2019: *The Traditional African Worldview and Medicine*. Oxfordshire United Kingdom: Taylor & Francis Publishers.
6. Regan T., 1987: *The Case for Animal Rights*. Oxford: Oxford University Press.
7. Roberts J., 2010: *Environmental policy*. London: Routledge.

