



Technology, environmental sustainability and the ethics of anthropoholism¹

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Abstract

Technology has tremendously shaped human society, economy and environment. The quest for better ways to human development has always been a key driver of technological advancement. However, such advancements have somewhat turned human beings to slaves of modern technology, its effects are therefore devastating. Several philosophers of technology have described technology as alienating: making humans lose their connection with fellow beings and nature, besides causing environmental degradation. Even though civilisation faces new unprecedented challenges regarding the negative impacts of technology on human societies, it can still be useful. This work posits that environmental challenges threatening humanity are not something that can be simply overcome by reducing or increasing technological use, but rather by humans re-thinking the attitude in which technology is applied to the environment. This study investigates the possibility of environmental sustainability through the ethics of anthropoholism. This work agrees with several environmentalists that the traditional anthropocentric attitude, which sees the environment only as a store-house for human exploitation with the use of technology is the major reason behind environmental degradation. This research reveals 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 (s)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. This study, as philosophical research, is critical in approach and uses the textual and contextual analytic method in arriving at its conclusions.

Keywords: anthropoholism, technology, sustainability, environmental ethics, live and let live.

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1. Introduction

New technologies usually arrive with some promises of changing human life for the better. They either improve human performances by simply working more and at a faster rate or create possibilities and options that did not previously exist. Computational machines are one such technology. They create different possibilities for interacting with the world and the environment by applying calculations to information processing and thus form a new arena for social interaction. In the process, technology has generated new ethical challenges in many areas of contemporary human life. It has affected how humans now interact with fellow beings and the environment. Beyond that, it has also rendered all the norms of a pre-computer society, including those associated with education and values, open to question (Saha 1999).

The problem posed by technology became more obvious at the outset of the industrial era (1760-1840) when humans started exploiting nature recklessly for selfish purposes. This attitude has caused environmental degradation; and an anthropocentric mindset has been blamed for the problem. Anthropocentrism literally means human-centeredness. Hence, "anthropocentric" orientation permitted and drove humans to pursue exploitative, destructive and wasteful applications of technology on the environment for selfish purposes. In this way, human beings have become pervasive, overwhelming and abusive to the natural environment. C. Akpan (2013) raises the question of whether it is the man or the machines that are now in control. This author further warns that the value placed on machines by man is alarming and that the machines have now turned around to devalue humanity and the environment. Hence there is an urgent need to re-evaluate man's uses of technological machines. Of course, challenges like this raises serious ethical concerns. In particular, this work discerns serious conflict between humanity and nonhuman nature. Technological advancement has and is allowing humans to extract natural resources for their benefits to the detriment of the environment, as humans often consider nature as an inexhaustible resource to be exploited basically for human use (Ozanne, Smith, 1995).

The present-day environmental crisis has forced humanity to rethink their traditional attitude towards the environment or nature at large. Humans 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 which these problems are to be looked at and solutions sought for. This has led to the emergence of the field of environmental ethics, which seeks to regulate and guide the human-nature relationship. According to contemporary environmentalists, against the traditional "anthropocentric" worldview, the human species occupies no special position on the earth, and nature in its biotic and abiotic parts has value in itself, which means nature has inherent value, irrespective of its usefulness to any other species, including the human race (Bassey 2019).

In the initial phases of the emergence of environmental ethics, articulating a non-anthropocentric ethic (i.e. an ethical worldview not centred on humans) was seen as the only way the interests of the environment could be accommodated and protected. Different views were advanced in this regard; some maintained that sentience (or the ability to feel pain or pleasure) was the appropriate criterion (Humphreys 2020), while others found it in bio-centrism, "being a subject of a life". Others still argued that "life as a whole, including the whole set of ecological relationships and conditions forming the preconditions and life support system of life in general" should be the criterion for moral considerability (eco-centrism) (Leigh-Lawrence 2017: 181). However, sentientism has been accused of being too biased to animals, completely leaving out the plant kingdom and other non-living beings in the environment. Bio-centrism promises to widen the scope of moral concern to include not only human beings but all *living entities*, including non-human animals, plants, etc. Hence, bio-centricism signifies a life-centred world-view of environmental philosophy (Basl 2019). However, there is a problem with bio-centrism which is only centred around "life", as the environment also contains non-living entities which are *abiotic*, viz. rocks, water, minerals, etc. This implies that bio-centrism is systematically biased to non-living entities in the environment as it excludes *abiotic entities* in its consideration. This is not plausible for environmental ethics, as every being in the environment deserves respect. Also, Paul Taylor, a major advocate of bio-centrism, introduced a principle of self-defence which argues "that human interests can over-ride the interests of other living things where significant human goods are at stake" (O'Neill et al., 2017: 85). 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.

Eco-centricism came with another dimension of non-anthropocentricism, 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, including the abiotic part of nature, is worthy of moral consideration. However, T. Regan (1987) cautioned that environmental holism or eco-centric ethics taken to its logical conclusion leads to environmental fascism. Eco-fascists put the well-being of the environment, at the forefront of their ideology, which implies that everyone has the right to use all means necessary to save the environment, including sabotage and murder (Nelson 1996). Or, as J. O'Neill et al. (2008: 105) put it, holism "appears to justify human diebacks for the sake of the summum bonum; the highest good of the biotic community". A similar criticism can be seen in S. Bassey's (2019) against African communal environmentalists, viz. G. Tangwa (2007), S. Ogungbemi (1997), O. Ugwuanyi (2011), O. Oruka (1992), K. Wambari (1997), etc., whom, while trying to fashion out a communal African environmental ethics (Holistic Environmental Ethics) placed all emphasis on the environment. Among these philosophers, following the traditional communal philosophers' (excluding K. Gyekye's moderate communitarianism), the importance of man in the environment was silent or overlooked. For instance, K. Wambari specifically opined that anthropocentric connotation is alien to the traditional African worldview and the African worldview is strictly communitarian (holistic), likewise G. Tangwa (2007: 392) attests that "the Western world-view can be described as predominantly anthropocentric and individualistic, and contrasted with its African counterpart, which I [Tangwa] have described as eco-biocommunitarian". These two and many other African communal environmentalists advocated for environmental holism within the African context and argued as if no level of individualism (anthropocentricism) is inherent within the African worldview and environmental ethics.

There is no doubt that anthropocentricism in environmental ethics is the opposite of environmental holism. This is because anthropocentricism is humancentred, while eco-centricism - holistic environmental ethics - is environmentcentred. However, this paper states that staying extreme to anthropocentric or ecocentricism - holistic environmental ethics - position is not ideal for environmental ethics. This is because any attempt to conserve the environment (i.e. sentientism, biocentrism, eco-centrism, etc.) will involve the human value system as well as an obligation which is still human-centred; it can be called weak or weakly anthropocentri*cism.* This implies that a minimal level of anthropocentrism should be welcome in environmental ethics, as long as the speciesism embedded in the traditional concept of anthropocentrism is not evident. However, it is important to note that an earlier version of weak anthropocentricism has been advocated by Bryan Norton (1984) who had accused many environmentalists of seeing the traditional conception of anthropocentricism only from an extreme version. He polarised anthropocentricism into weak and strong anthropocentricism prototypes. For weak anthropocentricism, B. Norton (1991) sees it as satisfying considered preference of human wants as contrasting to strong anthropocentricism which he sees as satisfying any felt preference of human wants. This means that *weak anthropocentricism* tends to be environmentally friendly, the reason being that it *considers* the environment before attempting to fulfil any desire held by a man. Strong anthropocentrism fulfils any felt desire held by man without consideration; hence, it leads to reckless exploitation of nature (Piso 2019). This work agrees with B. Norton that weak anthropocentric worldview makes possible environmental ethics that help to praise and censure certain human actions towards the environment.

It is also important to note that *weak anthropocentrism* does not imply *holistic environmental ethics* as it only considers worldviews and accord some form of respect to non-human beings in the environment. This is the reason why this work adopts the ethics of *anthropoholism* as a sustainable mechanism for environmental ethics and environmental sustainability. *Anthropoholism* seeks to bridge the gap between the two

seemingly opposed worldviews (anthropocentricism and holistic ethics). In anthropoholism, one finds a fusion of the weak anthropocentricism with holistic environmental ethics. Anthropoholism sees all beings within the environment in an interconnected web in which all beings cannot survive without one another. It accepts the importance of man in the environment but argues that human is not supreme above other beings in the environment. Anthropoholism tries to balance the extreme ethical worldviews of anthropocentricism and holistic environmental ethics. This essence of this paper is to investigate how environmental sustainability can be achieved by humans while applying technology to the environment with the ethics of anthropoholism.

2. Technology and environmental crisis

The term *technology* comes from two Greek words, transcribed as *techne* and *logos*. *Techne* implies art, craft, skill or the way, means 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). Lately, *technology* has gained more diverse meanings. In one respect, the term has come to mean something narrower. For instance, the etymological definition given above would admit politics or even art as *means of something gain*. Though these deeds are permeated by technology, most people would not see them as examples or subsets of technology. In another regard, when most people speak of technology today, it means more than just discourse about means of something "gained".

Firstly, L. Goeller (1996) sees technology as the rational process of generating *means* to order and transform energy, matter and information to achieve *certain valued ends*. Secondly, J. Cockcroft (1965) avers that technology is the set of means (devices, tools, systems, procedures and methods) created by the technological process. Technological objects range from toothbrushes to transportation systems. Thirdly, T. Layton (1974) sees technology is also the knowledge that makes the technological process feasible. It entails the procedures and facts necessary to manipulate and order energy, matter and information, as well as how to realize new means for such transformations. Fourthly, R. Aunger (2010), sees technology as a subset of related technological knowledge and objects. For instance, medical technology and computer technology are examples of technologies. This work adopts the definition of technology to mean the scheme consisting of the technological knowledge, technological process, technological objects, developers of technological objects, users of technological objects, and the worldview (i.e. the beliefs about things and the value of things that shape how one views the world) that has emerged from and drives the technological process (Kirkpatrick 2008). This is what Jacques Ellul referred to as the *technological system* (Davis 2018).

The evolution of human society is sometimes described as a series of radical technological innovations. The progress of society is often described in terms of chains of technological breakthroughs each one replacing its antecedents. Humans often glorify the heroic inventors and their spectacular innovations. Their names and achievements are forever written in society's special "Halls of Fame" the historical writings and the Nobel Prize. The world will always celebrate the achievement of James Watt, Thomas Alva Edison, Alexander Graham Bell or Charles Babbage for their technological breakthroughs. However, 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. Take, for instance, the issue of genetic engineering and biotechnology, where xenotransplantation is seen as a lifesaving option for people with severe ailments, e.g. heart, lungs, liver, kidney, etc. diseases. J. Okeke and C. Akpan (2012) note that where there are no human donors, biotechnologists have resorted to falling on non-human animals as the "sacrificial lamb" in so far as the animal organs are seen as congenial to the human erring organs. How this type of practice by man has destroyed the balance in the eco-system is not farfetched. Thus it is not out of place to say that in the blind race for the fulfilment of materialistic desire humanity has gradually cultivated an intense, individualistic outlook and attitude against the famous dictum: live and let others to live. He even fails to remember the Gandhian axiom that there is enough in the world to satisfy his needs but not his greed. Humanity's relentless march towards scientific and technological development has marred his caring attitude towards nature. During the Stone Age, several pieces of evidence exist that humans in the Stone Age wiped out various animal species in places as varied as the plains of North America and the mountains of New Zealand (Ryder 1996). Yet the environmental effects of hunting were minimally equated to the influence of agriculture, including herding as well as cultivation and, especially, industrialisation (Eyo 2019).

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 urbanisation 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 industrialisation 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 industrialisation 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 industrialisation. 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 imperilling 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 fertilisers, 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 industrialisation has amplified the concentration of carbondioxide content of the atmosphere. As this gas traps much of the terrestrial 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 modernisation and industrialisation has led to greater utilisation of fire extinguishers refrigerators, air conditioners and spray can dispensers emitting halos and chlorofluorocarbons (CFC). 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-violate rays of the sun. The creation of ozone holes in the industrial hubs increases the incidence of skin cancer chiefly among the whiteskinned 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 centres, 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 fulfil 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. Again, 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 outstrip nature's capacity to regenerate on its own time cycles. The environmental crisis caused by man has become the reason for the emergence of a philosophical field called environmental ethics.

3. Environmental philosophy and the ethics of anthropoholism

The concern for nature is not completely new to humans, but it can be said that it has undergone conspicuous neglect 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 mainstream Western 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 human-nature relationships. Newly developed environmental ethics and philosophy is that 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 behaviour, 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 nonhuman animals and plants and the "non-living nature" (Manzini 2019). With all these, environmental ethics and philosophy have set out its journey.

Being faced with an imminent eco-catastrophe, responsible thinkers from diverse spheres of life, both academics and activists, have come forward to tackle this problem. Contemporary philosophers, especially moral philosophers, have responded as well. They have been concerned with the moral grounds for protecting the nonhuman 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 (Western) natureviews 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 towards 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 (i.e. intrinsic/inherent value), humans would not feel a direct moral obligation to save them. Genuine ecological ethics demands that as humanity is inseparably connected with other things and beings, nature should be regarded as intrinsically or inherently valuable, irrespective of their usefulness to the human species.

In 1971, the First Conference on Environmental Philosophy was held at the University of Georgia, USA. Two years later, Richard Routley (1973) published his paper, which advocated clearly for a new ethic against the dominant Western worldview of *anthropocentricism* (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 (Kolb 2018). This implies that

since anthropocentricism means human-centeredness, anthropocentric bias has helped humans' direct modern science and technology to exploit nature, for selfish purposes.

The above thinking led moral philosophers, as Ben A. Minteer noted, to shift focus to "the articulation of a new nature-centred (eco-centricism) or nonanthropocentric worldview and an alternative set of moral principles able to account directly for the good of non-humans and the natural world as a whole" (Minteer 2009: 4). This implies that nature-centred or non-anthropocentric ethicists think that the discrimination found in *anthropocentricism* is not a sound moral position, as they argue in favour of equal moral worth for all beings. Hence, non-anthropocentrism (eco-centricism) plays down human's higher role in the environment, sees all members of the environment as equal and the environment as the common good. In connection with the above, S. Rowe (1994: 106) concludes that "logic points to the ecocentric proposition that people exist solely for the sake of the world". This work certainly agrees that biotic life and the world existed long before human beings, for billions of years; and there is the likelihood that both the world and abiotic life will continue even if human species goes extinct. But if humans exist only for the Earth as the eco-centrist suggests, what then is the Earth as well as life purpose for its continuality despite the major mass extinction of species? R. Paden's (2003: 54) attempts to answer this question when he avers that, "nature is not goal-directed and, therefore [...] it can have no interests". R. Paden's (2003) argument is true because environmental sta*bility* is not a goal of the ecosystems but rather a result of the goal-directed behaviour of the beings within them, i.e. plants and animals. Hence, if natural systems have no goals, then they also have no interests.

This research is strongly aware that R. Panden's (2003) statement sounds very much similar to I. Kant (2019) argument, which reckons humans as the only beings with interest, but this research also admit here the major difference. While I. Kant (2019) thinks *only* humans have goals, R. Paden extends it to *all* sentient beings who possess goal-oriented behaviour, 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 domain. 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 (anthropocentricism and nonanthropocentrism) are being probed, it becomes 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-centredness goes against any endeavour to wipe out anthropocentrism from any theory in environmental ethics. The above statement has made some philosophers attempt to humanise 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 chasm 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 anthropocentricism* into environmental literature as against the conventional an-

thropocentric stance he considered strong. Thus, he became critical of the traditional notion of the term *anthropocentricism*, arguing that anthropocentricism has often been seen from one angle but must be seen from two angles: strong anthropocentricism and weak anthropocentricism. To B. Norton (1984), strong anthropocentricism 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 anthropocentricism* is the traditional notion of anthropocentricism that is geared towards fulfilling any "human felt" desires, inclinations, 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 anthropocentricism tries to put into consideration humans' felt preferences, thereby taking environmental conservation into account before attempting to fulfil them. To explain this in bare terms, weak anthropocentricism sees humans as the centre of moral concerns like strong anthropocentricism 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 increasing aggregate of environmental problems the world faces and to seek solutions. Here, weak anthropocen*trism* can be seen as a position which provide sufficient reasons for the protection of nature, despite holding on to an ideology of humans being at the centre of moral concerns. This paper submit that such justification for the protection of the environment is more defendable compared to non-anthropocentric theories.

Nonetheless, in this paper it is aware that (weak) anthropocentric explanations on why the interests of humans are always before the interests of non-humans are not always 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 behaviour 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 inflict 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 anthropocentricism*.

Consequent upon the above criticism, in an earlier by the present author (Bassey 2019) had attempted to reconstruct the concept of *weak anthropocentricism* to mean those human-cantered approaches (human obligation, inclination and value system) that help for environmental conservation. Since human beings tend to value 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".

To further elucidate this paper point, E. Hargrove's account of anthropocentricism as meaning human-cantered, in a sense referring to a human-oriented perspective (human obligation, inclination and value system), seeing things from the human viewpoint (Hargrove 1992: 175), then should become the new conception of *weak anthropocentricism*. This argument is also supported by R. Watson (1983: 65) when he avers that: "Human interest in survival is the best ground on which to argue for an ecological balance which is good both for human beings and for the whole biological community". The above statement embodies S. Bassey concept of *weak anthropocentrism*, which this paper is believed to provide the best approach to future environmental ethics, action and policy.

Likewise, it is argued in this paper that *weak anthropocentricism* is not enough for environmental conservation because as B. Norton suggests, an adequate environmental ethic must be holistic (Norton 2003: 167). Here, the present author believes that the holistic ethics enshrined in the African communitarian worldview (Ubuntu) grand statement: 'I am because we are, since we are, therefore I am' (Bassey, Bubu, 2019). Applying this statement to ecological terms, *I* stands for the human species, and *we* signifies the collective environment, including all existence. Therefore, the phrase can be interpreted as: the human species (I) exists because the environment (we) does exist since the environment (we) does exist, the human species (I) exists. This African communitarian phrase "I am because we are, since we are, therefore I am" is in contradistinction to the Western philosophical disposition found in R. Descartes' (1641) dictum: *cogito ego sum*, which implies "I think, therefore I am". The *cogito ego sum* dictum alludes to a selfish proof of the existence of a single species of being enshrined in *strong anthropocentric* connotations of the Western school of thought.

The above reasons, among others, gave birth to *anthropoholism*, environmental ethics, which is hinged on the reformed *weak anthropocentricism* (human obligation, inclination, and value system) and the holistic environmental framework "I am because we are, since we are, therefore I am" of the African communitarian worldview. *Anthropoholism* is defined as "the ethical worldview that acknowledges man's (anthropo) value in conservation and his role in the eco-system but holds that despite his position, man is just a part of nature, such that he cannot exist independently of the environment (holism)" (Bassey 2019: 1). *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:

- humans are members of the earth's community of life on the same terms as all the non-human members are;
- (2) the earth's natural ecosystems are seen as a complex web of interconnected and interdependent elements;
- (3) each organism is conceived of as a teleological centre of life, pursuing its good in its way;
- (4) humans are important, not superior to any other beings in the environment.

The four basic principles show 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 jettisoned because morality is necessarily a human institution (does this statement not contradict what environmental ethics represents – Remember that Environmental Ethics suggests that morality is beyond the human species); 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" (environment), where tenants (different species of being) live. Among these tenants (different species of beings) is one tenant who serves as a caretaker (humans). Though, all individuals (different species of beings) have equal rights to live in the building (environment), as they pay the same rent and live by the rules and regulations laid down by the owner of the building (presumably God). However, the tenant-caretaker (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. Herman's (1981) definition, this paper avers that though all tenants (species) in the building (environment) are duty-bound to uphold the laid down principles of the building (environment), the caretaker (humans) 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.

N. Osuala (2019) and G. Asuquo (2020) had attempted a critique on anthropo*holism*, questioning its ontological foundations – the worldview where it is built on. It can be argued that both *weak anthropocentricism* and *holistic ethics* which are the basic tenets anthropoholism is evident in the ontological foundations of many environmental worldviews. For instance, through the Judeo-Christian worldview, the Holy Bible advocates that humanity acts as a steward of the environment and also averred that the earth is the Lord's and everything was created for His (God's) glory. Since, humanity is a creation of God just like all plants, animals and other beings within the environment, it is expected that humans respect nature because it is God's. A negation of this commandment implies "sin", hence, against the divine given mandate. The African communal ontology is also anthropoholistic because it advocates and agrees that humanity has a unique place in the environment as a caretaker or chief priest of nature and also argues that humanity is one with nature (holism) – (Bassey, Mendie, 2019). B. Norton (1984) in explaining his concept of *weak anthropocentricism* had already demonstrated that oriental religions, including Jainism and Buddhism, contain elements of both weak anthropocentricism and holistic environmental ethics. This can also be said of many other ontological foundations on which worldviews are built. If this is the case, *anthropoholism* seems to be a valid environmental worldview that cuts across many, if not all, worldviews.

The present author believes that humans adopting the ethics of *anthropoholism* will provides an ethical, logical and effective means of addressing environmental issues. It neither separates humans from nature, but allude 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.

4. Environmental sustainability and ethics of anthropoholism

It can be argued from the position of this work that morality is agent-centred and therefore humans must be morally responsible to the environment. Thus, R. Sylvan and D. Bennett (1994: 14) support the above when they aver that "the environment remains [...] mere backdrop to actions of agents". Also, the holistic ethics found in African communitarianism "I am because we are since we are I am" reveals "live and let live" attitude of tolerance which helps to ensure fairness and equity in the distribution of resources by humans, including future generations.

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 minimum undue competition by humans over natural resources. In essence, the inevitability of human use of nonhuman nature for their purpose is recognised but is also furthered under the guide of a moral system, which operates on the principles of need rather than the desire for accumulation. 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 attitude of caring for nonhuman nature. It is further grounded on a concern for future generations. Our Common Future defines environmental sustainable development as "a process in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change [will] [...] all [...] [be] in harmony, and enhance both the current and future potential 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 too. Everything humans need for their 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 (Njar, Enagu, 2020). 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 specie-being. In practice, 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 fulfilment of human needs is inextricably connected with sustainability in ecological balance; hence nature provides the material context within which human needs are fulfilled. The principles of *anthropoholism* are evident in the definition of environmental sustainability as J. Palmer (1992: 182) avers that "it calls for a collective responsibility for our earth, today and for the future [...] such a cooperative spirit may highlight the importance of a shared ethic of sustainability and its contribution deepening of understanding of the role of human life".

Also, humans 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 (strong anthropocentricism) 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.

5. Conclusion

Since the 1970s, the topic of ethical obligations to future generations has been of interest to philosophers, economists, environmentalists and others. While the context for application differs for each field, the central issues are the same: whether a current generation has moral obligations to non-contemporaneous future generations, the nature of those obligations, and whether those obligations require an earlier generation to make sacrifices for a future generation. Many scholars agree that 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 civilisations. This can be done when humans embrace an ethical worldview that aids environmental sustainability. As argued in this work, ethical context can be understood from the concept of sustainability, because the sustainability of the environment means taking into account the effectiveness, moral values and goals of environmental conservation. Hence, sustainability cannot be achieved without attention to its ethical dimensions. It has been proposed in this work that humans should accommodates the anthropoholistic worldview: an ethical worldview that reflects how society should live and interact with nature to attain sustainable development. The ethics of anthropoholism sees all beings within the environment in an interconnected web in which all beings cannot survive without one another. This implies that man must acknowledge the *right to live* of other beings in the environment. It further implies that man in his quest to satisfy his wants and desires must consider the environment and its inhabitant's existence, hence, use technology in a more sustainable way to attain ecological balance.

6. References

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