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The Problem of Climate Change: A Study of Anthropocentric Environmental

Ethics

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Abstract

Climate change is a change in the statistical distribution of weather patterns over a long period of time ranging from decades to millions of years. It is also seen as a change in average weather condition, or statistical properties of the climate system when considered over a long period of time. This usually is caused by excessive carbon dioxide emission in the atmosphere and thus leads to extreme unpalatable weather condition such as excessive heat. It is clear that the human activities in the world through industrialization and other careless environmentally unfriendly actions contribute much this problem. The question here is: how can this problem be managed in this contemporary world of industrialization? This paper proceeds to make recommendations to this through an anthropocentric ethics of environment suggesting a more human centered approach to industrialization as a means to managing the problem.

Introduction

The issue of climate change is topical in this period when it becomes easy to describe the world climate as inconsistent and adverse on the human life. From time to time a lot of environmental crises erupt thanks to the effect of the climate change. The environment which man seeks to possess by harnessing it turns to possess man through the human attempt which leaps into exploitation of the environment. No doubt the problem associated with climate change may not be entirely man-made but it suffices to say that by scientific discoveries human activities contribute a great percentage to what results in this problem.

It is based on the valuation of these human activities that result in this climate change that one can articulate an environmental ethical twist to the problem. Environmental ethics "considers extending the traditional boundaries of ethics from solely including humans to including the nonhuman entities." While evaluating the environmental ethics from the above concept, two trends of thinkers come up. The first would evaluate environmental ethics as funny since there may be no need ascribing morality to non-rational agents. As such the only value that may be attributed to the non human entities lies in their usefulness to man. The second group has an inclination towards believing that the human environment should be seen as possessing an intrinsic value so long as they are entities.

However, the two accounts battle the ground for either an anthropocentric ethics of environment or cosmocentric ethics of environment. Furthering the stricture between these two trends of thought, which seem to drive far these positions, one could surmise a softer aspect of anthropocentricism which equally accommodate the anthropocentric ethics and the cosmocentric ethics of environment. In this softer aspect, there is an attempt for one to take care of oneself and equally seen as being saddled with an obligation towards one's environment. This obligation to the environment makes one responsible to the damage made on the environment since one is obliged to care for this environment as an entity which serves one's life and those of others.

It is based on this soft anthropocentric ethics of environment that this work hinges to study how human actions have led to climate change and how the applications of the tenets of soft anthropocentricism can lead to a reduction in the effect of this climate change problem.

An Expose on the Problem of Environmental Ethics

The twentieth century was greeted with an awakened zeal by thinkers to protect the environment. This effort which is seen as a fruit of existentialism that held sway through the nineteenth century, is reputed for "filling the intellectual vacuum created by the preoccupation of the majority of those who identify themselves as philosophers with special problems far removed from the real world and from the general questions inspiring western thinkers since Socrates." This attempt to secure the human environment is aimed at a revolution against the medieval ethics which hands man over the environment following the biblical injunction:



...And God blessed them, and God said unto them, be fruitful, and multiply and replenish the earth, and subdue it, and have dominion over [...] every living thing upon the earth.³

With this injunction, it is believed that man has been handled over the environment to use to suite his desires. Such hand over has resulted to abuse of the environment since man's value for the environment is merely instrumental not intrinsic. The primary environmental ethics theorists therefore oppose the idea that only human beings are morally considerable in their own right, meaning that all the direct moral obligations we possess, industry those we have with regard to the environment are owed to human beings.⁴

Nevertheless, the substance of the primary environmental ethics theorists is made relevant when fully applied to the human circumstance. The structure of the universe is such that the human beings are at the centre of the universe but at the same time views the environment as ethically non relational. As such, many thinkers believe that the responsibility that we have on the environment must be such that this responsibility must have man as an end. Sequel to the above, Gale occludes that the formal environmental ethics development of the 1970s is not independent but rather the result of the 1960's awareness of technological effects, economic expansion and population growth.⁵

For environmental ethics to be worth its name, it must centre on the need to improve the environment to enhance a better life for the human beings and ensure a safer environment for them. Essentially, it is pertinent to conserve one's environment to build the life of presence and most importantly the life of the future. Pollution, for instance, must be avoided because it diminishes our health and climate change puts our homes at risk. We see that every theory on environmental ethics must focus on why the human entities should guard against such destructive actions against the environment to preserve to preserve our lives and our environment.

The anthropocentric environmental ethics considers further not only the immediate generation but a generation yet unborn. It is not strange to mention here that the decision and the actions of the present generation will have a lot of effect on the future generation. Gewirth thus rightly observes that some thinkers in the field of environmental ethics founded their environmental ethics on obligations to this future generation. This idea underscores the fact that morality must put into consideration the good which one would desire to be done for one and the will to act out such considerations.

Quite strangely, Golding posits a different perspective to the above ethical system which is equally corroborated by the substance of Gerwith's definition. For Golding morality must also encapsulate reciprocity. As such, one who performs a moral action must expect a reciprocation of such actions. Based on this 'reciprocity' Golding debunks the idea of Gerwith claiming that since these future generations do not reciprocate the gestures of the present generation, they are not beneficiaries to any moral obligation by the present generation. As such, any environmental ethic begins and ends with the people.

Golding's argument, no doubt, centers on ethical egocentricism which is overtaken by a broader reanalysis of a trans-generational reciprocity. By this trans-generational reciprocity, there is an attempt to represent the will of the older generation by an attempt by the new generation to preserve the legacy of the preceding generation. There is as such a mutual responsibility between the future and present generation. Golding's argument would have been made better by Peter Vardy's argument of the 'non-identity problem''s in which responsibility is owed not by reciprocity but by the consideration of the lack of knowledge of the identity of the individuals who are to enjoy the obligation.

However, policies that would enhance environmental development for any current generation would necessarily be passed on to the future generation irrespective of the identity. And such policies would impact on any one who exists in the future. This impact focuses on the "interest of the individuals of the future and not the future individuals themselves." If on the other hand, the present generation destroys the environment, the future generation will be harmed by these destructive actions.

The idea of preserving the environment which is championed by Gerwith evidently represents further an act towards the "idea of a good life." The future generation needs basic resources, such as food, water, friendly environment, and minimum health. Barry in line with this thinks that the older generation owes the new generation the obligation of ensuring that these basic needs are not robbed of them by our activities in the environment. This immediately suggests that the present generation must revise certain activities which lead to pollution, climate change, and so on.

Following this issue on the responsibility or obligation to the future generation, several questions are bound to be raised about the problem of climate change today and the environmental issue of the past and present generation which



cause it. Evidently, industrialization and pollution which are favored by globalization results in serious depletion of the of the atmospheric bodies and as such generates the problem of climate change; which is very dangerous and carries with it a deep worsening effect that spreads adversely from one generation to the other.

Explaining, Climate Change

By its name, climate change appears as an adjustment in the atmospheric activities. The above sharp definition favors a cursory analytical explanation of what climate change stands for. Nevertheless, the definition implicitly lays bare the various strata in the universe – Atmosphere, Cryosphere, Hydrosphere, Biosphere and Lithosphere – while showing that there a seeming disharmony among them results in the climate change is a natural change in the components of the earth's climatic system caused by an alteration in the interaction of such system.

The alteration in the climatic system shows itself immediately in the weather and the bodies upon which the whether has direct influence on. This immediate report on the whether informs the more systematic definition of climate change as a "change in the statistical distribution of weather patterns over periods ranging from decades to millions of years." It is also seen as "a change in average weather condition, or statistical properties of the climate system when considered over a long period of time. ¹⁰ Climate change is further typically described in terms of average changes in temperature or precipitation, but most of the social and economic costs associated with climate change will result from shifts in the frequency and severity of extreme events. ¹¹

The above definition does not encapsulate fluctuation short period atmospheric fluctuation. Climate change takes another twist to its understanding when understood as a change which results in the climate as a result of human activities which endangers the climate. By this one is right to believe that climate changes occur as a response to the world's balance of energy. In the loose sense of it, "the rate of energy loss by the space and the rate of energy gain by the sun determine equilibrium temperature." This temperature forms the earth's climate which is spread around the earth surface by both the wind and ocean current. This is what accounts for the climate structure of the earth which varies from one region to the other.

Worthy of not hereof is the possible error of mistaking climate for weather. Climate is not weather. While weather is the condition of the atmosphere at a particular place and time which is usually measured in terms of things like wind, humidity, rain, pressure and so on; and which can change swiftly and unpredictably from time to time within seasonal variation, climate is the average pattern of weather in a place. Thus, climate change is a significant and lasting change in the statistical distribution of weather patterns over periods ranging from decades to millions of years. It may be a change in average weather conditions or the distribution of events around that average (e.g., more or fewer extreme weather events). Climate change may be limited to a specific region or may occur across the whole earth.

The changes in the climate are generally shaped 'forcing mechanisms act on the climate and eventually see to either the slow or fast response of the climate system. The internal forcing mechanism is seen more in the excessive emission of the green house gas caused by industrialization and the reaction from the bye products of nuclear chemicals which generally, cause atmospheric concentrations which lead to global warming – increase in surface temperature.

The forcing mechanisms are not limited to human activities. Some other external forcings are involved. Some natural events like the sudden cooling of the airborne volcanic ash – (an ash cloud which consists of small tephra which are bits of pulverized rock and glass created by volcanic eruptions usually less than 2 millimeters in diameter)¹³ and thermal expansion of warming ocean water can also contribute, though minimally to climate change. Historically, precisely, three to four billion years ago the sun is believed to be 70% more intense in its emission than it is today. And if such becomes the atmospheric condition today one may not suppose the existence of liquid water on the earth surface. However, there is evidence for the presence of water on the early Earth, in the Hadean and Archean¹⁴ eons, leading to what is known as "the faint young sun paradox".

Hypothesized solutions to this paradox include a vastly different atmosphere, with much higher concentrations of 'greenhouse gases' than currently exist. ¹⁶ To be sure, the green house gases are those gases which are found in the atmosphere that emits and absorbs radiation within a thermal infrared range. ¹⁷ It is this process of absorption and emission that cause the green house effect the greater influence of which is recorded through human industrial activities. It is from these industrial activities that atmospheric concentrations of the green house gases come.

Globalization came with it a sharp twist towards industrialization and mechanization. With industrialization, the burning of fossil fuels increases and carries along with it increase in the atmospheric carbon dioxide (CO₂). This increment in the atmospheric carbon dioxide evidently defies the various natural sinks that take part in carbon cycle.



Carbon dioxide (CO_2) retains sun heat in the atmosphere, just as a glass would retain such heat in a sunroom/ blade or a greenhouse. Little wonder carbon dioxide (CO_2) is often referred to as a "greenhouse gas." Thus, whenever there is an instance of carbon dioxide increment in the atmosphere, there is serious problem in releasing the solar heat. The result is that, if everything else remains constant, the average atmospheric temperature will increase. Thus as people burn more fossil fuel for energy they add more carbon dioxide to the atmosphere. If this goes on long enough, the average temperature of the atmosphere will almost certainly rise.

The carbon dioxide (CO₂) emission is a result of the combustion of carbonaceous fuels which come through liquid fuels – gasoline, petrol and oil, social fuel like coal and gaseous fuels – natural gas. The international climate change scholars observe that since the year 2000, fossil fuel related carbon emission have equaled or exceeded the A2 scenario" except for small dips during two global recessions.¹⁸ Their observation shows that fossil fuels have generated almost an excessive quantity of carbon in the atmosphere. This calls for an affirmative action geared towards reducing the use of fossil fuels and thus reducing atmospheric concentrations of Greenhouse gases which are determined by "the balance between emissions of the gas from human activities and natural systems and the removal of the gas from the atmosphere by conversion to a different chemical compound" Otherwise sinks.

In brief, climate change is caused by human activity, as opposed to changes in climate that may have resulted as part of Earth's natural processes. ²⁰ It is a radical but adverse effect of an imbalance in the interaction among the various spheres in the universe. This imbalance results in an unpalatable weather condition and adverse destruction of nature through the activities of some natural disasters such as flooding and so on. This climate change is caused essentially by some natural occurrences but most especially human activities which add green house gases to the atmosphere no thanks to industrialization and burning of fossil fuel and forest clearing. Bearing in mind the role of human activities in causing climate change, the attempt should be, at this juncture, to see how far we can accommodate the environmental ethics solution to make suggestions on how this climate change could be controlled or at least minimized.

Anthropocentric Environmental Ethics and Climate Change

The very first indication is for the secular scholar to begin imagining the ethical relevance of the climate change problem. Industrialization has come to say and there is no moral responsibility with regards to the climate which literally functions almost independently. Nevertheless, the point which the anthropocentric environmental ethics captures in relation to climate change bothers more on the issue of distributive justice and trans-generational justice, what the above focus of the anthropocentric environmental ethics tries to achieve are:

- i) To ensure that the people who suffer most from the menace of climate change (who often constitute a small fraction of the population that cause such change), are assisted to survive such menace.
- ii) To ensure that the generation which come after us and which are part of does not suffer terrible environmental crises resulting from our misuse or abuse of the environment.

Bearing this in mind, environmental ethics must focus its attention on the human person as an entity whose future lies in his hands. As such, the understanding of the human person as a rational entity and moral being is what constitutes any environmental studies or at least any attempt to secure the environment. Thus, the anthropocentric environmental ethics inclines itself towards genuine effort to check the human activities which has resulted in climate change by searching out policies that will minimize such actions and stabilize the human environment. It is here that the ethical grounds of climate change lies. Michael Wills, sequel to the above, argues that climate change effect has grave moral implication. He, however, decries the complacency with which it is followed. According to him:

Climate change is really dangerous and it is a rapidly worsening problem with deep moral implication. Yet no effort is made to check the crises.²¹

Will's argument shows the need to bring the humans develop an 'ethical sense' towards their environment by getting involved in the various movements towards reducing this problem. It is evident then that this climate change must create in the contemporary human being a sense of responsibility, duty and obligation as to prevent harm to the millions of people round the world. It is when the problem of climate change is seen as an ethical problem that we see the practical consequences for policy formation.



Evidently, the measures to be taken in planting policies will naturally clash with some human interests which might make it difficult to uphold. For instance, the economic system which is most prominently built on growing industrialization will come under check. As such, such countries with large industrial production may find it rather incomprehensible to adopt and kind of policy which runs counter to or weakens any economic policy. Nevertheless, it is recommended that any opposition of climate change policies on the ground of national economic cost alone must comply with the responsibility of not harming the innocent people round the world.²² But the possibility of such consideration amidst the high industrial demand is slim.

Considering the impact of climate change ranging from diseases, drought, flooding, intense heat, storms, rising Oceanic damages, destruction of natural supply of water and food, and so on, nations and indeed individuals must put into consideration primarily, the safety of the human lives and preservation of the environment for an improved human existence. To achieve this, there must be a serious move towards the reduction of green house gas level that results in warming and which could lead to the lose of control over rising emissions. People therefore must look beyond just domestic economic growth and take a more ethically subjective stance as to halt the motion of the world towards destruction by the unchecked human activities.

The Germans set this lead through the German government policy on climate change. Some of their policies are underscored.

- 1. To shut down on nuclear power plant.
- 2. To meet future energy demand by expanded reliance on renewable energy
- 3. To ensure that future energy consumption needs will be met by the most ethically being methods of energy production renewable energy.

Research shows that the every policy drafted by Germany helps the citizens control their own energy emission and consumption by being less dependent on large electrical systems. Grune Partei makes it clearer stating that "energy policy can enhance democratic control energy policy and by doing this enables citizens to choose a more stable and secure future." ²³

The German act conspicuously x-rays the dubious silence of many large global nations like the US whose industrial productions lead to a greater percentage of the problem of climate change. The ethical grounds of climate change and indeed other environmental problems, which are founded on preservation of human life and healthy environment for a better living, should break down any political movement aimed at suppressing policies for climate change. In fact, the primacy of human life and simple law of justice sums up the need for a protective policy against human destruction of nature. The human beings must be made to understand the implication of extreme industrialization and mindless destruction of the environment (especially deforestation) on their lives and those of the future generation. Canadell's experiment²⁴, for instance, shows that the longer the years of gas action in the atmosphere the more prone the world is to the devastating menace of the atmosphere. Anthropocentric policies must be put in place to check the human activities and present the universe.

Conclusion

Climate change is a contemporary issue which bothers any mind that cares. This is because the fluctuation in the climatic condition coupled with the level of destruction experienced in nature is alarming. Generally, it is believed that the human activities which center on industrialization and deforestation enhance the generation of the green house gases which leases its effect on the globe in form of global warning. This results climate change which carries alongside several devastating effects and which can only be reduced or at least managed by regulating human activities.

The best way to regulate the human activities is by undertaken the task of an anthropological environmental ethics, which seems to limit moral responsibility to the human being while taking other natural things as subservient to the human morality and will. The thesis appears destructive to the current trend of environmental ethics which stresses on the intrinsic value not just the instrumental value of nature. Nevertheless, it is pertinent to understand that the purpose of any ethical construction towards environmental preservation must be anthropocentric to be workable. Hence this work tried to project the human dimension to environmental preservation through policy making which puts into consideration the justice as fairness involving the poor unprotected sufferers around the world and trans-generation justice which seeks to save the environment for continuity among the future generation.



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