

Environmental Bioethics: strategy to face planetary vulnerability

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Abstract

New production arrangements in consumption and population increase changed the scenery on the planet, setting them in global interests. The ethical crisis in care and the relationships between man and resource tenure gave rise to the appearance of a new field of study and performance in applied ethics: bioethics environment. Such study and work proposal within applied ethics may help in the reflection and coping the environmental problems is the objective of this work. Bioethics emerged as instrumental in addressing the crisis, a tool in the advancement of rational development based on human rights, sustainable development, collective accountability, in the principle of precaution, as well as in intergenerational solidarity, in order to prevent the increasing abuses to human and environmental health.

Key words: Bioethics. Environment. Environmental ethics.

Resumo

Bio(ética) ambiental: estratégia para enfrentar a vulnerabilidade planetária

O presente artigo discorre sobre a temática da globalização das questões ambientais no cenário do século XXI, no qual uma crise ética no cuidado e nas relações do homem com a fruição dos recursos naturais deu espaço para o surgimento de nova especificidade no campo da bioética: a bioética ambiental. Tal proposta de estudo e atuação dentro da ética aplicada pode auxiliar na reflexão e enfrentamento da problemática ambiental, sendo a apresentação dessa possibilidade da disciplina o objetivo do presente trabalho. A bioética surge como instrumental para o enfrentamento da crise, ferramenta no avanço de um desenvolvimento racional, baseado nos direitos humanos, desenvolvimento sustentável, responsabilidade coletiva, no princípio da precaução, bem como na solidariedade intergeracional, a fim de evitar atropelos cada vez maiores para a saúde humana e ambiental

Palavras-chave: Bioética. Meio ambiente. Ética ambiental.

Resumen

Bio(ética) ambiental: la estrategia de protección del medio ambiente para hacer frente a la vulnerabilidad del planeta

Este artículo aborda el tema de la globalización de los problemas medioambientales en el siglo XXI, en la que una crisis ética en el cuidado y las relaciones humanas con el disfrute de los recursos naturales dio espacio para el surgimiento de nueva especificidad en el campo de la bioética: bioética ambiental. Dicha propuesta para el estudio y la práctica dentro de la ética aplicada puede ayudar en la reflexión y afrontamiento de los problemas ambientales, teniéndose en cuenta que la presentación de esa posibilidad de disciplina es el objetivo de este trabajo. La bioética surgió como un instrumento para hacer frente a la crisis, una herramienta en el avance de un desarrollo racional, basado en los derechos humanos, desarrollo sostenible, responsabilidad colectiva, en el principio de la precaución, así como en la solidaridad entre generaciones, con el fin de prevenir los abusos cada vez mayores para a salud humana y ambiental.

Palabras-clave: Bioética. Para el medio ambiente. Ética ambiental.

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They declare no interests conflict.

New productive arrangements in consumption and population increase have changed scenes of the planet, setting them as globalized and guided toward global interests. In the context of environmental degradation and changes derived from this process, a lot has been talked about sustainability. However, as a result of globalization and techno-science, negative impacts have been left in the background, being collectively pointed and perceived as isolated phenomena. The ecological crisis, derived from the lack of environment care and the relations of man with resources use, has given space to a new field of study and activity within applied ethics environmental bioethics, which is Environmental Bioethics, developed due to the moral and ethical crisis that emerged in the post-modern society.

Setting the problem into context: Environment and its intricacies

Technical-scientific innovations have provided several important findings to the post-modern society. A new world has been being quickly built and changed by the anthropic action, as well as landscapes and natural resources, strategic to the planet survival. However, with the increasing range of applications of the modern biotechnology, there is the essential need of ensuring that such tool is carefully used and that progress does not ignore possible risks to human health and the environment¹.

In the eagerness of pursuing knowledge and mastering techniques able to change the future life, a ceaseless search has been pursued by biomedical sciences. After the Industrial Revolution, man was able to advance in a never experienced way, hugely impacting ecosystems and populations around the world². The perception that there was something wrong and that mistakes were generated by the human action, have only occurred with the negative repercussion of environmental disasters, due to losses of thousands of human lives involved in great accidents registered in human kind history.

By attempting to reverse this predatory process of men over the environment and its natural resources, the joint action of the international community was necessary, by mobilizing nations and Heads of State in order to discuss the issue and search for joint solutions for environmental matters at a national level. The three great annual conferences performed by the United Nations (UN) were the first Conference on the Human Environment, Stockholm, Sweden (1972); Conference on Environment and Development, Rio de Janeiro, Brazil (1992) and the World Summit on Sustainable Development, Johannesburg, South Africa (2002)³. These events have started the discussion regarding environmental problems under the international point of view. Several documents, treaties and legal rules were agreed by the signatory countries of the meetings, of which it was found the importance of care and environment management⁴.

In this concern context regarding the planet future, the first social movements were born, the Green Parties, the non-governmental organizations (NGO) and the international entities linked to the environmental issue. Problems common to North and South countries were placed in the round of negotiations, focusing on life preservation in the planet. Scientists were called to investigate various different matters, such as desertification, acid rain holes in the ozone layer, climatic variations, loss of biodiversity, freshwater scarcity, extinction of Fauna and Flora species².

In 1987, in Norway, the World Commission on Environment and Development of UN developed a document named *Our Common Future*, also known as Brundtland Report, in which signatory governments committed to promote economic and social development, in accordance with the environmental preservation. In this report, one of the most comprehensive definitions about the concept of sustainable development was found: *the sustainable development is development that meets the needs of the present*

*without compromising the ability of future generations to meet their own needs*⁴. Among so many environmental problems, connected with several uncertainties, the core of the issue began when man started its relationship with nature. Our development has occurred in an unbalanced way, through use of environmental assets. At increasingly high levels, and following commercial scales, human kind has been building its civilization mode, without caring about the depletion of resources. This post-industrial revolution picture has accelerated the wear of natural sources, in a continuous and self-destructive process.

It is known that crisis promote the urgency of reducing conflicts. Naturally, it would not be different regarding the conflict between man and nature, in which ethical values of reflection have placed man in the center of questioning about his acts. An anthropocentric view of the related facts has demonstrated the reality about the complex picture that links and directly acts over human and extra-human life (biosphere)⁵.

Innovative, controversial and emerging topics are subjects of speculation and reflection of legions of scholars. They need answers given the innovative nature of the technological man and of biotechnoscience:

(...) The production of transgenic foods on a global scale, as well as life cloning (including human), manufacturing of man inside the laboratory, the threat to biodiversity and the devastation of forest reserves are serious subjects that trigger the alarm of scientists, philosophers, religious and politicians. For its part, philosophy has been aware that, in our time, nature was excessively seen from the point of view of the utilitarian economy. We aim to take the greatest possible advantage of natural resources, by applying production techniques increasingly more sophisticated in order to satiate the consumerist appetite awaken by the market theory. Production, market and consumption are the focuses of globalization. Would it be possible to have another view of nature, wider than the

consumerist interests? Would it be possible to establish a less predatory and more respectful relationship between man and nature? *How does one use nature* without destroying it or dangerously damaging it?⁶

Conceptual definition: the meaning of environment

Discussing about ethics and environment means immersing into the complexity in which these topics are related, either by their importance or by the present nature of such issues, part of the daily lives of people around the planet. It is necessary, therefore, to first clarify the concept of environment, before passing to environmental issues and to perceive in what way they achieve the global scenario, calling various significant participants to debate so that solutions are found for a better world regarding the environmental crisis.

Environment is defined as the place we are part of, what surrounds and involves us. Such definition is almost a pleonasm, however understanding the real meaning of the term exceeds the natural conditions they consist of. It is necessary to visualize whatever environment dimensions exist, in order to better clarify the didactic understanding about the subject.

Not unusually, the mistaken conception that preserving the environment means protecting only Fauna and Flora still persists. However, the environment as a legal and protected asset may be classified under five different perspectives: I) natural environment (physical); II) artificial (man-made buildings); III) cultural (human-spirit creations, such as parties, dances, folklore, religion, gastronomy); IV) work (the environment in which man develops his potential); and V) genetic (modifications and human manipulations about the content given by nature).

Human being insertion into the environment

The perception about the human being as a

transforming agent regarding the environment issue is particularly recent, since it dates back the Industrial Revolution, a time of intense utilization of natural resources at production and consumptions levels ever seen in world history. By that time, the economy has developed a process of environmental degradation that resulted in the load to be supported nowadays regarding quality and amount of available resources for current and future generations use.

The prehistoric man (nomadic, hunter and collector) was already used to impact the environment and to unbalance it, however doing it differently since the consumption was not so high, the population density was lower, there were few areas of resource abundance and his waste materials were basically organic ⁷. Thus, the phenomenon of pollution is not recent, but rather its perception.

For a long period, it was believed that environmental assets were inexhaustible, either by the ignorance of man or the resilience capability through which the planet dealt with environmental modifications generated by anthropic activities. Currently, through studies and scientific evidences, it is known that several attitudes deriving from processes of nations' development are fully changing the environment, creating degradation at worrying levels, decimating species (loss of biodiversity), causing climate changes (global warming, scarcity of rainfall indexes, increase in emissions of gases that potentiates greenhouse effects) and also encouraging acute regional variations (droughts and aridity), impoverishing the soil (erosion) and exhaustion of hydrous bodies (aquifers and water tables contamination), among many other facts identified by the academic community.

Nations, when realizing that the environmental problems exceeded their borders of territorial sovereignty, concluded that pollution is a cross-border factor, and it does not encounter barriers or undergoes geographical limits. Earth, as an opened system, facilitates dispersion and exchange of fluids and compounds throughout the

globe during its cyclical procedures and physiochemical phenomena. Hence, environmental problems, previously assumed as sectorial or regional, have now become focus of a global warning. Rich and poor countries were forced to seat and agree before UN on commitments at an international sphere, involving mutual efforts that suppose common responsibilities, however differing in relation to levels of progress and development, as well as the well-being reached by countries.

However, despite such efforts, the actions taken were weak, without being capable of changing the situation of increasing environmental degradation. Since human being was the trigger of this planetary life degradation process, it is fair enough to make him responsible to find alternatives that may transform this bleak scenario. It should be considered that for truly undertaking the proposed transformations, first of all it is necessary to change the worldview of the human being, establishing a less anthropocentric perspective focused in purely economic issues. It is essential to think about the planet in an organic way, as an interconnected system, in order to ensure environmental sustainability ⁸ and intergenerational solidarity ⁹. Such dimension is particularly attached to the economic, social and environmental tripod. According to Nicholas Georgescu-Roegen ¹⁰, ecological economy must contemplate economic externalities to be included in the costs of economic and social production, under the penalty of generating a great environmental liability for society, directly falling upon the underprivileged population, weakened by its present conditions, and affecting its life quality. Bioethics, therefore, enters the scene, as an instrument for confronting crisis, given the existence of legal rules for this purpose at the domestic level of countries, as well as the international scenario. I refer to practical reflection and critical discussion about the environmental issue, under the socioeconomic point of view, in which ethics must promote an human social behavior.

Ethical responsibility with the environment

Due to modern times and scientific progresses achieved by man, a variety of new questions arises regarding interferences promoted in human relations and in the current life-style.

The academic Jonas presents a speech focused on non-comprehensiveness and completeness of ethics already proposed and lived by man during human kind development. His arguments are based in the human action that necessarily implies an ethical association, once it is related to action. With changes promoted in the natural environment, man imposes a new ethical modality in this process. In previous time, man did not have the necessary ability for changing nature. It could handle itself without actions of interferences, performances or human desires. Nature was not an object of human responsibility because it could take care of itself. However, with the development of towns, the social and cultural world created by man's hands, the human responsibility appeared.

Such urgency, necessary for visualizing the new ethics, can be explained by the fact of incompleteness regarding canons of traditional ethics, precisely by the appearance of the modern technique (techno-science) to the detriment of techniques previously used.

Traditional ethics, based on an anthropocentric view, now remains short and ineffective, in a constant and direct relationship between man, himself and others, because it does not reach new dimensions of responsibility introduced by techno-science. The vulnerability of nature itself, caused by the technical interference of man, raise doubts regarding the way of seeing the ethics to be considered, because currently it would perhaps not be set in a biocentric model, instead of anthropocentric, offering place to the environmental ethics (eco-ethics).

Another important point approached by Jonas⁵ reflects the concern about the new role of the moral knowledge, as far as all previous ethics did not visualize the obligation of considering the

global condition of human life and the distant future, including the own existence of human kind.

Nowadays, there is the new latent conception of rights and duties, in which Kant's categorical imperative does not cover public life and collective actions anymore, at a diffuse sphere essential to the wide complexity of human relationships. The Kantian maxim was focused on ethical actions of private life, in the sphere of individualized behaviors, which is not perceptible in post-modernity. It occurs because contemporary actions exceed the limits of here and now, present only in this generation. Techno-science progress has brought dimensions still without limits perception, in which man as he acts, does not fully know how much, who and in what way his innovations will promote outspread for currently known life possibilities. Under this point of view, the responsibility is clear in relation to the maintenance of life in the planet.

When we think about future generations, sustainability shall be considered regarding appropriation and rational use of natural resources. From this approach, responsibility becomes perceptible because in human activities and inter-subjective relationships, a new building of new ethical parameters must be shaped, in order to promote life maintenance.

Negative predictions regarding the far future of human kind continuity and planetary life coined by Jonas are of extreme significance for the maintenance of responsibility ethics. Imperatives of social conduct gain strength under the heuristic of fear, an expression created by him in order to provide realistic connotation to unpredictable and catastrophic facts, in which human activity may start high investments in the process of life interference: *it is necessary to pay more attention to the disgrace prophecy than to salvation prophecy*⁵.

By proposing these new ethical standards, the author understands that the previous ethics does not conjugate the necessary values for such

innovation produced by the new scientific processes. It is necessary to review and improve new moral behaviors, because new standards need parameters that can adjust outspreads promoted by human activities. Ethical behaviors aim to improve the common good, for either the present men or the ones to be born.

New times with their new problems have required new solutions. Ethics based on concern with environmental care was suggested, since characterized by values of protection directed to the environment, in an eco-biocentric view for the concrete reality promoted by human activities.

From the perspective of multidisciplinary theoreticians, reflexive perceptions are combined and interconnected in this complex network of connections. In the scope of multi-disciplinarity and transdisciplinarity origin of Bioethics, there are prescribed issues of great comprehensiveness that insist on dialoguing with matters of global nature, extending sanitary dilemmas and implying socio-environmental repercussions.

Bioethics global conception talks about already faced environmental matters that progressively increase in an emerging way regarding human and planetary survival. According to Pessini, the Potterian reflection about bioethics anticipates the whole current ecological problematic and it is aligned with the ecological cause of the United Nations, identifying three huge challenges to be faced in our time. The first one is the need of world peace, the second is the fight against poverty and the third is about environment. It should be stressed that these challenges are independent from each other, because without fighting poverty all ecological measures are useless. If we do not worry about ecology, all efforts for building a fairer world will be destined to failure, our descendants will pay for the unwise behavior of man and his nature depredation. Life on Earth is threatened with disappearance, becoming an ephemeral episode in the universe history¹¹.

In this area, there is bioethics of protection¹², with practices and techniques that may imply slips and setbacks, to which Brazil needs to be scientifically covered in order to refute or support its biotechnical-scientific model. It should correctly choose for risks and benefits, as well as negative externalities, in accordance with environment and human survival itself for sustainably (enjoying) using natural resources. This Bioethics approach explains human kind and planet vulnerability, conditioned to act through technoscience.

Hence, there is the State playing a role that ensures a fair protection model, providing harboring to weak citizens. This is bioethics of protection of man and planet, both weakened by anthropic conditions, whose developmentalist model was not part of global resilience mechanisms. Human being here acts as an integral part of the active pole (agent), the one that promotes modifications and supports new inter-occurrences that negatively affect the environment. In the passive pole of this relationship, there are environment and the man himself, as tormentor and victim of this self-destructive process.

From the French school, by publishing his work called *International Environmental Law*, Kiss inaugurated the theory of Intergenerational Law. His argumentative building base has started and innovative uncovering in the field of human rights and International Law, since it ensures rights that are not yet present in the real world but will maintain the journey of human family. This extended view of legal experience is disassociated from the classic logic of Law that we know nowadays, emphasizing what we currently call diffuse, trans-individual and collective rights⁹.

Going through generations that still exist in relation to the one that currently enjoys and develops its *modus vivendi* (life-style) under the auspices of an exploratory nature that come from natural resources, the doctrinal cutting of Alexandre Kiss inaugurates the need of the solidarity principle contemplation, a maxim of the

ethical world in which the collective and social common good is pleasant to society as a whole. Being solidary with others implies using alterity and perception, consequently touching on responsibility underneath ethics of care, at the level of actions and/or omissions, in individual, collective, public and private spheres.

Final considerations

International conventions existing within the legal frame permeate environmental issues throughout the globalized world. The ethical debates that involve such issues still are little discussed, but certainly known. Bioethics analysis should be available as a tool for the advances in rational development for meeting the desires of the current generation without compromising the future ones when keeping this developmental model.

Risks, mistakes and hits are inherent to this self-learning. However, reasonably acting by predicting and anticipating disasters that studies are capable of measuring, means safely stepping onto a ground that involves politics, power and diverse interests, especially the ones of economic intents. In this aspect, public policies (themselves), as tools for implementing the action will of the public powers (Executive, Legislative and Judiciary), show a picture of unpreparedness, ignorance and neglect to ills as intense as population health, life quality and environmental sustainability, especially when the future generations needs are considered, as well as socioeconomic factors that are linked to the problem.

Human beings have never took so much notice about so many issues regarding natural world, environment, Flora and Fauna as they do nowadays, when science has been revealing an interconnection among all species, biomes and systems. However, this advance in knowledge also needs to be based on several human values and on a world view directed to avoid aggressions and tramplings increasingly bigger to human and environmental health that can be currently noted.

Appealing to individual consumption of assets and goods, the current developmentalist system seeks to forget such important issues in the so far successful attempt of generating rising profits. For such, it intends to subsume the collective responsibility (Jonas) regarding the planet destiny (our common *home*), by encouraging unbridled consumption identified as *status* and power at the individual level.

This logic of political and ideological speech is consolidated by ignoring environmental specificities of each area of the globe, not considering the different need of ethnicities or nations, as well as by the universalization of techniques and technologies that monopolize the collective imagination and center it in the products of the market society. This way, the game of biopower is elaborated as a stake of *invisible* but active corporations that dominate the economic order and appropriate the environment. It is necessary to talk about environmental justice, that it is to say, not a purpose of justice directed to solve environmental conflicts under the responsibility of the Judiciary Power, but rather justice that involves the marginalized and weaken ones who live in risk areas, subject to contamination and reduction of life quality, mainly of emerging countries.

Following a logic built in an alienation process, in this web of manipulating consumption desires, human beings cannot see the processes in which they are inserted. They feel the ills that operate in their daily lives instead, changing natural actions or facts due to distortions of ethical and moral values that are permanent under construction and reconstruction in the sphere of the Universal Declaration on Bioethics and Human Rights¹³. Such abusive and foolhardy situation justifies bioethics being definitely directed to environmental issues, promoting reflection regarding collective ethical responsibility (Jonas) and the precautionary principle (Milaré), as well as interventions in socioeconomic and political dimensions of the collective imagination, necessary for changing the course of the planet degradation.

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Participation of authors in this article

Glenda Brana has developed the paper. Cesar Koppe Grisólia has done the final review and suggested the bibliography.

Received on: 12.17.10

Reviewed on: 10.17.11

Approved on: 12.3.11