

# The path from environmental ethics to human ecology

## El camino de la ética ambiental a la ecología humana

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### Abstract

Environmental ethics focuses on human responsibility towards the environment, especially due to the current abuse of natural resources. This relationship has caused serious impacts on the environment and human life, pointing out the need for a genuine and practical change for humanity to assume its responsibility in the preservation of the environment. By considering the theological-philosophical points of view presented by Pope Francis and Hans Jonas' ethical proposal for the technological

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era, this study seeks to merge both ideas to promote biodiversity. This implies recognizing the role of the human being as a responsible steward, promoting an ethic that orients towards the future, while maintaining respect for the position of the human being as guardian of the ecosystem and its biological diversity.

*Keywords:* biosphere, responsibility, resources.

## 1. Introduction

Undoubtedly, the interaction of human society with the biosphere is complicated. This relationship has had consequences ranging from ordinary environmental changes to biological extinctions resulting from the demographic increase in the human population and technological advances that are mainly related to human acts of defense and adaptability (1).

In the same way, because of scientific activity, various facts have been presented that make it necessary to reflect on the relationship of human beings with other species and to determine whether this relationship is one of survival or interdependence (1). This necessarily implies observing the responsibility of the human being with the future of the species and the biosphere in general.

Following this idea, environmental ethics, as a knowledge that unites bioethics and ecology, seeks to find a balance to avoid extreme positions. It is worth mentioning that the relationship of the subject with the environment, as well as the approach to environmental issues in the context of education (2,3) are necessary since education should ideally be from an ethical and responsible perspective for the sake of the future of the human species and life in all its biodiversity (3).

Therefore, it is a priority that such formation offers a critical and integral view that considers the social, cultural, historical, and environmental aspects of humanity, restricting disconnected contents or those that make the complexity of the problem invisible; we must educate and raise awareness for the present and the future (2,3).

The approaches of Pope Francis and Hans Jonas coincide in reaffirming the responsibility of human beings for the common good and the conservation of the diverse living forms that exist on our planet. Such responsibility is seen as collective and oriented to the future; therefore, it seeks the care of the ecosystem, biodiversity and human dignity for future generations. Since damage to the common home can be transgenerational, the proposal is to derive environmental ethics to an approach with sufficient anthropological support towards human ecology.

Finally, reference will be made to the human rights of the third generation seen within the reflection of eco-ethics. In conclusion, some final ideas are presented, which are not intended to extinguish the approach or reflection, but simply to point out the most transcendental details as a proposal that focuses on a global perspective, that is, a single world, a common project as humanity, the path of environmental ethics towards human ecology (4).

## **2. Methodology**

The methodology used to carry out this study was the bibliographical review and the dissertation, under a hermeneutic approach that allowed interpreting each of the texts consulted to establish an articulated and comprehensive dialogue uniting the contributions of different authors with respect to Hans Jonas and Pope Francis, resulting in the reflection on this topic. This review included the consultation of indexed journals and university repositories.

## **3. From environmental ethics to human ecology**

Environmental ethics seeks to unify the knowledge of bioethics<sup>1</sup> with environmental issues. According to the 1995 update of T. W.

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<sup>1</sup> Etymologically, the word Bioethics comes from the Greek Bios which means life and ethos which refers to ethics that, being associated with the Hippocratic ethical tradition that respects the principles “do no harm” and “do good”, seek to care for the whole person (6, p.4).

Reich's Encyclopedia of Bioethics, bioethics is the “systematic study of the moral dimensions—including moral vision, decisions, conduct, guidelines, etc.—of the life and health sciences, using a variety of ethical methodologies in an interdisciplinary approach” (5-7).

Likewise, Elio Sgreccia in his work *Personalist Bioethics* refers to bioethics as “a discipline with a rational epistemological status that is open to theology, understood as a supra-rational science, ultimate authority and horizon of meaning. Starting from a description of scientific, biological, and medical data, bioethics rationally examines the lawfulness of man's interventions on mankind” (7,8).

The first definition of ecology dates to 1886, by the biologist Ernst Haeckel who, in his book *Generelle Morphologie der Organismen*, refers to it as “the science of the relations of organisms to their environment, including, in a broad sense, all conditions of existence” (1,9).

Undoubtedly, changes have been triggered in the environment, specifically after the Industrial Revolution. They can be classified into three main categories: technological processes, population problems, as well as errors in thinking, attitudes, and values of Western society (9). On the other hand, Echeverría considers different alterations: polluted air, polluted and overconsumed water, depletion of natural resources, deterioration of human health as well as the extinction of various species (4).

Ecological ethics, also known as environmental ethics or eco-ethics, focuses on reflections and recommendations on how human beings should behave in their environment to ensure their own development and that of future generations (9). This discipline addresses the moral relationship between human beings and nature, evaluating the moral state of living beings, ecosystems, and the biosphere. It includes the ethical consideration of human beings, animals, plants, and natural elements such as water, air and land (5).

Despite its importance, extreme positions in ecological ethics have made it difficult to find viable solutions. A moderate proposal that considers the characteristics of each party can facilitate a more

balanced approach. This proposal advocates a moderate anthropocentrism and a weak physiocentrism, seeking a balance that allows harmonious coexistence between humans and nature (9,10).

Biocentrism, derived from the Greek words “bios” (life) and “kentron” (center), represents a perspective that focuses on all forms of life, including animals, plants, and microorganisms, regardless of their individual characteristics, such as sensitivity or the ability to experience pain (13). This approach is based on the idea that life is the supreme good and holds that each living being has its own well-being, following a teleological perspective. In other words, biocentrism defends the idea that each living being is unique and pursues its own good in a unique way. From this perspective, each living being is a valuable manifestation of life that must be protected. Biocentrism arises as a response to utilitarian anthropocentrism (5).

Anthropocentrism, derived from the Greek words “anthropos” (human) and “kentron” (center), (11) refers to human-centered systems or perspectives. In this view, a supreme privilege is given to the human being, considering him as the only being with intrinsic, absolute, and unconditional value. Man is seen as the center of all thoughts and actions, with everything else subordinated to him. Historically, anthropocentrism has predominated in Western religions, cultures, and philosophies, presenting man as the only rational being, created in the image of God, endowed with reason and free will (13).

In this approach, rights are not attributed to animals and ecosystems, but duties are assigned to human beings. Man is seen as the one who tames the environment according to his needs, being the measure and the center of reality (5).

A summary illustrating the fundamental positions of biocentrism, anthropocentrism and environmental ethics is presented in Table 1. The table provides a concise overview of the central perspectives associated with each approach, highlighting the fundamental differences in the consideration of nature and its relationship to humans.

**Table 1.** Definitions of biocentrism, anthropocentrism, and environmental ethics

<b>Biocentrism</b>	Perspective focused on all forms of life.	Every living being has a good or welfare of its own that follows a teleological perspective.
<b>Anthropocentrism</b>	Classifies systems or perspectives centered on the human, on humanity.	Man is the supreme being, the only being that has intrinsic value.
<b>Environmental ethics</b>	Moral relationship between human beings and nature.	Balance between the human being's place in the world and its interconnection with the rest.

Source: own elaboration.

Likewise, the following are considered as structuring axes of environmental bioethics: the defense of life, the creation of harmonious relations between people and non-human beings. Also, the limits of human morality are expanded to include animals, plants, and the territory in new scenarios of coexistence, thus establishing nature as a subject of law (11).

Using bioethics under the approach of Fritz Jahr, Aldo Leopold, and Potter (11-13), allows us to rediscover man's relationship with the environment, providing him with the necessary tools to face the environmental crisis. Therefore, considering bioethics as a science that provides this reflective contribution as a bridge between the biological sciences and the humanities, achieves the union of the present and the future, therefore, the union of the whole humanity and its original and common place, the biosphere (14,15).

It is clear then, ethics as care for the other and bioethics as care for life, provide tools that seek to ensure the destiny or permanence of humans on earth that depends on the preservation of nature, therefore it is a priority to take care of human actions in relation to

nature, remember that nature does not forgive, evil accumulates and leaves transgenerational traces (13,14,6,7).

Several authors have reflected on environmental ethics, which implies observing the duties and responsibilities of human beings towards the planet. Environmental ethics has emerged as a response to the abuses of anthropocentrism; however, it has left out of the approach the moral responsibility of the human being towards other living beings, that is, the anthropological foundations of the same have been eliminated (10). Faced with this need, we find proposals that coincide in giving environmental ethics the necessary anthropological focus so that the approach is then a human ecology.

The proposal responds to an ontologization of the link between man and nature through a relationship of reciprocity within a relational epistemology (9). This integrating vision encompasses social, political, ethical, and epistemological approaches, considering nature, culture, the mind, and body of man, as well as his environment, as a unit. Such an approach facilitates a balanced and integral perspective in relation to the environment (5,9,7).

In the following, we will review two positions that support such an approach, which, although starting from a different perspective, coincide and direct the final reflection towards the same end: the anthropological support that is necessary and so important for human ecology. As we shall see, both agree in recognizing the importance of human beings and thus the responsibility for their actions, which have caused damage—even irreparable damage—to the environment, profoundly affecting biodiversity (4,10,18).

#### **4. Encyclical *Laudato Sí*, Pope Francis**

Undoubtedly, a long and profound text that reflects on the care of our common home. After a brief introduction (numbers 1 to 16) centered on the thought of St. Francis of Assisi, who calls for sobriety and contemplation, we find ideas that cover various themes, including responsibility.

In Chapter I (numbers 17 to 61) he speaks about the ecological debt, specifically numbers 51 and 52, which refer to the irresponsible use and abuse of nature's goods that denote in the first place human degradation that is reflected in the degradation of the planet. It also mentions that current attitudes such as denial of the problem, indifference, comfortable resignation, and blind trust in merely technical solutions have not served to solve the environmental problem. Therefore, we are called to a community project centered on the understanding of the planet as a common good that we must shelter with caution and responsibility, the call to this new attitude is synthesized in numeral 53: "These situations provoke the groaning of sister earth, which joins the groaning of the abandoned of the world, with a clamor that claims us another course" (19).

In Chapter II (numbers 62 to 100), it calls for the adaptation of human capacities (reflection, argumentation, creativity, interpretation, and artistic elaboration) towards the good, which limits inequalities, injustices, and violence, first towards others and then towards the rest of living beings and, as a last consequence, towards the planet. Common goals centered on values and a humanistic understanding promote a common goal: "Today believers and non-believers agree that the earth is essentially a common inheritance, whose fruits must benefit all" (19).

Similarly, this is reiterated in numeral 118, where it highlights the importance of ecology with an adequate anthropology that recognizes and values the capacities of knowledge, will, freedom and responsibility: "When the human person is considered just one being among others, who comes from games of chance or physical determinism, there is a risk that the awareness of responsibility will diminish in people" (19).

In fact, to think of an integral —human— ecology requires that the dialogue on the environment at the international level observe global common goods, that is, a single world, a common project of humanity, centered on the moral law inscribed in human nature itself, which, guided by the principle of the common good, seeks social welfare that seeks intergenerational and intragenerational solidarity.



Table 2 below graphically lists some of the numerals of this document that make explicit reference to responsibility.

**Table 2.** Responsibility in *Laudato Si*

Number	Content
25	On the responsibility for our fellow men, importance of the foundation of civil society.
42	About endangered species.
68	Human beings are endowed with intelligence, which allows them to respect the laws of nature and the balance between the beings of this world.
95	Regarding the collective good, it refers to the heritage of humanity and that it is the responsibility of everyone.
118	Regarding ecology lacking anthropology, there is a risk that people's awareness of responsibility will decrease.
161	On responsibility for those to come.
165	On fossil fuels, international agreements on the responsibility for the costs of the energy transition
169	On the Rio +20 summit, Rio 2012, on the consequences on others and the need to reduce greenhouse gases.
179	On the sense of community and the responsibility of local authorities.
192	On intelligence with audacity and responsibility as forms of sustainable and equitable development
196	Regarding the common good, it is more the responsibility of those who have more power
206	On the social responsibility of consumers, since buying is always a moral act and not only an economic one.
210	On the levels of ecological balance (internal, solidarity, natural and spiritual). They are the pillars of an education that grows towards an ecological ethic that allows to grow in solidarity, responsibility and care based on compassion.
211	On the need for education in environmental responsibility.

Number	Content
219 and 220	On community conversion, superiority imposes a great responsibility that springs from man's faith.
229	On responsibility for others and for the world.

Source: own elaboration.

It is important to mention that human capacities of reflection, argumentation, creativity and artistic elaboration can provide goodness to human acts with respect to the Biosphere if, as humanity, we undertake a project with common goals centered on values and a humanistic understanding, the result will be directed towards the common good.

## 5. Hans Jonas and the principle of responsibility

The principle of responsibility is the core work of the German philosopher, published in 1979. In it, the author seeks to rescue the ethics of responsibility based on cautious and humble human action in the face of the transforming power of technology. The call is for a sensible ethical order, which ideally should be accompanied by prudence and balance (20).

Within Jonas' thought, four guidelines are described that explain the element of action within ethics: 1) collectivity, since it is through collectivity that the rule of responsibility exists in relation to political philosophy, i.e., the application of justice; 2) humanity has no right to suicide; 3) the great technological risks show the pride and excess of comfort of human existence, and therefore, there is no need to generate more conditions to preserve humanity; and 4) human existence must be safe from experiences that put it at risk or in a state of vulnerability (16). In short, an anthropological ethics of responsibility.

On the other hand, the philosopher shows the need for human beings to act with caution and humility in the face of the enormous

transforming power of technoscience. And so, he proposes a new imperative: “act in such a way that the effects of your action are compatible with the permanence of an authentically human life on earth” (3:17) or expressing it in a negative way: “do not endanger the indefinite continuity of humanity on earth” (17:20). Jonas’ approach considers transgene rationality, i.e., caring for future generations by being responsible for the new technologies created (16).

As we have seen, environmental ethics arise in response to the excessive anthropocentrism characteristic of the twentieth century. In the article “From environmental ethics to human ecology. A necessary change”, Alfredo Marcos and Luca Valero reflect and argue about the proposal of a human ecology that goes deeper than environmental ethics (10). Such an approach is understood as an integral ecology that considers both environmental and social aspects supported by an adequate anthropology,<sup>2</sup> in which the human being is the point of reference for ecological actions, recognizing the value of the rest of beings (10).

The authors also take up some of Hans Jonas’ ideas, mainly the moral responsibility of human beings towards other living beings. The proposal is fundamentally based on an environmental ethic and in accordance with Jonas’ thinking, aptly synthesized as follows: “we cannot avoid every effect of our action, nor abstain from every action. And if we did, they would also have an impact (by omission)” (10). Alfredo Marcos takes up Jonas’ approach and comments that

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<sup>2</sup> Recognizing the human being as a dynamic being, the process of ecological conversion implies a personal and communitarian change that requires intellectual and spiritual communion of being. The anthropological keys or dimensions considered for such conversion are first, the creatural dimension, which implies understanding human limits and finitude within the plan of creation through love. Secondly, we find the relational dimension, which refers to the social essence of the human being through the recovery of the sense and meaning of the body since, through the body, we become present thanks to the corporeal-spiritual unity, and it is the body that is the vehicle of human actions and interactions. Finally, the dimension of respectivity, which considers that all creation is interconnected and related which implies respect and promotion of all creatures with a view to social justice and global awareness with an anthropological basis that eradicates indifference and social apathy (21, p.30-36).

within the author's thinking we find the proposal to remove the feeling of "ecoguilt" since he considers it a political and global vector that reduces personal freedoms. In fact, the philosopher's call is precisely to move from doctrine to action (10).

## 6. The call of action towards the common good

Returning to the idea of the centrality of the person himself, which, from philosophy was seen by Stoicism as a "mask", this being the role or role that is represented in life, the person is defined as: "individual substance of rational nature" —Severino Boethius— (24).

From this definition three essential philosophical categories emerge: substantiality, understood as subsistence that executes functions that are of the person but are not The Person; individuation, which refers to the uniqueness and unrepeatable character of the human person expressed through the corporeality (genetic code) which is the principle of individuation and differentiation; and, rational nature, intellectual faculty that belongs to human nature.

As can be observed, this interpretation is in accordance with the established foundation of Bioethics, since it protects the person in his physical, psychic and spiritual integrity. This substantial unity of body and spirit possesses its own history, ideas and beliefs that refer to someone and not to something (23-26), a subjective who has values that it expresses through its corporeality (27).

Environmental ethics is based on the following basic theoretical principles: 1) principle of ecological justice, 2) principle of intergenerational solidarity, 3) principle of interspecific solidarity, 4) biocentric principle, 5) principle of responsibility, 6) principle of precaution and 7) principle of austerity (17). Within the framework of the principles of global bioethics, Lecaros<sup>3</sup> observes the principle of

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<sup>3</sup> The author proposes the following framework of principles: 1) A framework principle: the principle of responsibility as care for the vulnerable being that, in the terms proposed by Jonas, allows justifying non-reciprocal duties. 2) Derivational principles: i)

responsibility as the framework of the same and from which the derivational principles are derived, as well as the strategic and practical principles that safeguard the derivational principles, here we find the precautionary principle (14). One of the core issues in environmental ethics is the precautionary principle (17), which seeks to take care of actions and decisions in our environment. This is achieved through the exercise of the following specific virtues: responsibility, respect, prevention, the obligation to know and inform, as well as the sharing of power (14).

The principle of responsibility (14) is care for the vulnerable and fragile. It is considered the basis of the concept of ecological citizenship that includes the principles of precaution, solidarity, self-restraint, and responsibility of a global citizen with a prospective vision. González considers in this respect that “a real, pragmatic change of society itself and its relationship with nature, with the environment, becomes necessary” (18).

The aim is to achieve a balanced and sustainable interaction in which an adequate collaboration between human beings, all living beings and the Common House is achieved, considering in the actions the obligation of human beings to protect nature, animals and plants (28).

As we can see, the principle of responsibility contains the virtues necessary to achieve ecological citizenship, that is, care for the vulnerable.<sup>4</sup> It is desirable to understand duties as non-reciprocal, care and

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the principle of intragenerational global justice; ii) the principle of intergenerational justice (future generations); and iii) the principle of interspecific care or principle of care for life in the biosphere. 3) Strategic and practical principles that safeguard the derivational principles: i) sustainability principle; ii) precautionary principle; iii) principle of shared but differentiated responsibility; and iv) principle of international solidarity (16, p.11).

<sup>4</sup> In a first approximation, the word “vulnerability” derives etymologically from the Latin *vulnus* or *vulneris* (wound) and can be defined as being exposed to the possibility of being attacked or harmed physically or emotionally by someone or something. Vulnerability can be applied to individuals, groups, communities or populations, and can include physical, psychological, social, economic and environmental dimensions. It is important to mention that it is not only the exposure to harm, but also the lack of

compassion for the other, sufficiency, self-restraint and moderation, predictive knowledge, fear and caution before the risks of technoscientific activities, as well as modesty and humility before these, trying to act in a moderate way and with anticipatory moral imagination.

Thus, these principles seek to adjust the technosphere —characterized by linear, innovative, ecologically inharmonious, or maladjusted processes— with the limits set by the biosphere —cyclical, conservative and self-coherent processes— in order to recover the balance between the sphere that hosts us, the human sphere and the technological sphere (13).

Therefore, understanding the need for a community project in environmental ethics is a priority if we seek real and immediate change. Therefore, the social and individual ethical discourse should be renewed by a project that includes moral adhesion, voluntary cooperation, and participation of community members. A non-territorialist society in which the human world and the natural world interact in both the public and private spheres is desirable.

## 7. Third-generation human rights

Although human beings have duties, it is true that they also have rights. To speak of human rights, understood as the faculties or attributes possessed by all human beings without exception for the sole reason of their belonging to humanity (29). They are recognized by the States under international and national positive law norms, in addition to being based on ethical values. These rights have a historical context, contemplated since 1948 in the Universal Declaration of Human Rights (30), which is also addressed in the Universal Declaration on Bioethics and Human Rights of 2005 (31).

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adaptive mechanisms to prevent or minimize harm. It can occur due to external conditions (income instability, lack of access to quality health services, unsafe environment for people with visual or hearing impairment) or internal conditions (frailty, illness and disability). All people are vulnerable to different degrees and therefore it is a productive and positive human quality that promotes cooperation, solidarity, assistance, and care (4, p.178, 16, p.10,11).

Following the same line of thought, in the evolution of human rights we find in the first order the fundamental rights of man and citizen that make up the civil and political rights belonging to the first generation of human rights. The second generation includes the economic, social and cultural rights currently known as economic, social and cultural rights. Finally, third generation human rights arise as a response to the current problems and needs of man and humanity, they are known as solidarity rights and are found in the right to peace, to development, to the self-determination of peoples, to a healthy and ecologically balanced environment, to mention a few (29).

Likewise, the right to a healthy and ecologically balanced environment is also immersed in the right to a healthy and ecologically balanced environment. This problem is closely related to the production, distribution and consumption of goods and services resulting from a technical and globalized industrial production, understood as economic development, predominant since the middle of the 20th century (32).

The environmental problem is of worldwide interest. Such is the case that, at the international level, the UN has proposed 17 sustainable development goals for 2030. For this work, goal number 13 “Climate action” is important because it directly calls for human action to address the harmful effects of man on the environment. There is also an indirect relationship with goals 7, 11, 12, 14 and 15, since they range from the use of clean energy, sustainable cities, responsible production, and consumption to the conservation of underwater life and ecosystems (15).

It is clear then that anthropocentrism has omitted to observe ourselves as a single human family and understand the relationships between the beings of the universe. This has triggered some of the consequences of the deterioration of the world, such as pollution, climate change and its effects on social, economic, distributive, and political aspects, the right to clean and potable water, the loss of biodiversity, the deterioration of the quality of life and social degradation, evasive reactions lacking generosity, solidarity and care, as well as the diversity of opinions (19).

Likewise, the political-economic considerations that endorse or allow global phenomena that threaten any form of life on the planet (which can cause climate change, desertification, deforestation, and the increase of urban concentrations) should ideally be directed towards a common project.

## 8. Conclusions

Today it is evident how much damage has been done to Mother Earth. The irresponsible use and abuse of nature's goods reflect the dominance of consumerism in current behaviors, as well as the exploitation of resources, the lack of limits and the rise of mediated interests. This has led to a human freedom without limits, losing sight of the fact that nature is unique and unrepeatable, therefore, it is necessary to become aware, to think and to ask ourselves again what is the contribution of each one of us in the environmental issue?

Human ecology is a reminder that nowadays problems of this nature are inseparable from an approach that considers human, family, work, urban contexts and even the relationship of each person with himself.

The practical application of the thought of Pope Francis and Hans Jonas is to recover consciousness in the human being, seeking a balance between anthropocentrism and biocentrism. For both Pope Francis and Jonas, it is necessary to consider the principle of responsibility.

On the other hand, at the social level, it is necessary to form new habits. First of all at the internal level, which is with oneself; then solidarity, which is with others; the natural, which is with living beings; and finally, the spiritual. These new habits also include growing in solidarity, responsibility and care based on compassion, which implies a personal transformation that necessarily observes environmental responsibility.

It is desirable to establish harmonious relationships with other non-human beings —animals, plants, air, water, earth— and to estab-



lish a new morality with respect to the environment and the importance of caring for it. In this way, the sacredness of life can be reemphasized.

The construction of human ecology is aimed at orienting political, educational and communication efforts towards anthropological, scientific, experiential, and common-sense criteria that are oriented towards freedom and the virtuous development of people. The changes that are proposed or meditated on must be judicious, prudent, and not impulsive. Taking care of our environment implies our self-care, the balance of the organism-environment relationship.

Ecological conversion—which begins with an inner conversion— favors a return to simplicity and the recognition of the integrity of human life and, therefore, of ecosystems. Finally, it is a priority to rescue the relationship of care on the part of the human being towards the environment. This implies sobriety, closeness to nature and fraternity in the care of the common home, avoiding domination, consumerism and exploitation of resources, since it allows us to take care of ourselves, others and the ecosystem.

In short, community conversion requires good policies that focus on a common plan as a human family in order to achieve the much-needed ecological conversion that implies an alliance between humanity and the environment.

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