

# **Preliminar approach to orientative principles for a Global Bioethics capable of facing today's challenges**

## **Propuesta preliminar de principios orientadores para una bioética global capaz de enfrentar los retos de hoy**

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### **Abstract**

The current reality and its multiple interactions require a clear response from Global Bioethics that establishes the bases for the guidance and solution of global bioethical conflicts and dilemmas. Throughout this text we will reflect on the scope of Global Bioethics, from its birth as a discipline, to conclude with a proposed methodology that contributes to finding simple solutions to complex problems from an interdisciplinary perspective.

*Keywords:* Global bioethics, subjects of interest, human rights.

### **1. Introduction**

Global bioethics can be defined as a sub discipline of bioethics that was created and developed by the biochemist, oncologist and researcher Van Rensselaer Potter, in 1988, from his work *Global*

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*bioethics. Building on the Leopold legacy*, as a result of his reflections already expressed in his main work *Bioethics: Bridge to the future*, in 1971. In both works, Potter reflects on the need to create a new discipline that applies ethical principles to the new advances in technology, with the aim of avoiding harmful effects on the environment; that is, he proposes the creation of a transdiscipline aimed at guaranteeing human life, based on a dignified survival in an optimal environment, to which future generations would be entitled (1).

Concern about the disappearance of the human species and the destruction of the environment was not in vain. The 1980s marked a brutal escalation of pressure between the two protagonists of the Cold War, the United States and the Soviet Union, which ended with the fall of the Berlin Wall in 1989 and of the Communist bloc in 1991, thus reviving the ephemeral global hope for a world without conflict. At the same time, seeing the imminent triumph of the Allied bloc, the presidents of the United States and Great Britain (Ronald Reagan and Margaret Thatcher) laid the foundations for neoliberal economic policies as a result of the Atlantic Charter (1941) and the Bretton Woods Agreements (1944), which led to the creation of such important international institutions as the International Monetary Fund, the World Bank (1946) and, later, the World Trade Organization (1995).

These agreements, aimed at the implementation of liberal principles in the domestic economies of the countries, starting with the United States, put an end to the conquests and guarantees of social and labor human rights achieved by factory workers as a result of the struggles carried out by previous generations.

For its part, in Latin America, the implementation of the Reagan doctrine justified the political and economic support to military coups in Central and South American countries, generated with the aim of avoiding their potential support to communism in the context of the Cold War. As a result of these geopolitical maneuvers, a regime of systematic violation of human rights was established through policies of State terrorism. Guatemala, Chile, Argentina,

Panama, Bolivia, among others, suffered cruel dictatorships followed by long civil wars, the wounds of which have yet to heal.

A documented example of this historical moment is the case of Nicaragua and the United States (military and paramilitary activities against the Nicaraguan government).<sup>1</sup> In this interesting process, Nicaragua denounced the United States before the International Court of Justice for violating international law by supporting with resources the armed opposition (the *contras*) in their war against the democratic Nicaraguan government. During the maneuvers, in addition to thousands of deaths, fundamental structures of the State were destroyed (ports and other various means of land communication), leaving the country in a situation of technical and social development setback.

The panorama of global violence that characterizes this decade does not exclude the effects of weapons and the escalation of arms and technology on nature and its resources. The effects of sustaining a war economy, in addition to new technological discoveries applied to monoculture productions, were disastrous. Practices such as the nuclear tests on the Mururoa atoll (1966 and 1996); the Chernobyl nuclear accident (1986); the leakage of 45 tons of toxic gas in a pesticide factory of the US company Union Carbide, in Bhopal (India), which caused the death of more than 30,000 people in 1984. These are some of the events that highlighted the self-destructive capacity of human beings and its consequences for nature. To this must be added the discovery of the hole in the ozone layer in Antarctica; the indiscriminate use of pesticides; the beginning of the use of genetically modified plants and animals, etc. All these actions and their consequences were beginning to damage the health of the most vulnerable populations on the planet.

These are some of the historical events that put researchers, social actors and the population in general on alert and concerned about the survival of the human species. The unstoppable degradation of the environment, coupled with rapid technological advances, all of them without an ethical control that would allow

adequate reflection on the harmful effects of these actions, both for the individual and for Nature, highlighted the need to design and apply a series of principles that would serve as a guide for decision-making aimed at protecting Nature and, therefore, the survival of individuals and societies based on a common value: dignity.

In this context, it is necessary to highlight a key moment: the proclamation of the *Earth Charter*. In 1987, the *United Nations World Commission on Environment and Development* was created, which called for the drafting of a Charter that would include the fundamental principles for sustainable development, an initiative that has become a worldwide movement to date.<sup>2</sup>

Another important initiative for global bioethics started in the 1980s was the request to the United Nations for the *Declaration on the Rights of Future Generations* (2). In spite of the obvious obstacles encountered by its promoter, the French marine scientist Jaques Cousteau, a timid declaration was finally approved, the result of more than ten years of work and development.

These two milestones seem very distant; however, after analyzing the current panorama, marked by a global pandemic that has accentuated pre-existing inequalities, the continuous warnings from the United Nations about the alarming environmental degradation and the normalization of violence, national and international, that is generating insensitivity towards its victims; all these circumstances have brought to light two realities: global bioethics must evolve as other systems have done (scientific, economic or human rights) and, secondly, this evolution must be based on a transdisciplinary construction that creates new concepts, based on principles and constructions aimed at providing solutions to the global problems facing humanity.

## 2. Background

Van Rensselaer Potter, in the title page of his book *Global Bioethics. Building on the Leopold legacy* (3), defines the concept of «global bio-

ethics» as *Biology combined with diverse humanistic knowledge, forging a science that sets a system of medical and environmental priorities for acceptable survival*; that is, as «biology combined with diverse humanistic knowledge, shaping a science that develops a system of medical and environmental principles for acceptable survival».

Although some criticisms could be made of this work –such as its simplicity in the reading of social problems, since it is based solely on biological arguments that are quite imprecise when applied to a complex being (such as the person), who lives in a global village during one of the most difficult periods in human history<sup>3</sup>–, it is nevertheless possible to extract several important reflections as a guide for action in today’s world for the discipline called «global bioethics».

The first is that ethical values cannot be separated from biological facts, but neither can they be separated from medical, political and economic facts. In a period in which ethics has been vilified for the sake of the magnification of reasonableness, the analysis of history and its consequences in the human family show us that the rational is not always the most reasonable. For this reason it is necessary to inquire into the process by which ethical values can be present in decision making that affects life, human and natural, holistically. Thus, as Potter argues, *what is demanded of each generation is an ethical theory that is not a mere rationalization of prejudice or a physiological discourse so abstract as to be irrelevant to solving the practical problems facing humanity* (3).

Ethics applied to life or, to be precise, to the survival of life in a broad sense is the field of study of bioethics; however, since its creation it has taken on its own inertia, applying itself to biomedical and clinical activities. This approach was adopted, developed and defended by the obstetrician André E. Hellegers, who founded the Kennedy Institute of Bioethics at Georgetown University (1971), where, for the first time, an academic development of bioethics as a discipline took place. From the work done by Hellegers in 1978, the first encyclopedia of bioethics defined by Warren

Reich was published. From these developments, the definition of bioethics was agreed upon as *the systematic study of human behavior in the area of life and health sciences, examined in the light of values and moral principles* (4).

According to these publications, bioethics was thought to be in-cardinated in the areas of health sciences, focusing its implications on technological advances such as human *in vitro* fertilization, manipulation of human embryos, cloning, abortion, among other issues, as well as on encouraging the reflection on the consequences that these biotechnological developments would have on human life, dignity and survival.

With the aim of guiding the decisions to be taken in the biomedical field on these issues, the bioethicists T. L. Beauchamp and J. F. Childress proposed a system of principles applicable to the constant challenges that the development of biotechnologies imposed on bioethics, which to this day serve as a guide for the resolution of bioethical dilemmas. These principles are four: autonomy, beneficence, non-maleficence and justice. They were established within the current called principlism, considered as one of the sub-currents of utilitarianism, together with contractualism and *prima facie* deontology.

The first principle that of autonomy, refers to the duty to respect the capacity of people in making decisions about their own life and integrity based on the requirements of reasonableness and information. Secondly, the principle of beneficence refers to the duty of medical personnel and healthcare structures to act in the patient's best interest. The parallel principle to beneficence, non-maleficence, is oriented to the duty of healthcare actors to avoid harming the patient and, in the event of harm to the person, it must be of a lesser magnitude and proportional to the benefit to be achieved by the harmful action. Finally, the principle of justice is limited to establishing parameters for the equitable distribution of risks, harm and benefits in the healthcare area.

Parallel to the principlist current, others emerged, such as the personalist, utilitarian, liberalist and sociobiological currents, from which a hierarchy of principles was generated to guide the actions of healthcare and/or research personnel in cases of real ethical conflicts. However, if we analyze the resolution of conflicts or dilemmas in the field of global bioethics, we can see that these tools are not optimal for unraveling complex problems that put life at risk, from a broad and global perspective. Therefore, as a first approach to this branch of bioethics, we will briefly review its history.

Potter, already considered the father of bioethics in the English field, criticized, in his work *Global Bioethics* (1988), that *Joseph and Rose Kennedy Center for the Study of Human Reproduction and Bioethics* of Georgetown University used the term «and Bioethics» in its name, omitting the origin of the term and limiting its scope to its development in medical bioethics committees working in Bioethics Centers in the clinical area, dealing with the problems of life and death that are still controversial today. Thus, bioethics had been limited to its development within the medical, clinical or biotechnological research area, a trend that was criticized by the father of bioethics in his lecture on the occasion of the 66th Annual Meeting of the American Cancer Association (1975) (5).

With the focus on medical options, the fact that Bioethics had been proposed to combine human values with ecological facts was forgotten by many: the ethics of how far to exercise technological options in the exploitations of the environment was not associated with the term bioethics.<sup>4</sup>

The reality and the research activities carried out in universities show us that the two aspects are not in dispute; on the contrary, they are complementary and feed off each other in their common goal of achieving a dignified life for present and future generations in a common home that is cared for and respected. However, while for clinical bioethics there is a wide range of clear values and

principles for the resolution of ethical conflicts, can the same be said of global bioethics?

### **3. Are the principles of clinical bioethics applicable to global bioethics?**

Analyzing the origin of the interests involved in the conflicts of global bioethics, i.e., those that involve not only individuals, but also society, nature and even future generations, can hardly be solved on the basis of the principles of clinical bioethics, since the latter is developed on the basis of the relationship between two or more subjects (individuals) in the process of the medical or research act. However, when the bioethical conflict identifies a group of people (a collectivity) or a non-human living being, such as nature, with its flora, fauna and natural resources, the principles set out above have no meaning whatsoever.

Therefore, principlist bioethics, although it helps to clarify obscure points and to bring order to moral language, as well as to the construction of normative systems that allow overcoming fallacies and logical errors (6), manifests an undeniable Anglo-Saxon approach to reality, considered by several branches of bioethics (such as the so-called bioethics of intervention, the bioethics of protection, or the bioethics of protection or the bioethics of bioethics), protection bioethics or human rights bioethics) as incapable of shedding light on the needs of developing countries or even for the poor populations of developed countries (7), where the principle of justice and equality require greater commitment and significance.

In a world of limited resources, the good living of all is incompatible with the better living of some. It is not possible to make them compatible, not even by referring to J. S. Mill's statement that the foundation of all happiness is *not to expect more from life than life can give* (6). In the face of scarce resources, the excess of one is sustained by the lack of the other.



In this sense, accepting the interrelation between the destruction of the environment in relation to the progressive degradation of societies and the integrity of individuals, as is done from integral ecology, would provide the optimal transdisciplinary approach for the solution of the dilemmas of global bioethics: environment and natural resources, poverty, inequality, interculturality, among others, where the interest to be analyzed is not divisible.

Therefore, part of the task at hand will be the transformation of the principles of bioethics from a collective approach to the persons and natural assets in need of protection by global bioethics. This challenge is not only necessary for bioethics, but it is still a pending issue in the guarantee of human rights, which is why it is possible to make use of its developments and experiences. In this sense, this paper proposes and justifies the existence of four subjects of interest for global bioethics: the individual, society, nature and future generations.

#### **4. Areas of interest in global bioethics**

As mentioned above, the subjects of interest for medical bioethics are the person (physician/researcher/patient). However, people, being beings in relationship, cannot remain oblivious to what happens to their fellow human beings and to the environment in which they are situated; this is what global bioethics realizes and therefore it is important to understand and attend to the person in his or her social dimension and in his or her relationship with the environment. However, the panorama of global bioethics is more complex, since it involves other entities or subjects whose protection must be manifest: human communities or societies, nature and future generations. Therefore, one of the proposals of this paper is to recall the interest of providing protection and care to these three entities from Global Bioethics, without neglecting the person, for the reasons that will be developed below. However,

before starting the argument about the need to consider these subjects of interest, what is meant by such category will be specified.

The term *interest* comes from the Latin *interesse*, which means «to be interested, to matter». Consequently, the subjects of interest in global bioethics would be understood as those subjects or realities «that matter». Consequently, because of their importance for the dignified survival of the human family and the common home, they must be protected. Considering the levels of importance to contribute to the protection of the dignity of the person, it has been determined that the areas of interest should be: people, communities, nature and future generations. In this sense, if the necessary protection of these subjects is agreed upon, Global Bioethics would be forced to overcome the handicap of the individualistic vision of its traditional approach to consciously enter the collective vision, since only in this way will it be able to solve dilemmas that exceed the individual.

In current practice, there are conflicts involving interests that cannot be divided in proportion to the impact on individuals; in these cases we are talking about collective interests. As an example, referring to the right to personal freedom, to integrity, to freedom of thought and conscience, can be thought of in individual terms; however, if we try to calculate the interest that corresponds to each person, for example, the right to a healthy environment, or to Peace, or to the conservation of ecosystems, in these cases, the difficulty in determining the plot of common interest is highlighted (5). Moreover, even social substrates marked with some kind of discrimination would limit protection (such as nationality, whether legal residence requirements are met, whether tax burdens are complied with, among others). For example, this is the case of the contamination of a spring with which migrants and undocumented migrants in transit quench their thirst. In this case, it would be more appropriate to defend the spring *per se*, because it is valuable in itself, but also for the work it does in providing water to all those

who need it. Therefore, if we analyze the ethics of the activities that pollute that source, we must start from the analysis of the damage to the natural good itself, as a area of direct interest, but also to all mankind as a area of indirect interest, since anyone should have the possibility of quenching their thirst in the spring; even future generations should also be entitled to such interest.

For this reason, this legitimate prerogative of any person to have access to water from a spring is called collective or supra-individual interest. The category of diffuse interests has even been established, which refers to those whose beneficiaries are not identifiable, such as future generations.

The defense of individual, collective and diffuse interests has been developed in the field of law; however, this concern has not yet crystallized in the field of Global Bioethics developed by Anglo-Saxon authors, such as Ten Have. After making an analogy of Ada Pellegrini Grinover's studies on public and private interests in the international legal sphere, the academy makes a critique that highlights the ineptitude of the traditional normative (legal and bioethical) paths for the solution of conflicts or dilemmas in the protection of transindividual rights and duties; that is, those located between the public interest and the private interest, these being common in a globalized society (8).

Along the same lines, Kazuo Watanas explains that the traditional strategy that normative systems have had for the resolution of controversies has been built from the liberal vision, where the individual perspective is preponderant (9). However, this atomized perspective has fragmented conflicts, preventing their integral approach and, therefore, the design of a holistic, ethical solution in accordance with fundamental rights.

In conclusion, according to Antonio Gidi, supra-individual rights or interests do not belong to a specific person, but to an amorphous, fluid and flexible community with a social identity. They are not the addition (sum) of individual rights (10), but the adaptation

of the required positioning is qualitative; that is, transindividual interests (they go beyond the individual vision) have a marked social dimension, as they are common to a collectivity of persons or to society in general. For example, the interest in conserving the Amazon rainforest does not only come from the communities that live there, nor even from the states in whose territory it is located; this is an example of transindividual and diffuse interest, since it involves the human family as a whole, the ecological system itself and future generations, who should have the possibility of enjoying this resource in the same conditions as we do (or better). Therefore, diffuse interests are involved with the protection of collective needs synthetically referred to the quality of life and the environment.

*a) The person as the subject of interest of global bioethics:  
the pro persona principle*

The protection of the person has been one of the most controversial issues in bioethics, in terms of its consideration of the qualifier «dignity» and the scope of the concept of «dignity». Dignity refers to the inherent value of the human being for the simple fact of being human, as a rational being endowed with freedom, but the way to safeguard this quality is the element that has generated the greatest disagreements, since it is not granted by anyone, nor does it depend on any conditioning (ethnicity, sex, nationality or any other attribute), but is consubstantial to the human being and is inherent to the mere fact of being a person. It is not acquired by attitude.

Therefore, the value of the dignity of each and every person leads to the classic questioning of the origin of economic and social inequalities in the world; that is, to the ways of guaranteeing the principle of equality based on its best tool: equity. Consequently, on the basis of the principle of equality, all people have the right to a decent life that ensures health, food, clean water, oxygen, ade-

quate housing, environmental sanitation, education, work, rest and leisure, physical culture, clothing, pension; that is, that satisfies the needs for a good life. In the formulation of the philosophy of good living, not only material goods are considered, but also others of equal importance, such as knowledge, social and cultural participation, ethical and spiritual codes of conduct, the relationship with nature, human values; in short, the expectation of the future (11).

The current of thought in bioethics that is most protective of the person and his dignity is the personalist current, whose most important representative is Elio Sgreccia. He proposes four principles based on an anthropological framework that starts from the notion of the person as a unit and as a whole, to be exercised on a daily basis in the field of bioethics, these are: the principle of defense of physical life, the principle of freedom/responsibility, the principle of totality or therapeutic principle and the principle of sociability and subsidiarity.

The principle of the defense of physical life is established as a fundamental good, but not in its totality. Without it, there can be no other values. The principle of freedom and responsibility conceives it as an intangible, transcendent and proper good of the human person, which requires the use of the knowledge acquired through time and the will to make decisions. The totality or therapeutic principle derives from the medical intervention for the benefit of a patient, towards the wholeness of the person, to improve his condition from a state of disease, always seeking wellness. Finally, the principle of sociability and subsidiarity refer to the contribution of individuals to provide a service (sociability) or, failing that, to the obligation to be responsible for a service received and to provide the greatest assistance to those who most require it (subsidiarity). All of them present a social and humanistic tendency that serves as a structural framework for the construction of a Global Bioethics where the protection of human dignity is the starting point.

*b) The community as the area of interest of global bioethics*

Throughout the history of mankind, the human beings as essentially social beings, have been united in families, tribes, communities and any other social groups, whose members shared moral principles, religion, and customs, among other signs of identity. For this reason, when we speak of community or social group, we are not only referring to a group of people, but to everything that these people and their ancestors built in common: culture and worldview. All this is of the utmost importance not only for the people who are part of that community, but for all humanity and future generations; it is the whole of human knowledge and cultures, an intangible value that enhances the human family.

In this line, and closely linked to diffuse interests, are the rights of solidarity, aimed at the protection of peoples, not as a political category, but as a cultural structure (10). These solidarity rights were created in the 1960s, parallel to Potter's bioethics, and emerged as an optimal way to achieve cooperation and peaceful coexistence among peoples. This objective is based on the construction of values that seek to consider humanity as a whole, since the peoples that compose it experience shared needs and hopes, while respecting the diversity that characterizes them.

Among the so-called solidarity rights are: the preservation of flora and fauna, the care and promotion of art and culture, the right to the common heritage of mankind and the self-determination of peoples (12). In conclusion, solidarity rights seek to promote the principles of equality and equity, based on a notion of progress in accordance with the protection of human dignity, diversity and the common home.

Landing this category of rights in global bioethics, the peoples and communities of the world are proposed as subjects of interest and, therefore, worthy of protection when defending their strongholds, such as: the survival of their representatives, culture, language and, ultimately, their worldview.

*c) Nature as a area of interest in global bioethics*

The inclusion of nature as a subject of interest is not a new fact for bioethics, since it has already been defended in other terms as an entity of necessary defense and protection. As Potter states: *The Earth ethic is not a choice between the rights of human beings versus the rights of animals and plants. On the contrary, it expresses the belief that human species cannot survive without the capacity to see, feel, understand, love or even have faith without an Earth in community* (3). Therefore, in global bioethics, nature must be considered as an area of value and in need of protection, and this perspective is based on two justifications.

The first is the intrinsic value of nature itself. The planet Earth should not only be considered valuable because of the need we have of it for subsistence, but also because the ecological system that makes it up, the flora, fauna and all the resources that coexist harmoniously, have an intrinsic value that is difficult not to appreciate. Ecological ethics considers the notion of «intrinsic value» as a necessary requirement to establish moral duties towards the non-human world (13); however, it is disproportionate to deny the intrinsic value of nature from an anthropocentric perspective, only with the aim of justifying the distribution of humanity's responsibility towards it.

As a parallelism, it is possible to explain the process of recognition of companies as legal or moral persons, which are figures that are assimilated to an individual endowed with rights and obligations, but who is not a citizen, but an institution, organization or company. Therefore, if the construction of such a fiction is allowed, which even makes it possible to demand in its name rights such as property or access to justice, it is possible to think of nature as a subject of rights and interests.

Secondly, nature must be a subject of interest because of its instrumental value; that is, because of its role as a common home. The human species has always been dependent on plants and animals, which in turn depend on the soil, water and air; in other

words, the ecosystem is interdependent and needs to be balanced. Man-made damage to the environment has more profound effects than previously contemplated, leaving in a situation of vulnerability the peoples and communities whose worldview and survival depend directly on natural resources.

In conclusion, regardless of the argument chosen, whether it is the instrumental value or the intrinsic value of nature (or both), human beings must be aware of the importance of respecting and protecting it. Human beings should be more concerned about their duties for the conservation of the environment than about their rights over it, since the survival of all species, as well as our own subsistence, depends on this concern. As Potter pointed out, *humanity is in urgent need of a new wisdom that provides the knowledge of how to use knowledge* (3).

*d) Future generations as the area of interest of global bioethics*

With respect to the subject of interest of future generations, the first to raise the concern about the inheritance that would be left to «those to come» (beyond our descendants) was the French oceanographer Jacques Cousteau, who, during the 1960s, provoked a reflection based on Fanon's prose about *the commitment that entails an ethical and social «responsibility» to work for a more just, caring and humane world, where the «condemned of the earth» (6) are treated as subjects capable of autonomy, free of any determination that prevents them «be more»*. As a result of this concern, in 1975 a proposal for *A Bill of Rights for Future Generations* was submitted to the United Nations, from which a five-article petition was concluded. This was the first global awareness of the fate of future generations (14).

But it was in November 1997<sup>5</sup> that the *Declaration on the Responsibilities of the Present Generations towards Future Generations* was adopted, the first article of which states that *the present generations have the responsibility to ensure that the needs and interests of present and future generations are fully safeguarded*.



Despite the reluctance to recognize the importance of including future generations in decisions about resources and the environment, this consideration is imperative, for as soon as we consider «those to come» we will be envisioning our future. Requiring future generations to survive on a planet without water, with depleted natural resources and high levels of pollution because we do not know how to measure our current consumption is clearly unfair, and the effort placed on their shoulders is disproportionate. If we remember our ancestors by the institutions they created, the books they wrote, the pictures they painted, how will future generations remember us? By the animals that became extinct, the libraries that were bombed or the seas that were polluted?

But the heritage of future generations should not only consist of the natural environment, but also in the historical vestiges and in the different epistemes coming from the cultures that populate the planet. In conclusion, in everything that comes from the human being and that enriches both the spirit and the reason. In this sense, it is worth mentioning the Convention on the Protection of the World Cultural and Natural Heritage, adopted by the General Conference of UNESCO at its 17th session, held in Paris on November 16, 1972, which has been ratified by 191 countries.

For all these reasons, each of the above areas of interest should be considered and protected when making decisions where there is a moral dilemma.

## **5. A proposal of principles applicable to global bioethics**

In order to achieve the greatest protection of the areas of interest, it is essential to bear in mind that global bioethics is not a discipline separate from the rest of the disciplines; that is, there are other disciplines that can contribute to the fulfillment of the common objectives based on an interdisciplinary methodology. Therefore,

before referring to the proposed principles, a distinction will be made between system, value and principle, since there is a need to establish coordination between systems, principles and values that allow the protection of life in a broad sense.

*a) System*

A *system* is an ordered set of rules and procedures that regulate the functioning of a group or collectivity. Multiple normative systems can be identified within a territory, from those that come from legal norms, uses and customs, moral, ethical, religious norms, among others, whose ordering principles must be cooperation and coordination with the objective of achieving the common good (15). Under this multisystem perspective, together with the structures of principles and values of global bioethics that we will briefly develop below, we find the human rights *system*, which is composed of legal norms, principles and values, some of which are mandatory under international law.

Although the UNESCO Declaration on Bioethics and Human Rights has tried to mix human rights norms (those contained in international treaties that are binding on States), ethical norms (which are not binding) and internal norms that refer to the domestic law of countries (for example, those that regulate the expression of consent, the incapacity and other institutions that depend on the legal tradition of States, since they belong to civil law), this integration can hardly work if it is not approached with the appropriate methodology.

For all these reasons, it is proposed to consider that, for the same objective, such as the achievement of the common good through the protection of the four subjects of interest, it is necessary to articulate the bioethical system and the normative system, in such a way that the bioethical norms grant legitimacy and awareness to the protection framework established by the bioethical norms. Thus, both human rights and environmental protection regulations

would be obligatory, not so much because of the national and international coercive system (increasingly poor), but because of the crystallization of a universal morality in international custom.

*b) Values*

Values can be defined as individual aptitudes or qualities that define an individual's behavior in society. These values derive from universal ethical principles (16); hence their purpose is to guide individuals to act correctly, individually and collectively.

The values of the human rights system and global bioethics are similar: equality, justice, dignity, freedom. All of them imply a guide or guideline that tends to the protection of the best interests (16).

*c) Principles*

Principles (17) can be considered as the guide that allows differentiation between right and wrong. They are the tools through which values are manifested. Therefore, even in the field of rights, principles are a set of ethical parameters of a universal nature, aimed at guiding life in society. It is expected that all people know and put into practice the basic ethical principles, so that social coexistence is carried out in harmony, seeking personal improvement but never to the detriment of others (18).

These principles exist regardless of whether the individual is aware of them or puts them into practice.

Considering all of the above, the following is a first methodological proposal to encourage further reflection on whether these principles are the most appropriate tools to contribute to the establishment of a methodology of Global Bioethics, based on the pro-person principle, that is, from a vision of the person as a being in relationship and from whose freedom emanates the natural responsibility for the reality that surrounds him/her.

*1. The principle of weighting or proportionality in the measurement of harm-benefit in the confrontation of subjects of interest*

Weighting is the way to apply the principles and resolve the collisions that may arise between two interests of equal relevance (19) and that, because of this same interest, their equal protection is necessary. In this case, since the subjects of protection (personal, community, nature and future generations) have equal need for protection, one cannot be harmed in favor of the other. In fact, the interrelation among the four areas of interest would cause that, by harming one, the others would also be harmed for the benefit of one. For example, if a company (or individual) wanted to establish itself in an archaeological natural environment, it would be necessary to weigh the benefit that the individual and society would obtain from the activity of this company. On the other side of the scale, the damage to the environment and its irreversible quality must be taken into account, i.e., the level of impact on native species, the possibility of coexistence with the native communities and the respect for the heritage for future generations.

In this example, we can see how much the achievement of a benefit for a group of individuals could have an impact on the rest of the subjects of interest.

To determine a weighting methodology, we propose the adaptation to bioethics of the weighting or proportionality test, which has its origin in the constitutional argumentative technique of German origin,<sup>6</sup> and is intended to study the legitimacy of restrictions to fundamental rights made by the legislator, but which could be adapted to the needs of global bioethics in terms of measuring the proportionality of the harm-benefit that a decision, action or omission may cause to the subjects of interest.

In the technique of the proportionality or harm-benefit test, it should be stated that, given the possibility of causing harm to a stakeholder, it would be necessary to prove whether such harm is necessary and justifiable, compared to the benefit obtained by the rest of the stakeholders.

In order to unravel this argument, the following questions should be asked:

- a) Whether this action or omission pursues a legitimate *end* and if the *means* is also legitimate, on the understanding that the end does not justify the means.
- b) Whether such restriction or harm to the principle is *suitable* or whether there would be a less harmful one.
- c) If it is a *necessary* measure.
- d) And finally, if it is a *reasonable* measure.

From the answer to these questions, it could be concluded whether the decision taken is bioethical or not. For example, if we analyze the ethics of the decision to concession ancestral indigenous territories to a tourist group, the following points should be put on the table:

- If the decision pursues a legitimate purpose; that is, if the decision violates any national or international norm. In this case, although there are international norms that could prohibit this decision, since the states are sovereign, they could finally grant it. However, assuming that it were legal, it would be necessary to discuss the justice of such a decision, in order to consider it ethical or not, taking into account the damage to the areas of interest (people, communities, nature and future generations).
- Secondly, it is necessary to analyze the suitability; that is, what is the final objective of this tourist corridor. If this is economic development, it would be necessary to analyze whether there are no other measures less harmful to communities, nature and future generations that would meet this objective.
- The above requirement goes hand in hand with the question of how necessary such a tourism corridor is to meet the stated development objectives.
- Finally, it is necessary to analyze the reasonableness of the measure, i.e., the fairness in weighing the harm-benefit of the project's outcome.

In conclusion, the analysis of these points can give us tools to determine the ethical or bioethicity of a damage generated to a subject of interest or several of them.

2. *The principle of reasonableness when studying the legitimacy of a decision that may harm a subject of interest*

To speak of reasonableness in law implies analyzing whether the solutions to conflicts of legal relevance are fair or not; that is, whether the reasons behind them are in accordance with reason and not products of mere subjective appraisals or reactive to feelings, inaccuracies or personal tastes.

D'Ors identified reasonableness with prudence. Justice depends on prudence. It is an intellectual virtue that *implies knowing what should or should not be done (20); a prudent solution must combine the logical argumentation of clear legal concepts with the need to reach a practical solution that is as simple as possible (20).*

This perspective is very practical for decisions on global bioethics. Starting from the hypothesis that everything rational is not always the most reasonable, the reasonableness test would give us the guideline to analyze a decision that seems to violate the equality between persons or the value attributed to the areas of interest. Therefore, this tool is used to analyze the arguments used to justify differential treatment. To this end, the following steps are proposed:

1. First, to determine whether this measure violates the identity characteristics (race, age, nationality, language, among others) of those persons or groups that have historically been denied their rights or discriminated against precisely because of those categories. When a measure taken by an authority grants a differentiated treatment to a social group with respect to the rest, it may give rise to a suspicion of discriminatory treatment, especially when this difference is based on race, language, age, nationality, etc. In these cases, it is essential to justify the reasonableness of the measure, based on the actual greater benefit obtained by the vulnerable groups compared to the damage caused to the principle of equality.

2. Secondly, the level of justice attributed to the decision must be analyzed on the basis of:

- The *proportionality* of the measure; that is, whether the violation of the principle of equality is less than the individual or social benefit obtained.
- *Reasonableness*: Whether it is carried out legitimately and fairly.
- *Objectivity*: If the decision is motivated and based on the achievement of the common good.

This test could be used to validate the decision to eliminate patents on anti-COVID-19 vaccines. These measures, which are undoubtedly controversial, because of the economic effect it would have on pharmaceutical companies, would be of great benefit to those developing countries that have not had access to vaccines to be able to vaccinate their population.

In this case, it should first be analyzed whether the company can be considered as a stakeholder that belongs to a vulnerable category for having been systematically discriminated against throughout history. Here, the conclusion is that pharmaceutical companies do not belong to this category, as there has been no case or pronouncement in this regard that can prove this assertion.

Secondly, it is necessary to raise the following questions on:

- *Proportionality*. This is determined by measuring whether the harm generated for pharmaceutical companies is greater or lesser than the benefit for people in developing countries. After this reflection, it can be determined, for many reasons that the tangible and intangible benefit of extending access to the vaccine to a greater number of countries is greater than the benefits not obtained by the continued exploitation of patents.
- *Reasonableness*. In this section it is necessary to analyze whether this restriction is carried out in a legitimate and fair manner. Since it is the representatives of the countries who make the decision on the basis of the principles of cooperation and sharing the benefits of research through the internatio-

nal procedures provided for in the World Trade Organization (WTO), it could be argued that it is a reasonable measure. On the other hand, this decision should be accompanied by other measures aimed at mitigating the damage to companies; for example, marketing opportunities for other products, research, among other incentives at a global level.

- *Objectivity.* By balancing the common good and the economic benefit of companies, the cost-benefit analysis points to the ethical nature of the decision taken from an objective point of view, applying the maxim of achieving the benefit for the greatest number of people.

Therefore, from this succinct form in the argumentation, it can be concluded that this measure is reasonable from the ethical point of view for this specific case, due to the global pandemic that is costing the lives of thousands of people around the world. However, it must be borne in mind that these tools (the weighting or proportionality test and the reasonableness test) are only applicable to specific cases, the conclusions of which cannot be extended to the whole. This means that, even if it is determined (as is the case) that the suppression of patents is ethical for anti-Covid-19 vaccines, this does not mean that the suppression of patents for the rest of the drugs or procedures is ethical, since this would place the intellectual property system in serious crisis.

In addition to these tests of proportionality and reasonableness, other principles of law (32) can be adopted for the determination of moral obligations in the solution of conflicts and dilemmas of global bioethics; for example, in summary form, the following could be named:

- No one should be enriched by the harm of the other, meaning by other the different areas of interest of global bioethics.
- The thing that has been between some, should not harm or benefit others.



- Conventions between individuals do not derogate from public law.
- Anyone can improve, but not worsen the situation of the other.
- Not everything that is lawful is honest.
- The statute of limitations does not run against him who cannot avail himself.
- In all things, and most particularly in law, equity must be observed.

Although these principles were designed to settle disputes between individuals where there were no applicable rules, in general terms they determine parameters of equality, equity and justice necessary for the resolution of conflicts or dilemmas of global bioethics between the subjects of interest.

## 6. Conclusion

Global Bioethics has been a discipline that, from its beginnings, has been oriented towards the protection of the person and the environment so that the survival of the human species and future generations could be guaranteed. For this reason, because the protection of the person, society, Nature and future generations is important for Global Bioethics, as an interdisciplinary discipline oriented to the survival and protection of human dignity, the tools used in the solution of conflicts and dilemmas that may arise must be optimal for this purpose.

Consequently, the coordination and cooperation between the principles of law and the ethical principles of bioethics is proposed, so that they can be adapted to resolve global bioethical conflicts. Within this cooperation, two tests are presented, the proportionality weighting test and the reasonableness test, as an adequate way for the resolution and argumentation of global bioethical conflicts, where the people and the areas of interest are involved.

## Bibliographic notes

<sup>1</sup> Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America) (Merits). The judgment can be reviewed at <https://www.dipublico.org/cij/doc/79.pdf>

<sup>2</sup> Earth Charter Initiative. Earth Charter brochure. Web page document. Accessed on: <http://fundacionvalores.es/wp-content/uploads/ACF686Folletoinformativo-CT.pdf>

<sup>3</sup> Potter's analysis in his work focuses on the decrease of the global population as a means to avoid destroying nature. However, if we broaden the vision, it is possible to prove the fallacy of his argument, since it is the inhabitants of less densely populated areas (rich countries such as the United States and those belonging to Europe or Canada) who consume more resources, waste more food, as well as devastate nature through the extraction of predatory resources carried out by their companies in the territories of developing countries.

<sup>4</sup> Page 1. Own translation: «With the orientation of bioethics on medical choices, the fact that bioethics has been proposed to combine human values with ecological facts was forgotten by many. The ethics of how far the exercise of technological choices can go in exploiting the environment has not been associated with the term bioethics».

<sup>5</sup> Other international instruments that protect the rights of future generations are: the Convention for the Protection of the World Cultural and Natural Heritage, adopted by the UNESCO General Conference on November 16, 1972; the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity, adopted in Rio de Janeiro on June 5, 1992; the Rio Declaration on Environment and Development, adopted by the United Nations Conference on Environment and Development on 14 June 1992; the Vienna Declaration and Program of Action, adopted by the World Conference on Human Rights on 25 June 1993, and the United Nations General Assembly resolutions on the protection of the global climate for present and future generations of mankind adopted since 1990.

<sup>6</sup> It affects fundamental rights. Multiple interpretations have been made of this theory. One of the most recognized has been the interpretation of the Supreme Court of Justice of the Nation in the protection under review 237/2014.

## Bibliographic references

1. Potter VR. *Bioethics: bridge to the future*. 1971.

2. UNESCO. Declaración sobre las Responsabilidades de las Generaciones Actuales para con las Generaciones Futuras. 12 de noviembre de 1997. Accessed on: [http://portal.unesco.org/es/ev.php-URL\\_ID=13178&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html#:~:text=Para%20que%20las%20generaciones%20futuras,-e%20integridad%20del%20medio%20ambiente](http://portal.unesco.org/es/ev.php-URL_ID=13178&URL_DO=DO_TOPIC&URL_SECTION=201.html#:~:text=Para%20que%20las%20generaciones%20futuras,-e%20integridad%20del%20medio%20ambiente)

<https://doi.org/10.17345/rcda3070>

3. Potter VR. *Building on the Leopold Legacy*. 1988.
4. Reich WT. *Encyclopedia of Bioethics Volume 1*. The Free Press. 1978.
5. Potter VR, Reich W. *Bioética. O mundo da saúde*. 2016; 22.
6. Arpini AM. *Para una fundamentación de la bioética de intervención: Aportes desde la ética de la liberación latinoamericana*. 2016.  
<https://doi.org/10.26512/rbb.v15i1.26669>
7. Garrafa V, Da Cunha TR, Manchola-Castillo C. The teaching of global ethics: A theoretical proposal based on Intervention Bioethics. *Interface-Comunicacao Saude Educacao*. 2020; 24. <https://doi.org/10.1590/interface.190029>
8. Grinover AP. Hacia un sistema iberoamericano de tutela de intereses transindividuales. La tutela de los derechos difusos, colectivos e individuales homogéneos. 2004. <https://doi.org/10.21830/9789585284845>
9. Watanabe K. Acciones colectivas: cuidados necesarios para la correcta fijación del objeto litigioso del proceso. La tutela de los derechos difusos, colectivos e individuales homogéneos: Hacia un Código Modelo para Iberoamérica. 2003.  
<https://doi.org/10.2307/j.ctvm204rm.8>
10. Gidi A. Derechos difusos, colectivos e individuales homogéneos. La tutela de los derechos difusos, colectivos e individuales homogéneos. 2004: 25-44.  
<https://doi.org/10.21830/9789585284845>
11. Cardoso-Ruiz RP, Del Carmen Gives-Fernández L, Lecuona-Miranda ME, Nicolás-Gómez R. Elementos para el debate e interpretación del Buen vivir/Sumak kawsay. *Contribuciones desde Coatepec*. 2019(31): 137-62.  
<https://doi.org/10.15332/s0120-8462.2015.0113.04>
12. Cuevas MA. Las tres generaciones de los Derechos Humanos. CODHEM, Derechos Humanos. Toluca: CODHEM; 1998; 93-103.  
<https://doi.org/10.2307/j.ctvkwnp18.42>
13. Herguedas FA. Del valor intrínseco de la naturaleza. *Isegoría*. 2006; 34: 261-275. <https://doi.org/10.3989/isegoria.2006.i34.14>
14. Mac Farlane K. Los derechos humanos de las generaciones futuras (La contribución jurídica de J. Costeau). *Ultima década*. 1997; 8: 8.
15. Llasag R. Mecanismos de coordinación y cooperación para construir justicias interculturales. *Revista Ciencias Sociales*. 2019; 1(41).
16. Zavala JJA, Argüelles JJI. Derechos Humanos y Dignidad Humana. *Iustitia Socialis: Revista Arbitrada de Ciencias Jurídicas y Criminológicas*. 2018; 3(4): 8-23.  
<https://doi.org/10.35381/racj.v3i5.168>
17. Prieto-Sanchís L. *Sobre principios y normas: problemas del razonamiento jurídico*. Palestra Editores; 2017. <https://doi.org/10.33426/rcg/1993/28/1206>
18. Aranda RS, Jaimes IG, Caballero MSV. Los principios éticos y las obligaciones civiles. *Boletín Mexicano De Derecho Comparado*. 2015; 48(142): 313-337.  
<https://doi.org/10.22201/ij.24484873e.2015.142.4922>
19. De Ponderación PECD, De Casos IV IE, Administrativo PYD. El método de ponderación y las controversias entre derechos fundamentales. Razones y argumen-

- tos por los derechos humanos. 127. <https://doi.org/10.2307/j.ctv1qv3v9.8>
20. Martínez JI, Zúñiga Urbina F. El principio de razonabilidad en la jurisprudencia del Tribunal Constitucional. *Estudios Constitucionales*. 2011; 9(1): 199-226. <https://doi.org/10.4067/S0718-52002011000100007>
21. Ashby M. All across the universe: Bioethics across cultures. *Journal of Bioethical Inquiry*. 2019; 16(3): 299-300. <https://doi.org/10.1007/s11673-019-09941-1>
22. García Gómez A. Fostering the art of convergence in global bioethics. *International Journal of Ethics Education*. 2021; 6(1): 195-208. <https://doi.org/10.1007/s40889-020-00117-9>
23. Orfali K. A Journey through global Bioethics. *Journal of Bioethical Inquiry*. 2019; 16(3): 305-8. <https://doi.org/10.1007/s11673-019-09939-9>
24. Sganzerla A. Hans Jonas and the promotion of V. R. Potter's global bioethics. *Pensando-Revista de Filosofía*. 2020; 11(24): 60-72. <https://doi.org/10.26694/pensando.v11i24.11390>
25. Tosam MJ. Global bioethics and respect for cultural diversity: How do we avoid moral relativism and moral imperialism? *Medicine Health Care and Philosophy*. 2020; 23(4): 611-620. <https://doi.org/10.1007/s11019-020-09972-1>
26. Valderrama-Zurian JC, Aleixandre-Benavent R, Aznar J. The impact of Ibero-American science on global bioethical thinking. *Developing World Bioethics*. 2021; 11. <https://doi.org/10.1111/dewb.12309>
27. Andorno R. Human dignity and human rights as a common ground for a global Bioethics. *Journal of Medicine and Philosophy*. 2009; 34(3): 223-240. <https://doi.org/10.1093/jmp/jhp023>
28. Gracia D. History of global Bioethics. *Handbook Of Global Bioethics*. 2014; 1: 19-34. [https://doi.org/10.1007/978-94-007-2512-6\\_64](https://doi.org/10.1007/978-94-007-2512-6_64)
29. Muzur A, Sass H-M. Fritz Jahr and the foundations of global bioethics: The future of integrative Bioetics: *LIT Verlag Münster*; 2012. <https://doi.org/10.2979/intjfemappbio.6.2.194>
30. Ten Have H. *Global bioethics: An introduction*. Routledge; 2016. <https://doi.org/10.4324/9781315648378>
31. Widdows H, Dickenson D, Hellsten S. Global Bioethics. *New Review of Bioethics*. 2003; 1(1): 101-116. <https://doi.org/10.1080/1740028032000131459>
32. Biblioteca Digital UNAM. Principios Generales de Derecho. Accessed on: [https://www.derecho.unam.mx/seminarios/seminario\\_internacional/actualizacion-febrero-2013/ANEXO%202.pdf](https://www.derecho.unam.mx/seminarios/seminario_internacional/actualizacion-febrero-2013/ANEXO%202.pdf)

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