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Ethics and the Anthropocene Crisis: On the Moral Consideration of Nature

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This reflection on the moral consideration of nature begins with two classic arguments of environmental ethics which, while alerting to the growing human pressure on the environment, show the need to rethink the relation of humans and natural world. In my view, Aldo Leopold's *land ethic*, seconded by John Baird Callicott and Holmes Rolston III, is the approach in environmental ethics which not only postulates a broader comprehension of the universe of moral concern, but also lays the ground for a new ethical paradigm wherein the human, as a responsible member of the biotic community, has the duty to preserve the integrity, the balance and the beauty of the latter.

Keywords: environmental ethics, climate change, tragedy of commons, land ethic, earth community

The Ethical Challenges of Climate Change

There is no longer any doubt that humanity faces a dangerous challenge whose consequences may become catastrophic and irreversible. This is firmly expressed by a group of scientists (Ripple, Wolf, Newsome, Barnard, & Moomaw, 2020) who declare:

> Scientists have a moral obligation to clearly warn humanity of any catastrophic threat and to "tell it like it is". On the basis of this obligation (…), we declare, with more than 11,000 scientist signatories from around the world, clearly and unequivocally that planet Earth is facing a climate emergency. (p. 8)

If, from a scientific point of view, all studies point to climate changes that threaten life in general, mainly caused by human action, which irresponsibly has continuously increased an abusive attitude of maximum exploitation of natural resources,[1] from a philosophical point of view, there is no consensus on the philosophical approach capable of responding to such a challenge, and in many relevant domains the theoretical tools are insufficient, concerning, for example, intergenerational ethics, or the (moral) value of nonhuman nature (Jamieson, 2003; Palmer, 2011; Gardiner, 2011; 2012). Furthermore, it is undeniable that the problem of the environment is in essence an ethical problem that calls for responsibility and for an action in respect to nature and natural entities.[2]

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[1] "The climate crisis is closely linked to excessive consumption of the wealthy lifestyle" (Ripple et al., 2020, p. 8).

[2] "Climate change involves serious ethical issues, especially in its global, intergenerational, and ecological dimensions. Despite challenges owing to underdeveloped theories and pragmatic issues, there is an important initial consensus concerning the need for, and the overall shape of, serious action and the relevance of key ethical concerns, such as fairness and responsibility. Climate ethics is an emerging field that has much to offer, but within which much more work remains to be done" (Gardiner, 2012).

That said, a question is imposed on us: What criteria to adopt in order to face natural reality as a subject of moral consideration?

Given the accommodation of Western contemporary ethics to Kant's ethical determinations, namely the distinction between means and ends-in-themselves and the respective criterion of moral validation—rationality—the act of positively judging the non-instrumental value of nature is rendered problematic. Besides, the approach which contests Kant's formalism, utilitarianism, is far from solving such a polemic problem. Indeed, its principle—the maximum of benefit for the greatest number—proceeds from an atomistic vision of reality which is based on an individualist criterion—sentiency—thus conceding moral relevance solely to the individual. In sum, neither Kant's deontological ethics, nor Singer's utilitarian ethics or the main forms of consequentialism provide the grounds for the moral consideration of collective entities, such as species, ecosystems, or, in a word, nature.

Hence, if we consider with Tom Regan (1981) that an environmental ethics as such must postulate the moral status of ecosystemic totalities and the obligations inherent to human agents, how can we overcome this question?

Despite more than five decades long, the intense debate occasioned by the theme is still inconclusive.[3] And yet, the background problem—the ecological crisis—has not been reduced. Quite on the contrary, it has now been accentuated by climate emergency redounding on a "perfect moral storm" (Gardiner, 2011). Therefore, an ethical reflection applied to the environment is more and more pertinent and crucial.[4] In addition to the significative conceptual differences between the various philosophical positions which answer the problem at hand, the focus of the discussion is first and foremost in the examination of two angles in the problem:

Which criteria should we adopt to attribute intrinsic value to Nature?

How to conceive the ethical relationship between human individuals and the whole?

In the 1970s, uncountable articles drew attention to the problem at hand. Among them we underscore two articles particularly relevant for their crucial actuality in this exact historical moment, when the growing catastrophe of environmental disasters which endanger human life is so patent and incontrovertible. One of them is Richard (Routley) Sylvan's article "Is there a Need for a New, an Environmental, Ethic?"; the other one is Garrett Hardin's article "The Tragedy of Commons".

Two Classic Arguments of Environmental Ethics in a Time of Climate Emergency

In 1973, Sylvan (whose birth surname is Routley) writes the article "Is there a Need for a New, an Environmental, Ethic?", wherein he presents the argument of the "last man"; an argument which he would then extend to the argument of a "last people" in the article "Human Chauvinism and Environmental Ethics" (1980).

Both in its singular and in its collective forms, the argument dwells on the value of nature, defending that only the adscription of intrinsic value to nature may protect it from human cupidity and irresponsibility. In short, the argument is as follows:

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[3] For the ethical debate about intrinsic value of natural entities, see John A. Vucetich, Jeremy T. Bruskotter, and Michael Paul Nelson, 2015.

[4] "We must protect and restore Earth's ecosystems. Phytoplankton, coral reefs, forests, savannas, grasslands, wetlands, peatlands, soils, mangroves, and sea grasses contribute greatly to sequestration of atmospheric CO_2. Marine and terrestrial plants, animals, and microorganisms play significant roles in carbon and nutrient cycling and storage" (Ripple et al., 2020, p. 11).

If a last man survived the total collapse of the world and decided to exterminate each and every living being around him, animals or plants, the action would be legitimate from the point of view of an anthropocentric ethics which considers nature merely in its instrumental meaning. From the point of view of an ethics which ascribes intrinsic value to nature, however, the action would be morally wrong. By amplifying the extension of the concept "the last man" to "the last people", Sylvan supposes that for several reasons—survival, fun, negative feelings—this last human community (which is sterile due to radiations, and fully aware of this condition), decides to exterminate wild animals and destroy ecosystems, replacing them with fields of intense agriculture, as well as to tear down forests for the edification of equipment and the obtention of prime matters, thus disfiguring the planet in favor of its own interests and whims. According to the author, at its limit, a planet entirely manipulated by humans and irreversibly depleted would be the consequent result of an anthropocentric ethics.

Richard Sylvan's argument aims at demonstrating that the grounds of dominating Western ethics are insufficient to support an environmental ethics. Indeed, and according to the author, basic human chauvinism, typical of dominating ethics, only considers morally humans and inter-human relations, thus envisaging the principles of ethics only in that framework. Hence, if: (1) only humans are a source of values; (2) only humans have an intrinsic value; (3) the non-human world has an instrumental value for humans (Lee, 1993), then the sense of freedom and responsibility is circumscribed to the human sphere and the limits to action are to be considered only regarding the interests of other human beings. This means that outside an anthropocentered universe the agent has the legitimacy to act as he wishes. The argument of the last man or the last people thus shows that the non-existence of people means that no interest is to be considered, and hence the last man may destroy everything around him without this being immoral.

However, if the ecocide perpetrated by the last man is intuitively condemnable, subsuming that intuition a non-instrumental value of nature, neither the human-centered ethics conveys a criterion which legitimizes the moral condemnation of the destructive act, nor is it certain that, given the conditions, all human beings condemn it.

The powerful effect of Sylvan's thought experiment upon the academic production on the moral considerability[5] of nature proves its pertinence and relevance, for although he does not convey any objective grounds for the intrinsic value of nature, he clearly shows the need for an effective shift in the ethical paradigm.

In the same line of thought, we recall another polemic text which, in a certain sense, complements the argument of the last people.

In the article "The Tragedy of Commons" (1968), Garrett Hardin resorts to a fiction in order to convey the need for an ethics which morally considers the relation between human beings and nature. According to Hardin (1968), there is no technical solution for the problem of overpopulation if one seeks to maintain the levels of growth and well-being for all in a planet with finite resources. The solution lies in an ethical-political change that reconfigures human behavior. Let us imagine, Hardin says, a pasture open to all the inhabitants of a certain region. Each shepherd will try to keep his herd in this common land. This works out for centuries because diseases, tribal wars and other causes keep the population stable and in balance with the available resources, until the day when each subject begins to attempt to maximize his profit by raising the number of sheep. If the addition of a sheep constitutes a positive gain for the individual, this shall have a negative effect for the

[5] The expression "moral considerability" is owed to Goodpaster (1978, pp. 308-325).

collective, due to overgrazing. However, in a logic of individual freedom, each shepherd will seek to augment more and more his gains by adding one and another sheep to his herd. Each human individual is closed in a system which compels him to unlimitedly augment his herd in a limited land. Ruin is his fate, as well as the result of the exercise of individual freedom in a common territory. Such is the tragedy of commons.

The article illustrates the conflict between freedom and inherent individual rights *versus* the common good, assuming that the concept "common" is understood here not in the strict and reductive sense of society, but as a bio-ecological community wherein human agency takes place. And it is factually undeniable that we are now witnessing an unprecedented depletion of the environmental components (air, water, soils, biodiversity, and climate) which structure earthly life.[6]

I interpret Hardin's text as an admonishment towards the need to rethink ethics in a perspective beyond individual freedom and the rational choices of the ethical subject in a given economic-political context. Within a system dominated by the idea of unlimited growth, which systematically compels to the well-being of the individual through the consumption of all kinds of goods—be they basic, recreational or artificially induced by techno-science—individual rationality is closed within a common logic which, according to the author, unavoidably slides towards tragedy.

Although the article gathers a considerable number of objections, not only because it is based upon Hobbes' vision of the human being, thus ignoring altruism and the self-regulatory capacity of communities, as well as the positive virtualities of a Welfare State that promotes the common well-being, but also because it tends towards a totalitarian vision of society which elects coercion as a regulating form of behavior, the clear allusion to the risks of an economic *modus operandi* dominated by the unlimited growth of financial indicators seems plausible.

Hence, though substantively different, both Routley's and Hardin's argumentations appeal to a necessary reflection on two crucial aspects:

(1) The inadequacy of a traditional Western ethics based on the principle of individual freedom in an overpopulated planet with finite resources, and the consequent need for an ethics that goes beyond inter-human walls and understands the individual and society as members of the ecologic whole.

(2) The emphasis on the principle of responsibility (individual and collective), which cannot be separated from the principle of freedom.

Although the German philosopher Hans Jonas (1979) understood that, given the dramatic degree of affection that an unlimited techno-scientific freedom caused in the bioecological system, it is necessary an ethical transition less focused on the principle of freedom and more focused on the principle of responsibility, yet he did not leave the human-centered universe. According to Jonas, the responsibility ascribed to current agents does not regard nature, rather the future generations. Whose existence, Parfitt (1984) argued, is contingent, as equally contingent is its future way of life and existence because it will always be determined by present options. Hence, future persons and the respective identities generated in a context of depletion will be different from future persons and the respective identities generated in a context of conservation. That is, how can we now know what future generations will be and prefer? Could they prefer artificial atmospheres and to live in a sort of space greenhouse which may ensure all bio-physical conditions of survival, to feed on protein

[6] Quoting Joseph Fletcher, Hardin states that "the morality of an act is a function of the state of the system at the time it is performed" (Hardin, 1968, p. 1245).

and vitaminic formulas, to be clinically monitored on a regular basis; could they enjoy cultivating and nourishing virtual relations, to be born from genetic manipulation, free from hereditary pathologies and not to have the faintest idea of a life in the open air, or of what are wild areas or the natural world. That is, the conservation of nature on behalf of an anthropocentric ethics, even if it admonishes to the environmental responsibility that we owe to future generations, does not seem to constitute a consistent basis for a genuine environmental ethics. At least not one that should consider nature morally, i.e., to ascribe intrinsic value to bio-ecological systems and prescribe the agents' inherent obligations towards them.

This much is stated by a considerable group of environmental philosophers. We shall focus on Aldo Leopold's (1949) eco-centric approach to the assumed consideration of the intrinsic value of nature, which mandates an action of respect and preservation compatible with an "authentic and genuine" environmental ethics.

Values in an Interconnected Community

As a previous annotation to the concepts etched by ecocentrism some questions arise:

Are values always dependent on the human evaluator, and hence subjective? Outside of the human world, do natural beings have but an instrumental value? Is the classic definition of intrinsic value from a criterion *x* not, in practice, a way of excluding all others who do not exhibit *x*? Does moral exclusion make sense when one considers morally the whole?

If the answers to the first questions are affirmative, the disappearance of the last man leaves behind, in any case, a valueless world.

Let us take the example of water while reflecting on the theme.[7]

Bearing in mind that water has an instrumental value when it satiates my thirst, may I legitimately state that its value depends entirely on my interests, or the interests of anyone who is thirsty? Certainly not, especially when we all recognize that water is a fundamental constituent not only of our beings, but of life in general. I can even state that 70% of my body consists of water and 95% of my blood is water, so in a certain sense, I am water and I know that the same happens with all living beings. If nowadays it is erroneous to separate an I-body from an I-spirit, it is even harder to separate the I-body from its fundamental constituents. Hence, it seems plausible to state that water, as a good inherent to life, has a value which does not depend on particular interests and therefore possesses an objective, and not simply an instrumental value. On the other hand, if, as is shown by Ecology and Biology, all is interconnected, is it not simplistic to analyze the value of natural entities and human persons in dichotomic terms, such as either intrinsic, or instrumental? Is it not more evident to presume that all that can be subject to valuation—persons, non-human beings, species, ecosystems or even certain objects (a painting, for instance)—bears, according to the modality of relation, both an instrumental and an intrinsic value?

As such, if the value of water is not dependent of he who evaluates, for with or without evaluators it is always the necessary condition of a certain form of existence to which we call life, then water possesses an intrinsic value which should generate in agents the respect—or, environmentally speaking, the duty—to preserve and not to deplete.

[7] There is intense and growing (but controversial) interest in defining the value of water. In fact, the water crisis forced a deep reflection on water use and policies, giving rise to an emerging field called Water Ethics which deals with water integrity, water stewardship, and water justice, see Groenfeldt, 2019.

The last man, presuming that he had such power, could dry up or pollute all the water in the planet. However, in the light of a paradigm according to which water had a moral standing, he would clearly know that his action was wrong.

Holmes Rolston III (1975) presented the case of a rare and endangered species, the African butterflies which live in the hummocks of some grasslands in Africa. Is it legitimate that butterfly collectors, thus quenching their thirst to obtain a rare specimen, end up extinguishing this species?

Intuitively we shall all agree that it is not. The point here is not so much the reasons due to which certain acts against natural entities repulse us (beauty, functionality in the ecosystem, aliveness), rather to perceive that there is indeed a very generalized basic intuition which ascribes a non-instrumental value to collective entities or abiotic beings.

Ecocentric environmental ethics, namely Aldo Leopold's *land ethic*, by acknowledging our biophilic intuitions,[8] seeks to convey the rational criteria for ascribing value to ecosystemic totalities, as is displayed in its fundamental commandment:

A thing is right when it tends to preserve the integrity, the stability and the beauty of the biotic community. It is wrong when it tends otherwise (Leopold, 1949).

Integrity, stability, beauty constitute here objective values insofar as they are the *sine qua non* conditions of an equally objective and universal value which is that of health.

Indeed, in the land ethic, health is understood in its bio-ecological meaning of homeostasis—the autopoietic regulation which preserves an organic or ecological system in a condition of integrity and stability—as a principle inherent to all life in general. And the term general means here that the concept life is not limited to a merely organic sense, rather it is holistically understood as a vast web of bio-ecological relations. Hence, the health of ecosystems is a good in itself which is positively reflected on all its composing parts. Only by considering the humans as being apart from nature can one consider that he, and he alone, has intrinsic value. If the human being is understood as a planetary member involved with all the other beings in a vast chain of interdependences which has its own laws of self-regulation and replication, then this holistic matrix[9] will have an objective value and compels morally to respect and responsibility.

On the other hand, as is underscored by Holmes Rolston, in a holistic web all its elements simultaneously have intrinsic value and instrumental value—the prey has an instrumental value for the predator, but both the prey and the predator have a value in itself in the dynamic of the Whole. In this very sense, the discourse that distinguishes and separates intrinsic and instrumental value is pointless.

Replicating the problem of the nature of values, Rolston (1982) admited that values exist objectively, insofar as they are generated and projected by nature and discovered and interpreted and read by human beings; hence, in this context, the author defends, nature possesses its own (systemic) value, one which is enrooted in its extraordinary generative capacity, i.e., the capacity to produce beings, values and history. In the words of the philosopher, "Nature is a fountain of life, and the whole fountain – not just the life that issues from it—is of value. Nature is genesis, Genesis" (Rolston, 1988, p. 197).

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[8] See Wilson/Kellert's extensive work on the *Biophilia Hypothesis* (Island Press, 1996), and all the literature produced under the model of cultural evolutionism, which demonstrates the affinities between the development of all human potential and the stimuli which nature offers.

[9] Katz (1987) underlined that the idea of intrinsic value ceases to make sense in a holistic system.

To Rolston, values extend further than the human sphere, for they are inherent in life itself. Nature is encountered under the guise of its intrinsic unlimited generative faculty. This links a myriad of beings into dense and intrincate webs of systemic, interdependent relations; thus considered, nature is not just a causal connection between events or phenomena rather it is a creative complex, which produces values across its evolutionary history (Varandas, 2015).

Holmes Rolston, John Baird Callicott and other environmental ethicists defend, ground and emphasize Aldo Leopold's proposal towards a shift in the relation between the human being and the natural world, one in which the former goes from conqueror to member and citizen of the land, of the Earth. Such a shift in paradigm requires the deconstruction of Modernity emerging presuppositions which advocate the scission between human and nature and which understand natural entities as things and nature as a mechanic connection of phenomena and consequently postulate an axiology and an ethics compatible with that representation. This is a radical shift which is set here as the first condition for a new model of reality and man, a new axiological and ethical delineation which necessarily implies a reconfiguration of the anthropocentric mental universe to an ecocentric reconceptualization.

The metaphor of community, which Aldo Leopold subtracts from Ecology, is a perfect example of the *land ethic*, for its semantic pregnancy translates, in its essence, the new vision of human and action. Indeed, it reveals the being of the world, therein including the being of man which is differentiation, affinity, kinship; the very own dynamic of being in the world, which is inter-relation and interdependence; and the structuring element of relations—the bonds which connect all to all and are manifested, in consciousness, as affectivity and bio-empathy. It is precisely the intrinsic value of this communitarian world, which encompasses all beings and enroots them in a common fate—earth's evolutionary odyssey – that mandates the duty to preserve its balance, its integrity and its beauty (Varandas, 2015).

How to Face Freedom and Responsibility in an Earthly Community Under Threat?

In our view, the controversial and aporetic degree of the debate on the value of nature and natural entities stems from the obvious inadequacy of traditional ethical models, which are essentially atomistic and grounded exclusively on the singular and on insular relations. What is at stake, however, are totalities which obviously exceed the criteria of classification which seek to define the moral property of a class of individual beings, thus distinguishing it from others which do not exhibit it, as is the case with the criterion of rationality or sentiency. The proposal of the *land ethic* and *deep ecology*, both modalities of ecocentrism, implies that ethics is enrooted in a deeper comprehension of natural reality, in its ontological meaning of fundamental dwelling-place, and hence postulates the intrinsic value of nature for its quality as a source and a *locus* of being and value. In this semantic plane, the understanding of human agency is also deeper. Responsible for the more fragile and vulnerable entities, its freedom consists of letting be, of preserving and protecting what exists in its specificity and difference.[10]

Both the argument of the last man and the tragedy of commons inscribe us in the problem generated by the ecologic crisis. Though it is not the objective of this text to explore the conceptual implications of the articles cited, we underscore the confrontation therein visible between the individual/agent and a hypothetic global

[10] "Freedom cannot flourish unless is understood to include active responsibility (…) understanding our systemic links to the entire natural world expands our responsibility (…) we should strive to be active 'stewards', responsibly safeguarding the well-being of the biosphere" (Callicott & Lappé, 1991, pp. 246-247).

catastrophe. The answer to the ecologic crisis formulated by ecocentrism, that of conceding moral considerability to the whole, shall only constitute a limitation to the freedom of action of human individuals if ethical egoism prevails and, consequently, respect and responsibility towards the community to which they belong does not take place. However, ethical egoism is far from constituting a relevant theoretical basis for the actions which, in the principal versions of ethics, are to aspire to a common-good. Factually, in the inter-human world, each individual is part of a community towards which it has obligations. Be it family, be it the Nation or some other, any community imposes obligations and limits, by framing it, to the exercise of free will. Given that the intelligibility of ethical principles, namely those of freedom and responsibility, presupposes the relationality between singulars and collectives, then the *land ethic*, by extending the communal frontiers of morality, shall equally expand the sense of freedom and responsibility. Bearing in mind that the biotic community has a value which deserves respect, the agent, as a member of that community and acknowledging the harmful effects of certain actions—excessive consumption and waste, use of pollutants and non-sustainable materials, destruction of natural habitats, for example—should refrain from practicing them:

Climate change involves serious ethical issues, especially in its global, intergenerational, and ecological dimensions. Despite challenges owing to underdeveloped theories and pragmatic issues, there is an important initial consensus concerning the need for, and the overall shape of, serious action and the relevance of key ethical concerns, such as fairness and responsibility (Gardiner, 2012).

It seems to us that the kind of responsibility and freedom which the land ethic promotes appeals to the virtues of prudence and moderation (*phronesis*). Is this bad? Is this a threat to individual rights?

We do not think so. What seems immoral to us is that given the catastrophic levels of environmental depletion, individuals and the dominating economic system carry on acting in total spite for the Whole, in a dangerous landslide towards tragedy. We believe that, faced with an apocalyptic setting of ruthless and disruptive manifestations of nature along with the consequent general collapse of nuclear devices, the last man will do nothing. For in that terrible setting, his condition will be not that of an agent, but of a powerless victim, though not an innocent one.

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