Educational Proposals for an Environmental Ethics

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Abstract
The authors discuss how the current ecological imbalancebecame a widespread concern, referring to the non-compliance with international and national conventions that inducedthe understanding of a global co-responsibility infinding a planetary solution. It is also analyzed how environmental ethics came to enshrine non-human rights,while transmuting the demand of human solidarity to the various inhabitants from the multiple ecosystems, thus stressing the importance of a collective incumbency towards Nature. Furthermore, they analyze why such ecological co-responsibility requires an educational response pointing to a values´sharingprocess, whichinvites to a change in the field of economic growth and societal development. As authors try to show, it is, therefore, wise to strive for developing an ingrained concern regarding environmental issues, namely sustainability, relying on education to promote a teleological sense.
Keywords: Environment, ecology, ethics, education.

Introduction

In contemporary times, environmental issues constitute one of the greatest challenges for humanity, polarizing the concerns of society, increasingly eclipsed by the fragile ecological balance of the planet. Gradually, given the increasing evidence of theecological niches destruction, along withthe fauna and flora species extinction, as well as with the accelerated depletion of natural resources, such as coal, oil and natural gas, not to mention water, the world became aware of a potential environmental catastrophe. Thus, humankindhas come to weight the threat of committing one of the greatest injustices everdone, corresponding to the blindness oftrying to maintain the present lifestyle, that weakens the complex network of ecosystems and the biophysical tissue on which depends not only human life but also other species and the Planet. In fact, although the societal models –that guided Western political organizations in the second half of the 20th century–did focus inthe protection of citizens in accordance with the model of economic growth, they also have broadly forgottenenvironmental concerns.

The awakening ofenvironmental awareness was due to two main sources. In one side, we have the contribution of several authors, as we will later on this paper explain,that shookthe academic and political world with their enlightening innovative works. On the other side, we have to refer to theglobal mobilization that accompanied the emergence of a series of ecological catastrophes, with a heavy negative impact on the structural dynamics of natural ecosystems, as, for instance,nuclear accidents and oil spill. These events related to human ineptitude and negligence, whose effects were harmful at a "transterritorial" and "transgenerational" level,raisedthe imperative of taking urgent measures to protect the environment, increasingly affected at aplanetary dimension. In fact, threats, of world range, stem from many diversified sources, like the impact on the ozone layer, the acid rains, deforestation and"oceans plastification"that aggravated the depletion of biodiversity and species extinction. It was the awareness of the growing risksof ecological disasters, more or less under media attention, that triggered an educational effect within society, which began to demand priority intervention measures, giving risetoa new paradigm of citizenship, which developed people's concern for the destiny of the Planet.Moreover,at the economic level, the increasing ecological conscientiousness originated profound changes, namely by promoting the so-called "green economy" that has come to pounder the environmental costs of economic growth, while assuming the recognition of natural balance capital importance. In a wave of pragmatism and affirmation of political realism, it was proclaimed that economic development can only continueunder sustainability parameters. Such a principledidput forward the essential requirement of collaboration between economic agents, as compelled to explicit support of various unavoidable measures and regulatory instruments of environmental policy.

As a result of decades of civic and democratic movements, we have seen,all over the world, howthe settlement of environmental policies incorporated the sphere of Environmental Rights. These rights, yet to be fulfilled, obviously claim for specific regulation, as well as for civic adherence to the ethical proposals that nature protection postulates.And there is no doubt that the struggle to tackle ecological problems requires States'concerted action, a goal only achievable if there is a new approach to human development, reorienting the economistic ideology that has guided our modern society until now.

It should be noticed that, unlike other conjunctural crises, the contemporary ecological threat is a generalized phenomenon that holds us all responsible in the search for a solution. Born out of this sense of collective responsibility towards nature, environmental ethics consecrates the non-human rights and transmutes the very meaning of anthropological identity, demanding for human solidarity regarding the various inhabitants of the global ecosystem. Hence, by making its realization an essential urgency, such ecological co-responsibility also claims for an educational response pointingto different values from those that govern the hegemonic and potentially suicidal logic ofcapitalism without rules. If, as Holmes Rolston (1994) proclaimed, environmental ethics invites a change in the field of care, this does not necessarily mean any amputation of human freedom, but rather a critical revision of the right to the depredation of the Earth common goods. Humans need, for their own sustainability, to preserve Nature and so it will be within the framework of such new perspective that education, in its broadest sense, should promote a new teleological scope for human development. Moreover, one should take inconsideration that, contrary to other civilizationcrisis, the environmental crisis is not only a conjunctural problem, but it puts at risk any possibility of future life under the conditions known today. Therefore, it is wise we strive for developing an ingrained concern regarding environmental issues, namely sustainability,relying upon education to promote a teleological sense and the assumption of the responsibilities for protecting the environment, while not attempting to restrict human creativity and innovation.

1. Environmental risk while crossing "Modernities"

Environmental issues are today one of Humanity's greatest challenges, polarizing the concerns of a net of societies, increasingly overshadowed by the fragile ecological balance of our planet. Indeed, hangs over the present generations a threat of committing the greatest injustice: as seeking to maintain the present lifestyle it will eliminate the fragile web of ecosystems and the biophysical fabric on which depends not only human life but as well thesurvival of many other species. Much, almost everything remains to be done and stands indispensable an intervention in the planning, the management and the legal environmental organization. Besides, such conundrum has burst the urgent imperative of globally concerted action for preventing natural resources depletion, as well as the growing extinction of an increasing number of species. However, although the awareness about the environmental problem is raising, it is disturbing the confirmation of the inertia regarding the adoption of concrete solutions, not only by governments but also by the anonymous citizen.

Moving from the theoretical diagnosis of the environmental crisis to the application of concrete measures and the monitoring of its compliance has proved to be an extremely hard and sluggish operation.While environmental concerns were far from being a priority in the various countries' policies, with the end of World War II, the nations decimated by the conflict sought, above all, to lay the foundations of a political regimen that would allow, in parallel with strong economic growth, the implementation of free and universal education coupled with ample health policies. Indeed, such model, sometimes identified with aWelfare State, which guided Western political organizations throughout the second half of the twentieth century, had among its main objectives not only the guarantee of a well-functioning market, as Adam Smith forethought, but also the defense of the citizens' rights in the areas of health, education and justice, including elders' security. Meanwhile, the social welfare idea haschanged over time, precisely,because of the awakening of environmental awareness. And if it has initially incorporated only a single social aspect, it then cameto include the environmental protection imperative. That is why, States not only have to have a current concern for their citizens but also, and above all, a long-term concern to save natural resources for future generations. Now, such understanding introduced a transformation ofthe well-being conception in order to include the idea of environmental protection. See, for instance, the United Nations (2015) challenging program, entitled "Transforming our world. The 2030 Agenda for Sustainable Development", which it is worth to quote here:

> "[The] Agenda is a plan of action for people, planet and prosperity. It also seeks to strengthen universal peace in larger freedom. We recognize that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development".
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> All countries and all stakeholders, acting in collaborative partnership, will implement this plan. We are resolved to free the human race from the tyranny of poverty and want and to heal and secure our planet. We are determined to take the bold and transformative steps, which are urgently needed to shift the world on to a sustainable and resilient path. As we embark on this collective journey, we pledge that no one will be left behind.

> The 17 Sustainable Development Goals and the 169 targets, which we were recently announced, demonstrate the scale and ambition of this new universal Agenda. They seek to build on the Millennium Development Goals and complete what they did not achieve. They seek to realize the human rights of all and to achieve gender equality and the empowerment of all women
> And girls. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental." (United Nations, 2015, 5)

Historically, we can recognize that environmental concerns are not a completely new data but arose with the creation of the first natural parks, in an attempt to preserve the natural values of the endangered fauna and flora (e.g. the Yellowstone National Park - 1872).For instance, in England, the Alkali Act (1863) first drew attention to the harmful effects of industrial pollution and, in the other side of the Atlantic, it is not to be overlooked, due to its lasting influence, Henry David Thoreau's work entitled "Walden or Life in the Woods", whose earliest copiesdate back to 1854. In fact, from the second half of the nineteenth century, some concerns about the environmental implications of industrialization, which was already swarming destruction of traditional landscapes and ways of life, were stressed and gave rise to a critique of the hegemony of an anthropocentric and utilitarian vision –characterizing the first phase of Modernity– determined the massive, unprepared use of the supposedly inexhaustible natural resources.It was the broadening of the very contradictions that nurtured the rational and societal configurations of early Modernity, making dissonant its utopian expectations, shaped by the Enlightenment belief, that led, the so-called *second modernity,* or postmodernity todevelopa new critical reflexivity. An orientation that focused on the unpredictably increasing risks of "technoscience" applications, and the global risks arising from the excessive exploitation of natural resources, in compliance with the imperative of continual economic growth.

To awaken the environmental awareness was relevant the contribution of several American authors who, in the 60s and the 70s, influenced academic and political institutions with their innovative proposals, such as Rachel Carson (1962, 1965), Garrett Hardin (1968), Kenneth Boulding (1968) and Herman Daly (1973), just to mention a few.Echoing these ecological concerns, the *Club of Rome Report* or, the so-called, Meadows Report (1972) addressed crucial environmental and sustainable development issues in their planetary dimension, warning about the imminent risks of increased pollution. Although being an object of several criticisms, the Report became nonetheless an important historical landmark for the progression of ecological awareness, as highlighted by Edgar Morin (2007).Also noteworthy is the influence of some European sociologists such as Ulrich Beck (1992), who invoked the concept of "risk" to typify the new environmental and social conditions of contemporary times. As the author points out, the risks we confrontnowadays escape the predictive logic of the modern scientific mindset, and only by crunching into its operative rationality we allow their figuration as global, incalculable, irreversible, and cumulative. However, being as complex as they are, due to the later mentioned characteristics, they give rise to well-founded and widespread apprehensions, indicating the urgency of new conceptual pillars for the reconstruction of a public sphere increasingly permeable to disenchantment with technoscience and more sensitive to critical reflexivity.

Indeed, the occurrence of a series of large-scale ecological disasters, with the consequent structural erosion of planetary ecosystems, has inexorably changed collective consciousness in what may be termed "disaster pedagogy". Among several ecological disasters, one could refer to the spill of an oil tanker on 13 May 1967 off the French, Belgian and British coasts, polluting the beaches over a length of tens of kilometers, as well as to the nuclear accidents of Bhopal (1984) and Chernobyl (1986), which had harmful effects not only at "transterritorial" but also at "transgenerational" level. The benefit of suchmisfortunes is that they have somehow induced the urgent need for compelling environmental protection measures.

Less dramatically, but equally percolating, collective consciousness is confronting a new model of increasingly global and increasingly severe environmental hazards, like the ozone rarefaction, the acid rains, the climate change, the devastation of tropical forests, the expansion of "desertified" areas along with an acceleration of biodiversity depletion, not to mention the international trade of hazardous waste. Given these risks, it must be acknowledged that recognizing the warning uttered by ecologists, the response already outlined and to be implemented has to be global and multidimensional, involving governments and the civil society. Such intervention must consider that environmental issues are strongly predetermined by the North-Southpolarization, meaning the cleavage between the highly developed and the less developed countries, which prevents the construction of a consensual conception regarding environmental issues and the clarification of how to deal with global –while being local– problems, namely by disarming the biased hidden interests. The issue of economic costs is another decisive factor in facilitating or hindering agreements. Moreover, it should be noticed that the implementation of the various international resolutions always depends on the political will of the different countries, from which we deduce the great importance of monitoring compliance with international agreements and

conventions. Control should essentially be done by internal actors, including non-governmental actors, althoughregarding the international environmental policies. Contrary to what happened in classical diplomacy, whose action was invariably carried out by national governments, in international environmental policy there must be an intervention of different actors. This results from the understanding of the flagrant insufficiency of national governments to solveglobal environmental problems. And that is why international political organizations must be interventive in order to urge compliance with international treaties and conventions that should be taken seriously by the national parties. In this respect, we envisage that a plurality of playersought to be taken into account, like trade unions and employers', NGOs, the general and specialized media, the business sectors that struggle in the new market areas associated with the pro-environmentorganizations and the scientific community, theymust all be involved. Indeed, one of the most decisive contributions to the adoption of international environmental commitments lies in the ability of the scientific community to build consensus on the diagnosis of the problems under consideration. As very pointedly, Morin (2016, 19) states, "the ecological problem compels us to face the restructuring of human life and society", and, so being, thereis no gain in staying stuck between "the right-wing ecology, which is primarily technological" and the, "leftist ecologism". This kind of dichotomization,under a strong political charge, seemsfar too simplistic to approach such a complex issue, though we need an "ecological consciousness", necessarily, figurative of a radical change in our anthropocentric representations. Such transforming perspective should materializethe awareness of our dependence and independence –i.e. our interdependence– towards the fundamental relationship we have to develop with our ecosystem, which has to overcome the common objectivist perspective andits underlying idea of an insular man (Morin, 2016, 20).

So far, the above-held discussion has brought us to a preliminary conclusion. Given the multiple implications of the "ecological alert" at the diplomatic, political, legal, economic and academic levels, it is by now important to highlight the axiological inflexion that has arisen in the ethical-philosophical debate and in the educational orientations themselves.

2.Birth of environmental ethics and the deconstruction of anthropocentrism

Ethics and philosophy turned out to be quite late in becoming aware of the global environmental and social crisis. What is at stake now is not only Nature itself but also a Nature endangered by human techno-scientific action. The turning of philosophy to the understanding of the natural horizon, in which human action is inscribed, was ultimately dictated by necessity's empire. The escalating rise of the human capacity for physical transformation of the planet, meaning the accumulation of humanity's technical power projection over itself and the fauna and flora, with all the intrinsic problems it entails, was the factor that induced an awaken and pushed the refusal of the anthropocentric enclosure in which it was generated.Contradicting the traditional anthropocentric view that tended to subordinate the natural order, or the proclaimed interest of human progress, ecologist thinking, supported by a new anthropological and epistemological paradigm has challenged the reductionistic view of nature in which man figures as an exception, of supernatural rank. The admission that human identity can only be understood in relation to nature, to which it belongs, and not dissociated from its interdependence, removed the supposed primacy of the human agent, even if considered on the animal scale, under which human originality can be affirmed.As illustratively, Morin suggests, "the earth depends on the man who depends on the earth", a principle that refers to a common axiom of ecological thinking correlative to the environmental ethics: the indissociability between humankind and nature assumed as an enveloping matrix founder of our constituent beings. This holistic and regenerating conception of the reductionist distortion, which Modernity has confronted us with, is already embodied in the so-called "land ethics", outlined in the first half of the twentieth century by Aldo Leopold, where he acknowledges the rediscovery of his own identity from an immersion in nature (Varandas, 2012, 513-514).In fact,it was the recognition of the holistic integrity of nature that set Leopold under the influence of Darwinian thought, and thus permeable to an evolutionary conception of ethics itself, which will tend to progressively include within its normativity other entities than humans.

Among the proposals emanating from the field of anEarth Ethics, the common concern of the so-called "transcendentalist environmentalists", which evokes the concept of a cosmic soul to figure the symbiotic unity among the various beings that inhabit the earth, are evident. In this line, by clefting the Cartesianism and anthropocentrism "vulgata", Thoreau's work in the nineteenth century already envisages an "ecocentricrecentration" that escapes the linearity of science, to give rise to a new paradigm that appropriates the poetic intuition of the Romantics, which incense the mystical and mythical unity of humankind and nature. More close to us, in the twentieth century, and within the course drawn from the sciences that supported Ecology, the mystical feeling about the Person/Nature unityhas come to operateunder a systemic view of the energy exchanges that occur in the biotic chain, favouring evolution

or balance, while meeting the energetically continuous flow that unfolds in an etiologically oriented and connected manner.

Considered to be a restless and unsettling spirit, Arne Naess (1912-2009) also had, on his part, a great influence on Norwegian academic life, particularly as far as the post-war philosophical formation is concerned, but his work was also internationally recognized, resulting in several awards and distinctions beyond borders. Besides, Naesswas the founder of "Inquiry", a journal created to foster interdisciplinary collaboration between philosophers and social science researchers. And he addressed an ample diversityof themes in his prolific work in the field of ethics, epistemology, cultural anthropology, history of philosophy, linguistics and communication, thus becomingworldwide recognized. Being criticized for his unjustly belittled dilettantism as "intellectual vagabondage", Naess justified himself by arguing that "the philosophic researcher should be task-minded, not disciple-minded, and should follow questionings wherever they lead" (SW, 300).With such orientation he flew from a purely technical approach to meet a more complex ecological way of inquiry, to which he coined the term "deep ecology", to typify an "ecophilosophical" advance that incites us to a global approach to ecological and cultural issues, able to provideus with a slow form of resolution.

The above mentioned new perspectives of "environmental ethics" led us to a new paradigm of human development. As Morin (2016, 34) has so well stated, the word "development" must be completely rethought and complexified. We are now in the moment when the ecological problem joins the problem of the development of societies and of all humanity. That is, we have to move away from a "barbaric conception of development", unilaterally centred on the technological and "economicist" dimension, whichmade us enter a planetary "iron age", by intensifying the existent risks and threats while bringing forth new ones. Such is also the opinion of Harari (2018), in his book "21 Lessons for the 21st Century"(2018), that clarifies how the complexity and the urgency of the planetary problems induced by human interventionsare raising more and more difficulties to deal with.

Present challenges can be summarized as a question of controlling the uncontrolled development (Morin, 2016, 51) intrinsic to a planetary age. When our homeland is in danger, we are in danger and the enemy, we can finally understand it today, is ourselves. (E. Morin, 2016, 51). Hence, the real truth to be faced is that concomitantly with the announced risks of irreversible ecological destruction, which urgently we need to mitigate, we are fostering civilizational models that incite unbridled consumption with ecologically unsustainable and socially unfair living standards. So, establishing reformist policies that catapult conditions of ecological sustainability and greater social justice becomes the great planetary objective that embodies the 21st-century metanarrative, assumed as a utopia for the present times. In such a "governance of concertation and reform, which does not exclude the conflict inherent in societal dynamics, but regulates itto the benefit of threatened sustainability, the ecological movement incites a change in the development paradigm as a civilizational telos" (Morin, 83).

Evidently, the various authors agree that paradigm shifts will take time, as they imply major political, social and economic reforms that radically challenge our "techno-economicist" model, with its hierarchization, by adjusting individual and collective behaviours.It is in this sense that, given the widespread risk, such as that of global warming, Dimitri d'Andrea (2013, 162) warns us about how "the ability of an intervention to have real effects on the expected consequences largely depends on reach all the conditions of society's functioning: its rhythms, its organization and its purposes". From this comes the difficulty of concrete and immediate effective measures to contain the risks, when confronted with the financial interests that mobilize the "real politics" and the individual desire for comfortsprovided by the established levels of consumption.Under such understanding, it must be acknowledged that widespread fear does not, in itself, catapult a mobilizing dynamic against ecological threats, namely the climate hazard for human life, while assuring that the complexity and ecological magnitude is taken in consideration. Rather a new kind of answer is needed; one that encompasses our societies as a whole.

Breaking with the anthropocentric paradigm and making us realize the intrinsic dependence between the kaleidoscopic biotic systems, ecological/environmental ethics induces a deep and broad questioning of our community lifestyles anchored largely in the "economicist" model that the advancement of techno-capitalism provided. As Martusewicz, Edmundson &Lupinacci(2014, 3) denote, if some regulations and conventions have already been internationally established to prevent the growing ecological threat and find theoretical solutions that mitigate the polluting effects of industrialization, it is evident that the environmental crisis requires very knowledgeable technical specialized solutions, envisaging answers measures in which the legal and administrative regulation, being decisive, involves profound cultural changes.It is under such approach that the various authors, focusing environmental ethics, speak out, including those who refer to the need for "eco-justice", aiming for the development of diverse, democratic and sustainable communities. This means that such a shift from the "economicistic" paradigm,ruling westernized culture, will make it very difficult to find one-sided technical solutions able to solve the

ecological issues. In essence, we must question our societal matrix embodied in the "consumeristic" society, which lessens inequalities to create others, a process clearly evident in the statistics of actual "per capita" income decline in more than eighty countries (McKibben, 2007). In the case of those who want to tackle "eco-injustice", the ecological question cannot be dissociated from the political-social issue and neither, "a fortiori", from the educational one, once in democratic societies mass opinion is shaped by the values in which people are educated. Hence, it makes perfect sense to speak nowadays of "eco-justice and education" or "education for eco-justice".

3.   Ecojustice and education: towards a new sustainable development paradigm

As Martursewicz and Edmundson (2005, 71) wrote, "to be human is to be engaged in a vast and complex system of life, and [thus seeing] human well-being dependent on reading how to protect it." So being, we would say that, notwithstanding the connections and relevance that environmental education may have in this educational project, one should realize that it transcends it in some way.Indeed, environmental education has a narrower scope because it draws attention to ecological issues and the importance of individual behaviour, however, this pertains a cultural and societal dimension regarding the cultural and societal problem bursting from the environment puzzle. Insisting on a systemic approach to problems, the current eco-justice education aims to abandon a model of education that is directed towards uniformity, but insists on reflexively and critically questioning the social paradigm that guides education, namely by reviewing the sociocultural neoliberal model that has captured its steering wheel, to keep feeding and shaping the process of production correlated to the "economicistic" ideology, attuned with a individualistic orientation, that imposes economic effectiveness as the axiological compass of the various activities and hierarchies. Here we have to refer once again to Martusewicz and colleagues (2014), namely when they argue that we should think critically about the conditions that are "ecosupportive", looking carefully and without prejudice to those sustainable communities, not interfering with the ability of natural systems self-regenerating potentialities. Besides, to have a really overarching approach would take to consider the commons, or communal resources, which can becase-putted under two categories: the natural,as land, air, water, biodiversity; and the cultural, likethe beliefs and competencies that, belonging to us all, can empower us with the modes of constructing a better way of life. The later referred disposition unfolds in parallel a critic of the harmful behaviours of self-centred thinking, consumerism, or forms of marginalization and exploitation related to the consumer culture. Such new advance in the way to face the indissoluble question of the communal resources –that radically objects "Who can be the private owner of such resources belonging to humankind in the present days and to those to come?"– unravels an ignored –if not despised– ethical grounding of responsibility. It also suggests that we have to learn from each other, assuming an ethical humility of learning even from indigenous cultures beliefs and behaviours, while configuring sustainable lifestyles.

From what we have adduced above it is reasonable to infer that the concepts, discourses and metaphors of the "techno-productivistic" culture and the sustainability cultures areopposed. Hence, as Bowers (2006) incisively indicates, we have to criticize the understanding of the commons within the context of contemporary ideologies:

> "It is important that the everyday life in the world's diverse commons be understood within the context of the current ideological orientations, such as liberalism, conservantism (as currently misused in the press and by politicians), and the ideology that is being represented as serving as a bridge between the two – that is, libertarianism. Understanding the basic differences between the cultural assumptions and values that influence everyday life in the commons, which varies between cultures, as well as the current reliance on different interpretations of classical ideas as a guide to both domestic and international governmental policies, is especially important if we are to recognize the different ways in which the world's commons are being threatened. Among the characteristics shared by the different interpretations of classical liberal thinking –social justice liberals, 'free-market conservatives', and libertarians– is that they are all represented as a blueprint for achieving a better future to humankind. (Bower, 2006, 107)

Considering such a panoply of readings, the author goes on to clarify his position:

> "I argue […] that the need today, given the rate of technological change and the incessant intrusion of market forces into every aspect of daily life, is to be mindful (that is reflective) about which traditions are essential to the health of the commons, and which traditions carry forward socially unjust and ecologically destructive practices." (2006, 107)

If the renewal of democratic intentions today requires particular attention to ecological issues, it is clear that young generations must be prepared for this challenge. And given that the changes presuppose a rationale of "subjectivation", there is no sustainability for ECOJUSTICE that does not imply an educational project of ecological awareness, involving the school population, but also the mass of the common citizens. Indeed, if democracies are undermined by the oligarchic powers of a globalized economy, enlightened mass education can become its redemptive crucible in societies in which the democratic game still functions, while it can function as an open game. As Schleicher (2018), very poignantly refers, not only sustainability, in its complexity and entangled dimensions, is the most significant challenge to education,

being transversal to all education systems, as it has become the "key differentiator" regarding issues as: inequality, biological computer engineering challenges, technology racing ahead of schooling and human competences, massive destruction of jobs (quicker than creating new ones), human lower efficiency and competence compared to Artificial Intelligence and Robotization, along with human lower resistance to change, human lower endurance to acceleration and fragmentation. On the side of the opportunities, we can refer to the importance of: broaden social and economic equity, transformative education, empowering literacy, numeracy competencies, the creation of new kinds of jobs, in conjunction with the development of cognitive and emotional competences, as well as character qualities, values, creativity and the (in principle, unlimited) capacity of adaptation and imagination, or, as Harari (2018), puts it, the capacity to reinvent ourselves endlessly. According to Schleicher (2018, 227) "Educators hold the key to ensuring that the underlying principles of the SDGs become a real social contract with citizens".[1] Namely, because the "problematic" we have to cope with requires some cognitive, emotional and social soft competencies, that are essential to assure the social dynamics, the civic participation, the trust (as an indispensable social glue), the compromise, the compliance, the risk-taking and the assumption of change –that Harari (2018) sees as the main invariant of all the embroiled processes– as well as the innovation ability we need for tackling current inextricable problems. In respect to the subject that we have tried to address here, one has to bear in mind that the "ecojustice turn" requires knowledge but, above all, new attitudes, some character qualities and values that claim for a new education paradigm. Thus, as Nuccio Ordine has, in profoundly and eloquently fashion explained, it requires an education that goes beyond professionalization, technical competences and the useful, focusing on what can make us better persons and freer persons, namely humanities or, in his own words, "the usefulness of the useless" (Ordine, 2017). Something that the OECD points out very directly: "Education needs to aim to do more than prepare young people for the world of work; it needs to equip students with the skills they need to become active, responsible and engaged citizens." (OECD, 2018, 4) This leads us, repeatedly, to the embracing perspective that could be able to deal with the problems we face:

> "In the 21st century, that purpose has been increasingly defined in terms of well-being. Nevertheless, well-being involves more than access to material resources, such as income and wealth, jobs and earnings, and housing. It is also related to the quality of life, including health, civic engagement, social connections, education, security, life satisfaction and the environment. Equitable access to all of these underpins the concept of inclusive growth. Education has a vital role to play in developing the knowledge, skills, attitudes and values that enable people to contribute to and benefit from an inclusive and sustainable future. Learning to form clear and purposeful goals, work with others with different perspectives, find untapped opportunities and identify multiple solutions to big problems will be essential in the coming years." (OECD, 2018, 3,4)

Moreover, not only younger generations, who are more enlightened about ecological issues, are more likely to change their individual natural resource-saving habits, as they can become more demanding voters about national and transnational regulation that can even mitigate the risks of human life extinction, not to say planetary obliteration. Here we come to our point of concern that claims for a new education paradigm, as several times alluded above. And over and over, we found in the works of Rebbeca Martuzewicz a theoretical and practical organized breakthrough, relying on the idea of a pedagogy of responsibility grounded on the main concept about the need to care for the planet's fragile balance, by recognizing the interdependence between all living creatures. In order to cope with such challenge, we must identify the practices, the relationships patterns and the beliefs that could install healthier communities; and that is why we require a creative reframing of education as lived as an ethical process based in a vision of healthy, just, and sustainable communities. This entails a clarification of how our educational system and communities have, and still do, instil the values of exploitation, mastery, and dispossession of the commons. Now, if we want to counter such inertia, we need to set forth a pedagogy of responsibility, within democratic and sustainable communities, that could be a real propaedeutic against the harmful ideologies, settings, and patterns, installed and thriving amidst the current "libertarianistic" ideology. On this subject, Bowers apropos explains that

> "What needs to be discussed are the educational reforms that are essential if students are to graduate with a knowledge of how the local cultural commons represent alternatives to the consumer dependent lifestyle that further undermines community and degrades the Earth's natural systems. These educational reforms should enable students to recognize the different forms of enclosure, and the consequences they have for the individual, community, and the environment. The initial challenge, however, is to get students to recognize the cultural commons they participate in on a daily basis." (Bowers, 2009, 198)

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[1] As to the SDG is referring to the, above quoted, *2030 Agenda for Sustainable Development*, where the United Nations explains its programme of *17 Sustainable Development Goals*, which expresses that this institution has a vision, the concern and –at least–, a concrete line of action for wisely "achieving sustainable development in its three dimensions economic, social and environmental in a balanced and integrated manner. (2015, 6).

To unfold, in a meaningful process, such pedagogy, the author proposes that, in, first of all, there must be a deconstruction of the tacit –or taking for granted– ideas about our differences, deepening then the relationship of what is still alien to our way to be. These steps are crucial to implement an intercultural education and require an imaginative rooted methodology to develop a new mindset. Hence an Educational Manifesto for Eco-Justice becomes urgent for clarifying the teleological horizon of our pedagogical activity. In order to achieve its formulation, the means and resources may be diverse and should bereceptive to the cultural polyphony of the different voices that inhabit our earth. However, a unifying goal seems to berequired, we need to prepare the citizens of the 21-first century for a renewed and active democracy, which shatters the atony of comfort while developing an increasing awareness of eco-social issues.

As we are dwelling with the issues of developing an environmental grounded educational ethics, it seems advisable to present a methodological suggestion pertaining to how to conduct the education process itself. In this regard, it appears to us that the programme entitled "Curriculum for excellence through outdoor learning" (Learning and Teaching Scotland, 2010) seems to be a kind of methodology congruent with the purposes of an eco-justice education. In one hand, because of its propensity to embrace a desirable equilibrium between the different domains of educational finality, that Biesta (2015, 2018) has so well presented. Namely by addressing, in a complementary mode, the educational functions of qualification, socialization and subjectification.The latter referring to "the way in which children and young people come to exist as subjects of initiative and responsibility rather than as objects of the actions of others" (Biesta, 2015, 77). On the other hand, it should be stressed the intrinsic potentiality of outdoor education to propitiate a set of activities conducive to a quality growth process.

Indeed, we recognize to this methodology the merit of putting forward that open spaces have vast potential to promote learning. It is our belief that only imagination can be a limit to the application - from preschool through college - which educators can design for rich natural environments to function as motivating contexts for relevant, active, meaningful and diverse activities. In fact, outdoor educational experiences can be better harnessed through appropriate articulation with classroom activities so that creative, sustained and progressive opportunities are fully developed. Moreover, when these are placed under the inclusion paradigm, socializing and "subjectivizing" dimensions can also be promoted in parallel. Among the wide range of virtues, we can devise in this methodology, its propensity to provide remarkable or memorable, as well as recreational and delightful, creative and challenging experiences, as they unfold within a spirit of initiative and responsability. In terms of personalization, or if we want subjectification, the fact of placing the learner in many self-care situations indicates its value for encouraging self-awareness, autonomy, self-sufficiency, along with resilience - through enabling the development of capacities to assess and manage risks - but also by being able to call for the responsibility and affirmation of critical spirit. But, it is also important to recognize the inherent propensity of open spaces to offer the relationship pristine natural environmentsthat canprovide sensitivity regardingthe importance of global sustainability. Let alone, a sense of cosmic belonging and, finally, it is not to be forgotten how interaction with realistic, social and natural environments, can induce a community-empowering cultural spirit.

Conclusion

We have tried to show how current societal models have broadly forgotten environmental concerns due to the main focus in economic growth. In line with this issue, we presented the raise of an environmental awareness brought forth by some enlightening innovative works and the alarm caused by ecological catastrophes of "transterritorial" and "transgenerational" proportions that pertain the Planet as a whole. This has taken us to clarify how the demand for priority intervention measures has appeared and introduced the idea of a "green economy", referring to sustainability parameters, that claimed for the collaboration between economic agents under regulatory instruments. In particular, it was presented how environmental policies should incorporate the sphere of Environmental Rights, thus settling a collective responsibility towards nature. This took us to explain how environmental ethicstransmute the very meaning of anthropological identity, as it requires human solidarity regarding the various inhabitants of the global ecosystem. Such new anthropological and epistemological paradigm has arisen an ethical-philosophical debate that resonated within the educational realm. Which gave us the opportunity to present how the motivation to tackle "eco-injustice" calls for an "eco-justice education". Hence, we have come to present outdoor educationas a kind of methodology congruent with the purposes and the modes

required to propitiate a set of activities conducive to a grounded sense of responsibility towards ecological sustainability.

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