



# Environmental Education and the Integral Development of Human Potential

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**Abstract:** This article is based on the inductive method, starting from the readers' experiences to later establish this relationship with the structures represented by institutions and social behaviors and, finally, return to the challenge of acting individually and socially in the spaces in which it operates, in applied practice of this knowledge. Therefore, the concepts of being social are presented and important issues are discussed, such as: gender, respect and tolerance; socio-educational issues such as gender identity and anti-racist practices articulated with environmental education and citizenship and establish connections between macro and micro dimensions, for integral development and the human being, not as the center of the environment, but as an integral part of our habitat. It is intended to be provocative and move your willingness to insert yourself as a socio-environmental subject of transformation, especially in the school space, and that, from there, you expand with a change of behavior that is always open, acquiring and applying new knowledge.

**Keywords:** environmental education; human potential; social development.

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## 1 Introduction

The field of environmental studies is quite broad, having mobilized many research and publishing areas in the last decades. Hence the need for a specific focus on integral development and human potential, otherwise one runs the risk of falling into the whirlwind of hyper-information, leading to the anxiety and racing thoughts typical of "the burnout society."

Integral development of human potential is located within the field of environmental education and it's interdisciplinary, that is, the present article dialogues with and connects

to other content related to this topic, to the extent that philosophical concepts intersect with macro issues, such as climate change, environmental management by businesses and cities, and public policies and legislation. Such approaches must be articulated with micro concerns, especially from an artistic and educational point of view.

I shall thereby analyze integral development. Thus the connection between the macro and the micro, with human beings removed from the center of development (as in anthropocentrism) so as to be understood as a constituent part of nature in complete association with the whole.

## 2 The individual and the environment

When it comes to the environment, one usually begins with the approach from the 1970s, from the First Earth Summit (1972), which saw the presentation of both the Club of Rome's (1968) report on the limits to growth and the Meadows Report, this last one widely debated in the 1992 summit that took place in Rio de Janeiro, Brazil (Benjamin, 1993).

This perspective has its value and fulfills a very important role in raising awareness about the theme, but it's not the only way to approach this issue. One can start with the inductive approach of individual experiences, that is also proven as capable of triggering behavioral change, as stated by Ab'Saber (1993 - p. 107): "a process of education that guarantees a commitment to the future, involving a new philosophy of life. It is a new behavioral ideology, on both an individual and a collective scale."

There seems to be a direct relation between individual responsibilities and the environmental problem, in the sense that there's a need for immediate behavioral change in even the littlest of people's daily activities, accompanied by expressions such as "do your part."

However, have you ever stopped to think that things aren't that simple? While it's important that everyone does their part, if there are no structural (macro) changes, it's of little use for an individual to change their behavior in small ways, as this will have little effect considering the breadth of the environmental catastrophe underway. Although all or most individuals doing their part may significantly ease the situation, it will be difficult to reverse this process if there are no structural changes.

What if we begin from the opposite side, imagining a structural change in the production and use of clean energy, eliminating all forms of deforestation, river pollution, emission of other gases, reuse of all residues and waste, etc. Would all of this be possible or sustainable without a change in individual behavior?

The effects of this dichotomy turn into a vicious circle, feeding back on each other and moving toward an entropy with no viable way out in sight. The individuals engaged feel powerless, and the disengaged may feel guilty for not doing their part, even though they're victims of the system.

In this context, perhaps the best option is to change behaviors while at the same time engaging organizations and agendas in defense of the environment, combining individual and collective action that will gradually broaden society's awareness and legitimize this agenda to bring about structural changes.

Yes, all these initiatives are valid and promising. Many laws have been passed, new taxes created to penalize polluters and reward environmental protectors, and judicial punishments meted out to offenders. However, there have also been opposite shifts in the system, as environmental codes are changed to make them more permissive for devastators, offenders are let off the hook (which works as an incentive to those attacking the environment), and even authorities have sounded violent against those who defend the environment. Between advances and setbacks, there's no consensus on the overall results of this more than half a century of global environmental agenda.

In this dialectical scenario, I intend to present a concept seldom used and debated in our continent, even though it has been around for decades: the concept of self-reliance as a strategy for development, presented by Johan Galtung (1977). The term was initially coined by the North American philosopher Ralph Waldo (1841), who understood the need for the individual to avoid conformity, take initiative and follow his own ideas, but was also used by the Chinese leader Mao Zedong in the sense of regenerating oneself on one's own, which comes close to the concept of resilience.

Galtung (1977) takes up the concept of self-reliance and posits it as a strategy for another model of development, considering it as an open concept that articulates (individual) self-confidence and the collectives one is a part of, a logic of horizontal power under the principles of participation and solidarity.

This is more complex than taking individual action and participating in collective struggles to demand that authorities and companies promote structural changes. The author argues that adopting the concept of self-reliance as a strategy for development means, first of all, a behavior of resistance against the logic of "center-periphery" relations and its mechanisms of penetration, fragmentation, marginalization, and segmentation of places and individuals, considering that each part is the center; therefore, power relations (political and economic) must function horizontally, as a kind of "distributed network."

The author therefore proposes an alternative logic of development, one whose implementation doesn't depend only on individual actions, nor does it require a general transformation of the system. The practice of self-reliance as a development strategy consists in regenerating dominant patterns, beginning with self-reliance, trusting oneself, that is, both the individual self and the collective self with others in the same position, based on two principles: participation and solidarity. It's a dynamic and creative movement of bottom-up co-management and cooperation. As the author states, self-reliance refers more to the psycho-political field than to the economic one.

Still on this analysis of the relationship between individuals and the environment, one must consider the latter as an integrated whole, which is why this is a complex, rather

than a fragmented, way of thinking, one in which the parts are interdependent and humans are a part of this whole, not the center of the system as advocated in the anthropocentric view, hegemonic within the logic of modernity for at least the last three centuries and already proven unsustainable.

Thus in proposals aimed at sustainability one must approach the set of dimensions of development in an integrated and interdependent way. Ignacy Sachs (2002) is one of the main proponents of this view. He introduces eight dimensions of sustainable development: social, cultural, ecological, environmental, territorial, economic, national political, and international political.

This elaboration is curious for the relevance and emphasis the author gives to the first dimension: “Social: that which refers to the achievement of a reasonable level of social homogeneity, with fair income distribution, full and/or autonomous employment with decent quality of life and equal access to resources and social services.” (Sachs, 2002, p. 85)

But when it comes to this dimension of social homogeneity, of fair income distribution and quality of life, are we also talking about the environment?

Certainly yes, since if, on one hand, the anthropocentric experience of establishing a center-periphery relationship between humans and nature resulted in a situation that imposes limits on growth, on the other, reversing the situation and dealing with the environment without taking people into consideration, especially those victimized by this very center-periphery logic in socioeconomic relations, would be to repeat the same mistake. Therefore, environmental protection also requires the defense of social equity, as not everyone suffers the consequences of environmental destruction with the same intensity.

### 3 Ethics in social and environmental relations

An important argument to raise awareness for the need to reverse environmental imbalances is that these affect everyone indistinctly; air pollution, for example, spreads throughout the planet and doesn’t “respect” political territorial demarcations, nor the spaces of noble neighborhoods or suburbs, and therefore the environmental issue is boundless.

However, some are more affected than others, especially due to socioeconomic conditions, as indicated by the latest UN Human Development Report (UNDP, 2019):

Gender inequality: some groups of people are systematically disadvantaged in many ways. These groups might be defined by ethnicity, language, gender or caste—or simply by whether they live in the north, south, east or west of a country. There are many examples of such groups, but undoubtedly the largest worldwide is women. Gender disparities are among the most entrenched forms of inequality everywhere. Because these disadvantages affect half the world, gender inequality is one of the greatest barriers to human development. (p. 12).

Taken together, the two main indicators that most affect conditions for the development of human potential are gender and ethnic-racial characteristics. When these two situations overlap, overcoming imposed conditions becomes more difficult, as indicated in the table below, sourced from the UN's thematic documents on sustainable development goals for Brazil (2017).

Another environmentally unequal aspect is the incidence of violent deaths due to racial differences. The most recent data from the Brazilian Institute for Applied Economic Research (IPEA) shows how relevant this indicator is in the Brazilian reality.

In 2019, black people (the sum of blacks and browns according to official classifications) were 77% of all homicide victims, with a homicide rate per 100 thousand people of 29.2. Comparatively, within the non-black population (the total of Asian, white, and indigenous people), the rate was 11.2 per 100 thousand, which means the chances of being assassinated as a black person is 2.6 times superior to those of a non-black individual. In other words, in the last year, the rate of lethal violence against black people was 162% higher than against non-black people. Likewise, black women accounted for 66% of all murdered women in Brazil, with a mortality rate of 4.1 per 100 thousand inhabitants, in comparison with one of 2.5 for non-black women. (Cerqueira, 2021, p. 22).

In summary, there's no way to handle the environmental question without considering the main social ills that are equally the consequence of an unsustainable developmental model in its different dimensions.

It must be understood that we're not only in a process of environmental crisis, but in a crisis of civilization (Morin, 1995), resulting from the kind of economics-based (materialistic, consumerist, and industrial) thought that hypertrophied development, as well as from an anthropocentric, utilitarian vision of relations between people and the environment. In face of these crises, it's necessary to break away from our current lifestyle, building a new one based on biocentric and sociocentric paradigms, which together make up ecocentrism as a moral and ethical ideal of relations between humans and nature, leaving behind modernity's outdated dichotomy.

We're challenged by the strategy that combines long-term vision and immediate action within a scientific and anthro-political ideology: complex thinking; ethical attitude; practical action.

To enable this change in ethical behavior in the relations among individuals, and between them and the whole, "otherness" must be exercised and cultivated. This concept presupposes that each human being is interdependent and constantly interacts with the other, and thus the individual self only exists in contact with the other. It is the other that reveals my self. I am not without the other, who is different from me. In other words, an ethical behavior based on otherness presupposes the horizontalization of power relations (Galtung, 1977), without distinctions, on a path of resisting and overcoming the economics-

based style towards an ecocentric way of life, one in which gender, ethnic-racial, and generational oppressions, among others, are not appropriate.

As a consequence, lifestyle and social behavior are inspired by the ethics of caring for common goods, the commons. That is to say, no one should take possession of, nor destroy or pollute, what belongs to everyone, be it water, air, forests, biodiversity, or even other human beings, for the more destitute they are the more they require our care and solidarity.

Therefore, I'm calling attention to two aspects that reinforce inequalities and become obstacles to the development of human potential. On the one hand, sociocultural discrimination, which we could also call "soft skills" (to use a fashionable term), is subtle and reinforces stigmas, which in turn are transformed into socioeconomic inequality, creating a vicious circle of oppression and exclusion within the development process. Subtle discrimination noticeably influences inequalities, hence the insistence on behavioral change as part of structural change.

Let's do a simple behavioral mapping exercise: choose someone you know who holds an anti-environmental position, and another one who is a staunch environmentalist. Then choose a diverse set of controversial themes (also called divides in the social sciences) and observe some typical words used by one or the other when they relate, for example, to themes such as gender identity or opinions on feminism and sexuality; the relationship between poverty and desire to work or lack of opportunity; subtle speech connecting black or indigenous people to marginality; and so on. One can extend the conversation to a range of other issues so as to confirm or refute the hypothesis that there is a tendency for individualistic/selfish people to also be sexist, racist, against the environmentalist agenda, etc. in their language and everyday actions, while solidary/altruistic people are more careful to avoid sociocultural discrimination.

#### **4 Models of development and the subjects of transformation**

Were things always like that? Where did this all begin, and why has humanity followed this path?

One of today's most celebrated writers reflects on this with particular clairvoyance. Yuval Noah Harari, Ph.D. in History from Oxford University and professor at the Hebrew University of Jerusalem, has recently published the following trilogy of books: "Sapiens: A Brief History of Humankind" (2014); "Homo Deus: A Brief History of Tomorrow" (2016); and "21 Lessons for the 21st Century" (2018). In the first work, the author traces a genealogy of the current economic system, which he claims is rooted in the Agricultural Revolution:

All this changed about 10,000 years ago, when Sapiens began to devote almost all their time and effort to manipulating the lives of a few animal and plant species. From sunrise to sunset humans sowed seeds, watered plants, plucked weeds from the ground and led sheep to prime pastures. This work, they thought, would provide them with more fruit, grain and meat. It was a



revolution in the way humans lived – the Agricultural Revolution. (Harari, 2014, p. 70).

The cognitive and scientific shift, the industrial and cultural revolutions of modernity, have unfolded as a consequence, but in essence “the first crack in the old regime appeared about 10,000 years ago, during the Agricultural Revolution.” (Harari, 2014, p. 338)

Basically, this change in the essence of our lifestyle relates to the ethics of anthropocentrism, when sapiens placed themselves as the center of the survival process and began to exploit natural resources as consumer products in their individual favor to the detriment of their neighbors (competitors). Hence the concern to accumulate goods, as this logic would lead to scarcity, even if it were necessary to corrupt, attack, take others’ resources by force, or enslave them and then legitimize one’s actions as protected by law, also known as *jus naturale*, which precedes the role of the State. In short, what follows is this entire system that we all know very well, since we live in it; there’s no need to further comment on this.

But is this the only possible lifestyle? Are there possibilities of living differently than under the logic of exploiting others and the environment, always putting one’s interests first? “Me” in the center, others and nature as peripheral?

Theoretically there’s a lot written about it; a vast field of discussion, speculation and experimentation in terms of other economies. What about in practice? In practice, there is too.

Did you know about a recent trend toward “demetropolization” in Brazil, with medium-sized cities growing? The Brazilian Institute of Geography and Statistics (IBGE) found that in the 1970s, during the so-called “late industrial revolution” and the countryside-city migratory flow, there was an average population growth of 3.5% in big cities, going down to 2.1% in the 1980s, 1.8% in the 1990s, and 1.1% in the 2000s. “This occurred because inter-regional migrations have decreased in intensity or, in some cases, reversed, given that São Paulo itself has been registering migratory deficits.” (Pena, 2022)

The lifestyle in metropolises is no longer synonymous with quality. It’s rather the opposite, that is: environmental awareness itself, or the revival of more solidary and humanized values that the coronavirus pandemic itself awakened in some people, has instigated changes in lifestyle, such as preferences for a simpler situation, with less consumption and accumulation of goods and more contact with people and nature.

Will this be a large-scale trend, or remain a certain privilege for those who can do so?

At the same time, one wonders whether this shift in habitat from metropolises to smaller cities will accompany lifestyle changes.

This hypothesis will probably not be confirmed nor refuted immediately, as it depends on a set of structural factors, as well as on individual attitudes over a medium-term historical time frame.

However, one hears a lot about “new economies” these days, that is, other ways of producing and managing the resources necessary for both subsistence and the provision of simpler, healthier lifestyles that privilege quality of life over quantity of consumption. This simple reversal can represent a revolutionary process, from awareness to ethical attitudes and practical actions.

Thus the importance of environmental education as a way to call attention to other possibilities, which are many. Unlike capitalist market patterns of production in scale, unequal distribution, and unbridled, superfluous consumption without concern for externalities, other lifestyles can negate these models and generate wide diversity.

Author Michèle Sato (2005) portrays the differences of lifestyle in places like Mimoso (MT), a World Heritage Site, as an example of life based on the concept of bio-regionalism, which depends above all on affective memories with the land, the anthropological roots that many of us still have and that others might have forgotten, but will certainly still be able to access when coming into contact with this different world. Therefore, give yourself and your students this opportunity, not only in the form of tourism, but as a possibility for life.

The author argues that despite the diversity in its philosophical currents, bio-regionalism was first thought of in the United States,

in the thick of the counterculture effervescence and in the context of California’s alternative communities, which sought an alternative lifestyle and became a well known element of so-called “Deep Ecology” (ALEXANDER, 1996). In opposition to the lack of ecological sensibility, centered on the human species (anthropocentrism), deep ecology claims an ethics of life in its totality (biocentrism). Some authors believe that the love for the earth displayed by certain communities was not the result of counter-cultural ecological movements, but of the absence of choice in urban life that governs the principle of development. Their trajectory, thus, was not a straight line - while some still seek this alternative way of life, through permaculture, natural food habits, or a less consumerist way of life, others have followed a more political positioning in local history, interpreting cultures and communities without neglecting their regions’ surrounding natural environment. It is through this second current that we enter the world of Environmental Education (EE). (Sato, 2005, p. 191).

I leave you with the invitation, or provocation, to take a chance on other possibilities, or at least reflect upon the theme to find an integral style for the development of human potential, which is now as worn out, damaged, and polluted by the current hegemonic system as the entire environment.



## 5 Environmental education for civic behavior

This text's uniting thread is an invitation for us to go through a learning process beginning with the practical experience of each person, seeking to observe how the environmental theme is related to each individual's lifestyle, behavior, and choices (as long as this individual has opportunities to choose, of course). Such ethical choices are reflected in sociocultural behavior and in relationships with others and with nature in an interconnected way, for both are part of a whole in a view that rejects the *homo sapiens*-nature dichotomy, seeking to reestablish the notion of integral and holistic development. Finally, there's the idea that the current hegemonic system's standard lifestyle is not the only possible one, nor the one providing a better quality of life. In other words, this whole narrative is not neutral, being rather intended to provoke critical thinking, to stir the emotions, even, and therefore it is a path for learning, aimed at promoting transformations motivated by environmental education.

This is how Rodrigues and Colesanti (2008) discussed the state of the art of environmental education in Brazil then:

In recent decades we have witnessed the emergence of numerous movements in favor of the environment. In several countries, programs and strategies have been undertaken with the intention of curbing environmental degradation and/or finding less taxing processes of production and consumption. Within this context, Environmental Education practices have intensified, trying to sensitize and inform people of environmental reality, as well as showing and/or indicating the role and responsibility of society in what happens in the environment. (Rodrigues and Colesanti, 2008, p. 52).

The authors highlight the efforts to include the subject in school curricula in an interdisciplinary way, as well as the production of research and teaching materials, the expansion of graduate courses, and the practical engagement in socio-environmental actions. They conclude by discussing promising possibilities in the relationship between environmental education and new information and communication technologies.

Indeed there are great possibilities, even from a conceptual point of view, considering the principle of commons was in the origins of the Internet, in the sense of a purpose to horizontally share information globally. However, practice is always contradictory, depending on the logic and ethics by which the tools are appropriated.

Right now it's difficult to say whether the Internet, especially its "most consumed product" (social media), is consistent with the principle of sharing common resources, or is just simplifying language with the aim of expanding consumption, "creating" new needs, generating even more conflict and pollution through superfluous stuff, accelerating time and, therefore, hastening environmental catastrophes, at the same time as enabling greater "flexibility" for the exploitation of workers, disseminating the ideological alienation that we are all entrepreneurs, masters of ourselves, when in truth we have become precarious workers, without rights, without a modicum of security and future perspective, condemned

to work more and more, constantly, being increasingly unproductive and sickened by fatigue (Han, 2017).

Are we capable of being protagonists in this process of environmental education in our teaching practices? How can we do it? Where to start?

Perhaps the concept of self-reliance encourages us to dare, or, as Ristoff (2018) used to ask, “why does Johnny write more than João?”

Our tendency, given our extremely negative self-image as a people, is to attribute this difference to Brazilian students dedicating themselves less to the study of the topic in the two weeks preceding the writing of the text. This explanation can’t be ruled out entirely and, if true, would confirm the myth that the American student studies more. However, we have no evidence to make such a categorical statement, although we share the critic Leslie Fidler’s definition of “myth,” which is that “myth is a lie that tells the truth.” (Ristoff, 2018, p. 11).

This provocative excerpt may inspire us to believe, to exercise our self-confidence and “throw ourselves” into the network of educators who are aware that something must be done, who are coherent with the ethics of sustainability and engage it in daily practice, individually and collectively, transforming their lifestyles and acting so that the most profound systemic transformations are hastened and happen as quickly as possible.

Marques (2017) presents a good roadmap for kicking off a research or text: letting your thoughts, your stories, and your research project flow, while at the same time not clinging to written language alone, as this is also part of modernity’s “package deal” of power relations, establishing a hierarchically superior relationship to other forms of language (oral, visual, performative, etc.).

It should be stressed that in environmental education there must not be a central language in contrast with peripheral ones, as all ways of knowing, as well as all forms of art, are especially valuable and capable of expressing knowledge, abilities, and emotions. Choose what suits you best.

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