Environmental Education and Their Ways of Subjectivation in Educational Field

Celeste Dias Amorim, Luiz Artur dos Santos Cestari

Abstract — The knowledge and technology development, specifically during the contemporaneity, time of great achievements, and the predominance of rationality that brought contributions and advantages to societies on the one hand, but unpredicted consequences to the people on the other. This text is based on the assumption that environmental speeches are established in the educational field correlating their training goals with the ways of subjectivation in order to bridge the shortfall of human emancipation, which was caused by the development of the technical-instrumental rationality. Thus, the objective is to show that the environmental claim in education is done through concepts and values already consolidated in the literature published in the humanities, taking them as forms of subjectivity, understood here as advertised forms of subject concepts through their concepts. A qualitative approach, following Arendt's conception, is through action (speech) that man is manifested with each other, for man as a being historically constituted is inserted into the world through word and deed. It is through discourse (action) proposed by the Environmental Education through subjectivities, such as citizenship, participation, identity among others, environmental discourse establishes its training goals in education, introducing an important path of dialogue between environmental field and educational. Then, subjectivation shows an important path of the environmental speeches in the educational field. The debate about environmental education which must be mediated by the discussion on the human formation, promoting an emancipation of the subject capable of questioning, discussing and reflecting on the action of individuals in the society, by overtaking the instrumental rationality.

Index Terms — Education, Paradigm Crisis, Instrumental Rationality, Environmental Rationality.

I. INTRODUCTION

The search for the advancement of knowledge and technology in human history, especially during modernity, consists of periods of great achievements with the predominance of reason, which has provided wealth and benefits to society, but with them, carried unpredicted consequences to individuals, who consequently were struck by hunger, misery, destruction, and a change of values, among other issues, in other words, the advancement of technical-instrumental rationality occurred paradoxically to a deficit in human emancipation.

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Araújo^[1], in agreement with Habermas, indicates that social transformations support the interpretation of situations that provoke changes in the lifeworld, which is represented by three worlds: **objective** - true statements are possible; **social** - interpersonal relationships are legitimately regulated; and **subjective** - personal experiences are of privileged access. These worlds may not be colonized neither by the market nor by the State.^[2]

As a result, cultural standards and interpretations in forms of concept, notion, meaning, classification, and domination, maintain and accumulate cultural knowledge, and, likewise, instrumental rationality reproduces on individuals the logic of social processes. Stressing that instrumental rationality (IR) is originated in modernity, from the notion of reason as a tool, as the term is presented in the works of Habermas^[2], Santos^[3,4,5,6], Morin^[7] and Leff^[8,9,10]. Leff and Santos widen the IR discussion by bringing environmental rationality into the picture.

According to Habermas, there is reciprocity in the individual's interaction with society wherein the individual is inseparable from the social aspect, thereby achieving a historically situated reason that changes his world view. Hence, an individual is moved in the lifeworld "by the structural change in society and transforms as this society produces itself." [2]

Following similar reasonings, Marcuse^[11] states that, simultaneously, this world of objects, and not subjects, is shaped by a one-dimensional society. He states that the "false needs" for leisure and consumption lead the individual to "find himself in things" and to accept the "law of things", frequently leading the individual to believe in his freedom of choice, turning freedom into an instrument for smooth and comfortable domination. However, this promotes the tendency of standardized thought and behavior, in which "ideas, aspirations, and objectives, which, in their contents, transcend the established universe of word and action, are repulsed or reduced to this universe's terms, as they are redefined by rationality of the given system and its quantitative extension"[11], or, as stated by Buber[12] "[...] a man is not something between things or made by things. [...] the modern man collective life is necessarily engulfed in the world of the it."

A essential repercussion of this social model to this study is that man has become detached from his natural environment and has neglected its simplest processes. Thus, man, not seeing himself as an integral part of his environment, fails to acknowledge the effects of his actions, or if so, will not evaluate them.^[13]



One way to overcome instrumental rationality, and that appears today sustained by the reasoning that man must review his relationship with society and nature, is the proposal in favor of an environmental discourse as the means to raise subjects' awareness, i.e., the virtually indisputable indignation of educating subjects for a new (environmental) rationality as a way to overcome the instrumentalism of rationality. Thus, it "opens up to a sexualization of the world, transgressing the established order, which imposes a prohibition of being". [9] As it "[...] incorporates thought and values, rationality and meaning, it is open to differences and diversity, aiming to deconstruct the unitary and hegemonic market logic to build a global economy, integrated by local economies based on the specificity of the relationship between material and symbolic, cultural and natural".^[10]

The emergence of this discourse in recent years, whether in literature or in international agencies documents, has been an alternative not only in response to the narrowing of human rationality, but as a proposal to reinvigorate human emancipation, rethinking relationship between subject, knowledge, society, and nature.

Therefore, the discourse in favor of environmental rationality in the field of education has been presented through discursive forms of constitution of subjectivities, intermediating meanings for education through the environment using concepts such as participation, citizenship, and identity. Thus, this paper aims to show that environmental demand in the field of education happened by the means of well-established concepts and values in the humanities literature, taking them as forms of subjectivation, understood here as widespread forms of conceptualizing the subject given the mentioned concepts.

In the light of the exposed, in this study, we submit participation, citizenship, and identity as forms of subjectivation, under the perspective that the concept of subjectivity distances itself from the modern tradition, from the Cartesian lines of production to which capitalist societies are subject, to what it proposed by Environmental Education, namely, subjectivity beyond the self, individuality, that is distanced from the world of 'it', of objects.

II. ENVIRONMENTAL EDUCATION: FORMATIVE GOAL CENTERED IN SCIENCES OF EDUCATION OR IN THE SCIENCE OF EDUCATION

The supremacy of instrumental rationality (IR) over environmental rationality is an evidence that modernity crises and alternative ways to overcome this crisis move toward the search for new, less ambitious forms of rationality. Mini-rationality, as stated by Santos^[14], demonstrate that contemporary pretensions of emancipation are increasingly far from the modern ideal of an individual's global reason, and, the rescue of the emancipatory reason occurs through the subjects' particular and identity claims, motivated by speeches in favor of plurality and cultural diversity.

Under the perception of the interrelations of man with society in the light of environmental rationality (ER), education appears as another social practice, which aims to consolidate its demands. Thus, to speak of environmental education entails to assume ER as one of education's formative goals, and, in this context, education is a scientific

field that establishes relations with other fields, in this case with the environmental sciences field, however, as with the environmental dimension, several other formative goals are planned in education.

Moreover, at first, it is necessary to comprehend the meaning of education as a field of knowledge: "A field is a structured social space, a field of forces, a force field. It contains people who dominate and others who are dominated. Constant, permanent relationships of inequality operate inside this space, which at the same time becomes a space in which the various actors struggle for the transformation or preservation of the field. All the individuals in this universe bring to the competition all the (relative) power at their disposal. It is this power that defines their position in the field and, as a result, their strategies". [15]

Still with Bourdieu^[15], "It's on this level of structural history that the most important things appear. What counts in a field is relative weight, relative impact". Similarly, attempts to consolidate an environmental dimension in the field of education must occur while questioning consolidated relationship configurations between knowledge and education, which is one of its inherent features.

Likewise, Charlot^[16] assumes a perspective in which, in the field of educational knowledge, there are several circumstances, and, among them, is the context of education studies as well as the studies about education. This distinction alludes to a specific aspect of education as a field of knowledge, which is: "[...] the fact remains that it is an area in which permeate, at the same time, knowledge (sometimes from various backgrounds), practices and policies. Thus, the first definition for the discipline education or education science is outlined: it is a field of knowledge fundamentally diverse, in which, on the one hand, knowledge, concepts and methods originated in multi-disciplinary areas, and, on the other hand, skills, practices, and ethical and political purposes meet, interpellate, and, sometimes, are fertilized. What defines this discipline's specificity is this diversity". [16]

Faced with this miscellany, many theorists do not understand education as a specialized field of knowledge, as it "has always been seen as a mainspring for the realization of political, ideological, social, economic or religious purposes", [17] so education is distanced from its actual role in the lifeworld and from formative goals propelled by the human condition.

Röhr^[17] displays two models for the relationship between education and other fields of knowledge, which capture the authors's views of what it means to educate, polarizing positions between those who defend education not as a field of knowledge, but as a field of applications (education as sciences of education) and those who advocate for education as an specialized field of knowledge (science of education) - Figure 1. In regards to the latter concept, the author understands the field of educational knowledge as a scientific field, with its own epistemology for he considers the field the place to think of human development, and not simply as a field of applications of ideas originated from other sciences. ^[18,19] Thus, reflection on what it means to educate and inherent problems to the formation process precede the



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debate on the contribution of a discipline or knowledge about the meaning of education.

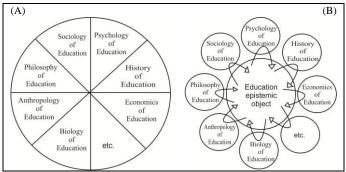


Figure 1 Models of education: (A) "sciences of education" and (B) "science of education" $\$

Source: Adapted from Röhr^[17]

In the first case (Figure 1A), the model is formed by several areas of specialized knowledge that act in a particular manner in education as pieces of a set forming a collection of knowledge on education, i.e., these areas are transiting on the educational field, but with specific goals aimed at a predetermined knowledge that responds to its own epistemic object, with no interrelation between them.

Similarly, "specialization "ab-stracts" or tears out an object from its context and entity, cuts its ties and intercommunications with the environment, and inserts it in an abstract conceptual sector, the compartmentalized discipline whose frontiers arbitrarily break the systemicity [...]. Specialization leads to mathematical abstraction operating itself a cleavage with the concrete, favoring whatever can be calculated and formalized". [20]

Hence, as shown in model A of Figure 1, there is a risk of instead of educating, indoctrinating, manipulating and training.

In the second model, the sciences of education act as fields related to the *science of education* (Figure 1B), which entails the formulation of problems through the epistemic object itself, and has freedom and the meaning of life as indispensable fundaments, allowing for education to seek in other areas contributions in order to accomplish its goals of men's humanization. [17,21]

Our discursive/theoretical option is stated in favor of the model of the Science of Education, assuming the perspective in which the relationship between man/society and man/nature is driven by freedom through dialogue with oneself, where he can recognize other men, with no mediation of things and objects, exerting speech and action in the human condition in the lifeworld.

Consequently, it is important to note aspects of the human condition, as presented by Hannah Arendt^[22], who establishes among man's plural experiences basic conditions of action and speech, where freedom is achieved in the exercise of action, speech and contrasting action against thought, for plurality is the fundamental activity of human existence, which allows for the relationship of man with himself and other beings.

Hence, based on the human condition as indicated by Arendt^[22] and on the lifeworld constructed by Habermas^[2],

this plurality of knowledge directs the field of education into reflection and distinguishing between sciences that use education - and, in that case, education is but a tool for the realization of purposes outside the educational field - and the science of education as a place where individuals reflect on their dimensions and on aspects of reality, and "[...] under the premise that the humane is entirely expressed in its potentiality, education's purpose is to gradually and proportionally develop that potential".^[21]

Nevertheless, the prevailing relationship of education with other scientific fields is that of a field open to compartmentalized applications, being Model A in Figure 1 the more common model to represent the relationship of education with other fields and knowledge, and the field of education may be reduced to a field in which different forms of subjectivity are projected, and each form exhibits an attempt to answer to a demand in the field of human sciences, put on the subjects by their time.

III. SUBJECTIVATIONS PROPOSED BY ENVIRONMENTAL EDUCATION

Subjectivity concepts (participation, citizenship and identity) presented here are discursive forms widespread in the humanities literature, and the environmental education has made attempts through them to mediate meanings of education, in other words, by the means of concepts such as participation, citizenship, and identity, educational ideas are approximated to environmental rationality, and, with such, environmental claims are seen as an Environmental Education (EE) project. Therefore, a brief exposure of how these concepts are constructed in the humanities is presented here and, then, a demonstration of some combinations of these concepts with the environmental discourse in education.

Participation

Habermas^[2], in his piece "The Theory of Communicative Action", states that participation is based on a cooperative action, where participants act simultaneously in the objective, the social and the subjective worlds, making "actor-world" relations attainable, in which an individual is not something but someone in the world, and, thus, acts to chase his own interests with principles that will not harm other people.

Consequently, subjects are translators of reality; their choices determine their relations between men and society, and participation is freedom itself, the alive spirit as indicated by Hannah Arendt^[22]. Though, this freedom is not one conceived by the modernity paradigm, in which humanism may lead human beings to the power over nature or to portray themselves according to the principles of instrumental rationality in a historical moment of socio-cultural paradigm crisis. ^[4,5,6]

Similarly, Loureiro^[23] states that "the hypothetical increase of personal freedom, due to the increased access to information and power of choice, centered on individuals, coincides with the increased weakening of the power of decision for the collective." Alternatively, Scherer-Warren^[23] indicates social movements as positive collective actions that arise in three forms of "non-exclusive varieties: (1)



complaint, protest and conflict; (2) cooperation, partnership and solidarity; and (3) construction of corporate or civil utopia." Thus, participation is not only individual but also collective. It is vital to the furthering of the dialogue between social actors, and favorable to the resolution of environmental matters. For the sociologist Herbert de Souza, or Betinho^[24], "if everyone fulfills their part, the world would be better". This "their part" includes, too, solidarity and respect for one another, and participation should be seen as "a collective learning and a political victory". [25]

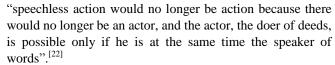
To participate is to share power, to respect one another, to ensure equality in decisions, to provide fair access to socially produced assets, in order to guarantee to all the chance to make history on the planet, to fulfill ourselves in communion. Participation means the exercise of autonomy with responsibility, with the conviction that individuality is complete in the relations with others in the world, in which personal freedom entails collective freedom. [25]

Another essential aspect of the proposed debate on EE is the concept of participatory citizenship as introduced by Wampler and Auritzer^[26], which describes organized citizens striving to overcome social and political exclusion through transparent and responsible public participation, thus, shortening distances in the debate on democracy in the perspective of institutions and theories of the civil society. Hence, the concept of participatory citizenship is supported by the work of Jürgen Habermas and Robert Dahl, the first used by Wampler and Auritzer to support social and political renewal as a place in the public sphere, as an example, open and public meetings, which represent conceptual tools and political strategies, and, the latter, to argue that local democracy contributes to the perception of the emergence of public dimensions, which distances power abuse. Moreover, the authors present participatory budgeting as a participation model, as the means for society to act in the political sphere, where actors and organizations exercise and expand democracy by means of the polis¹, i.e., the community of organized citizens, whether through labor unions and social movements or through political parties.

Similarly, Santos^[5] discusses that "local, regional and national communities from different parts of the world are running democratic experiences and initiatives based on alternative models for democracy, [...] for instance, municipal participatory budgeting". In addition, Silva^[27] reveals experiences with participation must no longer be treated as objects but as results of the dynamics in the field of relations, so "the meaning of a particular participation experience starts to be found in its place in the history of the given circumstances" ^{27]}. Thus, each experience is unique, even with equally using a place for participation, it presumes a variety of contents and directions, which are sought by social and political actors.

Furthermore, a participatory individual is a constructor of action, action that is manifested through opinions, stories, and deeds, and, without speech, fails to reveal itself. Thus,

¹Here *polis* is understood according to Hanna Arendt^[22] that represents the possibility of man distinguishing himself, and through word and acts reveal his singular and distinct identity. Thus *polis* is the political space, of dialogue that promotes participation of diverse social groups, where each one firms its identity.



To that effect, according to Buber² "Participation is as perfect as the contact of the "Thou" is immediate. The "T³ is current through its participation today. It becomes as current as his participation. [...] In subjectivity, it matures the spiritual substance of the person. The person becomes aware of himself as a participant of being, as a being-with, as an entity".^[12]

In the light of the stated, participation should establish in the field of education relations with environmental rationality, when an individual, sensible to his subjectivity, takes action in the lifeworld and acts when confronted with the *polis*.

Citizenship

In line with Betinho^[24], to be a citizen "is to take responsibility in constructing the world and our personal reality", a task of every man, but with a close relationship between man and nature, and man and society.

According to Betinho's perception, the term citizenship goes beyond the classical legal definition as the exercise of civil and political rights, thus, instead of individual rights, it becomes collective rights, i.e., social rights exercised through the defense of human rights and the search for a just society and a sense of solidarity, responsibility, and belonging. Thus, assuming this comprehension of citizenship, Loureiro^[23], in the Environmental Education discourse, portrays citizenship "as something constantly built, that has no divine or natural origin, nor is formed by rulers, but it is constituted in providing meaning to the belonging of the individual in society in each historical era".

Similarly, Santos^[5] states that plurality, arisen in social struggles for justice and cultural citizenship, requires alternative forms of law and justice in this new idea of citizenship, a "multicultural citizenship". Recall that, for Hannah Arendt^[22], the action is "the human condition of plurality, the fact that men, not Man, live on earth and inhabit the world." Therefore, citizenship should be multiple, not one.

Miniaurélio dictionary describes the term citizenship as the condition of citizen and one that leads to the individual or subject. Thus, to perceive subject as "cast" in the traditional citizenship definition is to identify the subject as alienated to the paradigm of universal rationality, which seeks knowledge of the object in its totality from an absolute truth standpoint, with the intent of dominating it. This perception creates the subject as a "precise interpreter of reality, with no opinion of it, without addition of any props. [...] With the broadening of knowledge, a subject has



²"I and thou" presents the relationship of man and world, of his being in the human duality of the "I". Thus, representing the human movement, the "I" that relates with "Thou" is not the same as the one that relates with "It", for "Thou" is seen as a subject and "It" as object.

³The "I" in the relation "I-Thou" sees oneself as a person in relation with others, in its alive presence, aware of his subjectivity. But the "I-It" relation, "I" sees oneself as subject of his own experience, situated in a world of objects, in which objectivity guides what is real. ^[12]

dominion over the object, and may file it, ending discussions, disagreements, polemics, uproars about it". [29]

Additionally, Buber^[12] notes that "the subject, as he acknowledges himself, may take possession of anything he wants." Thus, depending on one's world view, one would recognize the I for the benefit or in detriment of the object, in the first case, when considering environmental issues, we live according to Betinho in "[...] a curious and simultaneously very difficult situation. We develop the notion that everything exists for man's purposes. In meeting needs, aspirations, dreams, and fantasies of human beings, anything is possible. Nature has no value in itself. Animals exist to feed people, rivers, only to provide us water. This is a utilitarian view and appropriator of natural resources. This means to consider nature as having no value in itself, as it only has value in reference to men. [...] Ethic grounds must be created to consider all beings, in all their diversity, as part of the same world and that needs to be respected". [24]

This individual or subject must go further. In order to enlarge his citizenship, he must seek interaction, realization of himself and others, as it is in living with one another that the subject modifies himself. According to Loureiro^[23] "Social relationships established in school, family, work or community settings enable individuals to form critical perception of themselves and of society. [...] The relationships established in each formal or informal educational field are educational places of the exercise of citizenship".

However, in order to create an ethical foundation, there must be a strengthening of educational settings that contribute to recognizing the Self, for his benefit and not to his disadvantage. Correspondingly, Loureiro^[23] states "[...] the challenge of consolidating a substantial and direct citizenship dwells in the ability to publicize formal institutions, to establish quotidian democratic practices, to promote a school that lead to critical thinking about the living environment, and to consolidate a 'culture of citizenship', in the local, regional or international levels".

Morin^[20] understands education as a way to promote openness of the mind to receive the novel. It is a transmission link. Therefore, it plays a fundamental part in an individual's development, for if the development of man is an education's object, a "culture of citizenship" must be encouraged and consolidated.

Similarly, the relationship of man and society entails an very strong bond between subject and citizenship. This relationship determines a society as democratic or authoritarian. According to Morin^[20] the first "functions on the base of individual freedom and responsibilization", where individuals are citizens and express their desires and interests, while the second reduces "individuals to colonized subjects."

As a result, citizens, according to Habermas^[30], are not determined by a "model of negative liberties". He believes in positive rights, in which citizens are "politically responsible" for their community, as democracy manifests itself through the "self-determination praxis of citizens", as it is through participation of a common practice that citizens become what intends to be, and actions are driven by collective interests,

not by personal interests, so that a citizen recognizes himself as a member of society and as an autonomous individual exercising his political and legal rights, which are also desired in the social practices proposed by EE.

Identity

According to Habermas^[2], the market tends to dominate the lifeworld by means of a subject/object identity concept formed by the IR, but communicative rationality tends to react by forming a subject/subject identity, one that operates in the lifeworld and manifests itself in the renewal of traditions, which are increasingly dependent on an individual's critical and innovative capacity.

Similarly, Sato and Passos^[31], in the EE discourse, indicates the need to "break the subject-object link and challenge the subject-subject relationship" with actions based on thought and action, for the construction of an ethical debate that will give meaning and form the subject, that is, in this discussion, positions taken by the subject leads to his identity formation, since, according to Hall^[32], it is "by the means of difference [...] through relationship with the Other, relationship with what is not" that identity is formed, and, on the other hand, the construction of the subject is formed through "processes that produce subjectivity" [32], so the commend for a new paradigm, one that negates the prevailing socio-cultural paradigm, begins with a new conceptualization of the historically constituted subject, one that articulates emerging identity issues through subjective processes, which characterizes the relationships of subject/subject, subject/society, man/nature, and society/nature.

Thus, formal or informal, education must create a facilitating environment for the individual to form his critical, creative ability and a favorable setting for subjectivity. We must, nonetheless, recall that "individuals are products of the reproductive process of the human species, but this process must itself be done by two individuals. Interactions between individuals produce society, witnessing the emergence of culture, and back onto its individuals by culture" [20]. Thus it establishes the identity determined by the "triadic relationship *individual/society/species"*, where each "term is both means and end," noting that "we may not turn the absolute individual, and make him this circuit's purpose; neither with society or the species" [20].

Morin^[20] also indicates the relevance of culture in maintaining human and social identity, while "cultures are apparently self-enclosed in order to safeguard their singular identity", they also are open, for they incorporate "skills and techniques, and also ideas, customs, foods, and individuals from outside". And this is the unity and cultural diversity phenomenon, which enriches and strengthens identity and turns "the human individual himself is both one and multiple".

This aspect, too, is portrayed by Hall^[33] when he addresses the fragmentation of subjects and their cultural identities. With the decline of old identities, which describe a unified subject, and the emergence of new identities, fragmented, decentered and shifted, leading an individual to the loss of sense of self, both in the social as well as in the cultural world, and eliciting an individual's identity crisis, which:



"[...] finds its origins in an broader change process, that is shifting structures and core processes of modern societies and shaking references that used to provide individuals with a stable anchor in the social world. [...] the identification process through which we project ourselves in our cultural identities has become more temporary, variable and problematic [...]". [33]

Corroborating Cestari^[19], he states identity crisis "[...] takes subjects to an atrophy of their abilities, turning the condition for human freedom into controlled social need. That is, in a scenario manipulated by the cultural industry, cultural activities are increasingly marked with the seal of commerce, organized and industrialized, for market's purposes, thereby obliterating the individual's creative behavior and making domination seem like freedom, democracy, equality, and individuality [...]".

Thus, the above stated appears to be at the root of modern society's disintegration, what began in the late twentieth century, in which occurs rationality's fragmentation in mini-rationalities: class, gender, sexuality, ethnicity, race, nationality, environmental etc.^[4,5], but "also changing our personal identity, shaking the idea we have of ourselves as integrated subjects." [33]

Still in agreement with Hall, regarding his conceptions of this new identity, he presents three kinds of subject: the illuminist, characterized as individualistic, centered in reason; the sociological, which represents interaction between the self and society; the postmodern, formed by multiple identities "in different moments that are not integrated around a consistent self" [33], what Leff [9] calls ethnic identity, which are appropriated skills and knowledge.

Thus, originated in each concept of education, a concept of identity is presented, and destabilization of stable identities gives in to the emergence of new identities, given the notion of fragmented rationality, but of plural subject, wherein ER "produces new social meanings, new forms of subjectivity and political positions before the world" ^[9], for, as stated by Leff, the meeting of different identities is what produces a knowledge dialogue and, in this, Environmental Education is included.

IV. CONCLUSION

Man, as a historically constructed being, is inserted into this world through words and deeds, hence, man manifests himself through action (speech), "not as mere physical objects, but as men." Also, it is through speech that man is understood, establishes relationships with himself and with others, manages differences, strengthening plurality, which is "the basic condition of action and speech," because even though all are equal, each man is singular, so speech allows man to manifest and reveal himself, "living as a distinct and singular being among equals". [22]

Thus, speech that is ratified by history is incorporated into the life of the new generations, so it is necessary that "distinct and unique" man be aware that, through his actions (speech), one may always change and it always provokes a reaction, i.e., "an answer is always a new action with its own power to reach and affect others". [22]

In education, speeches are mediated by subjective values previously present here, and so are important concepts in the educational current scene, as well as in the means where views in favor of environmental rationality permeate. The current literature on EE in the field of education has shown that the introduction of the environmental discourse is made through appropriation of environmental demands and of values and concepts already established in this field. That is, in some ways, concepts such as participation, citizenship, and identity have already gained notable presence in the spreading of various pedagogical ideas, and, likewise, environmental speeches are yet another set of ideas initially introduced in the sciences of education to, then, through them, be constituted as a speech that establishes a domain in the education field, called Environmental Education.

One of the above demonstrated subjective aspects regards an emphasis in the defense that subjects, educated along the lines of ER, should be participatory individuals. The notion of participation is an alternative that provides the subject with the possibility of facing one of the conditions imposed by instrumental rationality and by a one-dimensional society: individualism. As discussed earlier, initially, participation involves the perception that individuals may react to meanings mediated by the instrumental logic of a capitalist society, and might see themselves plunged into a set values determined according to the market's purposes.

Secondly, ER attempts to reinvigorate a subject's sense of "community", through the concept of participation and through collective and organized actions that may directly cause change, so that the subject views himself not only in relation to other subjects, but also as part of his natural environment, in other words, participation seems to be a contemporary demand, presenting the subject with idea that he should participate for he must be aware of capitalist society's contradictions, as well as the idea of sensitivity to the depletion of natural resources, and, in this sense, subject's actions must be reframed so that he may interfere in the lifeworld, going beyond what has been established by instrumental logic, reconstructing rationality itself, going from reason of universal nature (modern reason) to the model of rationality, which is orientated towards demands posed by post-materialist movements. Thus, subjects' participation in actions are increasingly driven by post-materialist demands. This occurs not only with environmental movements, but also with identity movements.[4]

Likewise, a logic similar to the concept of citizenship, as previously stated, seems to be increasingly pervaded by the multicultural perspective, for we have moved from the modern and universal idea of a citizen centered in reason to an individual having an identity with a set of rights, considering social and identity demands from a particular minority, thus, increasingly, there are specific rules and laws that meet these social needs.

Finally, these two concepts are articulated with a third: identity. This concept has become recurrent in the humanities, for it seems we have increasingly moved away from the idea of a subject centered in the notion of modern class, especially one based on the Marxist theory's concepts.



Currently, the notion of social class is relativized due to the emergence of plural current identifications and, among many identities such as race or gender, the individual's identification with environmental issues is a demand pertaining to many subjects from all social classes, i.e., a business owner belonging to an international business conglomerate, a informal worker on the outskirts of a large city, or a member of a community movement, the idea of protecting natural resources seems to be of everyone's interest.

Therefore, this scenario displays two mobilizations in the humanities literature, because at the same time as authors point to attempts to reinvigorate these concepts of forms of subjectivity, through them, many social demands will mediate significance for overcoming instrumental rationality and reinvigorating a sense of human emancipation that supports many social movements. The environmental movement and the demands of an education for and through the environment is supported in these efforts, and likewise, other post-materialist demands have used the same concepts for their interests and for forming their particular ways of speaking and expressing demands.

Therefore, another issue is these concepts' limitations and places in regard to each demand. Regarding environmental claims, one might say that the attempts aim to overcome these concepts's notions only by the creation of a specialized field, that is, elaborations are made by philosophers, sociologists, political scientists, educators, etc. Thus, the place of producing an understanding of environmental education is where it attempts to become interdisciplinary, i.e., a common place between sciences of education and environmental sciences.

Furthermore, if we wish follow the path in search of an understanding of what is means to EDUCATE, for and through the environment, we must start in the field of education, and not forget the configuration of issues pertaining to this field. Thus, we must consider that the environmental aspect may be meta-formation, for it constitutes one of the human dimensions or reality aspects, but it must be viewed under the comprehension that the humane is manifested in its multiple dimensions and aspects. In addition, education is a field of knowledge in which a place is built for reflection on the meaning of education today. On the contrary, the purpose of education is limited to reproducing norms and rules of what is correct in man's relationship with nature.

Moreover, the debate on environmental education must be mediated by the discussion of human development, promoting emancipation of a subject that is able to question, discuss and reflect on each individual's action in society, as did Morin, and, in this process of construction of the understanding of subjects' education, include, as well, man's concern for his environment.

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