



Environmental Perception: Notes on Transdisciplinary Approach

Valéria Marques^{1*}, Suzana Ursi², Edneusa Lima Silva³ and Geisly Katon²

¹Department of Psychology, Federal Rural University of Rio de Janeiro, Brazil

²Department of Botany, University of Sao Paulo, Brazil

³Department of Psychology, Faculdade Sul Fluminense, Brazil

***Corresponding author:** Valéria Marques, Department of Psychology, Institute of Education, Federal Rural University of Rio de Janeiro, Brazil.

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Abstract

Environmental perception can be defined as the notion of perception applied to the relationships of individuals and communities with the environment. The interactivity together with the quality of environmental perception are essential elements for animal life. However, in its interaction with the environment, man causes several ecological imbalances, which leads to stress for himself and harmful impacts on nature. However, if man is responsible for several environmental problems, he is also the way to the solution. Considering the importance of the theme, this article aims to discuss the human- environment interaction, using as reference transdisciplinary interest as a proposal of new strategies for the emergence of an ecological, ethical, critical, supportive and responsible individual. The bibliographical research was used as a research design and the epistemological data based on the Complexity Theory/ network of knowledge and the Non-Ordinary Epistemology / Non-Trivial Isomorphic Mosaic Theory, which allows the study of reality as something in permanent movement, being seen as unity-diversity. The data collected allow us to infer that environmental perception is closely related to environmental awareness and that the more conscious the better the quality of interaction between man and environment. The interactive behaviors are the result of the perceptions, of the cognitive processes; the judgment and the expectation of the course of the environmental events stand out. It is understood that there is no neutrality in man- environment interactivity, because even in apathy or in the absence of explicit psychological manifestation, there is a political-ideological direction. It is concluded that the autonomy of this relationship is based not only on cognitive development, but also on self-knowledge, on the assumption of responsibility and on social maturity.

Keywords: Environmental perception; Trans-disciplinarity; Ecological awareness; Interaction man-environment

Introduction

To think about life is to think of an integrated system in which man is one of these elements. Integrated movement with the internal and external environment marks his existence. To think of this integration, we need to consider the detection canal of events. At this moment, we can point to perception as a reading mechanism and interpretation of the stimuli. The more complex the organisms involved, the more complex will be the perceptive process.

In the end, interaction with the environment is fundamental for the survival of the species. Interacting together with quality

environmental perception are indispensable elements for animal life. In an interdisciplinary approach, we can perceive how this evolutionary thought is ever more integrated into present-day psychology [1]. Besides acting, reacting and interacting firmly, the human being can also cut immediate links to the reality and create other times and spaces, in other words, human beings are capable of handling reality in an abstract way and cope with depictions, changing their behavior in harmony with this reading. Since the capacity of the human being is a main differential, the study into his environmental perception becomes ever more urgent.

Man's interaction with the environment many times causes ecological imbalance reverting to stress on man himself and nefarious impacts on nature. Moreover, if man is responsible for the many ecological problems, the road to solve these problems lies in himself [2]. The way in which humankind interprets reality and itself, namely the perception of reality and itself, interferes in the quality in which human beings interacts with the environment [3,4]. suggests that perception is the first stage in human communication. The act of perceiving is so natural and frequent that, in most cases, it is taken for granted and not even evaluated, remaining unnoticed. We suppose that if man widens his degree of ecological awareness, possibly it will have a more responsible interaction with the environment. The degree of ecological awareness is directly interlinked to self-awareness of the quality of his environmental perception [4]. Given the range of this theme, there is an interdisciplinary interest in urgently proposing new strategies to form an ecological, ethical, critical, sympathetic and responsible subject. This will be the focus of this article, we use the transdisciplinary concept by [6].

Epistemologically, strong transdisciplinarity (which from now on I will refer to as simply trans disciplinarity, unless otherwise specified) is based on three fundamental pillars: a) levels of reality, b) the principle of the bincluded middle Q, and, c) complexity (Nicolescu, 1998). In addition, it recognizes as simultaneous modes of reasoning, the rational and the relational. Transdiscipline represents, thus, a clear challenge to the binary and lineal logic of Aristotelian tradition [5].

Consistent with this conceptual choice, as an epistemological foundation in this article we have opted for the study based in the complexity theory / knowledge network [6] and in the non-ordinary epistemology / Mosaic theory of Untrivial isomorphs [7,8] which allows the study into reality as something in permanent movement, seen as a diverse unit. Its aim is to establish the greatest number of possible articulations between the phenomena and the possible levels of reading reality and social interaction that sustain an ecological development theory [9]. In this way, one criticizes the fragmented view and traditional dichotomy that separates objectivity from subjectivity, balance from change, observation from observed. It is assumed that human subjectivity is constituted in continual environmental interaction, where there are multiple influences between the perceived ambiance and the perceived, whether there is intentional and conscious perception or not. Psychological culture offers an alternative research in agreement with this statement. It contributes to the constructed sense attribution analysis in the articulation between knowledge and experience with future expectations.

To instrumentalize this proposed reference to an environmental educational theme, we have chosen the bibliography research method for the elaboration of this text. For the purposes of a fundamental concept, we begin with a theoretical review theme in human perception to arrive at environmental perception and its transdisciplinary implication.

Perception

Daily, we observe the indiscriminate use of the noun 'perception', with two most frequent meanings: as a cognitive act and moral act, i.e., how one sees/interprets or judges' reality. In informal conversation one commonly finds: "Have you perceived anything different in me?", when there is some change in one's appearance, such as the color of hair; or, "How do you perceive the impact of this news on the economic market?", when you insert a new element in a discussion as for example a political decision. These senses of the word perception are not wrong; however, its meaning is vaster the semantic problem arises only when one reduces or confounds its meaning, which could compromise the dialogue.

Perception can be studied from different aspects:

- 1) through processing, set off by physical, chemical, environmental, social and/or psychological stimuli (effective, cultural, cognitive)
- 2) by perceptive levels and directions, from a subliminal perception to an ample conscious perception, or from self-perception (interior world) to environmental perception (exterior world)
- 3) by the factors that influence that perception
 - external (such as intensity, contrast, movement, and incongruity), and
 - internal (motivation, experience, culture [knowledge, beliefs, values]), and
- 4) through perceptive failures, pathologies (hallucination, delirium) or not (illusion, camouflage, mimicry).

It is important to note that the relationship between reality and perception is not immediate. Perceptual experience of an object is not a true copy of the reality but a representation. This representation is always a (re)creation of partial reality. Sometimes we cannot perceive things that exist, or contrarily, sometimes perceive things that do not exist. These perceived illusions show sometimes that what one feels (sense organs) does not correspond to what is perceived (mental representation). According to [10], "perception is the set of processes by which we recognize, organize and make sense of the sensations we receive from environmental stimuli". We reiterate that the stimuli can come from an internal (oneself) and/or external environment. In this way perception, the sensations, are organized then form a percept, i.e. a mental representation of a perceived stimulus. The difference between the animal perception in general and human is the form and handling of this representation. Humans have a specific way of using more complex sensorial information available "handling them in such a way as to create mental representation of objects, properties and spatial relationships from the environment"[10]. Sensory limitation in humans is compensated by their capacity for mental representation, which amplifies the quality of the interaction with the environment. Each animal has developed in its evolution the

best way to adapt to its environment. We detain ourselves by being human.

Perception is part of a cognitive process; understanding that cognition does not develop in a watertight nor isolated way. Cognition organizes the elements to make a sense. It functions articulating into other aspects of development such as affective, social and organic aspects. As such, perception is closely related to intelligence, an important element in forming concepts, yet also with beliefs, values, preferences, experiences. Perception has some general biological founded lines yet is not erased by the singularity of the perceiver. Researching human perception covers a huge spectrum, that goes from study of the basic psychological processes, that involve sensorial information, neural networks, to superior psychological processes, the meta-cognitive processes [11] and enactive [12,13]. Moreover, to study each of these processes separately can become productive by leading to the fragmentation and distancing research into human subjectivity [14]. So, if perception is more than a simple sum of the sensory captured parts of the object, we need to investigate the process of object apprehension and of the attributional simultaneous context as the sense is always in negotiation and actualization.

Traditionally there are two cognitive conceptions that try to explain perception: bottom-up and top-down. There is another proposition that congregates both. In the bottom-up conception – based on Gibson (1966, 1979), [10] states that “perception occurs in the measured that the environmental objects offer an informational structure that, finally, reaches the sensorial receptors, leading to an internal identification of the object”. The theory of direct perception by Gibson, known as the ecological model, conceptualizes affordance and considers that being human one does not need the superior cognitive processes to measure sensorial and perceptive experiences. Whereas, in the conception top-down the constructive authors consider that who perceives, builds an initial internal representation to the stimulus, using apart from sensorial information other sources of information. As such, learning has a relevant role in this process. Perception would be a dynamic process during which various hypotheses are raised with respect to perceptions based on three factors:

- 1) Sensorial data, information from senses
- 2) stored data, known and retrieved information from memory and
- 3) constructed data, deduced information when cognitive processes are activated at a high level.

The relationship between sensation and perception can lead to ambiguities. Sensorial adaption provoked by constant stimulation causes detection of the stimulus to stop, as it leads to adjustment. For example, after wearing shoes for some time one no longer perceives the shoe the situation continues until there is a change such as steppingstone or tripping on the lace or focusing one’s attention on the shoe. This sensorial adjustment is

important for environmental interaction mental economy, once the mind becomes available for other stimuli. Moreover, this may become dangerous and cause accidents, when adjustment tends to consider that everything remains the same, yet it is different, and interaction requires new adaptation. Another example is when the organism, pathologically, begins to waste energy during interaction to avoid and/or ignore change. Therefore, variation to stimuli is an essential attribute for perception, like constant reorganization of the perceiver in interaction update.

Another curiosity is that the descriptions related to the environment show major interest about the fauna than the flora, in other words, people are less interested in plants within the ambiance. For this reason, [15,16] examine the reasons that led people (in the USA) to this, we can highlight some points: there being biology teachers with extreme affinity for zoology (zoo-chauvinism), as well as the frequent use of example with animals to explain concepts and basic principles of biology (examples zoo-centricity). Apart from these reasons, the authors (2001) highlighted the way in which humans perceived plants, which is subject to the restricted systems of processing cognitive and visual information, as well as, the degree of attention we give to something in its relative importance to us.

[14] distinguishes two determinants in perception: the autochthonous and behavioral. The first refers to biological qualities, related to the nervous system and connected to the brain. The second refers to the behavior qualities, related to motivation, personality, learning, attitude, social needs and cultural context, connected to the mind. The movement influenced by Bruner was known as “New look in perception”, which highlights subjective elements that interfere with perception:

- 1) Selectivity (each perceiver perceives reality depending on his characteristics and interests
- 2) order and meaning to the perceived (set of ideas that relate to the perceived, concepts and pre- concepts about the object and context)
- 3) impression forming (food of experiences, knowledge, preformed beliefs)
- 4) categorization (organization of precepts into classes, not only rational but also ideological and emotional).

The functioning of the mind and brain are not dichotomous, but systemic. The human being inherits his constitution genetically from his species, but also inherits cultural construction from the humanity. Human beings are not direct by instinct, they are active and capable of developing their own autonomy. To say that the subject is active in the act of perception means that the collective and singular attribution of senses are concomitant. The human beings do not only reproduce the symbolic richness passed down by their ancestors but can also recreate this culture [17]. The man interprets, attributes meaning to the perceived function from their previous experience, motivation and expectation, his interests and

his previous knowledge. The author has proven that perception is influenced by needs, and desires can influence it as well. [18] explains that perception involves various aspects of reality not only subordinate to cognition or structures of development, as it requires also participation in the world and as such construction of its subjectivity the meaning is forged into a collective dimension. The internal and external aspects are inseparable from the perceptive processes.

Perceptive Process

As we have seen until now, perception is not only the fruit of a working brain, albeit, biological aspects inherited from the species, but also the mind together with the whole body, in a systemic/holistic way, that gathers as much the personal psychic reality as the external physical and cultural influences. One can say that perception has an organic substratum and another representative. In relation to the organic substratum, we have what is directly related to the human somatosensory system. This is a system covers three large functions:

- i) Proprioception, the sensation of oneself,
- ii) The interoception, the sensation of the workings of the main systems of organs in the body and the internal state; and
- iii) Exteroception, which is the direct interaction of the external world on the body, responsible, for example for the sensations of warmth and cold [19]. The representational substratum point to the process of creating oneself and reality. It is a process of organizing and interpreting in a singular way sensorial data under a social-historical influence.

To make perception effective, the environment must exercise some influence on the observer, which may be a motivating or repulsive, which confers this relation to level of affectivity. Our mind organizes and represents what is captured by our senses, whereby vision stands out as a selective and creative process and is complemented by smell, touch, taste, and hearing [19,20,21].

No perception is neutral; it can suffer internal and external interference. The greater part of the perceptive process occurs unconsciously, as of the data assimilation, representation, object recognition, influence of senses and perceptive judgments:

- a) The gathering of connected data favors sense attribution, the establishing of points to experience and existing knowledge, for example, when we relate new to sedimented learning.
- b) The predisposition to gather something facilitates one's perception, for example, when one enters undergrowth aware it is rich in fauna, one perceives the presence of small animals;
- c) The existence of previous expectations, for example, we learn about the diversity of leaves, while walking along a trail, our attention becomes more selective, which favors our perception;
- d) Personal preference interferes in perceptual organization, for example, when interested in butterflies, while walking they draw our attention more; we are more prone to perceive them.

Relationship Between Perception and Conscience

Who is capable of perception? Animals, no matter how rudimentary, they have a cognitive apparatus. Perception and conscience are intrinsically related. Even though there are marked differences between humans and other nonhuman animals both have a conscience at different distinct levels. To exemplify this, imagine a scene a waterfront: water, a dog, and a man. The seawater has no level of consciousness; these changes arise from external interaction. It does not perceive its movements, temperature, etc. The dog's, as an animal, level of consciousness arises from its internal workings. It can perceive the effect of the sun's heat and react to it, whether to look for water to drink, or to lie down in the shade. Whereas the man can reach a more complex level of consciousness. He can perceive the sun's heat, and not only react but mainly, act upon the environment. He can look for or create a recipient to gather seawater close by to refresh himself little by little and/or get water from a cooler bag that he brought from home to kill his thirst, for example. Therefore, man's capacity transpires in his environmental mediated reaction, acting physically or mentally, albeit, behaving intentionally and/or handle mental representations that enable him to anticipate, plan, imagines, compare and etc. Man is capable of mentally managing space and time, learn from his experiences or from those like him, and increase his chances of survival and consolidate a better quality of interaction with the environment and life.

[22] differentiates these two levels of consciousness, the first would be awareness, 'to become aware'; in contrast the second, which would be consciousness, 'to become aware of being aware', a typical human consciousness. Outside the scope of this paper is animal consciousness, yet the human question of being aware of himself and the world around him stands out. This consciousness goes beyond himself and in pursuit to influence those others similar to him also have a conscience. Consequently, they are attributed thoughts and feelings (Ades, op. cit.) Which qualifies above all social cohabitation validating exchange of information, as well as other symbolic influence (values, norms, expectations, beliefs, constructions, identities and etc.)?

Faced with all these concepts, one can conclude that in deference to animals' man's relation to the environment is mediated. One powerful instrument in mediation is language. Reality is not learned directly; it is built by way of knowledge in an influential mutual interaction. Man is capable of designing, differentiating and describing his own and the world's knowledge. Man does not only react like animals, he represents the world and acts, albeit, he is capable of anticipation, planning, adjustment, generalization, assessment, and reflection. There is a direct relationship between perception and consciousness in the cognitive process. Perception is, therefore, a key element in the human symbolic aspect. On 7 July 2012, at the Francis Crick Memorial Conference "Consciousness in human and non-human animals", the document "the Cambridge Declaration on Consciousness" was promulgated, where various pre-eminent neuroscientists and other researchers in the area

confront the existence of non-human animal consciousness. It was written by Philip Low and edited by Jaak Panksepp, Diana Reiss, David Edelman, Bruno Van Swinderen, Philip Low and Christof Koch.

It is important to highlight that even conscious perception, many of which are not and not even entirely dominated, as there are uncontrollable elements that are directly related to the flow of thought. Summing this up, different people can have distinct perceptions of the same world [18,23,18] the human existential condition marked with ambiguity, in certainty, flow, and incompleteness.

Environmental Perception

Facing what has been said above, we can deduce that man sees the world the way he believes he fits nature. Schultz, Shriver, Tabanico and [24] demonstrate that man has an egoistic link to nature, his environmental concerns are related to himself, that is with little worry for the biosphere, which does not happen to people who believe they are part of nature. Different people can have completely distinct reactions in the same environment [25]. In general, people establish closer links to the environments in which they have been inserted, having more difficulty establishing relations with those geographically distant [26,27] However, people may develop temporary relationships with the environment, as in visitors to parks, beaches and nature reserves who look for satisfaction or leisure at these locations [28].

Environmental perception can be defined as a notion of perception applied to individual and community relations with the environment [29]. It is treated as a psychosocial phenomenon, where the representation of the environment depends on cognitive and affectionate processes [30], constructing through individual experiences. The concept of environmental perception is multifaceted [31] and linked to a socio-environmental perspective [32]. For some, environmental perception is more associated with human science, others it is biological science [29]. However, according to Marin and Lima (2009), the term Environmental Perception has a complex and trans-disciplinary nature, without consensual definition in the field of Biology. The authors propose the dialogue between Merleau-Ponty and Simondon in environmental perception to inspire a new look at and actions in Environmental Education.

In this way one should tend to a homogeneous framework, respecting the necessary ramifications in accordance with the adopted theoretical approach, which may give a diverse thematic focus, from which some examples based on study experience stand out in the fields of: Human geography, studies on topophilic bases of perception; education, cognitive and social historic aspects, significant life experiences and memory; Sociology, questions about imagery and the construction of human environmental social interaction; and Philosophy, phenomenological basis of perception and their ethic and aesthetic dimensions [33]. The study into

environmental perception unites elements that contribute to

- a) understanding of human behavior and his environmental interaction
- b) providing data for favorable man-environmental co-habitational organization between, and
- c) planning environmental educational acts [34].

In the same way that overall perception, environmental perception aggregates cognitive, emotional and cultural components, and can be defined as being an outlet for problematic conscientious links to the environment, albeit, the act of perceiving the environment one is embedded, and learning to protect and care for the same. It can also be defined by the way individuals see, comprehend and communicate with the environment, considering the ideological influence of each society. The responses or manifestations arising thereof are the result of collective and individual, from cognitive perceptive, processes judgments and expectations of each individual [35]. The author reunites various environmental perceptive psychosocial dimensions:

- 1) The cognitive (formation of mental images)
- 2) the emotional;
- 3) preferences related to environment (attraction level).

Certifying that perception and seeing, is not the same thing. One can look at something, yet not see it. While a group is hiking along a trail, they may all look at the same green scenery yet not see the same thing: the biologist may be static with the biodiversity, the geographer with the richness of the rocks; the psychologist may be interested in the living conditions, the layman recognize the leaves for digestive teas. The new and existing information modifies man's relation with the environment and consequently his perception. When there is a focused search for meaning, "to see" something becomes easier. The more the diffuse information arrives, the greater the possibility of conflicting interpretations, therefore, the greater perception is prejudiced. Gather data may form an ambiguous mental image for lack or excess of relevant information. This conflict can cause anxiety, provoking a freezing conduct or advance in the quality of the constructed knowledge. If the arriving information is very distant or conflicting with pre-existing information, it may be isolated, rejected or connected. In the first case, information enters and is soon "forgotten", for not establishing sensory ties. In the second case, information is rejected without elaboration, for not having sensory elaboration. In the third case, information is connected to pre-existence and other new information, creating a new level of knowledge. This does not mean to say that previous information will be substituted by new, but a new level of knowledge will be attained. The function of environmental perception is the interpretation and construction/update of meaning, with a fundamental role appropriation and identification of space and environment.

Environmental Perception and Educational Action

To feed this discussion, we propose a parallel below (Table 1).

The three types of representation are not exclusive. Even though it follows an acquisition order in infantile development (enactive, iconic and symbolic), it follows a hierarchical inclusive logic. The

person does not lose the capacity of first level representation when arriving at the third level; he can choose and/or coordinate the levels of his building knowledge process. The psychodynamic character related to thought, feeling an action collaborates in sense building and improves environmental perception.

Table 1: Concepts about environmental perception and educational action [14,36-38].

Bruner Representation AI Modes	Soulé Dimensions	Macedo Articulation	Example	Educational Action
Enactive –the world represented by sensorimotor	Sensory or experimental – immediate collection	First moment: direct contact through the senses by the central neural-sensorial system. The representations are linked to action and manipulation.	Environmental perception has at its source experience and environmental contact. Experience while walking equilibrium on the undulations of the soil, smell of the undergrowth, the heat of the day, the sound of the waves, to establish the rhythm of the paces, etc, paces, etc.	To imitate a bird
Iconic – thought based on mental images and categorized into reality, stable frameworks formed.	Valorousness -judgment attribution	Our senses attributed to these impressions then categorized (generally by the limbic and neocortical organs of the brain). These stimuli may cause emotional responses or reflexive physiological changes, conditioned or free conditioned or free (through the limbic- hypothalamic centers). There may occur judgments and classifications, these learning. Beginning to organize concepts and understand principles.	When one relates/registers the experience and compares it with those of others, it older experience, in a verbal or non-verbal form.	Enjoying a bird and comparing it with other animals
Symbolic – using symbolic representation.	Scientific analysis – establishing theoretical and conceptual relations and formulations.	There are complex associations, concepts articulated (cortex activity) supported by experience or imagined.	There is an improvement in the categorizations making them as broadly generalized as possible. Abstract thought allows for hypothetical situations and more mature and conscious action in interaction with physical and human environment.	To review the text about extinct birds and propose an action.

Relation Between Environmental Perception and Environmental Awareness

Environmental perceptions are taken as a prerequisite for reaching different levels of environmental awareness [39,38] emphasizing the importance of this construction for harmonious cohabitation between men and environment, with responsible, careful handling and preservation of nature. A study by [40] about environmental perception of chemical graduating students concluded that an educational intervention for deconstructing definitions and reductionist representations about the environment and equipping them for more complex discussions is appropriate. We perceive, therefore, access to information is important, but not

enough to change behavior. Educational proposals that allow an emotinal and motivational aspect to blossom, in conjunction with the cognitive, based on experience, debate and reflection opportune awareness, implication/commitment to environmental questions. We cite the underwater interpretive trail [41] as an example of environmental education focused on transdisciplinary approach, aimed at, not only conceptual improvement, to enchantment with the environment and environmental awareness. The project is run into conservation units into states in the south-eastern Brazil (São Paulo and Rio de Janeiro). Such project consists of a set of interpretive trails (in the sea, and coastal vegetation or in the form of informative interactive panels) that cover some ecosystems most subject to present-day pressure: Marine and coastal environments.

The greater part of the threats to such environments and its biodiversity is a direct result of human population distribution, as well as increased demographic tendencies. [42] highlight some of the main threats: loss of habitat, changes to the world climate and over-exploitation. It is estimated that about 70% of the world's population lives on the coast or at least 100 km from and said percentage is growing, which increases pressure on the use of natural resources, apart from needing their habitat to degradation, fragmentation, and destruction [43]. Such scenario makes the conservation of coastal areas urgent, including initiatives in environmental education, such as the Underwater Interpretive Trail Project. In Brazil, despite our enormous coastline, few actions of this type are applied [44,45] presented a panorama of this country.

Some research has been developed in understanding perception in relation to understanding how different publics that participate in the project activities perceive the marine and coastal environments (ex-tourists, students and elementary school teachers, university students), as well as the possible influences on such perception [27,26,34,46-52]. From the principal findings, among others, we can perceive that the feeling of belonging to certain environments is limited, even among the coastal population. In general, the initial perception of the participants is idealized for example through the existence of infrequently found organisms such as dolphins. After the environmental educational activities, perception to biodiversity is significantly increased, incorporating invertebrate organisms, (such as urchins) and algae. Enchantment is frequently reported. When investigating sensations, we find many positive sensations such as peace, well-being, and happiness.

To participate in activities makes a greater number of people establish relations between Marine and coastal environment and the percentage of this increase is very variable, depending on the public. However, the relations with the greater part of our public is utilitarian, in which the environment is seen as a resource to be used by the humankind. We believe that such perception is very present in our society and overcoming it is a long and arduous work.

Recently, research into the perception of anthropic impacts on the environment was incorporated into the research approach. Generally, participants in the underwater interpretive trail project were able to perceive possible impacts on the environment, including those caused by the presence in the environment during the activities but this was not always the case. Apart from this, the participants had, in general difficulties in relation to global impact (such as climate change) on coastal environments. In this way, we stimulated educational activities contemplating deliberately not only to increment knowledge but also broaden perception and environmental awareness.

Final Considerations

Perception is a fundamental process in the interaction between organism and environment. Each being inherits from

its species the capacity to read and respond to stimuli. This assessment varies between level of awareness and action control. In the case of humans, interaction with the environment is based not only on its physiological necessities, but also formed by its needs and desires. Environmental education has a primordial role in environmental perception development scene in its cultural strength; to achieve this one must know the cognitive, emotional and inactive characteristics of the interlocutor. Standard perception refers to predisposition that influences the perceptive process of the organism to capture environmental properties and important elements to its survival (life). Each standard perception will be influenced by the way the perceptive processes are stimulated, what data is considered or ignored. Standard perception is influenced by mental schemes (inherited and constructed), mental structure, concepts (constructed) and temporal-spatial context. Living environmental educational projects offer rich experience that stimulates the subject. The (re) construction and negotiation of senses gain force in the update of experience and exchange of perceptions among the participants.

Environmental perception is closely related to introduction of environmental awareness and infers that the greater awareness, the greater quality of interaction between man and environment. Individual and group subjectivity interfere so much in perception and the acquisition of awareness. Interactive behavior results from perception, cognitive processes and stand out in the judgment and expectation of the course of environmental events. Neutrality does not exist, even in apathy or omission of explicit psychological manifestation, there is one ideological-political direction. Autonomy is found not only on cognitive development but also on self-awareness, on the assumption responsibility and social maturity.

We can conclude that the relation between perception and environmental awareness is not merely a cognitive question, it includes other socio-historic questions such as economics and politics, for example. The media can exceedingly influence the perceptive process. Nevertheless, to confront the canonicity, ideological reproduction, it's proposed living experiences that profoundly penetrate the subject and his group and constantly exercising the problem of interaction between man and reality, contributing with effective actions to build a more mutually binding and harmonic world.

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Conflicts of Interest

No Conflict of Interest.

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