Aspects of environmental awareness training in the elementary teaching system

Caciuc Viorica - Torii *

The Teacher Training Department, ”Dunărea de Jos” University of Galați, str Garii, no 63-65, 800003, Romania

Abstract

The role of contemporary school becomes fundamental in the context of environment’s issue, mostly concerning the future, when the education must become more boldly opened towards the environment and its issues, by intensifying ecological education, focusing on attitudes towards values rather than knowledge. Ecological education must be implemented on a profound level in the preschool and primary education. It must be based on a program of which fundamental objective is to awaken the sensibility of the child to the environment, while he learns to read, write and count.

This study aims to conduct a thorough analysis of how the theories of environmental ethics can infuse the Romanian curriculum at primary level, and an analysis of the practical parts of the environmental awareness training to students.

Keywords: Ecological education; environmental ethics; moral values; environmental awareness.

1. Introduction

The inter-disciplinarity between the ecological ethics and education consists in the fact that the ecological ethics is the one which offers, from the perspective of the sustainable development, the structure and the background needed for the philosophic system, and the ecological education is the one that can implement it at the level of each individual because only by means of education the change of mentality and of behaviour can take place. Alongside the educational systems, the ecological ethics can intervene in a positive way so as to improve the building up and the reassessment of the human behaviour towards nature by rethinking the philosophic system of each individual and also a philosophy which could guide science and technology on what concerns their future strategies for development. Being an older preoccupation, the present paper is trying to deepen the interdependencies and the complementarities between the two fields of expertise. Thus, the ecological ethics can be an inexhaustible source so as to enrich the content of the ecological education by means of the problematics it tackles.

2. Theoretical background

In the present day situation when the number of classes is decreasing, the most accessible approaches remain the infusional and the modular one, the focus being laid more on the informative character of the ecological education during the educational process. To include the messages of the ecological ethics in order to finalize the ecological

* Caciuc Viorica - Torii. Tel.: +40-0336-130164
E-mail address: caciuc@yahoo.com
education is a means to efficiently make ii more accessible which can be applied from the earliest ages, with a major condition that is the educated should have a philosophical culture in this respect. For a better understanding, the infuional approach can be explained for one of the disciplines that children learn during the whole school period, the Romanian literature.

The problem regarding the relationship between man and nature, the effects of the uncontrolled intervention of man against nature, must be included in the children’s universe of knowledge, starting from the preschool period. Children literature, using the metaphorical language of descriptions, stories, poetry etc. represents an efficient means of making children aware of the reality surrounding them. The texts regarding nature and beings are the most accessible to children, in order to encounter the environment with all its components, in order to become aware of the fact that every being, plant, stone etc. has a well-established role and is conditioned by numerous factors: the place it lives in, food, way of reproduction, relations to other elements of the ecosystem it belongs to. These writings help children to understand the relationship between man and animals or plants and their environment, contributing to fulfilling the area of means of achieving the objectives and ecological contents, establishing a transfer of knowledge. The major contribution of literary texts for children stands in the fact that it makes the cognition of nature’s intrinsic value presented in scientific texts, more accessible, favoring the living and creation of positive feelings and conducts towards nature. The animals’ interests and aesthetic proprieties that offer their moral value are described in a fine and crafty manner by the authors of literary writings. In other words, the complementarity of the literary texts and the scientific texts is highlighted by the reflection of the philosophical and political ideologies of the editors in charge with school books and curricular materials.

In J. Bentham’s vision, the ability to experience pleasure and pain awards a moral statute to animals that have to be considered beings possessing rights and interests, just like humans do, the finality of the right being the protection of the animals, no matter the subject of these rights. J. Bentham’s famous question regarding the animals - “Should they suffer?” (Bentham, 1934, p.20) can be reflected in children literature. In this way, feelings such as maternal care, mercy towards the cub it gave life, the pain provoked by the loss of its cub (when the time for weaning comes) may overwhelm the animal’s soul and are depicted with penmanship by Emil Garleanu in the writing “The Deer”: “The deer lays next to its cub on the thick moss, warm as a ground fur. It stretches its head and its small, soft and humid muzzle on its mother’s back and, with its eyes closed, it lets itself to be caressed. The deer licks it, and her thin tongue lays down the soft, silky fur of its cub. The mother looks at it, and in her fugitive soul sets an insistent sentiment of mercy towards the frail being it gave life, fed with its milk, but of which it had to separate from today, because the time of weaning had already passed. And as it stared with its eyes in tears, a painful lowing escaped from its chest.” (Gîrleanu, 2005, p.66) The comparison of moss to the warm and silky fur emphasizes the aesthetic propriety of plants and animals, but also their connection and symbiosis, as components of the ecosystem. The unity and symbiosis with nature is also reflected in the interest for survival, when the mother is searching for a safe spot (the peaks) for its cub, which will remain alone after the weaning. “Up there it is guarded against the wolves and hunters’ vigilance, because on the edges of those gorges only them, the roes, dared to venture. In that place it would be just as safe as next to its mother.” (Gîrleanu, 2005, p.66) Apart from the life-centered ecological ethic elements, in Gîrleanu’s writings there also can be found elements of “total” ethics, depicting how important the peaks are for the freshly weaned cubs’ security. The interest for a long life is even better displayed through the mother’s sacrifice for saving the cub from death by being hunted by a wolf: “They wandered a lot until they finally reached a glade. The cub joyfully jumped forward. But in the same time, the deer stopped having a painful lowing escaped from its chest.” (Gîrleanu, 2005, p.66) The comparison of moss to the warm and silky fur emphasizes the aesthetic propriety of plants and animals, but also their connection and symbiosis, as components of the ecosystem. The unity and symbiosis with nature is also reflected in the interest for survival, when the mother is searching for a safe spot (the peaks) for its cub, which will remain alone after the weaning. “Up there it is guarded against the wolves and hunters’ vigilance, because on the edges of those gorges only them, the roes, dared to venture. In that place it would be just as safe as next to its mother.” (Gîrleanu, 2005, p.66) Apart from the life-centered ecological ethic elements, in Gîrleanu’s writings there also can be found elements of “total” ethics, depicting how important the peaks are for the freshly weaned cubs’ security. The interest for a long life is even better displayed through the mother’s sacrifice for saving the cub from death by being hunted by a wolf: “They wandered a lot until they finally reached a glade. The cub joyfully jumped forward. But in the same time, the deer stopped having a painful lowing escaped from its chest.” (Gîrleanu, 2005, p.66) The comparison of moss to the warm and silky fur emphasizes the aesthetic propriety of plants and animals, but also their connection and symbiosis, as components of the ecosystem. The unity and symbiosis with nature is also reflected in the interest for survival, when the mother is searching for a safe spot (the peaks) for its cub, which will remain alone after the weaning. “Up there it is guarded against the wolves and hunters’ vigilance, because on the edges of those gorges only them, the roes, dared to venture. In that place it would be just as safe as next to its mother.” (Gîrleanu, 2005, p.66) Another literary text that succeeds in depicting nature’s intrinsic value is the writing “The Little Bug”, by the same author. In this lecture, the description of the little bug stirs along the sentiment of compassion towards the beings that are so small, aesthetic feelings and emotions, through their gentleness, but especially through their interest towards life: “How it began to live, it could not tell. It had waken up from a sleep and it lasted like from the beginning of the world. It felt no pain, no joy. It had a lot of food for thought regarding how it came to life and who owned it. Small as a lentil seed, it moved its small legs and walked
around the edge of the leaf that had sheltered it. [...] It started. Was it him or another one? Were the legs not his, as they shined in that manner? And it seemed covered in gold! Because seen for the first time, its body was shining. Was it not a small piece fallen from up there, a piece of solid light lost on the ground? And to confirm this supposition, its body glowed like a warm light on the black soil.” (Gîrleanu, 2005, p. 64) The dualism between the human and non-human ecological ethic can be found in literary writings. Their study by children not only helps them to understand the moral significance of nature by becoming aware of its intrinsic value, found in the proprieties explained before, but also shapes and develops their capability to analyze and evaluate actions, decisions or individual persons from the environmental perspective, the literary texts thus offering an efficient opportunity to put a double ethical perspective of analyzing them into practice. One first perspective is represented by the consequentialism. This current of thinking considers mainly consequences of the action performed to matter when approaching or using case studies. These case studies represent “the analysis of moral aspects using reasoning procedures based on paradigms and analogies, which lead to the issuing of judicious opinions regarding the existence and stringency of particular moral obligations, as rules or maxims that are general, but not universal or invariable, as long as they are valid only under the specific conditions of the agent and the circumstances of the action.” (Jonsen & Toulmin, 1988, p. 257; Mureșan, 2007) This is why the study of texts such as “The Chicken” by Ion Alexandru Brătescu-Voinesti, or “White Fang” by Jack London, at an early school age, represents a means of making the ecological ethics more accessible to children between the two ages, by educating the assumption of responsibility for committing an ecological harm to nature by producing sufferance or even death of animals through a violent action like hunting. The narrative might take the shape of a personal tale of those involved in saving the animals (as an example, breeders of orphan kangaroo cubs, or the people caring for the wounded wild animals, etc.) or of reports and documents about the destruction of the wild animals’ way of life and effects on their development as individuals and species, or of seminars or speeches in front of the community about wildlife (as an example, the Indian Grey Owl who managed to save a species of beavers from extinction). In a way similar to the case study, narrativism does not refer to the intrinsic value, but to the value of the consequences. This is why poachery, the excessive hunting of certain species, fishing using dynamite may be considered as dangerous acts of vandalism and destruction, or excessive exploitation of nature, as toxic waste dumping into rivers or nuclear missiles experiments inside the wilderness of some islands of the Pacific or in its waters are. This kind of actions is suspect regarding the ethical point of view (see P. Singer), it might be considered the object of study for virtue ethics. “The basic idea is that some types of actions, as long as they show several character flaws, are suspect regarding the ethical point of view. The suspect part of these actions does not refer to their intrinsic value, but to their consequences. And it does not reduce itself to the intrinsic error of the actions in themselves, as some deontological ethic specialists might suggest. The actions are supposed to be dubious because they represent the indicative of a less virtuous, an inappropriate character. For example, vandalism and destruction, manifested through robbing and degrading the wilderness, are considered by some as a reduction in virtue and as actions, states of mind and features that a virtuous person should do its best to avoid, to resist and eliminate” (Elliot, 1995, p. 5) Following the idea of narrativism, the prosaic literary texts are real encyclopedias describing the life of animals and the forest, the pond, the meadow, the mountain, etc. in which they live. Through their artistic language, the literary texts reflect the ideology of ecological ethic, centered on animals and life more efficiently.

The rigidity and exactness of scientific texts display the right significance and right classification of the notions. This way, classifying things in living and lifeless, using examples together with images and clear and precise definitions help children to understand their interconnections and hierarchies, the relationships between man and wildlife representations, as well as man’s and their place inside nature. “Around us there are living things (butterflies, dogs, birds), but also lifeless things (watering can, cart, swingers). Things that are born, breathe, feed, develop, breed and die are defined as living things. All along, these things undergo different transformations caused by growth and ageing (figures 1-3) - the pictures in the manual. Some creatures are able to move by themselves (humans, animals), others are not (plants). Lifeless things can undergo transformations only under man’s actions or tempests.” (Pijlă & Mihăilescu, 2005, p. 8-9) Learning about the characteristics of living things (unit no. 2 from the school book for the 3rd grade), children will be able to understand more easily the interdependency between them: plants are producing the oxygen humans and animals breathe, or represent a source of food to them; the destruction or alteration of some parts of plants or animals might affect their life in the same manner as it might affect humans in similar situations. And we might continue offering examples. But equally useful for the understanding of the
ecological ethic ideology are the supplementary scientific lectures, which describe in a proper, clear and concise manner the different aspects regarding the life of insects and their “sociological” aspects. For example, we might look at the bee’s dance and the kinds of buzzing as a means of communication, that might help children to understand the ethical proprieties invoked earlier. “Harvesting food and filling up the honey-comb are operations that require permanently not only a good coordination of the action, but also a right report about the supply sources. This surprisingly exact report is achieved by the bees using their encrypted dance. Bees perform two types of dancing: a “ronde”, that is a circular dance, and a dance in the shape of the digit “8” […] Flying from flower to flower, their wings are moving in a certain rhythm. But when they return to the hive carrying a heavy load, they are accelerating their engines that “roar” on the highest notes. This is why the bees guarding the entrances of the hive, when hearing this siren from a far distance, allow the harvesting bees to enter without performing the regular checking.” (Opriş, 2005, p. 73)

3. Research hypothesis, objectives and research methodology

Both animal protection organisations and newer philosophical currents (ecological ethics centred on animals) plead for the recognition of the intrinsic value of non-human beings and the extension of the moral sphere so that to include them as well. But more often than not, such theories and conceptions are accessible only to certain categories of individuals, mainly specialists, as common people continue living by anthropocentric mentalities and conceptions, be they religious or scientific, viz. considering man above everything around. This type of behaviour has proved quite hard bearing on the planet’s ecosystem. The starting hypothesis focuses on the idea that there is an influence of the educational environment, i.e. the anthropocentric attitude and mentality towards animals and their rights, promoted by school curricula and implicitly by parents, on teenagers’ aggressiveness towards animals. As part of an exploratory type of research, based on the questionnaire method, the objective of the paper is assessing the level of development of teenagers’ attitude regarding children’s aggressiveness towards animals, identifying the differences in the development of the ecological awareness of pupils in the rural and urban environment. Another objective is identifying some of the psycho pedagogical implications of the presuppositions confirmed by the results obtained, to the purpose of providing a better grasp to the relation between humans and animals, and improving teenagers’ attitude towards animals.

The research sample consisted of primary school pupils from the urban and rural environment, being stratified according to criteria such as: school level – primary school; environment – urban and rural; the class, as follows:

- from the urban environment – 1st grade – 11 subjects, 2nd grade – 21 subjects, 3rd grade – 23 subjects, 4th grade – 26 subjects from “Ştefan cel Mare” and “Calistrat Hogaş” primary schools of Galaţi, and from the rural environment respectively: 1st grade – 11 subjects, 2nd grade – 21 subjects, 3rd grade – 23 subjects, 4th grade – 26 subjects from the schools in Pechea and T. Vladimirescu, in the county of Galaţi, among which 98 boys and 60 girls. The level of the parents’ education was not considered relevant because they had received an anthropocentric type of education which would not have hindered the child ren’s way of thinking and of acting.

The questionnaire is made up of 7 items referring to moral-ecological features as: respect towards nature, discipline, responsibility towards nature, moral-ecological conscience, initiative, moral attitude in the relationships towards others and nature, humanitarianism. Each one of these items is calculated based on the answer to a great number of questions concerning the behaviour of a subject in different concrete situations. Seven situations are being presented and for each one of them is presented several examples of attitudes that an individual may have related to that situation. For each attitude or position taken for the given situations, the pupil has the possibility to choose one of the three options given: the attitude might be true for him, partially true or false. From the questions and the concrete situations presented for each item, there are 8 attitudes that result – the moral obligation based on fear of punishment, the moral obligation as a result of the respect for other humans, the moral obligation as a result of the respect one has for the non-human beings, the respect for rules, the moral decision, the unjustified decision, the consistency of the moral conscience, the inconsistency of the moral conscience – and that may be present in each individual for that specific situation.
4. Results and discussion

On what concerns the first attitude – the moral obligation based on fear of punishment – from the analysis of the results one can observe that the average value of the individual coefficients is small at the level of each class from the rural environment, with a slight increase for the 1st grade (2.97) and is decreasing up until the 4th grade (2.27), above the medium level of the 1st grade, which means that along with the age growth the pupils do not act because they fear punishment, a situation that is not true for the pupils from the rural environment where the average value of the individual coefficients is significantly high and relatively constant for this situation (from 2.59 in the 1st grade, to 2.55 in the 4th), comparatively with the one for children from the urban aria. This situation can be explained by the fact that every bad attitude of the child, especially towards nature, is punished more severely in the rural aria than the urban one. The second attitude - the moral obligation as a result of the respect for other humans – the analysis of the results shows that the average value of the coefficients from the rural aria – which is between 7.10 and 7.82 – is smaller than that from the urban aria – which is between 8.36 and 9.12, which denotes a pretty high preoccupation towards the interest and the appreciation obtained by the young people from their teachers, parents and colleagues or friends. It is worrying the fact that the medium value from the 1st grade up until the 4th, is decreasing in the urban aria, while in the rural one it remains quite constant. This situation can be explained by means of the impact that the familial and social environment has on the child in time. This is also a result of the fact that once he gets older, the child loose his fear of getting punished as it can be seen in the analysis made above. One might observe that in the case of the third attitude - the moral obligation as a result of the respect one has for the non-human beings – the average values are similar both in the urban and rural aria, with a slight increase in the urban aria. Here it can be registered a slight decrease with the passage of time (from 4.78 to 4.62), while in the rural aria there is a slight variation in the growth of this attitude (from 4.27 in the 1st grade, to 4.39 in the 4th). This is a result of the fact that the pupil from the rural aria is directly involved in the relationship with the non-human beings due the responsibilities established by the family in order to assure the living conditions, while in the urban aria the child does not have a direct contact with them because he is not in the position to assure or to have responsibilities towards the non-human beings. From the theoretical point of view, both those from the urban and the rural aria are well prepared, but at the practical level only those from the rural aria have this possibility, while those from the urban aria, these are only abstract notions, without any possibility to interiorize some affective feelings and positive experiences towards nature and the non-human beings. The built up and developed, both at school and in one’s family, abilities to take care of, to durably exploit and protect nature and the non-human beings – as it happens in the urban aria – make the children’s attitude of respect for non-human beings from the rural arias to grow or to remain relatively constant, comparatively with that of the children from the urban aria that is decreasing with the passage of time. The fourth attitude - the respect for rules – reflects the difference between the children from the urban aria and those from the rural one. If in the urban aria can be observed a slight decrease for the respect of rules (from 4.30 during 1st grade, to 4.25 during the 4th grade), in the rural aria the values are relatively constant (from 3.89 in the 1st grade, to 3.97 in the 4th). If in the urban aria, due to a constant education the children accept and interiorize better the rules, in the rural aria it happens the contrary because of the fear of punishment. Even the fifth attitude - the moral decision – reflects the difference between the children from the urban and the rural arias. If in the urban aria, a certain decrease can be observed on what concerns taking some moral decisions (from 8.12 during 1st grade, to 7.73 during 4th grade), in the rural aria a slight increase can be seen (from 6.53 during 1st grade, to 6.73 during the 4th). The difference and also the decrease can be explained by means of the power to think and to take decisions of the children from the urban aria which is due to the educational level that they receive, reflected also in the degree of internalizing the rules and the ecological knowledge. On the other side, the pupils’ preoccupations for passing to the next school cycle, that does not lay emphasis also on the degree of developing the pupils’ ecological knowledge, makes their preoccupation for the problematic of the environment to decrease. In the case of the children from the urban aria, a slight increase of the values can be noticed and that can be explained due to their experience of life and of learning. On what concerns the sixth attitude - the unjustified decision – it can be observed that the difference from the children from the urban and the rural aria is relatively small, but also the reverse proportional rapport towards the previous attitude – the moral decision. The more it decreases the preoccupation for the ecological education, the more it grows the level of the unjustified decisions. The fact that pupils from the rural
aria enter in direct contact with nature and with the non-human beings, that they have direct responsibilities towards them, determines a relatively constant level of the unjustified decisions (with a value of 4,16), even if it is caused by the fear of punishment. All of these can be perceived as a burden and the child from the rural aria has the tendency to not respect the imposed rules related to the environment. It can be observed that the level of this attitude grows for the children from the urban aria (from 3,61 during the 1st grade, to 4,15 during the 4th), which can be explained by means of the difference between the intellectual training and the moral one, many times the second one being approach still from an intellectual perspective. On what concerns the seventh attitude - the consistency of the moral conscience – it can be observed an increasing and a decreasing variation from one year to the other, on what concerns the moral conscience of the children both from the urban and the rural aria. Still, the children from the urban aria register a slight superiority towards the others which is explained by means of the role played by the educational influences, both from the school environment and from the family. The transfer of knowledge from other fields is manifested at the level of the personality, even though the ecological education of children is not constantly accomplished from one school year to the other. On what concerns the last attitude - the inconsistency of the moral conscience – it is observed that the difference between children from the urban and the rural aria and the reverse proportional rapport towards the previous attitude - the consistency of the moral conscience. It can be observed that in the case of the children from the rural aria there is a relatively constant value (from 9,40 during 1st grade, to 9,42 during 4th grade). In the urban aria, the value variation is bigger than the one from the rural one, and we might see an increase from 7,88 during the 1st grade, to 10,80 during the 3rd grade and after that the value is decreasing to 8,93 during the 4th grade. The difference and the reverse proportional rapport between the 7th and the 8th attitudes is the result of not only the level of accomplishing the ecological education, but also of the difference of perceiving animals (it is easier to see the pain of others), plants or the ecosystems in general (it is hard to understand how it manifests the interest for survival in the case of the plants, rocks, the ecosystems) at this age.

When referring to the average value of the individual scores – from the analysis of the obtained results it can be noticed that the level of development of the ecological conscience of children from the primary schools is medium, slightly bigger for the pupils from the urban aria than those from the rural one, but higher in the case of the pupils from the 4th grade than those from the 1st grade, both in the case of the pupils from the urban and rural aria.

This situation is generated on the one hand by the fact that the level of development of the ecological conscience does not represent one of the criteria for passing to the next school cycle and from here the low preoccupation towards the problematic of the environment, and on the other hand, the model for an ecological conscience which is being promoted and achieve both by means of the explicit curriculum that focuses on training the young generation, and the initial training of the didactic staff in order to achieve an eco-centric mentality, both in the case of the educated and the educable ones is imperatively necessary. Thus, a precarious ecological education can be considered to be a factor that can determine the violence among the children and adolescents. (Caciuc, 2012; Constantinescu, 2012)

References


