

CRITICAL ENBIAGOGY (Εμβιαγωγική): BIOCENTRIC (INTERSPECIES) CRITICAL-PRAXICAL EDUCATION & COMMUNICATION BEYOND HUMAN BEINGS – DE-ANTHROPOCENTRISM

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Abstract

Any radical and innovative educational theory poses the following questions: How should we learn about and teach regarding every living being? What is the appropriate place of animals in human education? Is there an alternative education? A critical interspecies pedagogy of beings that opens up other knowledge about human-animal relations? In other words: What happens to education when humans are not considered the centre of teaching subjects? In the field of Critical Pedagogy, the issue of animal rights requires due consideration. Foucauldian biopower leads to the exploitation of animals, which is linked to racism, class discrimination, and multiple forms of violence and hierarchy. As Nehm (2019) highlights, a paradigm shift presupposes the adoption of theories of conceptual change. This adoption concerns our scientific, research, and educational removal from pedagogical science and sciences of education towards a new enbiagogy and is even critical in the third decade of the 21st century. The basic concepts that constitute the core of an inter-/trans-species perspective, according to Taylor (2017), can be summarized as follows: a. Humans are members of the earthly living community, in the same sense, with the same value, and on the same terms as other living beings. b. Humans have no greater inherent value than other living beings. Why should we assume that they do not think, have feelings, grieve, suffer, or are not aware of the world around them? On many occasions we have misused the very animals' names as swear words. Is this the correct approach in a new framework in regard to our 21st century education? This is The Question to be Answered.

Keywords: *De-anthropocentrism, enbiocentrism, critical enbiagogy, interspecies education.*

1. The deadlocks of anthropocentrism

As we progress through the third decade of the 21st century, it continues to be asserted that the central challenge by the end of the century will largely concern the survival of the human species on the planet; or at the very least, the improvement of human life conditions. This is primarily due to the ecological crisis, global conflicts, pandemics, and other existential threats. When discussions regarding humanity's survival pivot toward solutions or risk prevention, emphasis is typically placed on the decisive role of education and citizen upbringing. The term *anthropocentric* is frequently employed to describe an educational approach that places humans at its core, purportedly equipping individuals to meet their needs and confront the challenges of our era.

This text, structured as a scientific manifesto, articulates a novel proposition that stands in stark contrast to the academic, social, and cultural *status quo*; a proposition framed as an "urgent call" for social action (Sinkey, 2002). In this context, we critique the anthropocentric nature of education, which perpetuates the notion that only humans can act as moral agents within nature; an idea we argue is responsible for humanity's deadlocks and the imbalance in its relationship with the natural world.

The urgency of this manifesto is brought to life, vividly depicted and visualized through the gaze, body posture, and, by extension, the "voice" of a living being - a cat - seated atop an old school desk, next to an equally aged school bag (once belonging to either a teacher or a student) (Image 1). These two objects - artifacts of social and historical significance - carry their own stories and are part of the museum collection exhibited as an outdoor (visual) installation at the Museum of Education of the University of Crete. The school desk is layered with mud, as it had previously been repurposed as scaffolding for the construction of a building; an indication of its devaluation by humans and its transformation into a purely utilitarian object. Likewise, the school bag, once a vessel for carrying educational materials, was instead used to transport construction tools, thereby stripped of its original intellectual purpose.

Within this framework, the desk and the bag - timeless signifiers of the school institution - are now devoid of the pedagogical function they were meant to fulfill. They symbolize *natura morta* (still life), or alternatively, the imprisoned past and present of education, burdened with the deadlocks and crises accumulated by humanity's arrogance toward nature.

Figure 1.



As evident from the spontaneous capture of the image by a visitor to the Museum, the cat has taken its place on the school desk, having left behind the 'bars' visible in the photograph. It now occupies the position of the one who teaches humans. From this perspective, the cat urges us to reflect on the past while simultaneously calling for an immediate shift - before it is too late - toward a new educational paradigm. This shift necessitates the adoption of novel conceptual frameworks that will distance us from a now lifeless pedagogy and guide us toward a critical and emancipatory *enbiagogy* that extends to all living beings. Its gaze - both imperative and stern - 'instructs' us on the urgent need to re-educate ourselves in ways of being and acting that will ensure ethics, justice, and sustainability among all species.

The ongoing conflict between nature and humanity - of which the ecological crisis is but one consequence - stems from the dualism between humans and nature, as well as the unchecked exploitation of non-human animals by humans. This worldview grants humanity the exclusive privilege of reason and culture. As a result, human supremacy is legitimized through teleological and ontological reasoning, as well as theological constructs (Asproulis, 2023). Within this framework, humans are placed at the center of the world, occupying a hegemonic position that subjugates all other beings.

This dominant anthropocentric worldview is constructed upon a value system that prioritizes human survival over the needs of other living organisms (Hourdakis, 2023). Within this framework, respect for the natural environment and non-human beings is confined merely to their protection from uncontrolled exploitation. Furthermore, the anthropocentric assumption that non-human beings lack consciousness, reason, or communicative abilities reduces them to the status of 'animal-objects,' thereby legitimizing various forms of oppression and violence against them, ranging from captivity and slaughter to their 'education' in ways that align with socially sanctioned demands, personal desires, and everyday routines (e.g., animals as companions, servants, etc.) (Spannring, 2019).

It is evident that these practices constitute a brutal exercise of anthropocentric *bio-power*, aimed at the subjugation of nature through the manipulation and control of its objectified populations in service of maximizing utilitarian productivity (Foucault, 2002:312).

What is urgently required, then, is a paradigm shift, aligning with A. Leopold's (1966) argument that what we need is an *ethic of the human toward the Earth*. The following discussion aims to articulate this alternative paradigm, while also exploring its educational implications.

2. Biocentric worldview, inter-species relations and enbiagogy

At this juncture, we turn to a sustainable and non-exploitative relationship between living and non-living beings; one that does not position humans as the center of existence. Drawing upon philosophical thought, a thorough re-examination of Aristotle's definition of the human as a *political animal* compels us to critically reconsider the interrelation between animality/embodiment, sentience, and their political viability. The enbiocentric perspective we advocate (in direct opposition to anthropocentrism) begins with the premise that humans are members of the Earth's community of life, possessing equal intrinsic worth and existing under the same conditions as all other living beings (Taylor, 2017). This reconceptualization of nature necessitates a fundamental redefinition of anthropocentric environmental ethics.

The human species, along with all other species, constitutes an element within a system of interdependence. Recognizing humans as symbiotic beings embedded within an interspecies community dismantles the notion of human individuality and superiority over other species. All organisms function as *teleological centers of life*, meaning that each is a unique entity with its own intrinsic characteristics,

pursuing a common purpose in its own distinctive way. At the same time, organisms co-create co-evolutionary networks that foster symbiotic relationships of cooperation, thus driving the evolutionary processes of nature. Such symbiotic relationships are foundational to all life forms on the planet, including human existence, within the framework of a responsible *symbiotic biopolitics* (Sen, 2009).

From a biocentric perspective, humans do not possess greater intrinsic value than other living beings, nor is their relationship with them transactional. Consequently, a new ethical and value-based framework emerges concerning the existence and interactions of living and non-living beings, significantly expanding the ways in which we think, interpret, and ultimately learn.

At the educational level, we are talking about an interspecies, critical, emancipatory, transformative, and liberatory pedagogy (critical enbiagogy), which raises the following questions: How should we 'teach' and learn about living beings? What is the proper place for all beings in education? Is there an alternative education that opens up new knowledge and experiences for human relationships? Ultimately, how is education realized when humans are not considered the only 'students'?

An interspecies/enbiocentric education is called upon to accept each living species as a unique entity and leads us to reconsider how human individualism constitutes the 'anthropomorphic' politics of sustainability. The enbiocentric questions raised promote an interspecies ethics and introduce us to a new postmodern-Earth rationalism, which refers to rational living beings that possess consciousness, intelligence, and culture and, as such, can teach humans (Hourdakakis, 2023). This interspecies ethics challenges the traditional 'norms' of human-animal relationships (Pedersen, Håkansson & Wals, 2019) and recognizes that animals also have a right to planetary resources for a flourishing life that is sustained over time. In such an epistemological perspective, which changes the way we think about education, the 'human political animal' no longer holds exclusivity (Massumi, 2014).

This requires a post-anthropocentric pedagogy that seeks an extended learning process for humans, involving the continuous deconstruction of ingrained expectations and beliefs, leading to reflective thinking regarding the personal relationships humans form with animals. This process would enable individuals to reshape their choices and see themselves as beings willing to grow and "create new possibilities in the world" in a dialogical interspecies learning space (Dolby, 2017: 86).

What concerns us is how an education centered around critical analysis of hegemony, respect for nature, interspecies dialogue, and empathy for all living beings offers methods for dismantling violence, oppression, and hierarchical systems within our living culture (Andrzejewski, Pederson, & Wicklund, 2009). In this context, the exploitation of animals and natural resources becomes a matter of ethical concern (Weil, 2004). Therefore, the concept of dialogue and the critical dialectic of liberatory pedagogy includes all beings in an egalitarian condition of coexistence within the framework of a 'biocentric literacy of planetarity' (Kahn & Humes, 2009: 181). According to Bookchin (2016: 245), reintroducing humans into the natural evolution restores their fruitful coexistence in the world of life and leads to the naturalization of humanity.

3. How do non-human animals teach us?

How can we immerse ourselves in a cross-species dialectic in education, based on the assumption of overcoming our cultural prejudices that shape the way we think about non-human animals, and how can they teach humans?

A series of studies refer to various mechanisms/types of animal teaching, such as "opportunity teaching," where the teacher places the student in an educational problem, situation, or condition that encourages the acquisition of new knowledge, experience, or skills; "guidance teaching," where behavioral change results from encouragement or punishment; and "unintentional" social learning, which occurs through non-systematic or informal learning, such as imitation, etc. (e.g., Hoppitt et al., 2008). Therefore, we see how apparent the similarity of learning mechanisms is across all living beings, and how similar the terminology describing animal and human teaching appears.

Despite these findings, there is an opinion that examples of teaching in animals are fundamentally different from human teaching (Premack, 2007). This is the anthropocentric perspective, which considers teaching as evidence of specific human-like cognitive abilities, a distinction that is based on a hierarchy of living beings and ignores that teaching in animals is based on entirely different mechanisms from human teaching.

Therefore, the study of teaching in animals could offer valuable lessons in human education. Some examples include: a) Anatomy-Biology: common characteristics shared by humans and animals - eyes, nose, teeth, skin, limbs, stomach, lungs, kidneys, liver, brain. b) Language-Communication: animals have linguistic systems to transmit information and emotions. c) Social-Emotional Skills: many animals have a strong sense of responsibility to their social group, their brains produce dopamine in response to signs of affection, etc. d) Hierarchy of Needs: an animal accustomed to saving lives during disasters might set aside

its inherent survival instincts. e) Psychosomatic Symptoms: an abused pet may show signs of neurosis or aggression. f) Therapeutic Beings: for example, the horse, by absorbing the confusion in humans, offers them the opportunity to recognize this confusion and creates space for its overcoming. g) Life Cycle: animals are born, grow, age, get sick, and die.

A fusion of these “lessons” from animals with human lessons could form an ecocentric program for all living beings. In this program, for example: a) The school garden and field trips will be revived (walking ecoagogy). b) Animals will become teachers and classmates of humans. c) The social and political education of living beings will include the rights of animals (see the Universal Declaration of Animal Rights). d) A new environmental ethics will be cultivated. e) Learning contents will acquire a liberating and critical-practical value (e.g., in Aesop’s fables, we learn about the psychology of “sour grapes” and understand the benefits of the ant’s industriousness; in religious parables, we appreciate creation as an ethical - ecocentric - refinement; in history, we understand that animals and abiotic nature have much to tell us about the past; in chemistry, the production of must is linked to the emotions created by chemical compounds, etc.).

In essence, based on the above, a new curriculum emerges with the introduction of thematic units that will ensure the harmony of relationships among all living and non-living organisms, without even requiring our conscious processes, in a harmonious way that will, rather than constrain us, liberate us. This will allow us to connect with the natural joy provided by the enbiocentric-ecocentric worldview, with new “lessons” now, such as: a) Rights - Justice - Freedom - Equality, b) Love - Care - Solidarity - Happiness, c) Friendship - Kindness - Empathy - Compassion - Altruism, d) Observation - Patience - Perseverance - Industriousness, e) Cohesion - Teamwork - Sociability - Communication, f) Sustainability - Continuity - Diversity - Similarity - Harmony.

4. Identity of the field

Based on the analysis thus far, we attempt to codify the characteristics of the new enbiocentric paradigm, following Fensham’s (2004) three criteria for identifying a scientific field. These criteria are:

1. The Scientific/Research Criterion: The critical enbiagogy, based on the theoretical framework developed, clearly approaches human life and its relationship with other living beings and the abiotic environment from a cross-species perspective. It seeks an alternative education system that opens up a new field for human-animal relationships. Within this context, the goal is to understand how *inter-species* knowledge is built, from preschool to higher education, to design learning environments in formal, non-formal, and informal education that effectively support the construction of this cross-species knowledge. Additionally, it aims to contribute to the re-examination of curriculum programs, design new interdisciplinary learning paths for specific subjects, and contribute to the development of sustainability and new global models through critical rethinking of dilemmas that may be related to these issues. It aims to adequately prepare educational staff and professional teams in enbiocentric paradigms and contributes to the advancement of research in this field through the implementation of research programs and experimental applications. Furthermore, it aims to prepare cross-species literate citizens.

2. The Criterion of Educational Impact: In the enbiocentric paradigm, the educational impacts concern: a) Critical-practical enbioagogy strategies and teaching methodologies, b) Evaluation of how students and teachers perceive the enbiocentric paradigm and how their perceptions evolve over time - conceptual change, interest, motivation, values, decision-making on bioethical issues, enbiocentric scientific thinking and understanding, c) The connection between formal, non-formal education, and informal learning, utilizing the theoretical and methodological tools of cross-species research and teaching.

3. The Structural-Institutional Criterion: Critical enbiagogy must govern academic research and teaching as an organically structured interdisciplinary field within academic institutions. The treatment of the object of enbiagogy is realized at the University of Crete (UoC) through the “Center for the Study and Research of the History of Education and the Teaching Profession” (C.S.R.H.E.T.P.) at the Department of Primary Education. The research work of C.S.R.H.E.T.P. addresses the educational and teaching needs in the field of studying and documenting the history of education and the teaching profession over time. The C.S.R.H.E.T.P. archival collections include numerous materials (printed and object-based) connected to living beings and the abiotic environment. Part of this educational material forms the museum collection/exhibition of the Museum of Education at C.S.R.H.E.T.P. Under the auspices of C.S.R.H.E.T.P., the Master's Program in "Educational Sciences, Critical Pedagogy, and Teacher Education" is organized and operated, in which postgraduate students are taught and practiced in the field of enbiagogy in both formal and non-formal education settings based on critical and practical pedagogical principles.

5. Support for the research proposal

C.S.R.H.E.T.P., as an academic entity at UoC, connects the study, research, and teaching of critical enbiogogy, mainly through the archival collections and museum exhibitions at the Museum of Education. Here, visits, workshops, and experimental applications are conducted. Additionally, within the framework of the Master's Program in Critical Pedagogy, the theoretical approach of enbiogogy is linked to critical-practical research and teaching methods. Thus, an interdisciplinary investigation and experimental application of enbiogogy is possible through C.S.R.H.E.T.P. in relation to the utilization of archival documents-museum material referring to inter-speciesism, the training of candidate and/or active teachers, the reformulation of the curriculum and interactive learning with the use of cutting-edge technologies in formal, non-formal and informal educational environments.

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