

Critical Education

Volume 17 Number 1

February 18, 2026

ISSN 1920-4175

Imagining Critical Pedagogies and Ecological Humanities in the Pluriverse

Nomadic, Decolonial and Life-Centered Environmental Education as a South-Complex Environmental-Desiring Machine

Jorge Garcia-Arias

University of Leon, Spain

Helen Moura Pessoa Brandão

Federal University of Espírito Santo (UFES), Brazil

Natalia Sanchez Gomez

University of Boyacá, Colombia

Garcia-Arias, J., Pessoa Brandão, H. M., Sanchez Gomez, N. (2026). Imagining critical pedagogies and ecological humanities in the pluriverse: Nomadic, decolonial and life-centered environmental education as a South-complex environmental-desiring machine. *Critical Education*, 17(1), 19-41.
<https://doi.org/10.14288/ce.v17i1.187177>

Abstract

Our article explores the possibilities of imagining a decolonial environmental education in Abya Yala/Latin America as an environmental-desiring machine underpinned by a South-complex environmental thinking, capable of generating subjectivations, promoting agency, and nurturing critical pedagogy praxes that place ecosystems sustainability and care-of-life at the very center. To illustrate those pluriversal alternatives, we present two educational and political-pedagogical experiences: a 'nomadic curricula' praxis on the Federal University of Espírito Santo (Brazil) mediated by (re)existence/resistance movements woven by Kapi'xawa and Kizomba collectives and communities; and a water-care popular environmental education experience in the Sochagota Lake (Colombia), as a pedagogical praxis of (re)existence/resistance to hegemonic market-episteme 'water management' models.



Readers are free to copy, display, and distribute this article, as long as the work is attributed to the author(s) and **Critical Education**. More details of this Creative Commons license are available from <https://creativecommons.org/licenses/by/4.0/>. **Critical Education** is published by the Institute for Critical Educational Studies and housed at the University of British Columbia.

Introduction

The set of multiple and interrelated crises (ecological, political, war, eco-social, care, cultural, etc...) that has come to be called “poly-crisis”, and that is the result of the predominance of a capitalist, neoliberal, and neocolonial predatory logic, invites us not only to imagine environmental/ecological humanities (Hartman, Oppermann & Armiero, 2024), but to feeling-thinking (*‘sentipensar’*) from ‘other’ places (*‘lugares otros’*) (Leff, 2002). That is, to look for new ways of thinking, feeling, and understanding that go beyond the disciplinary capacities and subjectivities that are established in formal (environmental) education, transcending the linear and mechanistic technical-scientific-financial-environmental *solutionism*. Aiming to open the door to socio-economic, political, cultural, and onto-epistemic transitions (Escobar, 2021) able to generate ‘cracks’ (Walsh, 2017) in the wall built by hegemonic thought that prevails in the Capitalocene (Moore, 2017).

Generating these cracks implies (re)imagining, (re)thinking and (re)acting from ‘outside’ (*‘afuera’*) the hegemonic subjectivities of coloniality, an exercise of resistance and re-existence from which other ways of being, thinking, doing and feeling are possible, and which give hope for other *pluriversal* futures (Kothari et al., 2019; Garcia-Arias et al., 2025; Sardão & Silva, 2024) to be imagined.

Contemporary capitalism entails the subalternization of ‘other’ beings, cultures, and knowledge(s), and gives pre-eminence to a modern/colonial/Western-centric vision of environmental education (EE) that is neoliberal, academicist, instrumental, and technocratic, based on formal processes, and deeply connected to the hegemonic concept of ‘sustainable development’, an oxymoron and a neoliberal device which is central to the capitalism/(mal-)development paradigm (Garcia-Arias et al., 2025), and one of its hegemonic manifestations: the 2030 Agenda (Telleria & Garcia-Arias, 2022). The capitalism/(mal-)development paradigm not only presents false solutions to the poly-crisis (Fraser, 2022), but also makes invisible other existing fully viable alternatives and, even more, other possible utopias (West et al., 2024).

Mainstream EE is unidirectional –from experts/educators to learners–, vertical, and mediated by a ‘knowledge-based economy’ –founded in the production, distribution, and use of (orthodox) knowledge– where the educational system must provide uncritical ‘learners’ with the cognitive tools and techniques necessary to contribute to the well-oiled operation of the ecologically predatory, neoliberal, financialized, patriarchal, and neocolonial Capitalocene (Garcia-Arias et al., 2023).

Faced with this hegemonic paradigm –in which the colonizing *molar machine* (Deleuze & Guattari, 1972; 1980) incorporates the mechanisms of the capitalist machine– several critical and dissenting views coexist. Among these, it is worth highlighting the pluriversal alternatives to development (Kothari et al., 2019; Garcia-Arias et al., 2025), many of which can be brought into dialogue with previous Latin American critical environmental thought (Galano et al., 2002; Leff, 2002; 2012). For these critical views, the capitalism/(mal-)development paradigm reproduces the ‘colonial matrix of power’ (Quijano, 2000) that, anchored in modernity and its neocolonial institutions (Mignolo, 2007) –among them, mainstream EE–, promotes a cosmology of ‘development and sustainability’ based on the Human-Nature dissociation, and on predatory subjectivities of domination, extraction, subalternization and control, establishing and perpetuating different forms of exploitation (human, more-than-human, nature, class, race, gender, culture, ...).

Transcending this domination/subalternization/extraction/exploitation trap requires not only overcoming capitalism, the deconstruction of the concept of hegemonic ‘development’ itself (Escobar, 1996), and its (re)politicization (Swyngedouw, 2018), but also a pluriversal, decolonial and rhizomatic EE (Garcia-Arias et al., 2023), as a mediation to understanding the world from ‘other’ knowledge(s), built from more diverse epistemologies –included those from Latin America (Santos, 2014; Noguera, 2018; Esteva, 2020).

But also in Abya Yala/Latin America, mainstream EE is built under the coordinates of the hegemonic paradigm, and it is necessary to (re)imagine *other* EE anchored in *others* epistemologies, ontologies, pedagogies, knowledge(s) and praxes –designed, lived, and felt ‘*desde dentro y desde abajo*’ (from within and from below) by peasant, indigenous and Afro-descendant communities themselves, who both inhabit the territory and feel inhabited by it. Such EE must be critical, autonomous, intercultural, rhizomatic, decolonial, ecofeminist and pluriversal, in order to redefine new ways of relating to the planet. As Garcia-Arias et al. (2023) pointed out:

The experiences of critical, autonomist, and emancipatory pedagogies carried out in the global South (...) constitute a source for learning to build pluriversal forms of education. Critical pedagogies, critical intercultural education, epistemologies of the South, and Latin American environmental thought, all share the same origin matrix: they define themselves from an epistemological and political-pedagogical plur(ivers)ality as anti-colonial Souths, demanding a plurality of forms of producing knowledges. (p. 1399)

Mainstream EE, limited to the field of education as an institutionalized/schooled space (Walsh, 2017), has been hijacked by instrumental interests of teaching and the transmission of (modern/Western-centric/colonial) knowledge, so our gaze points towards the *pedagogical praxis* as an essential methodology within and for social, political, ontological, and epistemic struggles for liberation (Freire, 2006).

Additionally, these constraints of hegemonic EE invite us to (re)imagine ecological humanities (Van Dooren et al., 2024) that can overcome their institutional and epistemological boundaries to embrace the poly-crisis threats beyond formal, institutional-based education. A (re)imagination that allows EE to become a driving force in the development of a transdisciplinary and intercultural ‘*diálogo de saberes*’ (dialogue of knowledges) that makes possible new ways of being, thinking and feeling. Or, in other words, to radically transform EE into an *environmental-desiring machine* that engenders the flows of deterritorialization of the ‘*one*’ and reterritorialization of the ‘*socius*’ (Deleuze & Guattari, 1972), and which mediates a tapestry of life from decolonial, care-centered, communal, and pluriversal perspectives.

Critical and autonomous environmental thinking from the South(s), as a hopeful path towards other ways of living that contribute to the centrality of life and ecosystems, allows us to think about this pedagogical challenge in coherence with the notion of the environment which emerges from the culture-nature nexus.

In this context, our article explores the possibilities of imagining a decolonial EE in Abya Yala/Latin America as an environmental-desiring machine underpinned by a *pensamiento ambiental complejo-Sur* (South-complex environmental thinking) (Maya, 1996; Noguera, 2018), capable of generating subjectivations, promoting agency (Deleuze & Guattari, 1972; 1980), weaving ecological humanities, and creating new pedagogical praxes that place care, life and ecosystems at the very center.

Departing from the idea of ‘nomadic curricula’ (Pessoa, 2021) –that is, curricula always on the move, that are dynamic and open to the issues that contextualize them–, a decolonial EE can operate as an environmental-desiring machine, producing in and from conviviality, life-care and the commons. While the *machine of coloniality* promotes processes of ‘individuation’, which Guattari & Rolnik (1996) conceptualize as the ‘alienation of desire’, the *environmental-desiring machine* could engender processes of ‘singularization’ –that is, disruptive processes in the sphere of the production of desire, and *lines of flight* against ‘capitalocenic’ subjectivities.

From this situatedness, the participatory research presented here engenders these singularization movements by promoting academic activities contextualized into local cultures even amid the molar and fixed articulations of educational institutions and curricula without contextualization, which merely provides training for the job market, and not for a good life worth living.

Based on extensive fieldwork, the article analyzes two different educational and pedagogical pluriversal experiences. Firstly, an EE praxis on the Federal University of Espírito Santo (UFES), and the articulations of (re)existence movements produced by *Kapi'xawa* and *Kizomba* school collectives and communities in the municipality of Alegre (Espírito Santo, Brazil), mediated by rounds of talk, capoeira, and other praxes. Secondly, a water-care popular EE experience –based on South-complex environmental thinking– in the Sochagota Lake (Boyacá, Colombia), as a pedagogical praxis of resistance to a market-based episteme ‘water management’ model.

By mapping those autonomous and decolonial EE experiences in Brazil and Colombia –which are produced in everyday education and community life, rich in experiences and *reterritorializations*, often invisible in official/academic references, but which (re)exist in the pluriverse–, we explore the possibilities to imagine and potentiate some pedagogical praxes that can produce eco-collective subjectivities, ecological humanities, and create non-mainstream EE experiences ‘*afuera*’ (outside) of the capitalism/(mal-)development paradigm.

The rest of the article is organized as follows. In the next section we present the concept of ‘nomadic curricula’ and we apply it to the educational praxis of an EE developed in the Alegre Campus of the Federal University of Espírito Santo (Brazil). Afterwards, after analyzing the pedagogical praxes of the ‘South-complex environmental thinking’, we present its application in an experience of decolonial EE focused on water-and-life care, in the Lago Sochagota (Boyacá, Colombia). In the last section, we discuss both praxes, connecting them with the idea of an environmental-desiring machine, and imagining some of the basic elements of a decolonial and rhizomatic EE, capable of generating ‘other’ possible pluriversal futures (convivial, communal, critical, and autonomous).

Environmental Education and Decoloniality

From The Colonial Matrix of Power to the Coloniality of Knowledge and the Nomadic Curricula

In Abya Yala/Latin America, original colonialism has been replaced by a ‘colonial matrix of power’. According to Quijano (1992), globalization can be understood as the culmination of a process that began with the constitution of America and the colonial/modern and Eurocentric

capitalism as a new pattern of global power. In this vein, the author elaborates on ‘coloniality’, a process still ongoing, which has proven to be more stable than colonialism.

Within this colonial matrix of power, several *colonialities* coexist. Firstly, a ‘coloniality of power’ (Quijano, 2000), inherent to a capitalist world-system (Wallerstein, 1974) in which (racial, among many other) hierarchies emerge. Secondly, a ‘coloniality of being’ (Maldonado-Torres, 2007) which refers to the real subjectivity of power differences that determine that subalternized subjects and peoples (the poor, indigenous peoples, Afro-descendants, some women, peasants, racialized and non-heteronormative people) who inhabit the (geographic, economic and political, but also cultural) peripheries *are* subalternized, and their voices are not heard (Spivak, 1988), making them the main actors concerned and affected by coloniality. Finally, a ‘coloniality of knowledge’ (Grosfoguel, 2002) based on the discourse of a hegemonic ‘civilizational’ model underpinned by the capitalism/(mal-)development paradigm, which is presented as the most advanced manifestation (as well as an aspirational model) of ‘human progress’ (Lander, 2000). This coloniality of knowledge implies a process of (cultural) domination on a global scale that marginalizes the ‘*otredad*’ (otherness): ‘other’ forms of knowledge(s) (‘*conocimientos otros*’), ‘other’ political-cultural identities, ‘other’ subjectivities, ‘other’ ways of validation of cultures and knowledge, and ‘other’ educational processes.

This colonial matrix of power imposes a Western-centric/ modern/ colonial/ capitalist/ racist/ patriarchal world-system (Grosfoguel, 2013), that constructs a monocultural gaze based on a historical-epistemic structure (Mignolo, 2011), and impacting on the ways of knowing and producing knowledge(s), and on the symbols, modes of signification, patterns, and instruments of formalized education.

Bernadino-Costa et al. (2019: 9) deepen this problematization by emphasizing that “colonization in the field of knowledge is the product of a long process of coloniality that continued reproducing economic, political, cognitive logics of existence, of the relationship with nature, etc. that were coined in the colonial period”.

Additionally, Mareto Silva & Krohling (2020) emphasize the relationship between the subalternization of both nature and women in Abya Yala:

the exploitation of Latin American countries is based on three pillars: i) the exploitation of Nature, with permanent extractivism, the enslavement and submission of rural communities by international industry; ii) cultural colonization that imposes Europeanized standards for thinking and living as if they were absolute and universal values; iii) the double subjugation of Latin American women, who were subjected by Latino men and, later, by colonizing men. (p. 126)

Hence, after original colonization various colonialities has been (re)produced to generate an ideology that prevents or hinders an autonomous and pluriversal approach to ‘real sustainability’ in Abya Yala’s territories. Transitions to break with this ideology, so that ‘other’ sustainability can be achieved, are needed (Escobar, 2021); and these transitions require a new socio-political, economic, and cultural system, but also different EE pedagogical praxes.

In this context, Latin American ‘*sentipensares*’ (feeling-thinking), and critical pedagogies (Suárez et al., 2016; Pinheiro-Barbosa, 2020) play a key role in allowing the construction of an educational process that promotes the rupture with very diverse forms of oppression (class,

coloniality, race/ethnicity, among others), while creating a nexus with an onto-epistemic critique of the capitalism/(mal-)development paradigm. That is:

critical pedagogies de-hierarchize knowledge by dismantling the conception of a one-way political/pedagogical subject –understanding that educator and learner must be producers and builders of knowledge(s)–, questioning neoliberal relations and building new epistemic territories (...) where these ‘pedagogies that decolonize’ propose forms of re-existence, resistance, and insurgency. (Garcia-Arias et al., 2023, p. 1399).

Latin American political-pedagogical praxes, such as the educational project of the *Movimento dos Trabalhadores Rurais Sem Terra* (MST) in Brazil (Caldart, 2004), the Zapatista’s *educación verdadera* (true education) (Garcia-Arias et al., 2023), the feminist pedagogies of popular, community, decolonial, indigenous and peasant feminisms (Pinheiro-Barbosa, 2018), or the pedagogy of *alternation and field education* (Fraga & Sousa, 2017), challenge the hegemonic EE model, connected to the capitalism/(mal-)development paradigm and anchored, among others, in the Sustainable Development Goal #4 of the 2030 Agenda, which although presented as an EE that aspires to “leave no one behind” and to confront the present ecological crisis, in reality it is a depoliticized, uncritical, prescriptive, unidirectional and utilitarian educational model, which serves to sustain the status quo (Jickling & Sterling 2017).

The pedagogical-political praxes inspired by these Latin American ‘*sentipensares*’ (feeling-thinking) and critical pedagogies are impugatory and insurgent, that is, they aspire not only to (re)imagine education itself but also to build autonomism (Maldonado-Villalpando et al., 2022) and environmental humanities (Van Dooren et al., 2024), through praxes that are not only educational, but also prefigurative. In short, it is about imagining and weaving pluriverse (Garcia-Arias et al., 2023; 2025), and *Buen Vivir* systems (Garcia-Arias & Cuestas-Caza, 2024) from educational-political praxes based on ‘other’ onto-epistemologies, knowledge(s) and modes of conviviality.

By understanding that the curriculum is not limited to the classroom, but that it is interwoven with communities, families, teachers and students’ experiences and everyday lives, the idea of ‘nomadic curricula’ (Pessoa, 2021) may be an integral part of this decolonial and rhizomatic EE needed, as the ‘nomad’ (Deleuze & Guattari, 1980) constitutes territories with the potential to bring about collective transformations.

The two case studies presented below show the possibilities of constructing molecular revolutions to break with the coloniality of knowledge. According to Mignolo (2020), in the formation of the school curriculum in global South countries, a bloody battle took place that subordinated the knowledge of previously colonized peoples, making them ‘unfit’ for the curriculum, a fact that relegated them to a form of ‘cultural knowledge’ and thus legitimized the colonial difference through the coloniality of knowledge. Therefore, there is still a curriculum largely based on Western onto-epistemology that disregards other epistemes.

Coloniality of knowledge in Brazilian higher education (HE) institutions

In this context, discussing the importance of the effects of colonization, followed by other forms of colonialities, in Brazilian HE institutions seems relevant (Tristão, 2016), highlighting the need to deconstruct colonial discourses and produce ‘other’ narratives. For instance, academic literature has problematized the challenges that university faces when receiving an increasing

number of culturally diverse students, and movements for contesting the (mono)cultural-social-labor hegemony emerge (Certeau, 2012).

Brazilian HE is, in general terms, based on a solid tradition of Eurocentric modernity, in which the effects of both Portuguese colonization and current colonialities can be observed. Hegemonic knowledge has been produced predominantly by a white and western group of scholars, from the perspective of a Western-centric epistemology, so that ‘other’ knowledge(s) are rarely considered. Thus, monocultural education opposes the students’ cultural diversity, decontextualizing them from the educational process, and contributing to the crisis that Brazilian HE is experiencing (Alves, 2001). Subsequently, it is necessary to (re)imagine and (re)think Brazilian HE institutions, proposing a logic of ‘multiple singularities’ which respects the cultural diversity of this community.

This challenge is thus linked to the HE institutions and the society in which they are inserted. Rethinking the roles they play today requires understanding their complexity, for example problematizing the movements of contestation to hegemonic education, or by analyzing whether students can provoke change, or create possibilities for ‘other’ EE in local communities, schools and HE institutions (Pessoa, 2020).

For a rhizomatic and decolonial EE, it is needed that ecological knowledge should be contextualized to the specific curriculum of the courses, highlighting the contributions of local cultures. For example, within the practices articulated by the *Kapixa* ‘wa collective, local farmers taught graduates how to store rainwater in the soil for dry periods, articulating indigenous knowledge with academic knowledge to mitigate the effects of climate change.

In this sense, we defend the need for a resizing of pedagogical praxis, and for other guidelines for ecological knowledge(s) that are not only theoretical, but articulated within the pluriversal tapestry of cultures and social practices (Garcia-Arias et al., 2025), and with a close relationship between research, teaching, dissemination and extension of knowledge (Pessoa, 2022; Tristão, 2008). However, a paradigm shift that reorients EE towards valuing all the relationships interconnected in the socio-environmental network –in which more-than-humans, humans and nature are interwoven– is not an easy task, and a South-complex approach to the ‘capitalocenic’ ecological crisis from the epistemologies of the South may be of help.

Therefore, it is relevant to analyze colonialities and its updated disciplinary forms of subjectivity to rethink the EE in relation to territories, communities and culture(s). And, in that sense, local praxis linked to academic training constitute an important context to be explored because they can contribute by showing the need for a *glocal* perspective (Garcia-Arias & Cuestas-Caza, 2024), understood as a local gaze at global effects, and not the other way around, to combat some manifestations of climate/civilization crisis. Thus, enabling the construction of an EE that finds paths for pluriversal alternatives in the Capitalocene.

Nomadic curricula in the Federal University of Espírito Santo (Brazil)

With our field work on the Alegre Campus of the Universidade Federal do Espírito Santo (UFES), Brazil, we have mapped some learning movements, seeking the possibility of a decolonial EE which problematizes issues beyond institutionalized and mainstream EE, involving agroecology, ecofeminist and anti-racist perspectives.

The participatory field research was carried out by one of the co-authors (Pessoa, 2020; 2021) in the municipality of Alegre, located in the Southern region of the State of Espírito Santo (Brazil), known as the Region of ‘*Caparaó Capixaba*’. This region is currently known for its coffee monoculture and ‘specialty coffees’ production, with almost no evidence of remaining ancestral crops. It is home to the Caparaó National Park, which was inhabited in ancient times by different indigenous groups: the *Botocudos*, the *Poris* (or *Puris*), numerous *Tapuia* tribes and, later, the *Tupi*. The region was also inhabited by groups of hunter-gatherers who, with their resistance to colonization by the Portuguese, prevented –for a certain time– the destruction of the Atlantic forest in several regions. They were subject to State persecution and, nowadays, they are subalternized and exploited within this new monocultural reality.

Upon observing that no approach in the University's courses provided contextualization with an EE linked to local culture(s) and knowledge(s), we began our research by monitoring whether this movement existed in other locations on the campus, in addition to the classrooms.

Our epistemic and methodological cartography is anchored in the schizoanalysis and the rhizomatic principles of Deleuze & Guattari (1972; 1980), following the *lines of flight* to the *desiring machine*, seeking a path to compose responses to Gaia's intrusion (Stengers, 2015), since both the perspective of EE and the (re)existence movements analyzed can be related to the rhizome in their articulations in the context of the university and beyond it. This cartographic research-participative intervention (Passos et al., 2010) was carried out following the movements of (re)existences that took place on the South campus of the University. More specifically, the data in this cartography was obtained when monitoring movements on the Alegre campus of UFES and beyond, in the conversation networks formed in 10 conversation-meetings, 5 event-meetings and 4 training-meetings. We also followed social media (Facebook and Instagram) interactions, and we participated in meetings/assemblies with some organizations linked to the University, from 2017 to 2019.¹

In meeting-conversation-training events we got to know the *Kapixa'wa* and *Kizomba coletivos* (collectives) –groups formed by university students, but operating independently from formal teaching activities– which promoted projects with schools and local communities.

Kapi'xawa emerged in 1987, from a group of agronomy students that questioned the conventional agriculture model taught in the classroom, and aspired to other forms of knowledge(s) linked to local practices. In our research, we analyzed training in agroecology and permaculture, detecting interrelations with social issues, such as environmental racism and agroecological feminisms, which may be associated with the molecular crossing of EE.

Another collective analyzed was the *Kizomba coletivo*, which emerged in 1999 as a national movement, and settled from 2017 on the Alegre campus, and which aspires both to new pedagogical praxes and a new political culture that denounces racism, patriarchy and transphobia, in HE and beyond, questioning the various forms of exploitation, and which can be associated with *decolonizing flows* in EE.

The *Kizomba* and *Kapixa'wa* collectives promoted rounds of talk, workshops on Afro-Brazilians and indigenous cultures, exhibitions, cultural actions, and fairs, involving all the members of the educational community.

¹ See Pessoa (2020; 2021) for a more detailed approach to the methodology used, and data obtained.

Among these activities were, for example, the articulations between *Kapi'xawa* and the *Laboratory of Studies and Research in Environmental Education*, which promoted conversation circles about the disposal of waste and the preservation of the environment with students from the municipal school in the Area of Relevant Ecological Interest (AREI); the organization of the *Caparaó Consciousness Meeting at Sítio Floresta*, located in the Floresta Rural Settlement with the slogan of '*Planet Earth is our Environment, our Common Home*'; or the organization of the *I Festival of Diversity and Human Rights of Alegre*, under the motto '*Caring is a political act*'.

Our cartography followed a few lines and found networks and projects linked, for instance, to junior enterprises in university incubators and lecturers on campus. To follow these flows, we have identified additional collectives (self-organized groups without hierarchies, formed by university students) that compose a 'nomadic curricula' with communities, and promote 'molecular revolutions' (Guattari, 2012) in the emergence of eco-collective subjectivities. The 'nomad' constitutes or seeks to constitute territories with the potential for collective transformation (Deleuze & Guattari, 1980), so that 'nomadism' is not about physical but intensive displacement, in the sense of following the *flows of desire*. Therefore, school curricula, by understanding subjectivities, can provoke *detrterritorializations*, creating possibilities of feeling-thinking about eco-collective subjectivities in the composition of nomadic curricula, amid attempts to control and capture the *coloniality machine* (Pessoa, 2022).

Part of the narratives of these collectives allow us to consider EE as a dimension in which the dichotomies created by the coloniality machine, among other dispositives, can be de-territorialized and re-territorialized by multiple and singular relations, within the rhizomatic structure of the Human-Nature-Culture tapestry:

In school, I viewed environmental education as preserving the planet. That's what I understood. I saw environmental education as teaching people to understand how to preserve the planet, but as I became involved in agroecology and later graduated with a degree in geology at university, I came to a broader and different view of environmental education." (Statement from a student at a meeting-conversation).

So I think environmental education is very much stuck in the preservation bias. I personally believe that the way forward for environmental education is to convey the idea that we are part of a whole. To me, this is the transformation that people need to receive in environmental education." (Statement from a student at a meeting-conversation).²

Moreover, in our event-meetings (*Meeting of Rural Women of Alegre* (EMRA), and *Meeting of Conscience from Caparaó* (ENCO)), the communities demanded relations of respect towards the Earth and the more-than-human species, as is the case with some ancestral cultures. This is embodied, for example, in agroecological practices, such as permaculture, which we associate with attempts to reterritorialize relationships with the land. The collectives also highlighted the importance of preserving ancestral habits and customs, and the local cultures of each place in the actions and events they facilitate.

We also observe some traces in micropolitical formations that can enhance singularity, the power of being molecular and multiplicity, without assuming any unity or totality or circumscribing to a single subject: "[...] *a whole youth that fights for ourselves to transform our*

² All quotations in the text have been translated from Portuguese and Spanish into English by the authors.

tomorrow, and even our today, for a society in which we can speak without fear of being repressed". (Statement from a student at a meeting-conversation).

In these agencies, we observed the possibility of nomadic curricula, which were not limited to the content of the curricular proposals of the careers. Where ideas were lacking for the institution to allow the crossing of EE in academic training, there were possibilities for collective agents in their networks of conversation: "*Strengthen the campaigns and groups that already exist [...]. And move these actions to transform, maybe not this space, but to claim that UFES gives us a space to really work [...]*". (Statement from a student at a meeting-conversation).

From our field research and participant observation, by emphasizing the power of the (re)existences produced by narratives which can be nourished with cultural experiences, we can imagine an EE which may be articulated within communities that highlight the importance of preserving their ancestral habits and ways of experiencing local '*nature(s)-culture(s)*' (Pessoa, 2020; 2022).

Additionally, it is possible for these movements to resonate in collective enunciations, such as observed in meeting-conversation:

We, young students of UFES in Alegre, are looking for an organization to really change these old practices that the old politics has been bringing. [...] to build this new political culture that we care so much about proposing democratic, socialist, feminist, anti-LGBTphobic and anti-racist". (Statement from a student at a meeting-conversation).

The possible rupture with 'old practices' that are imbued with power, together with the intertwining of 'common' causes, provide clues for this research. That is, a pluriversal EE perspective (anti-capitalist, decolonial, non-racist, ecofeminist, inclusive, critical) that seek to break with this disciplinary process of domination of the socio-environmental networks, seeking to problematize the effects of coloniality on social relations of coexistence with the planet, and to promote pedagogical praxes and environmental humanities in the connections between communities, real life schooling, and universities.

These experiences can enhance and influence the different learning processes. We have detected '*flows of desire*' that give rise to curricular compositions (i.e., knowledge that is created collectively as a literary work or an artistic painting) in the search for connections with local cultures in the rounds of talk and workshops involving the sharing of knowledge with Afro-Brazilians and indigenous cultures, aspiring to facilitate networks for sharing socio-environmental communal knowledge(s), and organizing meeting-training events, which suggest possibilities for the development of a nomadic curricula, which could be articulated as an environmental-desiring machine, engendering flows of deterritorialization of the '*one*' and reterritorialization of the '*socius*' (Deleuze & Guattari, 1972).

On that curricular production, compositions that leverage decolonial EE and that problematizes and repoliticizes the domination of nature and indigenous cultures by capitalism/(mal-)development paradigm, and produce clues in the research trajectories can be observed: in approaching socio-environmental issues, in meeting-conversation events and schools' activities that question socio-environmental policies, in recreating new ways of feeling-thinking –such as the training event, which took place on May 2019, in which students participating in the

Kapixa'wa collective produced knowledge that go beyond the prescribed and/or official orthodox educational programs.

Additional examples of this decolonial and rhizomatic curriculum production include creating 'conversation circles' between teachers and students (both as 'learners' and 'knowledge creators') on ways of relating to nature-culture(s), in which co-education takes place; collective debates on consumerism, use/reuse and recycling; sanitization of fruits and vegetables for consumption and food sovereignty; among many others that emerged in the discussions as *flows of desire*.

Every *flow of desire* intertwines with each other like a rhizome and arises from the interest in learning about the socio-environmental knowledge(s) that contextualizes them. By following this learning interest, this 'invented' curriculum moves like a *nomad* (Deleuze & Guattari, 1980), as it goes towards what interests it. Additionally, those nomadic curricula generate 'other' knowledge(s), and produce, in their micropolitics, relevant compositions with local cultures and communities, being able to (re)create the ability to think, act and care together in harmony, in current 'capitalocentric' framework, in which civilizatory crises pursues us (Stengers, 2015).

During the curriculum production of these cartographies in connection with schools' communities in meeting-conversation-training events, eco-collective subjectivities and possibilities to enhance nomadic curricula are produced, creating a context of mutual care which provides clues to the convivial reappropriation of the commons and to the transversality of decolonial EE, by means of a pedagogical praxis that goes beyond the school/university formal education axes. In these powerful eco-collective assemblages and (nomadic curricula) compositions open to the unknown –which break with the knowledge enclosed in Western-centric/modern/colonial disciplines–, the possibilities for an *environmental-desiring machine* able to produce a pluriversal, rhizomatic and decolonial EE emerges.

Thus, this pedagogical praxis may help to articulate nomadic curricula as a counter-hegemonic way to escape the forms of control that are intertwined with the current Brazilian HE model. Curricula that are produced in everyday school and community life, rich in experiences and care-centered, often invisible, but that (re)exist in pluriversal worlds opposed to the Capitalocene.

In this context, decolonial and rhizomatic EE can promote flows of desire, which are articulated to the spaces-times of schools/universities and beyond them, as it is machinic, transversal and transdisciplinary. As an environmental-desiring machine it engenders nature-culture(s) flows of desire. An environmental-desiring machine that can be potentiated by inventive and decolonial movements, such as those presented in the Brazilian case. Movements that can be articulated as *fighting machines* amid a context of dismantling and attempts to control the *coloniality machine*, struggling for critical ecological humanities of freedom, whether at school/university or outside it, in the Capitalocene.

South-Complex Environmental Thinking, Pedagogical Praxis and Decolonial Environmental Education

Pedagogical Praxes in a South-complex Latin American Environmental Thinking

Pedagogical praxis in the context of the '*Pensamiento ambiental complejo-Sur*' (South-complex environmental thinking) (Maya, 1996) represents an invitation to think of the Earth as pluriversal, and imagining an ethical-poetic and aesthetic proposal that inspires the search for other

ways of inhabiting it (Noguera, 2018). For this Latin American philosophical perspective, the ecological crisis is a civilizational one, and it is necessary to abandon the mechanistic and universalistic vision of the one-world to move towards an understanding of the tapestry of life, through autopoiesis and autonomism (Maturana & Varela, 2003).

Furthermore, it advocates the construction of new ecological humanities that democratize knowledge through praxis, and draws on philosophical reflections connected to the ecological complexity (Leff, 2000), and to the epistemologies of the South (Santos, 2014; Garcia-Arias et al., 2023), to emphasize the notion of a diverse and creative feeling-thinking which rescues the affective (Morin, 2018).

Additionally, *aesthetics* becomes a fundamental pillar of this philosophical approach: aesthetics as an intersubjective exchange of sensitive effects, a non-linear, open, and permanent self-construction that can take on the challenge of thinking about the complexity and pluriversality of the world (Fabelo & Pino, 2011). Thus, the ‘aestheticization’ of EE constitutes a moral and creative power that links humans with more-than-humans and nature (Noguera, 2004).

Therefore, pedagogical-political praxis must generate spaces that favor ethical-aesthetical-political transitions towards a symbolic-material tapestry of (educational and cultural) pluriversal alternatives, by taking an aesthetic stance that is articulated with social communication, and functions as a code that carries meaning(s) and generates models of life (Motta, 2012).

In other words, more than a methodology, we need a *poetics* that promotes a critical decolonial EE that allows us to face the challenges and urgencies of the Capitalocene. In this *ethical-aesthetical-political-poetical turn*, the challenge is to bring to pedagogical praxis a thinking-doing with and from the mother-Earth, which evokes a human situated on the planet, rooted in a place (Boff, 2017).

In this way, the poetic-aesthetic joins the *oneiric*, the ludic and the flows of desire (which have been forgotten in the Western-centric/modern/colonial knowledge), but without renouncing the educational dimension (Noguera et al., 2020), proposing a pedagogical praxis, where ‘praxis’ is understood both as a subjectivity that transforms the world, and as a practice of freedom (Freire, 2005).

Hence, when (critical) pedagogy *is* praxis, the performative exercise of reflection-action becomes a pedagogical and political machine, with a strategic-active use, essential for social, political, ontological and epistemic struggles for liberation (Walsh, 2017), as well as for the reterritorialization of a decolonial EE.

The deployment of a pedagogical praxis, from the South-complex environmental thinking perspective, constitutes a path of resistance to the dominant forms of knowledge which, from a colonial historical perspective, has given rise to the hierarchization of epistemes, naturalizing patterns of power that (re)produce relations of domination where the knowledge(s), experiences and ways of life of those who inhabit colonized territories have been subalternized.

In that context, our fieldwork was carried out by one of the co-authors (Sánchez Gómez, 2020; 2021) between 2019 and 2021, within the project “*Resiliencia y Gestión de Sistemas Socio-Ecológicos Estratégicos para la Actividad Agrícola en Escenarios de Variabilidad Climática. Caso de Estudio: Lago Sochagota (Boyacá, Colombia)*”. Lake Sochagota, together with the freshwater and thermo-mineral flows with which it is connected, is a strategic socio-ecological system for the development of agricultural, tourism, mining, and human consumption activities.

Given that the market-episteme management and operation of this system can compromise the quality and quantity of water necessary for the resilience of the system, the project aims to develop a pedagogical praxis of decolonial EE in search of collective ways to care for water as a common, convivial and life-sustaining element (Sánchez Gómez, 2020).

The development of our participatory field research was consistent with a South-complex environmental thinking approach, and therefore it did not establish a specific object of study, but rather delves into a scenario of socio-ecological complexity in the municipality of Paipa, Boyacá, Colombia, as a case study. The consolidated '*grupo motor*' (driving group) was made up of participants from five sectors, differentiated by activity, as follows: (i) farmers from Caños, Romita and Esperanza villages; (ii) owners of hotels and spas offering thermal water bath services; (iii) users of irrigation canals in the villages of Caños, Romita and Esperanza; (iv) social and collective organizations on environmental issues that wish to participate through an open call; and (v) institutions directly involved in the decision-making process around water management in the area. The number of participants was variable, ranging between 15 and 30 participants in the different proposed activities.³

Pedagogical praxis in Lago Sochagota (Colombia)

The results of the fieldwork allow us to imagine the possibility of (re)signifying and reterritorializing the symbols of *water-culture* as a key element of the language of the Earth, and to think about other ways of inhabiting it (Noguera, 2013; Noguera et al., 2020), but also to analyze its significance, interpretation, consciousness and aesthetics-poetics, through a machinic agency (Deleuze & Guattari, 1980).

As previously noted, we did not work with a 'sample', but with a 'driving group' that was not entirely selected by the researchers but emerges in the living process of the research (Montañés, 2010). Those 'driving groups', which integrate the environmental-desiring machine, are, in our socio-praxis, groups that represent a type of collective leadership: heterogeneous in their composition but sharing a common action. Inside them there are no 'representatives', but people who want to commit themselves for a time to a task that seems interesting (Villasante, 2015; Villasante et al., 2000).

Our research aspires to be a transformative and autonomous performative praxis and, consequently, the representativeness of this 'driving group' is not statistical but meaningful and structural, where participation is built according to relationships and roles, and not to individual characteristics (Galeano, 2004).

The fieldwork involved participatory environmental scenarios in the territory (collective meetings, environmental forums, citizen mobilizations, political meetings, community workshops), allowing the establishment of relationships of trust with community leaders, peasants, activists, grassroots organizations, and citizens that allowed the construction of the 'driving group' of the participatory-research process. The information was obtained through participant observation and recorded using a field diary, audio recordings and photographs, and it was validated by the 'driving group'.

³ See Sánchez Gómez(2021) and Sánchez Gómez & Usaquén (2020) for a more detailed analysis of the project methodology and results.

The dialogues within the ‘driving groups’ aimed to overcome the ‘capitalocentric’ hegemonic subjectivity which has turned water into a ‘resource’ that can be ‘valued’ in economic/market terms. The collective and autonomous reflection in the active participation meetings showed the urgency of moving towards a reterritorialization and a re-encountering with water as a common. Our research also showed the complex interconnection that exists in that socio-ecological system, and the need to generate spaces for reflection that allow the recognition of interdependent relationships. This is a fundamental element to overcome the individualistic culture of the Capitalocene and that of mainstream EE, which have reinforced the idea that individual change is sufficient to achieve ‘sustainable’ societies, hindering the collective encounter. This deterritorialization has generated a scenario of distrust and conflict that turn the ‘management of the commons’ into a power struggle where dominant forces end up subjugating the subalternized groups and individuals, and taking away their agency and autonomy.

In the framework of this process around Sochagota lake, some pedagogical praxis activities have been carried out. One of them involves the generation of a pedagogical route ‘*Agua de luna para la sal de la Tierra*’ (Moon water for the salt of the Earth) in order to stimulate the dialogue between scientists and the peasant communities, around the Sochagota lake system. Likewise, the podcast ‘*La almojábana, un reflejo de lo que somos*’ (The *almojábana*, a reflection of what we are) was created and broadcasted on the community radio station *La Paz de Paipa* during 2021. This radio production uses the *almojábana*, a popular food in the area, as a metaphor for the beginning of a process of popular EE that uses the creative act as a pedagogical device.

The collective reflections on this participatory EE with the ‘driving groups’ offered three ways to rethink water governance in terms of life-care, which can be a model to (re)imagine a decolonial EE based on an environmental-desiring machine.

The first one is based on ‘*care as listening*’, as an attitude of interest and attention to the other(s) and to the otherness. In this path it is necessary to silence the human voice so that the language of water (nature/mother earth) can emerge (Noguera, 2013); in this sense, to care is to pay attention, to heed the call of the water, to listen to its clamor, from silence. The second path has to do with ‘*care as solidarity and compassion*’, which constitute a convivial way to coexist in harmony, so that the nature is understood from other logics where the subalterns (those most affected by ecological degradation in the Capitalocene) are placed at the center of the agenda, weaving ties of support and mutual aid. On the third path, listening, solidarity and compassion converge, constituting the path of ‘*care as responsibility*’ (Jonas, 1995). To feeling-thinking co-responsible is to commit oneself to life-care and protection, and demands awareness of the consequences of what one does and what one fails to do, which suggests a direct relationship with action. In this way, the responsibility of care is both a pedagogical praxis and a performative political ‘*agencement*’ (assemblage). Reflection and autonomous action become synergistic subjectivities in the process of decision-making that concludes in the ways of acting.

Discussion and Final Remarks

In this article we have shown how an environmental-desiring machine functions as a coupling of collective desires that, both in the Brazilian and Colombian experiences presented, materialized in agencies that go beyond the conventional practices of EE, achieving molecular revolutions that, from the rhizomatic interaction academy-community, were constituted as lines of

flight capable of subverting the relations of exploitation-domination-control of nature, humans and more-than-humans, which predominate in the Capitalocene.

These forms of (re)existence/resistance, provide references for a decolonial, rhizomatic and pluriversal EE which –either through the proposal of a nomadic curriculum as a space of free collective transformation, or through a water-care pedagogical praxis based on a South-complex environmental thinking– becomes necessary for the mutation of individual desires that capitalism/(mal-)development paradigm has produced, for an environmental-desiring machine capable of producing a *socius* that is potentially revolutionary.

Our fieldwork in the Federal University of Espírito Santo shows that a decolonial EE, by understanding subjectivities, moves deterritorializations and creates possibilities of feeling-thinking about eco-collective subjectivities in the composition of nomadic curricula, amid attempts to control and capture the coloniality machine. The rhizomatic openings that the *Kapixa'wa* and *Kizomba* collectives can promote (using networks to share knowledge(s), convening training meetings, organizing workshops and joint efforts for the community), can allow them to (re)create ‘other’ knowledge(s), without barriers imposed by disciplines or by the university. Likewise, we detected movements that can enhance curricular nomadism and facilitate the crossing of EE in flows of desire, with molar-molecular scripts, which can enable nomadism in curricular compositions, and transversality in disciplines and knowledge(s).

This is not to say that technical/scientific knowledge is not important (it is indeed); but also, in addition to this one, there are ‘other’ issues. Thus, the virtue and transformative power of a decolonial and rhizomatic EE lies in its effects, in the propagation of ‘cracks’, in the rhizomatic openings provoked by its movements, which can enhance nomadic curricula, open to the dialogues that contextualize us.

In this sense, we bet on imagining a pluriversal, nomadic and critical EE that, intertwined with the micropolitics of re-existences, can cross nomadic curricula. A decolonial EE which articulates with social movements and local culture(s), weaving flows of curricular production, and which (re)exists in educational institutions, even if they try to strangle it in disciplines and actions. Most of its resonances are informal and transgressive, but not even their absence from the hegemonic curricula is able to prevent the agency of the environmental-desiring machine.

Therefore, EE from a critical and pluriversal perspective can promote flows of desire, which are articulated to the space-times of the university and beyond, as it is machinic, transversal and multidimensional; that is, an environmental-desiring machine engendering nature-culture(s) flows of desire. A desiring machine that can generate lines of flight amidst the axiomatic power of the coloniality device. A machine that rhizomatically articulates favoring deterritorializations of traditional knowledge to reterritorialize a more integrated one, articulated around local cultures and social movements, seeking a close relationship between research, teaching, diffusion and extension, as can be seen from our case studies, in the activities and events that were presented, and in the training provided by collectives, local farmers and other community members.

An environmental-desiring machine that can be potentiated by movements of re-existences; movements that can be articulated as ‘fighting machines’ (Negri & Guattari, 2017) in the midst of a context of dismantling and attempts to control the coloniality machine, struggling for new spaces of freedom, whether in the university or outside it.

Regarding our research on the Lago Sochagota, we have shown that, in a decolonial EE situated in a South-complex environmental thinking, water governance should be based on interdependence/eco-autonomous organization, which establishes that there is no autonomy without multiple dependencies (Morin et al., 2006). The need for the recognition of interdependence is key to overcome the indifference and concealment of the other(s) and the otherness, generated by geo-biopolitical discourses that have constituted a universal/Western-centric model of inhabiting the Earth; that is, a colonial, ecologically predatory and 'capitalocentric' system.

Learning from this praxis of EE applied to water-and-life care, we imagine and propose, instead of the hegemonic market-episteme approach, the ethics and pedagogical praxis of care and protection as guiding principles to rethink water management, based on a convivial relationship with ourselves, with the otherness and with the Earth. Based on a collective feeling-thinking on the driving group's desiring-machine, a pedagogical praxis of care makes possible the feelings of solidarity and compassion needed for conviviality.

Therefore, life-care emerges both as a critique and a line of flight to the Capitalocene, and its absence in our relationship with nature and 'others' as the cause of our disconnection with the 'whole'. In face of this *de-agencement*, we propose a relationship of care in which reterritorialized links allow humans to listen to the language of water (and of the Earth), respecting its cycles, but also its mysteries.

Life-care allows not only to rethink nature, but also to promote paths of listening, solidarity and responsibility that allow approaching environmental complexity from other (ecological humanities) logics. This requires an '*ontological turn*' (Garcia-Arias & Schöneberg, 2021) that helps to overcome an ontology based on control, domination and hierarchies, to an ontology based on the convivial tapestry of life (Maturana & Varela, 2003), but also, as we have shown in this article, an '*ethical-aesthetical-political-poetical turn*'. This transition has the potential to generate a transformation in power/knowledge relations, empowering the care of the common as a political exercise, as a performative action, and as an ethical-poetic pedagogical praxis. In sum, a turn that allows to leave the Capitalocene towards an '*Ecocene*' in which

the nexus of mind-and-matter, culture-and-nature, self=and-world, are gathering and co-evolving together in non-fusing but holonic ways of part and wholes, thereby disclose an open process of 'betweening'. The embodied 'subject' or 'inter-(sub)ject' and its likewise embodied 'inter(sub)jective' encounters with all their meanings and 'inter-(ob)jective' lifeworld and its forces are an extensive continuum. (Küpers, 2020, p. 7)

Therefore, our research achieves to (re)imagine an EE able to generate paths built on '*conocimientos otros*', and transforming reality by pedagogical (and political/poetic) praxis that propitiate life-care as a way of inhabiting the aesthetic-poetic Souths.

That is, a rhizomatic and pluriversal EE as an environmental-desiring machine capable of decolonizing life, nature, human and more-than-human beings, and territories. A rhizomatic and pluriversal EE, understood as an environmental-desiring machine, that generates agency and interconnections, as shown by the two experiences analyzed in this article, evidencing alternative paths that, in a framework of diversity of contexts, manage to meet in common collective desires, where the academy-community interaction constitutes the propitious pedagogical scenario to enable the production of other ways of knowing that contribute to the centrality of life.

As we have shown, a critical EE capable of overflowing hegemonic institutional education (neoliberal, colonial, patriarchal) requires the participation of grassroots social movements that represent the subalterns (peasants, indigenous, Afro-descendants,...) that, in their 'rebel dignity' (Baronnet, 2011), militancy and struggle, give meaning to the daily practices from which the environmental emerges, in a neoliberal, neocolonial and 'capitalocenic' context that impacts on nature(s)-culture(s) relations.

In experiences such as that of nomadic curricula in Brazil HE, and that of a pedagogical praxis for water-care based on a South-complex environmental thinking in Colombia, we can observe flows of (common) desires that overflow the theoretical, practical and methodological positions of each of the experiences, and generate ontological and epistemological openings and praxes. Here, the environmental-desiring machine functions as a collective reflection-action capable of producing a tapestry of knowledge(s) and experiences, connecting art and culture as pedagogical devices, unfolding molecular revolutions, and producing new flows of desire that empower a decolonial, rhizomatic and pluriversal EE.

Giving continuity to these counter-hegemonic perspectives of EE becomes increasingly necessary to imagine other possible pluriversal futures (convivial, communal, critical, and autonomous) in the Capitalocene, where the centrality of life and ecosystems must be non-negotiable. This search implies the capacity to be able to think, feel, and act from 'other' places, from a pluriversal '*afuera*' ('outside') that cannot be accessed without a critical (environmental) education that makes possible the creation of new concepts-precepts-affects that allow Humanity to inhabit poetically and politically our planet. In this context, hopefully this research may help to think beyond institutionalized and formal education, towards an Education (in capital letters) articulated with local cultures and their ways of relating to life and ecosystems.

Acknowledgements

The authors thank the anonymous reviewers for their comments and suggestions, which helped to substantially improve the article. They gratefully acknowledge the work of *Critical Education* co-Editor, E. Wayne Ross. Jorge Garcia-Arias is grateful, without implication, for the discussions with some members of the project *CIRCUL'ARTs (Connecting Critical Pedagogies, Inclusive Art Forms and Alternative Barometers for Urban Sustainability, CA23117)*. The usual disclaimer applies.

References

- Alves, N. (2001). Imagens das escolas: sobre redes de conhecimentos e currículos escolares. *Educar em Revista*, 17, 53-62. <https://www.scielo.br/j/er/a/myqn3zHj9Xgbx8zJpnbXFnt/>
- Arrighi, G. (1994). *The long twentieth century: money, power, and the origins of our times*. Verso.
- Baronnet, B. (2011). Zapatismo y educación autónoma: de la rebelión a la dignidad indígena. *Sociedade e Cultura*, 13(2), 247–258. <https://revistas.ufg.br/fcs/article/view/13428>
- Bernadino-Costa, J., Maldonado-Torres, N. & Grosfoguel, R. (2019). Decolonialidade e pensamento afrodiaspórico. In J. Bernadino-Costa, N. Maldonado-Torres & R. Grosfoguel (Eds.). *Decolonialidade e pensamento afrodiaspórico* (pp. 9-26). Autêntica Editora.

- Boff, L. (2017). *Saber cuidar: ética do humano-compaixão pela terra*. Vozes Limitada.
- Caldart, R. (2004). *Pedagogia do Movimento*. Expressão Popular.
- Certeau, M. (2012). *A cultura no plural*. Papirus.
- Deleuze, G. & Guattari, F. (1972). *Capitalisme et schizophrénie, 1. L'Anti-Œdipe*. Editions de Minuit.
- Deleuze, G. & Guattari, F. (1980). *Capitalisme et schizophrénie, 2. Mille plateaux*. Editions de Minuit.
- Escobar, A. (1996). *La invención del Tercer Mundo: construcción y deconstrucción del desarrollo*. Norma.
- Escobar, A. (2021). Reframing civilization(s): from critique to transitions. *Globalizations*, 1-18. <https://doi.org/10.1080/14747731.2021.2002673>
- Esteva, G. (2020). Alternative paths of transformation. *Globalizations*, 17(2), 225-231. <https://doi.org/10.1080/14747731.2019.1670959>
- Fabelo, J., & Pino, A. (2011). *Estética, arte y consumo: su dinámica en la cultura contemporánea*. Benemérita Universidad Autónoma de Puebla.
- Fraga, R. C. Q. & Sousa, J. R. F. (2017). Pedagogia da Alternância e prática educativa na Educação do Campo: Experiência da Escola Família Agrícola Dom Frágoso no Ceará. *Práxis Educacional*, 13(26), 196-216. <http://www.repositorio.ufc.br/handle/riufc/51333>
- Fraser, N. (2022). *Cannibal capitalism: How our system is devouring democracy, care, and the planet - and what we can do about it*. Verso.
- Freire, P. (2005). *Pedagogía del Oprimido*. Siglo XXI.
- Freire, P. (2006). *Pedagogía de la Autonomía: Saberes necesarios para la práctica educativa*. Siglo XXI.
- Galano, C., Curi, M., Motomura, O., Porto Gonçalves, C.W., Silva, M., Ángel, A., Ángel, F., Borrero, J.M. & Carrizosa, J. (2002). Manifiesto por la vida: por una ética para la sustentabilidad. *Ambiente & Sociedad*, 10, 1-14. <https://doi.org/10.1590/S1414-753X2002000100012>
- Galeano, M. E. (2004). *Diseño de proyectos en la investigación cualitativa*. Universidad EAFIT.
- García-Arias, J. & Schöneberg, J. (2021). Urgencies and imperatives for revolutionary (environmental) transitions: from degrowth and postdevelopment towards the pluriverse? *Environmental Politics*, 30(5), 865-871. <https://doi.org/10.1080/09644016.2021.1911443>
- García-Arias, J., Corbetta, S. & Baronnet, B. (2023). Decolonizing education in Latin America: critical environmental and intercultural education as an indigenous pluriversal alternative. *British Journal of Sociology of Education*, 44(8), 1394–1412. <https://doi.org/10.1080/01425692.2023.2234088>
- García-Arias, J. & Cuestas-Caza, J. (2024). Pluriversal autonomies beyond development. Towards an intercultural, decolonial and ecological Buen Vivir as an alternative to the 2030 Agenda in Abya Yala/Latin America. *Latin American Perspectives*, 51(4), 122-140. <https://doi.org/10.1177/0094582X241292327>

- Garcia-Arias, J., Tornel, C. & Flores Gutiérrez, M. (2025). Weaving a rhizomatic pluriverse: *Allin kawsay*, the *Crianza Mutua* Networks, and the Global Tapestry of Alternatives. *Globalizations*, 22(2), 302–322. <https://doi.org/10.1080/14747731.2024.2352942>
- Grosfoguel, R. (2013). Racismo/sexismo epistémico, universidades occidentalizadas y los cuatro genocidios/epistemicidios del largo siglo XVI. *Tabula Rasa*, 19(19), 31–58. <https://doi.org/10.25058/20112742.153>
- Grosfoguel, R. (2002). Colonial difference, geopolitics of knowledge and global coloniality in the modern/colonial capitalist world-system. *Review (Fernand Braudel Center)*, 25(3), 203–224. <https://www.jstor.org/stable/40241548>
- Guattari, F. (2012). *La révolution moléculaire*. Prairies Ordinaires.
- Guattari, F. & Rolnik, S. (1996). *Micropolítica: cartografias do desejo*. Vozes.
- Guzmán, A. (2015). *Auto-organización en sistemas socio-ecológicos para la gestión del cambio ambiental -lineamientos metodológicos y aplicaciones*. Unpublished PhD Dissertation. Universidad de Los Andes, Colombia.
- Hartman, S., Oppermann, S. & Armiero, M. (2024). The Environmental Humanities: European perspectives on how a field is addressing Twenty-first-century global challenges. In Braidotti, R., Casper-Hehne, H., Ivković, M. & Oostveen, D.F. (Eds.). *The Edinburgh companion to the New European Humanities* (pp. 305-327). Edinburgh University Press.
- Jickling, B. & Stephen S. (2017). *Post-Sustainability and Environmental Education. Remaking Education for the Future*. Palgrave Macmillan.
- Jonas, H. (1995). *El principio de responsabilidad: ensayo de una ética para la civilización tecnológica*. Herder.
- Kothari, A., Salleh, A., Escobar, A., Demaria, F. & Acosta, A. (Eds.). (2019). *Pluriverse. A Post-Development Dictionary*. Tulika Books and Columbia University Press.
- Küpers, W. M. (2020). From the Anthropocene to an ‘Ecocene’ –eco-phenomenological perspectives on embodied, anthrocentric transformations towards enlivening practices of organising sustainably. *Sustainability*, 12(9), 3633. <https://doi.org/10.3390/su12093633>
- Lander, E. (2000). *La colonialidad del saber*. CLACSO.
- Leff, E. (2000). Pensar la complejidad ambiental. In Leff, E. (Ed.). *La complejidad ambiental* (pp. 7-53). Siglo XXI.
- Leff, E. (2002). *Saber ambiental: sustentabilidad, racionalidad, complejidad, poder*. Siglo XXI
- Leff, E. (2012). Pensamiento ambiental latinoamericano. Patrimonio de un saber para la sustentabilidad. *Environmental Ethics*, 34, 97-112. <https://doi.org/10.5840/enviroethics201234Supplement58>
- Maldonado-Torres, N. (2007). On the Coloniality of Being. *Cultural Studies*, 21(2), 240-270. <https://doi.org/10.1080/09502380601162548>
- Maldonado-Villalpando, E., Paneque-Gálvez, J., Demaria, F. & Napoletano, B. M. (2022). Grassroots innovation for the pluriverse: Evidence from Zapatismo and autonomous Zapatista education. *Sustainability Science*, 17 (4), 1301-1316. <https://doi.org/10.1007/s11625-022-01172-5>

- Mareto Silva, T. & Krohling, A. (2020). Feminismo e decolonialidade na América Latina: a libertação da mulher dos países latino-americanos e sua contribuição para a efetivação da sustentabilidade. *Revista de Gênero, Sexualidade e Direito*, 6(1), 117-139.
https://doi.org/10.26668/2525-9849/Index_Law_Journals/2020.v6i1.6596
- Maturana, H. & Varela, F. (2003). *De máquinas y seres vivos: autopoiesis: la organización de lo vivo*. Lumen.
- Maya, Á. (1996). *El reto de la vida: ecosistema y cultura: una introducción al estudio del medio ambiente*. Ecofondo.
- Mignolo, W. (2007). Delinking: the rhetoric of modernity, the logic of coloniality and the grammar of de-coloniality. *Cultural Studies*, 21(2), 449-514.
<https://doi.org/10.1080/09502380601162647>
- Mignolo, W. (2011). *The darker side of modernity. global futures, decolonial options*. Duke University Press.
- Mignolo, W. (2020). *Histórias Locais/projetos globais: colonialidade, saberes subalternos e pensamento liminar*. Editora UFMG.
- Montañés, M. (2010). *El grupo de discusión*. Cuadernos CIMAS-Observatorio Internacional de Ciudadanía y Medio Ambiente Sostenible.
- Moore, J. W. (2017). The Capitalocene, Part I: on the nature and origins of our ecological crisis. *Journal of Peasant Studies*, 47(3), 594-630.
<https://doi.org/10.1080/03066150.2016.1235036>
- Morin, E. (2018). Por un pensamiento Sur. *Quaderns de La Mediterrània* (27), 296-303.
<https://www.iemed.org/wp-content/uploads/2021/05/Por-un-pensamiento-del-Sur.pdf>
- Morin, E., Ciurana, E. R. & Motta, R. D. (2006). *Educación en la era planetaria. El pensamiento complejo como método de aprendizaje en el error y la incertidumbre humana*. Universidad de Valladolid.
- Motta, R. (2012). El protagonismo de la poiesis en la articulación de saberes. In Gonzalez, J. M. (Ed.). *Conciencia educativa. Investigación, educación, complejidad y transdisciplinariedad* (pp. 115-135). Escuela Militar de Ingeniería.
- Negri, A. & Guattari, F. (2017). *As verdades nômades: por novos espaços de liberdade*. Autonomia Literária e Editora Politeia.
- Nistal, T. A. (2008). IAP, redes y mapas sociales: Desde la investigación a la intervención social. *Portularia*, 8(1), 131–151. <http://hdl.handle.net/10272/2178>
- Noguera, A. (2004). *El reencantamiento del mundo*. Universidad Nacional de Colombia.
- Noguera, A. (2013). Despliegues investigativos de su pensamiento en educación ambiental. In Fernandez, A. (Ed.). *La Educación Ambiental en México. Definir el campus y emprender el habitus* (pp. 87-107). SEMARNAT.
- Noguera, A. (2018). Tierra-calco/tierra-rizoma. Desafíos simbólicos de la era planetaria. In Noguera, A. (Ed.). *Pensamiento Ambiental en la era planetaria. Biopoder, Bioética y biodiversidad* (pp.15-42). Universidad Nacional de Colombia.

- Noguera, A., Ramírez, L. & Echeverri, S. (2020). Métodoestesis: los caminos del sentir en los saberes de la tierra una aventura geo-epistémica en clave Sur. *Revista de Investigación Agraria y Ambiental*, 11(3), 45-63. <https://doi.org/10.22490/21456453.3897>
- Passos, E., Kastrup, V. & Escóssia, L. (Eds.). (2010). *Pistas do método da cartografia: pesquisa-intervenção e produção de subjetividades*. Sulina.
- Pessoa, H. (2020). *Cartografia dos movimentos de reexistências na universidade: possibilidades de agenciamentos da máquina desejanambiental*. Unpublished PhD Dissertation, Universidade Federal do Espírito Santo, Brazil.
- Pessoa, H. (2021). Produções da máquina desejanambiental na composição de currículos nômades. *Revista Eletrônica do Mestrado em Educação Ambiental*, 38 (2), 141-161. <https://doi.org/10.14295/remea.v38i2.12428>
- Pessoa, H. (2022). Educação ambiental e currículos nômades: conexões com a filosofia pós-estruturalista. *Ensaio Pesquisa em Educação em Ciências*, 24, 1-18. <https://doi.org/10.1590/1983-21172022240105>
- Pinheiro-Barbosa, L. (2018). Mulheres zapatistas e a pedagogia da palavra no tecer da outra educação. In A. M. Castro & E. C. Machado (Eds.). *Estudos feministas, mulheres e educação popular* (pp. 25-47). LiberArs.
- Pinheiro-Barbosa, L. (2020). Pedagogías sentipensantes y revolucionarias en la praxis educativo-política de los movimientos sociales de América Latina. *Revista Colombiana de Educación*, 1(80), 269-290. <https://doi.org/10.17227/rce.num80-10794>
- Quijano, A. (1992). Colonialidad y modernidad/racionalidad. *Perú Indígena*, 13(29), 11-20. <https://www.lavaca.org/wp-content/uploads/2016/04/quijano.pdf>
- Quijano, A. (2000). Colonialidad del poder, eurocentrismo y América Latina. In Lander, E. (Ed.). *La colonialidad del saber* (pp. 201-246). CLACSO.
- Sánchez Gómez, N. (2020). Cuidado del agua en clave del pensamiento ambiental complejo-Sur. *Acta Hispánica*, 2, 721–736. <https://doi.org/10.14232/actahisp.2020.0.721-736>
- Sánchez Gómez, N. (2021). *Praxis Pedagógica en clave del Pensamiento Ambiental Complejo-Sur*. Universidad Simón Bolívar Instituto de Posgrados Doctorado en Ciencias de la Educación Barranquilla, Colombia.
- Sánchez Gómez, N. & Usaquén, O. (2020). La gestión del agua en clave del pensamiento ambiental complejo-Sur. Estudio de Caso Lago Sochagota. In Acosta Castellanos, P., Guerrero, H. & Fabián, C. (Eds.). *Medio ambiente y sostenibilidad: con la mira en los ODS* (pp. 119-142). Ediciones USTA.
- Santos, B. S. (2014). *Epistemologies of the South. Justice against Epistemicide*. Paradigm Publishers.
- Sardão, M. & Silva, P. G. (2024). From the universal to the plural: Imagining, building up and obliterating alternative futures. *Futures*, 161, 103412. <https://doi.org/10.1016/j.futures.2024.103412>
- Spivak, G. (1988). Can the Subaltern Speak? In Nelson, C. & Grossberg, L. (Eds.) *Marxism and the interpretation of culture* (pp. 271-313). University of Illinois Press.

- Stengers, I. (2015). *No tempo das catástrofes: resistir à barbárie que se aproxima*. Cosac Naify.
- Suárez, D., Hilleret, F., Ouviaña, H. & Rigal, L. (2016). *Pedagogías críticas en América Latina*. Noveduc.
- Swyngedouw, E. (2018). CO2 as neo-liberal fetish -the love of crisis and the depoliticized immuno-biopolitics of climate change governance. In Cahill D., Konings M, Cooper M. & D. Primrose (Eds.) *The SAGE Handbook of Neoliberalism* (pp. 295-307). Sage.
- Telleria, J. & Garcia-Arias, J. (2022). The fantasmatic narrative of ‘sustainable development’. A political analysis of the 2030 Global Development Agenda. *Environment and Planning C: Politics and Space*, 40(1), 241–259. <https://doi.org/10.1177/23996544211018214>
- Tristão, M. (2008). *A educação ambiental na formação de professores: rede de saberes*. Annablume.
- Tristão, M. (2016). Educação ambiental e a descolonização do pensamento. *Revista Eletrônica do Mestrado em Educação Ambiental*, edição especial, 28-49. <https://doi.org/10.14295/remea.v0i0.5958>
- Van Dooren, T., Rooke, D., Sadokierski, Z., Osborne, N., Wiggin, B., Armiero, M., Muecke, S., O’Gorman, E., Adamson, J., Ureta, S., Deger, J., Tsai, Y-L., Muir, C., Wehner, K., Kearnes, M., Minter, P. & Rigby, K. (2024). Developing the public environmental humanities: Challenges, opportunities, and lessons. *Resistance: A Journal of Radical Environmental Humanities*, 11(2), 6-44. <https://dx.doi.org/10.1353/res.2024.a953845>.
- Villasante, T. (2015). Conjuntos de acción y grupos motores para la transformación ambiental. *Política y Sociedad*, 52(2), 387-408. https://doi.org/10.5209/rev_POSO.2015.v52.n2.45204
- Villasante, T., Montañés, M. & Martí, J. (2000). *La investigación social participativa: construyendo ciudadanía*. El Viejo Topo.
- Wallerstein, I. (1974). *The Modern World-System*. Academic Press.
- Walsh, C. (2017). *Entretejiendo lo pedagógico y lo decolonial: luchas, caminos y siembras de reflexión-acción para resistir, (re)existir y (re)vivir*. Abril Trigo y Alter/nativas.
- West, S., Haider, L. J., Hertz, T., Mancilla Garcia, M. & Moore, M. L. (2024). Relational approaches to sustainability transformations: walking together in a world of many worlds. *Ecosystems and People*, 20(1), 2370539. <https://doi.org/10.1080/26395916.2024.2370539>

Authors

Jorge Garcia-Arias is a Full Professor in International Political Economy & Global Development Studies at the University of Leon, Spain. His main research lines are on the intersections of critical development studies, pluriversal alternatives to development, radical political ecology, and ecological humanities.

Helen Moura Pessoa Brandão holds a PhD in Education (Teaching, Curriculum and Cultural Processes), and a MA degree in Chemistry (Trace Element Analysis and Environmental Chemistry) from the Federal University of Espírito Santo (UFES), Brazil. She is a Professor in the Department of Chemistry and Physics (DQF/UFES) and in the Postgraduate Program in Teaching, Basic Education and Teacher Training (PPGEEDUC/UFES).

Natalia Sanchez Gomez holds a PhD in Educational Sciences and is a Professor at the University of Boyacá, Colombia.

Critical Education

criticaleducation.org

ISSN 1920-4175

Editors

Sandra Mathison, *University of British Columbia*

E. Wayne Ross, *University of British Columbia*

Associate Editors

Abraham P. DeLeon, *University of Texas at San Antonio*

Adam Renner, 1970-2010

Co-Founding and Past Editor

Stephen Petrina, *University of British Columbia*

Editorial Collective

Wayne Au, *University of Washington Bothell*

Jessica Bacon, *Montclair State University*

Jeff Bale, *University of Toronto*

Grant Banfield, *Flinders University*

Dennis Beach, *University of Gothenburg*

Kristen Buras, *Georgia State University*

Paul R Carr, *Université du Québec en Outaouais*

Lisa Cary, *Murdoch University*

Antonio J. Castro, *University of Missouri*

Erin L. Castro, *University of Utah*

Alexander Cuenca, *Indiana University*

Noah De Lissovoy, *University of Texas at Austin*

Ardavan Eizadirad, *Wilfred Laurier University*

Gustavo Fischman, *Arizona State University*

Derek R. Ford, *DePauw University*

Four Arrows, *Fielding Graduate University*

David Gabbard, *Boise State University*

Rich Gibson, *San Diego State University*

Panayota Gounari, *UMass, Boston*

Keith Heggart, *University of Technology Sydney*

Dave Hill, *Anglia Ruskin University*

Nathalia E. Jaramillo, *Kennesaw State University*

Richard Kahn, *Antioch University Los Angeles*

Gianna Katsiampoura, *University of Athens*

Harper Keenan, *University of British Columbia*

Kathleen Kesson, *Long Island University*

Ashwani Kumar, *Mount Saint Vincent University*

Ravi Kumar, *South Asian University*

Saville Kushner, *Drew University*

Yulong Li, *The Chinese University of Hong Kong*

John Lupinacci, *Washington State University*

Kevin R. Magill, *Baylor University*

Alpesh Maisuria, *University of East London*

Curry Stephenson Malott, *West Chester University*

Gregory Martin, *University of Technology Sydney*

Cris Mayo, *University of Vermont*

Peter Mayo, *University of Malta*

Peter McLaren, *Chapman University*

Shahrazad Mojab, *University of Toronto*

João Paraskeva, *University of Strathclyde*

Lana Parker, *University of Windsor*

Brad Porfilio, *California State University, Stanislaus*

Marc Pruyn, *University of the Sunshine Coast*

Lotar Rasinski, *University of Lower Silesia*

Leena Robertson, *Middlesex University*

Sam Rocha, *University of British Columbia*

Edda Sant, *University of Manchester*

Doug Selwyn, *SUNY Plattsburgh*

Özlem Sensoy, *Simon Fraser University*

Patrick Shannon, *Penn State University*

Steven Singer, *The College of New Jersey*

Kostas Skordoulis, *University of Athens*

John Smyth, *Federation Univ. Australia*

Hannah Spector, *Boston Psychoanalytic Society & Institute*

Marc Spooner, *University of Regina*

Inna Stepaniuk, *Simon Fraser University*

Paolo Vittoria, *University of Naples Federico II*