

Socio-environmental issues in the brazilian political and educational context: an analysis based on historical- critical fundamentals

ABSTRACT

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The natural conditions of ecosystems have been brutally altered as a result of the capitalist mode of production. We are currently experiencing what we call the climate crisis and despite being debated for a few years by the authorities in power, climate breakdown has always been pointed out as something distant, while the devastation of nature and the climate emergency have been ignored by several figures in important positions of power such as governors, and large corporations. Taking it into consideration, the present study uses Historical-Critical Pedagogy, Historical-Dialectical Materialism and Critical Environmental Education, with the aim of debating the problems relating to the climate emergency, thus, we brought the discussion about how agribusiness corroborates to this phenomenon, in order to criticize this activity carried out in the country, as well as the need to overcome the ideas of the exploitation of society-nature imposed by bourgeois democracy, and to understand through school education the causal determinants of this civilizational crisis in order to achieve a society that brings balance in the relationship between society-nature.

KEYWORDS: Climate emergency; Society-Nature Relationship; Historical-Critical Pedagogy; Historical-Dialectical Materialism.

Questões socioambientais no contexto político e educacional brasileiro: uma análise a partir do fundamento histórico-crítico

RESUMO

As condições naturais dos ecossistemas têm sido brutalmente alteradas em decorrência do modo de produção capitalista. Atualmente vivemos o que chamamos de crise climática e, apesar de ser debatida há alguns anos pelas instâncias de poder, o colapso climático sempre foi apontado como algo distante, ao passo que a devastação da natureza e a emergência climática têm sido ignoradas por diversas figuras em posições importantes de poder como governadores e as grandes corporações. Diante disso, o presente estudo utiliza-se da Pedagogia Histórico-Crítica, do Materialismo Histórico-Dialético e da Educação Ambiental Crítica, com o objetivo de debater acerca das problemáticas que tangem a emergência climática, assim, trouxemos a discussão sobre como o agronegócio corrobora a esse fenômeno, a fim de realizar a crítica dessa atividade exercida no país, tal como a necessidade de superar as ideias da exploração da sociedade-natureza impostas pela democracia burguesa, bem como compreender por meio da educação escolar os determinantes causais desta crise civilizatória, a fim de alcançarmos uma sociedade que traga o equilíbrio da relação entre sociedade-natureza.

PALAVRAS-CHAVE: Emergência climática; Relação Sociedade-Natureza; Pedagogia Histórico-Crítica; Materialismo Histórico-Dialético.

INTRODUCTION

The natural conditions of ecosystems have been brutally altered as a result of the capitalist mode of production. Life in this society demands sources of energy, human labor, and natural resources at high intensity, making it impossible to maintain and balance ecosystems, affecting the fullness of the expression of life. Thus, we are currently experiencing what we call the climate crisis or climate emergency.

As Löwy (2013) points out, this crisis arises from a set of factors that are intertwined within the capitalist system, exploiting natural resources, soil and its riches, water, polluting the air we breathe, as well as exploiting the vital activity of human beings, in a process of commodification that favors and enhances the private accumulation of material wealth produced in national economies. Although the debate has been taking place for a few years by the instances of power, climate breakdown has always been pointed out as something distant, in the distant future. However, the process of devastation of nature has accelerated abruptly, while the accumulation of capital is restricted to a small group to the detriment of the majority of the population, that suffers from extreme weather events, in addition to the numerous and unequivocal situations of pauperization imposed by this model of production of life in society.

We can highlight the exponential increase in air pollution, the constant emission of Greenhouse Gases (GHG) from the use of fossil fuels and the deforestation of native forests that play a fundamental role in the capture and storage of carbon dioxide from the atmosphere, these issues are mainly linked to activities such as agribusiness and existing transport systems, which have enhanced the greenhouse effect and intensified the existing climate crisis. Other factors such as water contamination, destruction of the ozone layer, increasing speed destruction of native forests and rapid reduction of biodiversity causing the extinction of thousands of species (Löwy, 2013), are also part of the context of the climate crisis.

Thus, it is possible to identify that climate change goes beyond global temperature rise (Zupelari & Cavalari, 2020), bringing extreme events ranging from intense rainfall in some regions and significant droughts in others to the desertification of certain areas, as well as rising sea levels and a series of disasters associated with these events.

In this sense, throughout human history, the worsening of how natural resources are used has become evident. Given this, there is concern among some global power institutions to implement guidelines to regulate the use of nature (Silva, 2023). The Kyoto Protocol is one such example, established in 1997 with the goal of achieving the 'reduction of emissions for developed countries and those with economies in transition to capitalism at the time, considered historically responsible for the current climate change' (Brasil, 2002). This includes the United States, a symbol of capitalism and one of the world's most polluting countries, which refused to ratify the protocol, arguing that it would harm the nation's development (Löwy, 2013)."

Furthermore, we have seen other initiatives, such as the United Nations International Conference—Rio+20, which introduced the concept of a green

economy. This strategy ostensibly aimed to expand the fight for environmental quality, yet its true objective was to commodify nature and transfer control of environmental heritage to capital-driven actors—a key factor in the current socio-environmental crisis. These measures, which fail to address the root causes of the socio-environmental crisis, exacerbate nature's devastation and the climate emergency. They enable influential figures in positions of power—such as governors and large corporations—to ignore the issue and actively keep the population unaware of the true extent of ecosystem imbalance. As a result, few private sector actors or public authorities are genuinely interested in adopting and promoting measures to prevent extreme climate-related events, such as those recorded in recent years.

We argue that these agents are themselves alienated in the face of the dangers posed by the socio-environmental crisis—perhaps the most severe ever experienced by humanity. It is worth emphasizing that, from the perspective of historical-dialectical materialism, alienation constitutes an analytical category arising from the relationship between human beings and their vital activity (Marx, 2004).

This activity and its product are expropriated from the producing agent, removing their control over both the production process and the generated product, thereby promoting the estrangement of human beings from themselves, from others, and from their environment. In this sense, we can understand the lack of commitment toward addressing ecosystem imbalance as a determining factor of the socio-environmental crisis.

Given this problematic situation, 2024 witnessed extreme drought and heatwaves across various regions of Brazil, catastrophic flooding in Rio Grande do Sul, and devastating wildfires in both the Amazon and Pantanal biomes - events that severely impacted neighboring countries like Bolivia and Paraguay, while smoke from the fires became visible across multiple Brazilian states.

In light of this, the present study aims to examine issues pertaining to the country's recent history and establish connections with both the climate emergency and public education. Its purpose is to propose pathways, objectives, and strategies to foster school-based discussions, ultimately working toward an emancipatory education that enables a balanced relationship between society and nature.

THEORETICAL FRAMEWORK

To examine the issues underlying this article's central theme, we ground our analysis in Critical Environmental Education, Historical-Dialectical Materialism, and Critical-Historical Pedagogy. These frameworks are essential for both understanding and ultimately overcoming the structural determinations driving the socio-environmental crisis.

Historical-Dialectical Materialism is a method developed by Marx and Engels that refers to the interpretation of reality through materiality and concreteness. It thus concerns the form of human social organization for the production and reproduction of life, aiming to transform the exploitative foundations established by the capitalist mode of production. This method focuses on both interpreting and

transforming reality through praxis - understood as the unity between theory and practice (Pires, 1997). Therefore, when individuals become aware that they are social and historical beings and begin to understand their social context through the determinants affecting social life, they become capable of seeking to transform this very reality (Pires, 1997).

As Konder (2008, p. 44) points out:

[...] dialectical thought requires patient labor: it must diligently identify, through gradual effort, the concrete contradictions and specific mediations that constitute the "fabric" of each totality, that give "life" to each totality.

Historical-dialectical materialism enables, from the perspective of dialectical totality, the unveiling of fundamental laws of social organization throughout human history in its diverse expressions regarding life production. This is because it facilitates analysis of the concrete material life of production relations. Consequently, it identifies contradictions within socio-political, economic, and environmental processes and phenomena - going beyond formal (and often hegemonic) perspectives that tend to perpetuate the system and its inherent ills.

Regarding Critical-Historical Pedagogy, it constitutes a pedagogical approach developed by Dermeval Saviani and collaborators. This educational theory, grounded in Historical-Dialectical Materialism (Saviani, 2012), seeks to understand the educational process based on objective-historical development articulated with pedagogical theory. Its purpose is to equip individuals – that is, to provide the cultural tools – for transforming society toward political and, above all, human emancipation. This theory enables understanding both contemporary education and the historical determinants that have shaped school educational processes. In other words, it seeks to comprehend societal organization under the capitalist mode of production and the constraints imposed on school education (Saviani, 2012).

Not without reason, Critical-Historical Pedagogy is grounded in the structural relations of society through its materialist and historically-conditioned approach. This enables an understanding of the social, political, economic, and organizational context in which schools are situated. Therefore, Critical-Historical Pedagogy advocates for an education that is critical, emancipatory, and transformative, while Historical-Dialectical Materialism enables dialectical analyses of reality's phenomena - all aimed at achieving a more just and balanced society.

We further employ Critical Environmental Education, understood here as 'a pedagogical process that addresses environmental issues by facilitating the appropriation of human culture and productions, enabling confrontation of the societal crisis humanity currently faces' (Maia & Teixeira, 2012, p. 241). This approach aims to expose and analyze capital's contradictions with nature (Peneluc, Pinheiro & Moradillo, 2018), thereby providing a foundation for understanding and connecting issues regarding environmental degradation.

AGRIBUSINESS AND THE ACCELERATION OF THE CLIMATE EMERGENCY: EXAMINING PHENOMENA IN THE BRAZILIAN CONTEXT

Currently, we are witnessing numerous extreme climate events resulting from the climate emergency across different regions of the planet. These include floods in Africa (Kenya) and Asia (Indonesia, Afghanistan); record-high average temperatures and increased heatwaves during the Northern Hemisphere summer; as well as accelerated ice melt in Antarctica and the Arctic. In Brazil, we experienced the devastating floods that ravaged Rio Grande do Sul in late April and early May 2024, along with unprecedented wildfires and historic droughts in the Amazon, Cerrado, and Pantanal biomes, particularly during September of the same year (Bones & Araújo, 2024).

It is known that floods are natural phenomena already familiar to populations, as Wollmann (2014) points out. However, these events have been intensifying. In the case of Rio Grande do Sul, the water level of Guaíba surpassed the 1941 flood records in 2024. At the same time, we must consider that the proper name 'Guahyba' means 'meeting of waters' in the Tupi-Guarani language - which explains why extended periods of precipitation would naturally lead to flooding in this specific territory (Silveira et al., 2023).

Furthermore, in this region, 'rainfall originates from southern disturbed currents (Polar Fronts) and western currents (Tropical Instabilities), with a strong predominance of the former over the latter' (Wollmann, 2014, p. 80). Consequently, the resulting rainfall volumes are significantly higher, which may lead to flood occurrences in the state, particularly during winter. Additionally, Wollmann (2013, p. 80) notes that flood studies in the state have been debated for years by various authors, highlighting that: 'Among the main scientific studies on flood mapping in Rio Grande do Sul's watersheds, the most notable include those by Reckziegel (2007), Wollmann (2010, 2013), Righi (2011, 2013), Oliveira (2010), and Menezes & Scoti (2013)'.

The state of Rio Grande do Sul has a population of 10,882,965¹ million people residing across 497 municipalities (IBGE, 2023). Following the intense rainfall that caused the worst disaster in the state's history, 78 municipalities declared a state of public calamity while 340 municipalities entered emergency status - totaling 478 affected municipalities according to the May 2024² Report on Impacts of Extreme Rainfall and Flooding in Rio Grande do Sul and the state's Civil Defense records.

Beyond the material damages suffered by the population, 806 people were injured, 27 went missing, and 183 died - in addition to the animals that also suffered from these climate impacts in the state. The tragedy exposed the neglect stemming from 'the Rio Grande do Sul state administration, which implemented policies of public sector strangulation and privatization of areas of public interest' (Rizzotto, Costa & Lobato, 2024, p. 1).

Despite the state having a flood prevention system, data reveals that in 2018, warnings were issued to both the state government and Porto Alegre's city administration indicating the pumping system required urgent maintenance, as it could potentially fail. These warnings were ignored by the city's mayor, Sebastião Melo (Rizzotto, Costa & Lobato, 2024).

On April 30, 2024 - just one week before the state's disaster - Brazil's National Center for Monitoring and Early Warning of Natural Disasters (CEMADEN) issued an alert to the state government about potential disaster risks³, this warning was ignored by Governor Eduardo Leite, a member of the Brazilian Social Democracy Party (PSDB) and proponent of neoliberal policies.

Throughout his term as state governor, Eduardo Leite has systematically dismantled environmental protections⁴, aligning with the policies of Ricardo Salles - widely known as the former minister of the 'cattle herd clearance' (referring to his notorious push to weaken environmental regulations).

The Rio Grande do Sul state government implemented over 489 measures since 2019 - the first year of Governor Eduardo Leite's administration - that systematically weakened environmental protections. These included relaxing environmental regulations for irrigation dam construction in Permanent Preservation Areas (PPAs), and more recently, failing to invest in slope protection infrastructure and repairs to Porto Alegre's (the state capital) flood prevention system. This system had already demonstrated urgent need for repairs during the September 2023 floods, and has now 'failed miserably,' laments Walter Collischonn, Professor of Environmental Engineering and Water Resources Engineering at the Federal University of Rio Grande do Sul (UFRGS) (Rizzotto, Costa & Lobato, 2024, p. 2).

With nature being central to capitalism's dynamic, Löwy (2013, p. 81) stresses: 'If you refuse to confront capitalism, then discussing the environment is pointless - because the destruction, devastation, and poisoning of our environment are all products of capital's accumulation process'.

Following the devastating floods in Rio Grande do Sul, Brazilian society now faces a major crisis stemming from rampant deforestation of native forests and criminal wildfires promoted by a predatory agribusiness system. While this is most prominently seen in the large-scale destruction of the Amazon and Pantanal biomes, it also manifests through the uncontrolled expansion of capitalist logic over the environment - including isolated fire outbreaks across multiple Brazilian states such as São Paulo, Paraná, Mato Grosso do Sul, and the Federal District.

Brazil's National Institute for Space Research⁵ (INPE, 2024) collected and analyzed data through its Fire Monitoring Program, revealing 2024 as the worst year for wildfire hotspots in the past decade. September alone recorded 83,157 fire outbreaks across all Brazilian states, with Mato Grosso state leading at 19,964 cases (24%), followed by Pará state with 17,434 outbreaks (21%), and Amazonas state ranking third with 6,879 recorded cases (8.3%).

The state of Mato Grosso encompasses three Brazilian biomes: the Amazon, the Pantanal, and the Cerrado, while the states of Amazonas and Pará are part of the Amazon Rainforest. In this context, it can be argued that the aforementioned biomes were the most affected by wildfires, which occurred in significant numbers in September 2024.

Brazil's biomes have been affected since the country's colonization period, as Silva (2023, p. 8) notes:

The deforestation of native forests has occurred since the beginning of Brazil's colonization, established through aggressive practices that exploit natural resources without restraint, along with massive introduction of exotic animal species into these environments. This process has intensified throughout history, particularly under capitalism's current societal organization.

Regarding the Amazon biome specifically, it remained largely unexploited economically until the late 1960s and early 1970s. During Brazil's military dictatorship, a political and economic project was established to occupy the Amazon region and integrate it into national market production and commerce. This initiative built upon earlier efforts like the Belém-Brasília Highway construction under Juscelino Kubitschek (late 1950s to early 1960s). Kubitschek had also implemented the Manaus Free Trade Zone while creating conditions for expanded agribusiness projects, primarily through Regional Development Policies (Mesquita, 2009).

Thus, environmental degradation began with the territorial occupation, particularly starting in 1970 during Emílio Garrastazu Médici's administration (1969-1974), marked by the construction of the Trans-Amazonian Highway (BR-230). In this context, Médici proposed eliminating the "Green Hell" through his vision of national integration. However, the highway - which cost over US\$1 billion at the time - was never completed and was ultimately reclaimed by the rainforest.

According to the Democracy Memorial (1970, n.p):

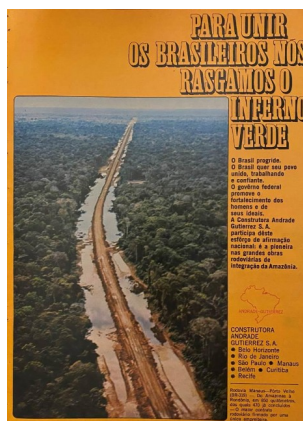
The Trans-Amazonian Highway was the crown jewel of the National Integration Plan (PIN), which included a twin highway (Northern Perimeter Road), the Cuiabá-Santarém Highway, an irrigation project in the Northeast, and the Rio-Niterói Bridge - the only project actually completed. The PIN's slogan was "integrate so as not to surrender."

The implemented National Integration Plan (PIN) primarily aimed to promote economic development and integrate the North and Central-West regions, which the government considered less developed. The Plan was established by Decree-Law No. 1,106 of June 16, 1970. Notably, 'Article 2: The first stage of the National Integration Program shall consist of the immediate construction of the Trans-Amazonian and Cuiabá-Santarém highways' (Brasil, 1970).

From this moment onward, a media campaign began glorifying the highway's construction in the Amazon. Headlines constantly bombarded citizens with slogans like 'To unite Brazilians, we're tearing through the green hell' or 'A treasure awaits you. Seize it. Profit. Grow rich with Brazil.' In 1972, the Amazon Development Superintendency (SUDAM) published the magazine 'This is the Amazon,' portraying the region as a land of abundant wealth needing occupation and exploitation. Furthermore, magazines like *Realidade* (1970) ran advertisements explicitly encouraging gold prospecting and development through natural resource extraction and highway expansion in Amazonas - all supported by massive promotional campaigns during this period.

Figure 1

Advertisement by construction company Andrade Gutierrez published in the 1972 Amazon Special Edition of Realidade magazine.



Source: Reproduction/Ricardo Cardim Collection.

Consequently, the working class migrated to the Amazon region. As Pereira (2013, p. 1) notes:

At the level of official discourse, the relocation of so-called "population surpluses" from the Northeast would "alleviate" social conflicts in that region while creating labor pools favorable to expanding agribusiness, mining-metallurgical, and industrial projects in the Amazon.

To understand this politico-economic context driven by development and profit motives, we must revisit the transformations in Europe and the United States following the 1973 economic crisis - particularly the Welfare State regimes. These changes required shifting liberal democratic societies to control labor movements fighting for workers' rights, while countering reforms that gained traction during this period. These included the ideology of deregulated markets, policies to increase unemployment and create a reserve army of labor, alongside fostering acceptance of increasingly precarious work conditions: without labor rights protections, without workers challenging employers - all to maintain human exploitation and corporate profitability (Duriguetto & Demier, 2017).

Thus, neoliberal ideology advocates for profitable growth through the exploitation of the society-nature relationship without establishing limits that would constrain capital accumulation. Through this economic policy, the dominant class controlling the means of production utilizes the State to systematically erode workers' social and political rights - all to benefit the private sector through increased privatizations and public-private partnerships in public institutions like schools, state-owned enterprises, healthcare facilities, and other sectors (Duriguetto & Demier, 2017).

In Brazil, neoliberal counter-reforms only materialized in the 1990s under the administrations of Itamar Augusto Cautiero Franco and Fernando Collor de Mello. This period was marked by increased sales of state-owned enterprises to international financial institutions, leading to the privatization of Brazilian public companies across sectors including telecommunications, electric power, finance,

metallurgy and steel production, mineral extraction, among others (Siffert Filho & Silva, 1999).

Within this same context, numerous international private institutions have sought to acquire Brazilian lands for natural resource exploitation - aiming to extract and export raw materials to other countries (Cavalcanti & Fernandes, 2012).

So, the 1990s:

were marked by a severe crisis in Brazilian agriculture, with widespread bankruptcies among farmers and agribusinesses - a direct consequence of neoliberal measures that eliminated subsidies, reduced credit, and exposed domestic agriculture to international competition through lowered import tariffs (Alentejano, 2020, p. 253).

Therefore, soy - the primary crop cultivated in the Cerrado - has expanded into the Amazon, becoming one of the leading drivers of deforestation for crop cultivation. While soy isn't solely responsible for the biome's deforestation and degradation, other activities like mineral extraction, timber logging, and cattle ranching expansion equally threaten this ecosystem's preservation, along with its biodiversity and local populations (Cavalcanti & Fernandes, 2012).

The unlimited deforestation and exploitation of Brazilian biomes like the Amazon Rainforest exacerbates the climate emergency by disrupting natural processes including: Climate regulation, Evapotranspiration that drives the water cycle and flying river formation. These systems can no longer follow their natural course, affecting all life forms - including humans - while increasing: Soil erosion and degradation; Leaching; Biodiversity loss; Environmental pollution; Water resource depletion (Domingues & Bermann, 2012).

So, we can observe the rise of agribusiness in Brazil - transitioning from a conservative modernization model (1960s-1990s) to an agribusiness-based economy since the 2000s (Cordeiro, 2022).

Data shows that Brazil's agribusiness sector expanded significantly, evidenced by:

Annual average export values rising from USD 50 billion (1995-99) to approximately USD 200 billion by the late 2000s; Basic commodities increasing from 25% to 45% of export volumes by 2010; When combined with semi-manufactured goods, this share reaches 54.3%. This confirms the re-primarization of foreign trade (Alentejano, 2020, p. 254).

The first and second administrations of President Luiz Inácio Lula da Silva were marked by a significant increase in commodity exports driven by Chinese demand, establishing Brazil as a top agricultural exporter. This period also saw expanded public policies that boosted national economic growth (Corsi, Mendonça & Santos, 2024). Despite Brazil's considerable economic expansion during the first decade of the 21st century, the agribusiness sector achieved record revenues under the Bolsonaro administration during the COVID-19 pandemic.

According to data from the Center for Advanced Studies in Applied Economics (Cepea) at Esalq/USP, in partnership with the Brazilian Confederation of Agriculture and Livestock (CNA)⁶, agribusiness grew in 2020 compared to 2019, reaching 26.6% of Brazil's Gross Domestic Product (GDP) - totaling R\$2 trillion (approximately USD 400 billion) in this sector alone. In 2021, it continued to

expand, accounting for 27.4% of national GDP, but declined to 24.8% in 2022. For 2023, agribusiness GDP stood at 23.8%, while agricultural activity specifically grew by 15.1%⁷ (Brasil, 2024).

From this perspective, agribusiness growth can be attributed to several factors, including: Expansion of deforested areas for commodity crop cultivation; Increased cattle ranching. Planted area grew from 65.9 million hectares in the 2019/2020 harvest to 79.7 million hectares by August 2024 (2023/2024 harvest). The main grain-producing states are: Mato Grosso, Paraná, Rio Grande do Sul, Goiás, Mato Grosso do Sul, Minas Gerais, Bahia, São Paulo, Tocantins, and Maranhão. Furthermore, Brazil's cattle inventory now totals 234,352,649 head⁸ (Brasil, 2024).

As a result, agribusiness has exploited Brazilian biomes in pursuit of profit. Under far-right administrations like Jair Messias Bolsonaro's, the sector capitalized on opportunities to seize territories for monoculture expansion and landowner empowerment. This was enabled through: Weakening of environmental legislation; Budget cuts to environmental agencies; Brazilian Institute of Environment and Renewable Natural Resources (IBAMA); National Institute for Colonization and Agrarian Reform (INCRA); Chico Mendes Institute for Biodiversity Conservation (ICMBio). These measures were spearheaded by former Environment Minister Ricardo Salles (Lhamas, 2023).

Bolsonaro's four-year presidency was characterized by systemic neglect, particularly in environmental policy, and became a central campaign issue for Lula. Even after winning the election, Lula continues advocating for Brazil's reconstruction during his third term - yet without challenging the bourgeois democratic order sufficiently to overcome the current mode of production and confront socio-environmental exploitation. This includes addressing agribusiness, Brazil's most environmentally destructive sector.

Although Lula appointed a Workers' Party (PT) member to lead the Ministry of Agrarian Development - theoretically responsible for advancing land reform - there remains a glaring power imbalance favoring agribusiness and large-scale agricultural commodity producers. To maintain fragile governability, Lula cannot significantly antagonize Brazil's influential ruralist congressional bloc, which exhibits near-gravitational alignment with right-wing opposition. This sector served as a key electoral base and supporter for both Bolsonaro's government and the 2016 coup against Dilma Rousseff (Corsi, Mendonça & Santos, 2024, p. 104).

OVERCOMING THE IDEA OF BOURGEOIS DEMOCRACY: REVOLUTIONARY EDUCATIONAL DEBATES FOR THE OVERCOMING OF THE CAPITALIST MODE OF PRODUCTION.

To transcend bourgeois democracy and establish a Marxist-oriented participatory democracy, a critical understanding of the constituent elements of the former is indispensable. Such an analysis is necessary to avoid the ideological pitfall of advocating interests that are opposed to the working class (Martorano, 2007).

Bourgeois democracy emerged from the French Revolution through the efforts of workers and the bourgeoisie themselves to seize power from the French monarchy, aiming to fight for improved economic and political conditions. At that

time, the bourgeoisie was a revolutionary force. However, the bourgeoisie consolidated economic and political power through alliances with the military and the Church, giving rise to the rule of law (Bigoto, 2017). Once in control of economic and political power, it became a conservative class and paved the way for contemporary neoliberal conceptions.

Thus, the key elements defining this bourgeois democracy are expressed, according to Martorano (2007), in: unequal conditions of political freedoms; the conflict between parliament and state bureaucracy; the contradiction between the titularity and exercise of popular sovereignty; limited political competition; and the suspension of constitutional legality. In light of this, we will examine some of these elements by drawing parallels with developments in Brazilian society since the 21st century. Subsequently, we will discuss how the interests of bourgeois democracy manifest within the educational sphere.

Regarding the third characteristic that expresses the contradiction between titularity and the exercise of popular sovereignty, Martorano (2007) argues that while voters are required to cast their vote every four years for a "political representative," there are few effective mechanisms to compel elected officials to implement the proposals outlined in their electoral campaign platforms. Moreover, there exist scarcely any means to remove these representatives for failing to fulfill their mandates, except through impeachment. In this same vein, Martorano (2007) further contends that no legitimate political representation exists, as voters are controlled through political and electoral mechanisms.

From this perspective, we witnessed in Brazil the institutional coup against Dilma Vana Rousseff, culminating in her 2016 impeachment process. The president had her mandate revoked - constituting a suspension of constitutional legality (Martorano, 2007) - based on allegations of '[...] violating the Administrative Misconduct Act, budgetary laws, and suspected involvement in corruption schemes at the state-owned Petrobras through investigations conducted under Operation Car Wash (Lava Jato) by the Federal Police' (Prado & Pieri, 2017).

The presidency was subsequently assumed by then-Vice President Michel Miguel Elias Temer Lulia, who was responsible for creating and approving numerous legislative measures and policies contrary to working-class interests, including the Labor Reform, Pension Reform, and the New High School Reform (NEM) (Prado & Pieri, 2017).

All subsequently proposed and approved reforms reflect bourgeois ideology. With the Labor Reform enacted in April 2017, significant modifications were introduced to working conditions, including the deregulation of: 12x36 work shifts (12 hours worked, 36 hours off); intermittent work schedules; part-time work arrangements; intra-shift breaks; implementation of time banks; remote work (home office); and overtime regulations⁹. At the time, Michel Temer's administration employed a rhetoric of "modernization" to promote these changes positively, claiming the reform would increase job opportunities in Brazil, enable mutually beneficial worker-employer agreements, and provide greater stability for financial markets. However, in practice, these measures primarily served to expand bourgeois opportunities for worker exploitation and profit accumulation (Carvalho, Pinheiro & Freitas, 2021; Prado & Pieri, 2017).

During the same administration, the Pension Reform proposal was initiated and promoted through Constitutional Amendment Bill 287/2016 (PEC 287/2016). However, due to lack of support in the National Congress - stemming from corruption allegations made by businessman Joesley Batista, who directly implicated Temer - the bill failed to pass. Consequently, the reform was only approved during Jair Bolsonaro's government under the leadership of Economy Minister Paulo Guedes in 2019. The key provisions of the reform included:

Modification of minimum contribution periods; Implementation of a unified contribution rate for both private and public sector workers, following income tax principles; Increased retirement age for both men and women (Jardim & Moura, 2023, p. 71).

This reform embodies the neoliberal capitalist perspective, advocating for minimal state intervention through a mixed social security system while simultaneously enabling the capitalization of private pension schemes. The Bolsonaro administration justified the reform by claiming that the public social security system was primarily responsible for issues such as high unemployment rates and budget deficits. They argued that implementing private pensions would resolve these problems, including the alleged generational conflict over jobs between younger and older workers in Brazil. However, despite the promotional discourse surrounding private pensions, the model was not fully implemented due to World Bank influence, as the absence of new contributors would leave retirees without pension benefits (Jardim & Moura, 2023).

In addition to the Labor Reform and Pension Reform, Michel Temer facilitated the conditions for approval of the New High School Reform (NEM). The capitalist mode of production sustains itself through reforms addressing problems manifested in social practice.

To contextualize our current situation, we must recognize the present scenario as a predominantly neoliberal ideological field - that is, where everything must be transformed into profit. To achieve this objective, neoliberal thought presents 'Reforms' as the only solution to evident problems. Consequently, education must also undergo transformation (Munhoz, Medeiros, Santana, Molina & Perin, 2023, p. 24).

Secondary education constitutes the final stage of basic education with an orientation toward higher education. However, its role and functioning within public schools have been persistently questioned. The proposed reform presented itself as attractive and "modern," while concealing its regressive nature through the false notion that students would have freedom to choose their educational paths via so-called 'formative itineraries.' In reality, these pathways had the sole objective of vocational training and labor market orientation, disregarding any emancipatory educational purpose. Furthermore, the reform proposed increasing instructional hours from 2,400 to 3,000 hours, divided into 1,800 hours for the Basic General Education curriculum (FGB) and 1,200 hours for flexible educational pathways (Lima & Maciel, 2018).

The reform project initiated in 2016 was fast-tracked through Provisional Measure MP 746/16, subsequently approved and established as Law No. 13,415/2017, which implemented the Secondary Education Reform. This legislation introduced curricular restructuring under the justification that Brazil's low performance in both the Basic Education Development Index (IDEB) and the Programme for International Student Assessment (PISA) necessitated a curricular

reorganization - particularly in secondary education - ostensibly to prepare students for vocational education, or more critically, for alienated labor (Silva, 2018).

The aforementioned Law stipulates:

"Article 36. The high school curriculum shall consist of the National Common Curricular Base and specialized educational pathways, which shall be organized through different curricular arrangements according to their relevance to the local context and the capacity of educational systems [...]".

Consequently, the New High School Reform (NEM) became linked to the National Common Curricular Base (BNCC) and modified the National Education Guidelines and Framework Law (LDB - Law No. 9,394/2016), as Silva and Araújo (2021, p. 7) point out:

By being incorporated into the National Education Guidelines and Framework Law (Law 9,394/16), the reform delegated to the federated entities responsible for secondary education the task of implementing the necessary adjustments. Among the provisions requiring state-level regulation are: the instructional hours allocated to the common basic curriculum, which cannot exceed 1,800 hours; the "New High School" curriculum proposal based on the BNCC; the criteria and processes for recognizing "notable knowledge" for teaching qualifications; and the establishment of partnerships.

In this context, debates emerged opposing the High School Reform due to its proposal to eliminate Philosophy and Sociology as mandatory subjects, while maintaining only Portuguese Language, Mathematics, and English as a foreign language as compulsory throughout all three years - to the detriment of other knowledge domains (Silva, 2018).

Furthermore, the National Common Curricular Base (BNCC) follows the standards and guidelines of international institutions such as the World Bank and the United Nations Educational, Scientific and Cultural Organization (UNESCO), with the objective of preparing individuals for the labor market. So, it can be argued that the curriculum promotes a practical-based educational approach with limited theoretical foundation, prioritizing everyday applicability over scientific knowledge while fostering competitiveness, individualism, and pragmatic actions. From this perspective, the educational sector has become commodified, operating in accordance with market principles (Munhoz et al., 2023).

This phenomenon originated during Michel Temer's administration but persisted in subsequent governments, albeit with distinct characteristics. During Jair Bolsonaro's presidency (2019-2022), school violence, hate crimes, and murders increased significantly. The period witnessed numerous attacks against educators and students across various institutions, coupled with a rise in fake news and science denialism - particularly during the COVID-19 pandemic (Xavier, Oliveira, Ignacio & Lima, 2024).

Consequently, during the tenure of the first Minister of Education in 2019, Ricardo Vélez Rodríguez established the Secretariat for the Promotion of Civic-Military Schools. However, after just four months in office, the minister was dismissed later that same year and replaced by Abraham Weintraub, who remained in the position until 2020. Weintraub continued both the implementation of civic-military schools and the pilot program to test the New

High School Reform (NEM). His successor, Milton Ribeiro, assumed the ministry in 2020 during the SARS-CoV-2 pandemic and became known for freezing teachers' service time during remote instruction - thereby undermining their rights to five-year bonuses (quinquênios), annual bonuses (anuênios), merit-based leave (licença-prêmio), and other benefits. The minister also published the National Implementation Schedule for NEM in 2021 (Xavier et al., 2024).

The Schedule mandated nationwide implementation beginning in 2022 with the first grade; expanding to both first and second grades in 2023, and progressively thereafter. Furthermore, it introduced new assessment frameworks for SAEB (Basic Education Assessment System) and updated the New ENEM (National High School Exam) matrix. Still in 2021, 37 INEP (National Institute for Educational Studies and Research) technical staff resigned due to lack of administrative and professional autonomy (Xavier et al., 2024, p. 470).

In 2022, still during Bolsonaro's administration, the New High School Reform (NEM) came into effect. Consequently, numerous problems permeated the education system through this reform, including: the devaluation of teachers undermined by the presence of professionals with "notable knowledge" teaching classes; the significant deterioration of students' basic education evidenced by reduced instructional hours across subjects, thereby impoverishing the teaching of scientific, artistic, and philosophical knowledge. Furthermore, educators struggled with the implementation of specialized educational pathways due to the lack of physical infrastructure, technological resources, and teaching materials for conducting classes.

Compounding these factors, the New High School Reform (NEM) has fostered the increasing implementation of active learning methodologies aligned with bourgeois ideology, thereby further undermining the education of the working class.

As highlighted by Cássio and Goulart (2022, p. 290):

The high school reform is beyond reform. Its detrimental effects, already evident in research findings, cannot be addressed or corrected through mere "revisions" of educational policy. These effects are structural, as NEM represents a curricular reform that lacks the massive investments needed to fulfill the promises made in official propaganda and endorsed by billionaire supporters. Isolated incentive programs, such as the Full-Time High School Funding Program, fail to meet the substantial demands of secondary education in the country.

Given the numerous problematic issues identified regarding the New High School Reform (NEM) implemented during the Temer administration and perpetuated under Bolsonaro's government - which maintained its reductionist and pragmatic educational objectives - another critical aspect, according to Barbosa (2019, p. 96), lies in "the Ministry of Education's adoption of obscurantist, authoritarian, persecutory measures that dismantle national education policy through reduced federal funding." Consequently, multiple factors characterize NEM, including emerging student movements calling for its repeal, such as the Revoga NEM (Repeal NEM) movement, which continues into the current administration of President Luiz Inácio Lula da Silva.

With the election of new governors and a new president in 2023, significant expectations for change emerged regarding the situation Brazilians endured during

Bolsonaro's controversial administration. Key proposed changes include, for instance: public policies to mitigate the climate crisis, nature conservation focused on reducing Amazon deforestation caused by agribusiness, repeal of the New High School Reform (NEM), among other measures. However, while socioeconomic conditions have improved compared to the previous government, society still faces obstacles to implementing truly effective policies.

With Lula's return to the presidency, social movements, students, educators, and other education professionals anticipated the repeal of the New High School Reform (NEM). However, despite various legislative procedures and popular mobilization efforts, the repeal did not materialize. Instead, Law No. 14,945 of July 31, 2024¹⁰ was enacted, amending Law No. 9,394 of December 20, 1996 (the National Education Guidelines and Framework Law) to establish new directives for secondary education. Key modifications include adjustments to instructional hours, elective pathways, and available programs.

'Article 24. I - The minimum annual instructional hours shall be 800 (eight hundred) for elementary education and 1,000 (one thousand) for secondary education, distributed across at least 200 (two hundred) days of effective school work, excluding time allocated for final examinations when applicable;

§1. The minimum annual instructional hours specified in Item I of this Article shall be progressively increased to 1,400 (one thousand four hundred) hours, in accordance with the timelines and targets established in the National Education Plan.

In addition to adjustments in the workload, the legislation enacted by the Chamber of Deputies (2024) approved the implementation of formative pathways and technical education, as defined in the following provision: 'IV – integration of diverse fields of knowledge, grounded in academic disciplines and, where applicable, within the technical and vocational training curriculum.'

In this context, the theoretical framework of Historical-Critical Pedagogy allows us to understand that the approval of Law No. 14,945/2024 serves market interests by shaping individuals for alienated labor. This is because these curricular components dilute the socialization of scientific knowledge for students—particularly those in public schools—while also undermining their human development. Such development can only be achieved through cultural growth, which stems from the appropriation of the historical-social process of human beings—a process that the New High School Reform (NEM) has effectively obstructed (Martins, 2012).

As a result, the process of acquiring human particularities—that is, culturally formed complex behaviors—requires the appropriation of the legacy objectified through historical-social practice. The processes of internalization, in turn, mediate between the planes of interpersonal (interpsychic) relations and intrapersonal (intrapsychic) relations. This means they are constituted from the universe of human objectifications made available to each individual through the mediation of others—in other words, through educational processes (Martins, 2012, p. 212).

In addition to these approvals, the erosion of scientific knowledge dissemination persisted in 2024, this time under the current governor of the state, Tarcísio de Freitas. On October 8th, he vetoed Bill (PL) No. 80/2023, proposed by Congressman Guilherme Cortez (PSol). The bill aimed to implement climate education in São Paulo schools to address the climate emergency. The proposal

would have been incorporated as supplementary content to existing subjects in the curriculum and had already been approved by the São Paulo State Legislative Assembly (Alesp)¹¹.

Thus, the rulers of bourgeois democracy, such as Tarcísio de Freitas, reinforce capitalist logic, as discussing the climate emergency opens space for questioning the primary agents responsible for environmental degradation. In Brazil, the main driver of the society-nature exploitation is the capitalist mode of production - whose clearest manifestation is agribusiness. Consequently, projects aimed at fostering such critical reflections are not in the interest of public officials, since their intent is to maintain the current mode of production and its functioning order.

The hollowing out of public education operates in subtle ways, disproportionately affecting secondary school students - the sons and daughters of this country's working class. This process effectively alienates these individuals from human cultural development, failing to provide critical formation or advance them toward emancipatory education.

Therefore, only through Critical Environmental Education (EA Crítica) - which actively confronts the current environmental crisis - can the teaching-learning process enable students to fully comprehend climate crisis issues and develop both a worldview and social praxis capable of mitigating environmental impacts stemming from our mode of production. As Loureiro (2007, p. 68) asserts: "We must calmly acknowledge that we live in society, and thus, even when attempting to transcend the reality we're immersed in, we often end up reproducing what we seek to overcome." Consequently, we must consistently orient ourselves toward critical and emancipatory education that pursues both the transformation of reality and the constitution of subjects.

In this regard, Historical-Critical Pedagogy (Saviani, 2012) as a pedagogical theory provides the necessary framework for individuals to understand the need for collective organization to overcome the prevailing mode of production. This theoretical approach advocates for the socialization of systematic and intentional knowledge through formal education, aiming to develop subjects who comprehend the mediations and phenomena of objective reality beyond immediate appearances and common sense. Its ultimate purpose is to enable understanding of the contradictions within social praxis as a prerequisite for overcoming them (Galvão, Lavoura & Martins, 2019).

For this reason, this formative process is lengthy and spans all stages of basic education, aiming to develop human nature. The human being is fundamentally social - therefore, to become truly human, one must appropriate the knowledge and culture historically produced (Martins, 2012).

However, by denying working-class children access to knowledge through educational policies like the New High School reform (NEM), individuals face unequal conditions for humanization. Consequently, the educational process becomes fundamentally unequal in a class-based society, undermining both learning outcomes and human development (Martins, 2012). This denial of scientific, artistic, and philosophical knowledge perpetuates the existing social structure and maintains the exploitative relationship between society and nature (Mendes, 2020).

CONCLUSION

In this article, we have sought - through the lens of our society's recent historical context - to examine the issues surrounding the climate emergency. By adopting a critical approach, we aimed to identify pathways for understanding the foundational determinants of the civilizational crisis inherent in bourgeois democratic society.

Thus, bourgeois democracy continues to perpetuate and defend its ideology and interests - whether through fascist governments like Jair Bolsonaro's or through liberal-left administrations like Lula's. While these presidents propose diametrically opposed approaches to governing Brazil, both ultimately adhere to maintaining the neoliberal economic model as a national imperative. This logic permeates all levels and institutions of society, reinforcing capitalist modes of production. Moreover, bourgeois democracy structurally prevents the working class from appropriating knowledge, thereby obstructing both emancipatory education and a proper understanding of existing reality.

Therefore, a reorganization of the working class becomes imperative - enabling its self-recognition as a class and its understanding of the necessity for daily struggle against capital's domination over labor as mediated by the bourgeois state. In other words: to constitute itself as a working class for itself.

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13. ____ This article was translated into English by Adair Clemente Andreoli Filho, who holds a degree in English language from Wizard by Pearson Manduri and is currently pursuing a bachelor of teaching's degree in History at the State University of Northern Parana (UENP), Jacarezinho campus, Parana, Brazil.

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