

Between freedom and control: technology, education, and subjectivities in the dialogue between Loveluck and Morozov^I

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Abstract

This theoretical essay aims to discuss the political ambiguities that marked the emergence of the *internet* and the ways in which, in the present context, algorithmic dynamics structure forms of control, affect subjectivity, and impact education. Based on the genealogy proposed by Benjamin Loveluck (2018), it is shown that the *internet* was constituted through tensions between ideals of freedom and mechanisms of surveillance. By articulating this perspective with the analyses of Morozov (2018), it is observed that the consolidation of *big tech* companies has intensified processes of monitoring, data capture, and behavioral induction, with repercussions in the educational field and in individuals' mental health. The discussions developed demonstrate that platformization and algorithmic logic expand performance demands, extend working hours, and contribute to experiences of overload and social comparison. It is concluded that a critical understanding of these processes is fundamental to fostering more reflective and ethical uses of digital technologies, providing support for future research on the relationships between the internet, society, and education.

Keywords: Algorithms; genealogy of the internet; digital society; subjectivities.

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Entre liberdade e controle: tecnologia, educação e subjetividades no diálogo entre Loveluck e Morozov

Resumo

Este ensaio teórico tem como objetivo discutir as ambiguidades políticas que marcaram o surgimento da *internet* e os modos como, na atualidade, as dinâmicas algorítmicas estruturam formas de controle, afetam a subjetividade e incidem sobre a educação. Com base na genealogia proposta por Benjamin Loveluck (2018), evidencia-se que a *internet* foi constituída por tensões entre ideais de liberdade e mecanismos de vigilância. Articulando essa perspectiva às análises de Morozov (2018), observa-se que a consolidação das *big techs* intensificou processos de monitoramento, captura de dados e indução comportamental, repercutindo no campo educacional e na saúde mental dos sujeitos. As discussões desenvolvidas demonstram que a plataformização e a lógica algorítmica ampliam exigências de desempenho, prolongam jornadas e contribuem para experiências de sobrecarga e comparação social. Conclui-se que a compreensão crítica desses processos é fundamental para promover usos mais reflexivos e éticos das tecnologias digitais, oferecendo subsídios para pesquisas futuras sobre as relações entre internet, sociedade e educação.

Palavras-chave: Algoritmos; genealogia da internet; sociedade digital; subjetividades.



Entre libertad y control: tecnología, educación y subjetividades en el diálogo entre Loveluck y Morozov

Resumen

Este ensayo teórico tiene como objetivo discutir las ambigüedades políticas que marcaron el surgimiento de *internet* y los modos en que, en la actualidad, las dinámicas algorítmicas estructuran formas de control, afectan la subjetividad e inciden en la educación. Con base en la genealogía propuesta por Benjamin Loveluck (2018), se evidencia que *internet* se constituyó a partir de tensiones entre ideales de libertad y mecanismos de vigilancia. Al articular esta perspectiva con los análisis de Morozov (2018), se observa que la consolidación de las *big tech* ha intensificado los procesos de monitoreo, captura de datos e inducción conductual, con repercusiones en el campo educativo y en la salud mental de los sujetos. Las discusiones desarrolladas demuestran que la plataformización y la lógica algorítmica amplían las exigencias de desempeño, prolongan las jornadas y contribuyen a experiencias de sobrecarga y comparación social. Se concluye que la comprensión crítica de estos procesos es fundamental para promover usos más reflexivos y éticos de las tecnologías digitales, ofreciendo insumos para futuras investigaciones sobre las relaciones entre internet, sociedad y educación.

Palabras clave: Algoritmos; genealogía de internet; sociedad digital; subjetividades.



Introduction

The internet has emerged as one of the most important phenomena in recent history, altering not only how we communicate, but also the structures of power, sociability, and global governance. Since its emergence, the network has presented an essential paradox, given that it is frequently celebrated as a space of freedom and information democratization, yet also functions as a control mechanism.

The analysis of Benjamin Loveluck (2018), in “Networks, Freedoms and Control: A Political Genealogy of the Internet”, focuses on this ambiguity. The author suggests that the internet should not be viewed as a neutral technical artifact, but as the result of a historical and political process involving the combination of diverse values, institutions, and interests. Loveluck (2018) examines the historical trajectory that led to the creation of the network, highlighting the elements that shaped its structure and culture—namely, the military-industrial-academic complex, scientific cooperation, and the impact of the countercultural utopias of the 1960s. The author demonstrates that the ideal of technical and communicational freedom emerged alongside sophisticated forms of control, creating a constitutive dialectic that spans the entire history of the internet. In this sense, this theoretical essay aims to discuss the political ambiguities that marked the emergence of the internet and the ways in which, today, algorithmic dynamics structure forms of control, affect subjectivity, and impact education.

In addition to this genealogical perspective presented by Loveluck (2018), the text also mobilizes the contributions of Morozov (2018) to problematize how the contemporary internet, far from constituting a neutral space for the circulation of information, operates as an instrument for monitoring, predicting, and inducing behaviors. While digital culture was originally associated with the promise of emancipation and social participation, Morozov (2018) argues that such ideals were progressively captured by technological corporations



that transform social interactions, personal data, and subjective expressions into market value. In reorganizing social relations, these market processes, combined with algorithmic logic, affect emotional experiences within school and university contexts.

Methodologically, this study is a theoretical essay, a textual genre that “is characterized by its reflective and interpretive nature” (Meneghetti, 2011, p. 322). Here, the authors do not limit themselves to conventional reason, nor do they submit to it as a gesture of conformity; on the contrary, they operate within their own intellectual movement, capable of constructing their own historicity by thinking about the object within the spatial and temporal conditions that traverse it. In this dynamic, the essay emerges as an exercise that shifts thought away from strict empiricist constraints, broadening consciousness beyond immediate readings and enabling interpretations that are not restricted to the repetition of data, but rather interrogate and critically recreate it.

Although Loveluck (2018) and Morozov (2018) constitute the central axis of this study, the discussions are expanded by authors who analyze the social, subjective, and educational effects of contemporary technologies (Lévy, 1999, 2010; Sadin, 2023; Castells, 1999; Kenski, 2012). Among these dialogues, contributions regarding mental health and social networks, the platformization of teaching work, and the impacts of digital technologies on professional education and practice are included, making it possible to problematize not only the history and politics of the internet, but also its daily expressions in educational, emotional, and institutional relationships.

Based on this integrated approach, the objective is to discuss how practices of control, surveillance, and behavioral induction, historically analyzed by Loveluck (2018), manifest today in the constitution of digital environments that affect both the social experience of individuals, as well as their mental health and learning processes, as problematized by Morozov (2018). Therefore, the essay seeks to highlight that understanding the internet merely as a technical instrument means ignoring the power dynamics that structure its architecture,



as well as the subjective and pedagogical effects that emerge from its daily use.

In addition to this introduction, this theoretical essay is organized into two sections and final considerations. The first section analyzes the historical and political constitution of the network, highlighting the tensions between freedom and control. The second examines how algorithmic logic directs information flows, induces behaviors, and produces effects on subjectivity, mental health, and teaching work, particularly in the educational field. In the final considerations, the main arguments developed throughout the text are revisited, emphasizing the relevance of a critical understanding of digital technologies in education and their implications for mental health. Through this structure, the essay critically articulates technology, education, and subjectivity.

The political ambiguities of the emergence of the internet: freedom and control in Benjamin Loveluck's genealogy

During the Cold War, computer science and communication technologies assumed the geopolitical role of ensuring information resilience and security in conflict situations. Loveluck (2018) starts from the observation that the internet emerged in a context of intense interaction between scientific research and military strategy. ARPANET, funded by the Advanced Research Projects Agency (ARPA) of the United States Department of Defense, was created in 1969, symbolizing this origin. The decentralized architecture of the network, capable of operating even under attacks on command centers, constituted both a technical solution and a model of distributed power.

However, despite decentralization, control remained present. The industrial-military-academic network was created as a tool for monitoring and tracking both information flows and technical behaviors. Loveluck (2018) highlights that the ideal of hierarchy-free communication was already embedded in a regime of cybernetic rationality aimed at simplifying social complexity into measureable and controllable information flows. Cybernetics,



formulated by Norbert Wiener in the 1940s, provided theoretical foundations for this perspective, integrating information, control, and feedback as essential components of social structure.

Thus, the very logic of the internet emerges under the aegis of “informational governance” (Loveluck, 2018), in which the freedom of data circulation is simultaneously the condition and the limit of control. The author emphasizes that communication protocols, network standards, programming languages, and technical devices are not neutral. They carry values and political choices that define the interaction among individuals. Thus, since its inception, the internet has presented a tension between autonomy and discipline, innovation and surveillance, freedom and security.

Although Loveluck (2018) approaches the emergence of the internet from a political-genealogical perspective, his considerations connect directly with the technical fundamentals presented by Tanenbaum and Wetherall (2011). According to these authors, the internet is a set of networks organized around packet switching principles and standardized communication protocols, such as TCP/IP, which allow interoperability among different systems. This decentralized infrastructure, originating from academic and military experiments such as the ARPANET project, constitutes the material basis of what Loveluck (2018) describes as a space of freedom and cooperation. Thus, the political ideal of an open and collaborative network is supported by a technical structure that is likewise decentralized, designed to resist centralization and censorship.

Tanenbaum and Wetherall (2011) indicate that the decentralization of the internet, often linked to freedom, is also a consequence of technical choices guided by strategic goals and efficiency. Loveluck (2018) highlights that the alleged neutrality of digital infrastructure conceals underlying political values and conflicts. This tension is evident in the very design of the protocols, which, while encouraging free communication, impose rules and standards of control over data flow. The comparison between both authors, Loveluck (2018) and Morozov (2018), demonstrates that the internet is a hybrid artifact—



simultaneously technical and political—resulting both from engineering decisions and from perspectives on cooperation, security, and power.

Tanenbaum and Wetherall (2011) also contribute to clarifying an essential point of Loveluck's (2018) argument: the interdependence between infrastructure and governance. As the internet was developed based on technical principles of redundancy, modularity, and openness, it also transformed into a battleground between freedom and control. Engineers strived to ensure robustness and efficiency, while social and political actors attributed values of autonomy, transparency, and control to this foundation. In this context, Loveluck's (2018) political genealogy identifies in the network engineering presented by Tanenbaum and Wetherall (2011) its technical-historical equivalent, demonstrating how the materiality of the internet contributes to shaping its ethical and political dimensions.

During the 1970s and 1980s, with the expansion of ARPANET to universities and research centers, new possibilities were established for the network, such as scientific collaboration and the dissemination of knowledge. The development approach based on Requests for Comments (RFCs)—public documents that set standards for network protocols—reflected a collaborative and non-hierarchical spirit. According to Loveluck (2018), this culture of cooperation conferred upon the internet a participatory and meritocratic character, grounded in the exchange of information and the concept of distributed innovation. Such protocols engendered what Lévy (2010) would later call technologies of intelligence.

However, this socio-technical model was not free from ambivalence. While on one hand it encouraged creative freedom and the diffusion of knowledge, on the other it perpetuated subtle hierarchies of technical power and symbolic capital. The openness of the network depended on those who possessed the specialized knowledge required to operate it—an informal yet concentrated power within scientific and technological communities. Loveluck (2018)



highlights this aspect by asserting that “technical autonomy” often conceals ties of institutional dependence and funding from governments or corporations.

Thus, the logic of control was not eliminated, but merely reconfigured by the academic culture that shaped the internet. Instead of providing total freedom, open codes and protocols established new norms—a technical regulation of digital space whose authority stems from the very structure of the network. This conclusion aligns Loveluck (2018) with authors such as Lawrence Lessig (2006), who asserts that “code is law.” In other words, the technical configuration of the network largely defines the possibilities for action and freedom in cyberspace.

Pierre Lévy’s (1999) vision regarding the impact of cyberculture on knowledge complements and enriches Loveluck’s (2018) analysis of the internet’s shift into a space of collaboration and collective production. In the book *Cyberculture*, Lévy (1999) asserts that the digital environment gives rise to “a new relationship with knowledge,” marked by the decentralization of information, collective intelligence, and the breakdown of the traditional, hierarchical model of knowledge transmission. This perspective directly connects with the RFC culture cited by Loveluck (2018), as both authors identify in the network’s architecture a configuration that promotes sharing, collaboration, and decentralized innovation. In this way, knowledge ceases to be the privilege of centralized institutions and begins to emerge from horizontal interactions among connected individuals.

However, Lévy (1999) admits that this new cognitive ecology is not formed in a neutral manner, as it depends on technological mediations and socio-technical logics that direct the production of knowledge. In this respect, there is alignment with the critique by Loveluck (2018), who argues that the technical devices of the internet embody values and mechanisms of control. While Lévy (1999) sees cyberspace as an expansion of opportunities for collaborative learning and collective intelligence, Loveluck (2018) believes that this same infrastructure can be harnessed for purposes of control and informational



power. Both perspectives demonstrate that the freedom to produce knowledge in the digital environment coexists with dynamics of control and surveillance, making the network a contested political and epistemological space.

Ultimately, the “new relationship with knowledge” mentioned by Lévy (1999) can be viewed as the epistemological counterpart to the dialectic between freedom and control emphasized by Loveluck (2018). The former highlights the creation of communities of meaning and learning that transcend geographic and institutional boundaries, while the latter points to the political and historical conditions that constrain this freedom. In this context, cyberculture reflects both the emancipatory power of networked knowledge and its susceptibility to appropriation by monitoring systems, algorithms, and corporate interests. Thus, the intersection between Lévy (1999) and Loveluck (2018) provides a critical analysis of the internet as a phenomenon that is simultaneously cognitive and political, where knowledge and power are intrinsically linked.

An important point noted by Loveluck (2018) when analyzing the genealogy of the internet concerns the symbolic and cultural appropriation of technology by countercultural and libertarian movements of the 1960s and 1970s. Inspired by the United States counterculture, principles of self-management, and community experiments, various groups began to view digital technologies as a means of individual and collective emancipation. In this scenario what the author terms the “digital utopia” emerged, the conviction that the network would possess the power to eliminate intermediaries, dissolve borders, and establish a free and decentralized society.

The so-called “Californian Ideology” was the expression of this idealistic perspective, combining aspects of economic libertarianism, the hippie counterculture, and a belief in technological entrepreneurship (Barbrook; Cameron, 1996). According to Loveluck (2018), this ideology played an ambiguous role: while it proclaimed the liberation of the individual from the State and institutions, it reinforced the power of private corporations and digital markets.



In this way, the promised freedom was converted into a new space of control, now imposed by informational capital and systems of algorithmic monitoring.

Loveluck (2018) argues that the genealogy of the internet demonstrates a shift in the axis of power, moving from state-military control to corporate and market-based control. The logic of surveillance does not disappear; it merely transforms into more subtle forms, such as mass data harvesting and the modulation of user behavior—aspects analyzed by Deleuze (1992) in his discussion on the transition from the Foucaultian disciplinary society (Foucault, 2014) to a society of control, in which power becomes unlocatable and diluted within the network (Costa, 2004). In this context, the libertarian utopia was gradually subsumed by informational capitalism, a phenomenon discussed by Shoshana Zuboff (2019) in her examination of “surveillance capitalism.” Thus, Loveluck (2018) points to a structural contradiction, as the very infrastructure that enables free and horizontal communication also underpins the most sophisticated mechanisms of social and economic control. He suggests understanding the internet as the result of a historical dialectic between freedom and control, rooted in military, academic, and countercultural matrices. This connection is neither accidental nor a late addition to technical advancement; it is integral to the creation process of the network itself. The decentralized architecture, regarded as an icon of digital freedom, also enables new forms of governmentality in which control is not applied externally, but emerges from the technical structure itself and from user behaviors. This gives rise to new devices for controlling subjectivity that are more sophisticated and deeply intertwined with technologies under neoliberalism (Foucault, 2008).

Loveluck (2018) maintains that the political genealogy of the internet reveals how power spreads through networks, replacing vertical hierarchies with horizontal forms of regulation. This logic aligns with what Foucault (1979) terms the microphysics of power: power is not merely repressive, but also productive, permeating technical apparatuses, discourses, and everyday practices. Loveluck (2018) applies this approach to the digital context, demonstrating that freedom



of expression and technical autonomy act, paradoxically, as conditions for the implementation of diffuse control.

As a result, the internet should not be considered merely a means of domination or emancipation, but a space of constant conflict. Network politics is not restricted to governmental instances alone, but extends to design decisions, algorithms, protocols, and user behaviors. This perspective shifts the focus of the discussion on digital regulation, where the challenge goes beyond simply “controlling” the internet to understanding how it has integrated mechanisms of power from its very inception.

The Mind Under Algorithms: Technology, Education, and Control in Light of Evgeny Morozov’s Ideas

The internet and digital platforms historically emerged as promises of emancipation, freedom of expression, and the democratization of access to information. In this view, Morozov (2018) describes how, in the 1960s and 1970s, video activists believed that the spread of portable cameras and cable television would allow ordinary people to produce and broadcast content, strengthening democracy and promoting social justice. This utopian conception saw technology as a tool capable of radically transforming social relations. However, the author demonstrates that the promise of digital emancipation turned into a technological feudalism, in which corporations such as Google, Meta, Amazon, and Apple centralize power, organize information flows, and convert individual data into capital, shaping behaviors and preferences without users realizing it. Thus, what was advertised as a space of freedom reveals itself to be an environment of control and surveillance structured by the logic of contemporary capitalism.

The idea of net neutrality is, therefore, mistaken. Morozov (2018) argues that technology does not exist outside of social, political, and economic contexts, but is constructed and organized by private and collective interests that dictate what is seen, read, and consumed. This critique echoes the analyses of Duci



and Gomes (2024), who state that newer digital platforms, while presenting themselves as neutral and innovative spaces, are actually apparatuses of power and the market, shaping teaching work and the very organization of education according to corporate logics. Just as Morozov (2018) identifies the dominance of big techs over daily life, Duci and Gomes (2024) demonstrate that the educational field is subjected to platformization, a process that reduces teacher autonomy and turns educational action into a product of surveillance and performance. In teaching practice, platformization reinforces job precariousness, in which the pursuit of “innovation” and permanent updating can drain the pedagogical meaning of the activity and subordinate the teacher to metrics of engagement, productivity, and digital visibility. This scenario can imply subjective consequences, since the intensification of work and the pressure for constant adaptation can generate emotional wear, a sense of inadequacy, a reduction in the ability to define one’s own work processes, and a weakening of teachers’ mental health, as they come to carry out their activity under regimes of control and continuous evaluation.

Reading Veloso and Lima (2024) expands this reflection on teaching work by demonstrating that telework during the pandemic was presented as an opportunity for autonomy and flexibility, but in practice generated overload, isolation, and the intensification of working hours, highlighting what they term the “silicon cage”—a metaphor that alludes to the subjective and labor imprisonment promoted by technologies. There is, here, a strong dialogue with the “digital feudalism” described by Morozov (2018), as these authors show that beneath the discourse of technological freedom lies a system of control and exploitation sustained by capitalist logic. In the case of teaching, platforms have imposed a new type of surveillance and measurement of work, converting pedagogical activity into data, metrics, and productivity reports. Duci and Gomes (2024), in line with this analysis, address the concept of ubiquitous teaching, in which the continuous presence of digital technologies, especially mobile ones, extends teaching work beyond institutional boundaries, distributing tasks and



responsibilities across any time and place. This permanent availability, sustained by the discourse of innovation and flexibility, causes professional demands to permeate daily personal life, lengthening working hours and contributing to overload and emotional strain.

Andrade and Alves (2024) corroborate this perspective by discussing permanent connectivity and making explicit that the pressure to be available, engaged, and productive on digital platforms weakens the capacity to disconnect, leaving the individual vulnerable to stress and mental overload. This analysis dialogues with Morozov (2018) in the sense that, by subjecting social life to algorithmic mechanisms of control and prediction, platforms begin to shape subjects' behaviors and decisions. From this perspective, it is possible to understand that such mechanisms also influence emotional, cognitive, and professional dimensions, as they organize expectations regarding performance, engagement, and productivity.

In the educational field, this phenomenon manifests itself today in the aforementioned process of platformization of teaching work—a process in which digital tools reorganize pedagogical practice and compel teachers toward constant updating, pressured by demands for higher performance on educational platforms, which contributes to the depletion of the pedagogical meaning of teaching while intensifying emotional wear and psychological suffering among this group. Furthermore, as noted by Duci and Gomes (2024), the introduction of algorithm-driven digital technologies into the educational context reorganizes forms of interaction and connection, consolidating new relational structures. In this process, the expansion of these platforms, under the discourse of innovation and modernization, alters the dynamics of teaching work and produces significant changes in the pedagogical relationships between teachers and students.

The study by Gilmar et al. (2025) offers evidence that deepens discussions regarding the impacts of digital technologies on subjectivity, demonstrating that excessive social media use among university students is associated with



anxiety, depression, insomnia, and body dissatisfaction, thereby reinforcing patterns of social comparison and expectation. These findings dialogue with Santos, Silva, and Lima (2022), who point out that continuous exposure to idealized and competitive content intensifies perfectionism and feelings of inadequacy, directly affecting emotional well-being. When situated within the educational context, such effects transcend the individual sphere and impact the learning process, as states of psychological suffering tend to compromise concentration, motivation, academic retention, and the capacity for critical participation in the university environment. These phenomena, according to Morozov (2018), indicate that the algorithmic logic of platforms not only directs consumer behavior, but also interferes with individuals' intellectual development by shaping desires and patterns of belonging, consequently influencing how students learn, study, and relate to knowledge.

Critical analysis of digital interactions demonstrates that, while technology offers opportunities for communication, learning, and creativity, its excessive and/or unconscious use entails significant risks to both mental health and the balance between work and personal life. The difference between utilizing technology in a healthy manner and becoming a victim of its engagement logic lies in the exercise of critical awareness, which involves understanding how algorithms are designed to prioritize certain content, create artificial needs, and stimulate the constant consumption of products and experiences. This critical reading is essential for individuals to filter content, establish boundaries, and preserve their psychological well-being, without relinquishing the benefits that technology provides.

From a psychological perspective, it is observed that individuals who fail to develop this critical awareness tend to internalize unattainable standards of happiness, productivity, and success, experiencing feelings of guilt, frustration, and inadequacy. Conversely, those who understand the dynamics of algorithmic manipulation recognize its effects and set limits on their use of digital networks and platforms, demonstrating greater emotional resilience and capacity for



self-care. In this sense, it becomes essential to use technology in a reflective manner, acknowledging that many digital platforms are structured to capture attention and induce practices aligned with the capitalist logic of consumption and performance. By developing self-knowledge and taking an active stance toward these mechanisms, individuals avoid becoming hostages to algorithmic dynamics and begin to employ technology as a tool to support well-being and their own purposes, rather than as an instrument of control and emotional exhaustion.

It is noteworthy how the digital feudalism described by Morozov (2018) and the silicon cage described by Veloso and Lima (2024) converge in pointing out that technologies, when driven by market logic, produce imprisonment rather than emancipation. Both contexts—that of social networks and that of teaching work—reveal subjects captured by invisible systems of control, in which the promise of freedom turns into emotional, cognitive, and productive dependence. The articulation among the studies by Santos, Silva, and Lima (2022), Andrade and Alves (2021), Gilmar et al. (2025), and Duci and Gomes (2024) demonstrates that mental health and the field of contemporary education are deeply intertwined with digital dynamics, since anxiety, depression, social comparison, work intensification, and toxic positivity can, in many cases, be reflections of a society structured between algorithms and capital.

This overview demonstrates that the critical analysis of technology must go beyond the realm of consumption and efficiency, incorporating perspectives on psychological well-being and working conditions, especially in the field of education. Morozov (2018) warns us that technology is not neutral; therefore, the impacts of this controlled and manipulated environment manifest directly in people's daily lives, reinforcing dysfunctional patterns of thought and behavior. For us to use technology in a healthy manner, it is necessary to recognize its operational logic, develop critical filtering tools, set usage limits, and reflect upon the content and platforms with which we interact.



Ultimately, technology and social networks must be understood as ambivalent instruments: they can promote communication, learning, and creativity, but they can also contribute to psychological suffering and professional alienation when mechanisms of manipulation and surveillance go unrecognized. It becomes evident that the conscious and critical use of technology is essential for preserving mental health, reducing the impact of patterns of comparison and perfectionism, and minimizing the pressure for constant productivity. The discussions presented reinforce that the debate surrounding technology, society, and education must centrally incorporate psychological dimensions, considering that mental well-being and healthy working conditions are fundamental to the practice of teaching. In this context, teachers—as mediators of knowledge—play an important role in forming students who are more conscious and capable of utilizing technology reflectively, developing critical competencies that make it possible to minimize the negative effects of algorithmic dynamics and the digital space.

Final considerations

The trajectory presented by Benjamin Loveluck (2018) in “Networks, Freedoms, and Control” provides a deep and critical analysis of the roots of the internet, enabling an understanding of its main political ambiguities. The author demonstrates that the internet is the result of a historical combination of technical rationality, a culture of collaboration, and libertarian utopia—a synthesis characterized by an unrelenting tension between emancipation and domination. This genealogical perspective shows that the concept of digital freedom has never existed in isolation, as it has always been intertwined with mechanisms of control, whether in the military, academic, or corporate spheres. By highlighting this duality, Loveluck (2018) enriches the current debate on internet governance, privacy, and digital democracy, emphasizing that the technical structure of the network is likewise a political structure. One of the main points presented by the author is that freedom on the internet is not a



guaranteed condition, but a contested space. Thus, critically understanding this genealogy is essential for developing public policies, regulations, and civic practices that can address the problems of information control and preserve the liberating potential of digital technologies.

In accordance with the reflections of Loveluck (2018), Morozov (2018) makes explicit that the contemporary internet operates as a system of algorithmic control that, rather than promoting freedom, reinforces practices of surveillance, behavioral induction, and the reproduction of capitalist interests. These dynamics, which unfold in phenomena such as the present-day platformization of education, affect both users' mental health—through social comparison, pressure for productivity, and emotional overload—and teaching work, which is marked by the intensive use of platforms and the continuous presence of digital technologies. Furthermore, it became clear that this ambivalence of the internet demands a critical stance toward technologies, recognizing that the very instrument that fosters communication and learning can also produce mental illness and work intensification.

Finally, we hope that the discussions presented in this essay provide support for the development of further studies on technology, subjectivity, and education, reinforcing the need to conceive more conscious and ethical uses of digital platforms in an algorithm-driven society. Therefore, further theoretical discussions are suggested, but above all empirical field research that makes it possible to glimpse the dualities that permeate the use of digital technologies in various contexts, especially in education.

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Note

- 1 Statement on the Use of Artificial Intelligence – Gemini, an artificial intelligence tool developed by Google, was used to assist in translating this article into English. The translated version was fully reviewed and adjusted by the editorial team to ensure fidelity to the original text, terminological accuracy, and compliance with the journal's editorial standards. The tool was not used to generate the article's arguments, analyses, or academic content.





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