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AI, New Extractivism and Eco-media Literacy

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Introduction

The mechanism behind explosive digital growth is closely connected to the deep nature of computing. The boundless desire for digital technologies that shape cognitive and cultural habits frames a hegemony of values and expectations derived from the digital. In the metanarrative of datafication, netizens are merely products of the spectacle of Big Data and its automated correlations. Through their actions, users cannot grasp the infrastructural algorithmic texture of the software and code that organises and manages the platform environment. In other words, netizens cannot influence the social realm of the digital condition, since its algorithmic nature, as emphasised by F. Stalder (2018), is beyond the reach of the networked public. As critical librarianship implies questions about libraries' or librarians' professional attitudes that consciously and unconsciously support systems of oppression, we could face it with roots causing the contemporary crises, whose (digital) capitalist attitude and pro-growth discourse is looming over ecological collapse. As C. Fuchs (2024, 190) states, digital capitalism represents a dimension of capitalist society where the processes of capital accumulation, decision-making power, and reputation are mediated and organised through digital technologies, and economic, political, and cultural processes result in digital goods and digital structures. It is an antagonistic dimension of society that represents how economic class antagonism and social relations of domination are shaped by and, in turn, shape digitisation. As C. Fuchs (2024, 190) observes, paraphrasing N. Fraser, "digital capitalism is more than just a digital economy."

The public access to information and communication technologies, media and information literacy, digital inclusion, green transition, etc., are just some of the key areas in which libraries, through their services, contribute to the implementation of the UN's 2030 Agenda for Sustainable Development Goals. On the other hand, among librarians and information professionals, discussions on the "limits to growth" that encompass extremely complex debates on the ecologically sustainable form of capitalism, changes in investment strategies for production, and the need for a shift away from the dominant idea of human progress "based on the 18th-century strategy of unlimited resource use, continuous growth, and unbridled production" (Civallero and Plaza Moreno 2016) are extremely rare. We could say that librarians should not take the Sustainable Development Goals themselves as unquestionable indicators of progress toward a sustainable future, but rather, as D. Soudias (2021) emphasizes, be ready to minimize the reproduction of neoliberal reasoning and transgress institutional limitations related to discourses, policies, resources, and technologies. In this regard, this paper intends to offer a framework for critical reflection in terms of eco-media literacy since technological innovations coupled with various forms of market-based solutions are not leading to greener production, greener jobs, greener consumption and greener growth, nor are they reducing inequalities and environmental impacts, but rather, they are ossifying the status-quo of dominant hegemonic practices of digital colonialism.

Beyond Sustainability

Sustainability, understood as ecological viability, assumes that economic and social activities account for balancing the capacities of natural systems and the interconnected deep crises of contemporary societies. If we consider that the end of democracy is contemplated in a range of social theories (Runciman 2018; Levitsky and Ziblatt 2018), as well as alarming forecasts about the disruption of planetary boundaries for sustainability (for example, Rockström et al. 2009; Steffen et al. 2015), the repoliticisation of the concept of sustainability emerges as a foundational methodological movement. The very concept of "sustainability" arises from the need to articulate the relationship between economic growth and development and ecological degradation. As such, it has been presented as a global priority for decades in order to achieve environmental sustainability and socio-economic justice.

Almost a decade ago, the UN General Assembly adopted the 2030 Agenda for Sustainable Development (UN 2015) with seventeen goals aimed at fighting inequality and injustice, ending extreme poverty, and addressing the dangers of climate change. However, the defining logic of capitalism, exponential growth in the "accumulate or die" dynamic, has not been abandoned. In other words, the hegemony of growth remains unquestioned.

Quite the contrary, as Buch-Hansen, Koch, and Nesterova (2024, 2) explain, the threat of ecological collapse has paved the way for so-called "green growth," or the continuation of economic growth combined with the protection of "environmental services," accompanied by optimism for technological innovation toward greener production, jobs, and consumption. The green, eco-friendly marketing model is based on the concept of sustainable development ("green consumerism", Smith 1998; "greenwashing," "green spin", Alves 2009; Roszkowska-Menkes 2021; "Green New Deal", Herman 2015; "green jobs," "green economy", Cottle 2015), without addressing the primary causes of the crisis. As Civallero and Plaza Moreno (2016, 17) note: "The green wave has not succeeded in reducing the human impact on the planet, but has instead worsened the situation by creating new business opportunities". In regard to the prevailing inability to imagine a different type of society, eco-social collapse stems from the unsustainable lifestyle of the privileged minority of humanity: “over half the world’s people are living in squalor, and about 20% of the world’s population enjoys a Westernized middle-class lifestyle or better. The problem, then, is obvious: when material wealth is fixed, there needs to be an equitable distribution of resources to ensure a decent life for everyone” [1] (Kwet 2024, 44).

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[1] “Let’s put it this way: imagine the world’s wealth is a ten-slice pizza pie produced in a town of 100 people. A few rich people own the dough, oven, restaurant, guns, and houses, and they force the majority to cook the pie. One person (representing the upper class) takes five of the slices and the next nine people (representing the middle class) take another four. The last slice is divided among the remaining 90 people (representing the global poor). This is how wealth is divided across the world. Socialists have long argued that this arrangement is totally unjust, and have been trying for over a century to make a fair and equitable alternative. Defenders of capitalism argue that it is ethical. Instead of sharing the pizza equally, we can keep growing the total size of the pie, and one day everyone will have enough.” (Kwet 2024, 44-45).

The role and position of libraries in the development of democracy, civil society, culture, and education, as well as their potential to support the social foundations of human well-being, is a recognisable mission embedded in professional values. IFLA, for example, clearly supports the integration of the 2030 Sustainable Development Goals, from promoting literacy, access to information, and digital inclusion, to activities, projects, and programs that support decision-makers in recognising libraries as partners in advocating ecological responsibility, inspiring change in local communities.

In recent decades, libraries have shown exceptional dedication to contributing to sustainable development practices, particularly through the creation of so-called green libraries. According to the IFLA Environment, Sustainability, and Libraries Section (ENSULIB), a green and sustainable library is one that respects ecological, economic, and social aspects of sustainability. Green and sustainable libraries can be of any size but should have: environmentally friendly buildings and equipment; active reduction of emissions and the carbon footprint of buildings and equipment; the principle of a green office: business routines and processes that are ecologically sustainable; sustainable economy: careful attention to consumption, promoting and developing a circular economy and sharing economy, making them accessible to the entire community; sustainable library services: relevant and up-to-date information easily accessible to users, offering shared spaces, devices, and education on ecological topics, economical work processes, and a positive carbon footprint; social sustainability: implies good education, literacy, social engagement, cultural diversity, inclusion, and general involvement – libraries actively work to reduce inequality; environmental management: environmental goals that align with the SMART principles (Specific, Measurable, Achievable, Realistic, and Timebound); the library works to reduce its own negative impact on the environment, and its environmental protection policy, implementation, and results are presented to the broader public; commitment to general ecological goals and programs: commitment guided by the UN 2030 Sustainable Development Goals, the Paris Agreement on climate change, and related ecological certifications and programs (IFLA 2022a; IFLA 2022b).

Still, libraries are almost totally immersed in the adoption of the consumerist hegemonic socio-economic model, rarely revising its consumption patterns, particularly what markets and ideas they are supporting with their purchases, services, and activities.

As E. Civallero and S. Plaza Moreno warn, libraries could adopt an "eco-socialist ethic" (Löwy 2002, 2004, cited in Civallero and Plaza Moreno 2016), or positions that exclude overly optimistic visions regarding the severity of the ecological crisis. In articulating anti-capitalist resistance to appropriation, competition, accumulation, consumerism, mercantilism, extractivism, and advocating for commons, public, and collective societal interests, and ultimately degrowth, Civallero and Plaza Moreno (2016) bring to the forefront some of the fundamental principles of critical librarianship. Nevertheless, emancipatory ideals of equality, democracy, and community fundamentally permeate library theory and practice, while on the other hand, critical approaches to librarianship and information science, which question positions of power and the social practices that perpetuate them, often remain on the margins of the profession.

If libraries, as sites of cultural production, as J. Budd (2003, 22) argues, help in the construction of desires and expectations of communities, and actively respond to their expressed needs, then social responsibility could also be articulated in the open recognition of public failure in the context of the commodification of information and knowledge. As Lawson, Sanders, and Smith (2015, 15) state, the commodification of the information profession is conditioned by the authority of neoliberal hegemony.

> The value of information and knowledge as a public good for intellectual and social progress is now secondary to its primary purpose of economic efficiency". Furthermore, the fetishisation of productivity, with the constant threat of austerity measures as a form of punishment for the inefficiency (of libraries) in capitalist societies, also serves as a tool to deter the workforce from understanding the social complexity of the products of their labour (Nicholson and Seale 2018).

Therefore, it can be argued that the rhetoric of neutrality, when it comes to green libraries, gives way to a critical perspective regarding the proclaimed values of sustainability. However, it is almost impossible to find examples within the profession that unequivocally problematize the "green" agenda as a paradigm for new capitalist growth. If core librarianship principles embody "real utopia," given that they are based on fundamentally anti-capitalist beliefs (free and universal

access and distribution), alternative proposals for social change as well as in long-term political strategies for social justice and human emancipation (Wright 2011) should be aligned with bold visions of attitude shifts.

One such proposal can be found in the recent research by M. Antonelli, R. Tanner, R. S. Aldrich, and A. K. Ho (2022) titled "Libraries in the Doughnut Economy," where, in addition to note regarding the urgency of a shift in the global economy due to climate challenges, they emphasise the principles of the doughnut economy as guidelines for libraries to also question the culture of growth dependence.

The authors highlight the compatibility of the seven principles derived from the doughnut economy model, as presented by K. Raworth (2017), with fundamental library values, proposing seven ways in which libraries can contribute to society in the transition to a 21st-century economy (Antonelli et al. 2022, 130).

According to Antonelli et al. (2022, 137)

> This will require library leaders to talk differently about what a library is and how we do business. It will require us to participate in workplaces that are centred on well-being. It will require youth service librarians to embed eco-literacy, empathy, and civic-mindedness into services and programs at a deeper level. It will require collection development managers to connect with readers and researchers in new ways and to define collections more broadly, beyond traditional library materials. It will require adult programming librarians to have an ethos that puts social cohesion, engagement, and empowerment at the centre of their thinking. It will require the operation and construction of library facilities that do not just use up natural resources but put back positive assets into the ecosystem"

Undoubtedly, such a mindset shift could activate support networks and services to facilitate the production of knowledge in local communities and strengthen them, encouraging user communities to raise awareness about social inequalities and environmental destruction, the importance of wealth redistribution in all its forms, along with advocating critical openness, digital commons, open educational resources, etc. Without epistemological and ontological alternatives to the digital capitalism narrative, the increasing calls from professional conferences attributing

"green libraries" to project slogans about sustainable development goals will not bring about change in ways of thinking. Consequently, we rarely hear in library discourse voices of genuine emancipatory alternatives nor direct articulations about being trapped and dependent on the "consumerist, extractivist, and exploitative mentality that currently governs our economy" (Antonelli et al. 2022, 137).

In this light, we should articulate missing questions about structures, functions, habits, norms and practices of “digital” along with questions on how digital technologies shape production of subjectivity and destruction of the sociality by confronting actors responsible for global inequality and planetary destruction, as well as rejecting the political consensus that technological innovations requiring growth are the best way to combat climate change. Whether librarians are ready to articulate their position in political demands beyond capitalism or conform with informational/computational structures as puppets to the "hegemony of growth" (Schmelzer 2016) may depend on how libraries respond to understanding of the techno-social condition.

AI hype-revisited

Addressing the capitalist, imperialist, and environmental dimensions of digital power (which together deepen global inequalities and push the planet's ecosystem toward an impending collapse), therefore, requires critical analysis of the global impacts of the high-tech economy (more precisely, critical theory of digital capitalism, digital regrowth, etc.).

In words of M. Kwet (2024, 9), we are missing a dimension of digital degrowth theory (and practice): "When it comes to technology, most degrowth research and activism focus on green technologies like solar panels, wind turbines, but not on the relationship between companies like Google, Microsoft, and Facebook with degrowth". Articulating the digital degrowth through the lens of depoliticising technology leads to new insights into the nature of the climate crisis by addressing the challenges of digitisation, algorithmisation, and platformisation across all segments of our lives, fostering an understanding of digital capitalism in broader social transformations. The growing geopolitical autonomy of machine intelligence, the algorithmic factory, establishes bio-informational capitalism by digital transformation of human interactions (Hibert 2022).

The ideology of Silicon Valley, based on technological disruptiveness and innovation, generates an algorithmically generated model of the world based on automated calculations of data-mediated techno-sociability. The algorithmic operationalisation of the hegemony of networked colonisation, so-called “platform capitalism” (Srnicek 2016), as a regime of “datafication” (van Dijck 2014) and “data colonialism” (Couldry & Mejias 2019), being delivered through smart technologies, ultimately culminates in the ubiquitous AI hype. The new economic imaginary of datafication-driven growth, as explained by G. Lovink (2022), is driven by old premises of hyper-growth and involves the process of entrusting and transferring management power over meta-data to corporate platforms, characterized by the vast interconnection of governments, businesses, media, and the academic community in an ideological consensus about the power of the global algorithmic economy.

Paradoxically, nothing better represents the current obsession with growth than the "obsession" with Big Data: “Big Data is a More Data ideology, driven by old school hypergrowth premises. " (Lovink 2022). Datafication, according to Schafer and van Es (2017), is at the "core of our culture and social organisation". Moreover, its ideological foundations, as van Dijck (2014) observes, are based on problematic ontological and epistemological claims, yet "dataism exhibits characteristics of a widely spread secular belief" (ibidem), creating the illusion of absolute knowledge (Han 2022). AI hype based on data-centric rationality is currently upholding a new era of data cult belief that everything is calculable and controllable, although machinic intelligence never reaches the conceptual level of knowledge.

While it is commonly understood that correlation does not imply causation, machine learning systems impose, as Pasquinelli and Joler (2021, 1276) noticed, a statistical culture replacing the traditional episteme of causation (and political accountability) with one of correlations blindly driven by the automation of decision making. This techno-libertarian attitude shows not only contempt for the constraints of democracy but also wilful blindness to the environmental costs of ever-increasing energy consumption in a datafied society. As noted by Y. Yu, J. Wang, Y. Liu et al. (2024) the rapid development of AI is contributing to exponential surge of computing power demand and projected total carbon footprint from the AI systems in the top 20 of carbon emissions could reach up to 102.6 Mt of CO2 equivalent per

year, similar to the emissions from 22 million people for a year. In the International Energy Agency (IEA 2024, 8), report is projected that the electricity consumption associated with AI, data centres, and cryptocurrency could double by 2026. These figures are just a minor reminder of alarming environmental costs related to datafication growth as an unquestioned development paradigm precluding "collective imagination that in many ways demonstrated how alternative vertical and horizontal technological arrangements were possible. Not one stack but many plateaux" (Lovink 2022, 32).

However, as Pasquinelli (2023) shows, the decolonisation of the AI narrative should begin with understanding the social history of algorithms, specifically recognising that concrete material practices of organising and managing knowledge, expressed in collective human behaviour, extend back to ancient ritual formulas that also implied precise, step-by-step instructions. The fact that humanity, as Pasquinelli emphasises, remembers ancient formulas about procedures and techniques for managing rituals (which is how the oldest material practices, those predating many human tools and all modern machines, have been preserved and recorded) reveals that the fascination with artificial intelligence is a symptom of trust in algorithms as abstract mathematical principles.

Moreover, according to Pasquinelli (2023), the essence of artificial intelligence is not to replicate human cognition but to codify human knowledge, skills, and division of labour. Ultimately, understanding so-called AI systems does not stem from the question of whether the machine is self-aware but from the insight that the algorithmic factory emerged as an expression of the need to speed up communication, automate mental work, and manage the economy. Exposing the materiality of technology, therefore, aims to decolonise the economic imperative of datafication-driven growth by articulating the material consequences of digital platformisation.

The dominance of the techno-industrial dictate of automation and development leads to a complete loss of awareness of its materiality (Han 2022, 95–96). Eco-media literacy (Lopez 2021) is an emerging area of media literacy that teaches that the integrated relationship between media and living systems reveals the same old McLuhan's essential truth of media literacy: media is not a tool anymore, but the

environment. As stated by Haider and Sundin (2022), media and information literacy poorly refers to the ongoing individualisation, fragmentation, and emotionalisation of information and the proliferation of strategically circulated misinformation and malinformation, accelerating polarisation and alienation, as well as the processes of self-commodification causing the loss of individuality, freedom and happiness.

An urgent need to demystify the invisibility of computational operations by bringing them out from behind the veil of technical obfuscation (Haider and Sundin 2022), summed up in the following question: Is media and information literacy even possible in an age of largely invisible algorithms and increasingly invisible information systems? Since the anatomy of artificial intelligence reveals the materiality behind the opacity of the social algorithm, which is rooted in new forms of labour and exploitation (Crawford and Joler 2018; Joler 2020; Crawford 2021), we should first admit that AI is an extraction industry (Crawford 2021).

The three key driving components of AI, data, human labour, and environmental resources, according to K. Crawford (2021), reveal an enormous environmental footprint pointing to how the deep materiality of resources (rare minerals, energy, water, etc.) that power artificial intelligence inevitably leads to the unprecedented centralisation of power. The world re-designed by Silicon Valley was supposed to be decentralised and free; instead, we have ended up with a monolithic techno-colonial power.

> Artificial intelligence is not an objective, universal, or neutral computational technique that makes determinations without human direction. Its systems are embedded in social, political, cultural, and economic worlds, shaped by humans, institutions, and imperatives that determine what they do and how they do it. They are designed to discriminate, to amplify hierarchies, and to encode narrow classifications. When applied in social contexts such as policing, the court system, health care, and education, they can reproduce, optimize, and amplify existing structural inequalities. This is no accident: AI systems are built to see and intervene in the world in ways that primarily benefit the states, institutions, and corporations that they serve. In this sense, AI systems are expressions of power that emerge from wider economic and political forces, created to increase profits and centralize control for those who wield them. But this is not how the story of artificial intelligence is typically told" (Crawford 2021, 211).

Conclusion

Asking the question about what happens when artificial intelligence saturates political life and depletes planetary resources and how "new extractivism" (Joler 2020) reshapes our societies is not only an alarm to emphasise the struggle against injustice and poverty, but also demands radical change in social behaviour. Undoubtedly, the world we live in requires a radical transformation due to the urgency of intensified climate change, loss of biodiversity, epidemics, migration, and wars. Libraries may play an important role not only in bridging the digital, AI divide, but also in exposing the challenges of standing at the edge of ecological collapse caused by the abuse of power.

Therefore, by developing strategic approaches and partnerships with movements that, in a broader political-ecological sense, encompass research that connect societal transformation with the theories and practices of so-called eco-materialism (Lopez 2021), eco-media literacy aims to promote a normative shift in eco-ethical cultural policies, media practices, and attitudes, encouraging changes in the cultural behavior of ecologically conscious citizenship. More precisely, the goal of eco-media literacy is to promote normative change through eco-ethical cultural policies, practices, and approaches to transforming existing media practices, industry structures, and regulations (ibidem).

By introducing often overlooked aspects of the effects of digital information infrastructure, as well as the critical evaluation of digital capitalism, a deeper integration of the assumptions for the reconceptualization of media and information literacy and the new actualisation critical librarianship should emphasise structural aspects of information disorder, particularly the exploitation of data, human labour, and natural resources.

The "ecological reboot" suggesting a material and affective turn towards ethical, political, and aesthetic considerations under the name "eco-media studies", can be another important locus that bridges the epistemic gap between technology and nature, human and non-human, material and immaterial, and so on. In other words, eco-media studies today are much more of a "sphere" than a "field" that frames various areas of research without imposed boundaries (Lopez et al. 2021).

The goal of eco-media literacy is therefore the promotion of normative change through eco-ethical cultural policies, practices, and approaches to transform existing media practices, industry structures, and regulations.

Finally, we should not forget that “AI is neither artificial nor intelligent. Rather, artificial intelligence is both embodied and material, made from natural resources, fuel, human labour, infrastructures, logistics, histories, and classifications. AI systems are not autonomous, rational, or able to discern anything without extensive, computationally intensive training with large datasets or predefined rules and rewards. In fact, artificial intelligence as we know it depends entirely on a much wider set of political and social structures. Due to the capital required to build AI at scale and the ways of seeing that it optimises, AI systems are ultimately designed to serve existing dominant interests. In this sense, artificial intelligence is a registry of power” (Crawford 2021, 8).

Bibliography

Alves, I. M. "Green Spin Everywhere: How Greenwashing Reveals the Limits of the CSR Paradigm." *Journal of Global Change and Governance* II, no. 1 (2009): 1–26.

Antonelli, M., R. Tanner, R. S. Aldrich, and A. K. Ho. "Libraries in the Doughnut Economy." In *Sustainability in Libraries: Programs and Practices*, edited by R. Tanner, R. S. Aldrich, M. Antonelli, and A. K. Ho, 127–139. Chicago: ALA Editions, 2022. Accessed July 20, 2024. https://scholarship.rollins.edu/cgi/viewcontent.cgiarticle=1372&context=as_facpub

Bashir, N., P. Donti, J. Cuff et al. "The Climate and Sustainability Implications of Generative AI." *An MIT Exploration of Generative AI*, March 2024. https://doi.org/10.21428/e4baedd9.9070dfe7

Buch-Hansen, H., M. Koch, and I. Nesterova. *Deep Transformations: A Theory of Degrowth*. Manchester: Manchester University Press, 2024.

Budd, J. M. "The Library, Praxis and Symbolic Power." *The Library Quarterly* 73, no. 1 (2003): 19–32. Accessed September 11, 2024. https://www.jstor.org/stable/4309618

Civallero, E., and S. Plaza Moreno. "Libraries, Sustainability and Degrowth." *Progressive Librarian* 45 (2016): 20–45. Accessed June 5, 2024. http://www.progressivelibrariansguild.org/PL/PL45.pdf

Cottle, E. "The Myth of a Green Economy and Green Jobs: What Strategy for Labour?" Johannesburg: Rosa Luxemburg Stiftung, 2015. Accessed August 19, 2024. https://www.rosalux.de/fileadmin/rls_uploads/pdfs/engl/2015-Green-Economy-E-Cottle-02_20151.pdf

Couldry, N., and U. A. Mejias. *The Costs of Connection: How Data is Colonizing Human Life and Appropriating it for Capitalism*. Redwood City, CA: Stanford University Press, 2019.

Crawford, K. *The Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. New Haven, CT: Yale University Press, 2021.

Crawford, K., and V. Joler. "Anatomy of an AI System." Accessed May 15, 2024. https://anatomyof.ai/

Fuchs, C. "Critical Theory Foundations of Digital Capitalism: A Critical Political Economy Perspective." *tripleC* 22, no. 1 (2024): 148–196. https://doi.org/10.31269/triplec.v22i1.1454

Haider, J., and O. Sundin. *Paradoxes of Media and Information Literacy: The Crisis of Information*. London: Routledge, 2022.

Han, B. C. *Non-Things: Upheaval in the Lifeworld*. Cambridge: Polity Press, 2022.

Herman, C. "Green New Deal and the Question of Environmental and Social Justice." *ILO Working Paper* 31. Berlin: Global Labour University, 2015. Accessed June 20, 2024. https://global-labour-university.org/wp-content/uploads/2022/03/GLU_WP_No.31.pdf

Hibert, M. "Rekonfiguracija diskursa otvorenosti." *Vjesnik bibliotekara Hrvatske* 65, no. 2 (2022): 1–22. https://doi.org/10.30754/vbh.65.2.973

IFLA. "Što je zelena knjižnica?" Accessed September 10, 2024. https://www.ifla.org/wp-content/uploads/IFLAGreenLibraryDefinition_Croatian_2022Jan_v2.pdf

IFLA. "What is Green Library?" Accessed September 10, 2024. https://www.ifla.org/wp-content/uploads/IFLAGreenLibraryDefinition__English_2022Jan.pdf

International Energy Agency. *Electricity 2024: Analysis and Forecast to 2026*. Accessed December 14, 2024. https://iea.blob.core.windows.net/assets/6b2fd954-2017-408e-bf08-952fdd62118a/Electricity2024-Analysisandforecastto2026.pdf

Joler, V. "New Extractivism: An Assemblage of Concepts and Allegories." Accessed August 18, 2024. https://extractivism.online/

Kwet, M. *Digital Degrowth: Technology in the Age of Survival*. London: Pluto Press, 2024.

Lawson, S., K. Sanders, and L. Smith. "Commodification of the Information Profession: A Critique of Higher Education Under Neoliberalism." *Journal of Librarianship and Scholarly Communication*3, no. 1 (2015). https://doi.org/10.7710/2162-3309.1182

Levitsky, S., and D. Ziblatt. *How Democracies Die*. New York: Crown Publishers, 2018.

Lopez, A. *Ecomedia Literacy: Integrating Ecology into Media Education*. New York, London: Routledge, 2021.

Lovink, G. *Extinction Internet: Our Inconvenient Truth Moment*. Amsterdam: Institute for Network Cultures, 2022.

Löwy, M. "Pour une éthique écosocialiste." *Contretemps - Revue de Critique Communiste* 4 (2002): 8–14. Accessed July 19, 2024. http://www.contretemps.eu/wp-content/uploads/Contretemps%2004.pdf

Löwy, M. *¿Qué es el ecosocialismo?*. Buenos Aires: Herramienta, 2004.
Nicholoson, K. P., and M. Seale (eds.). T*he Politics of Theory and the Practice of Critical Librarianship*. Sacramento: Library Juice Press, 2018.
Pasquinelli, M. *The Eye of the Master: A Social History of Artificial Intelligence*. London/New York: Verso, 2023.
Pasquinelli, M., and V. Joler. "The Nooscope Manifested: AI as Instrument of Knowledge Extractivism." *AI & Society* 36 (2021): 1263–1280. Accessed January 11, 2025. https://doi.org/10.1007/s00146-020-01097-6
Raworth, K. *Doughnut Economics: Seven Ways to Think Like a 21st-century Economist*. London: Random House, 2017.
Rockström, J., W. Steffen, K. Noone, Å. Persson, F. S. Chapin III, E. Lambin, T. M. Lenton, et al. "Planetary Boundaries: Exploring the Safe Operating Space for Humanity." *Ecology and Society* 14, no. 2 (2009): 32. Accessed August 20, 2024. http://www.ecologyandsociety.org/vol14/iss2/art32/
Roszkowska-Menkes, M. "Greenwashing." In *Encyclopedia of Sustainable Management*, edited by S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, and R. Abreu. Springer, 2021. https://doi.org/10.1007/978-3-030-02006-4_390-1
Runciman, D. *How Democracy Ends*. London: Profile Books, 2018.
Schafer, M., and K. van Es, eds. *The Datafied Society: Studying Culture Through Data*. Amsterdam: Amsterdam University Press, 2017.
Schmelzer, M. T*he Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm*. Cambridge, UK: Cambridge University Press, 2016.
Smith, T. M. *The Myth of Green Marketing: Tending Our Goats at the Edge of Apocalypse*. Toronto: Toronto University Press, 1998.
Soudias, D. "Imagining the Commoning Library: Alter-neoliberal Pedagogy in Informational Capitalism." *Journal of Digital Social Research* 3, no. 1 (2021): 39–59. https://doi.org/10.33621/jdsr.v3i1.58
Srnicek, N. *Platform Capitalism*. Cambridge: Polity Press, 2017.
Stalder, F. *Digital Condition*. Cambridge: Polity Press, 2018.
Steffen, W., et al. "Planetary Boundaries: Guiding Human Development on a Changing Planet." *Science* 347 (2015). doi: 10.1126/science.1259855
United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development*. Resolution Adopted by the General Assembly on 25 September 2015, 42809, 1–13, 2015.

van Dijck, J. "Datafication, Dataism and Dataveillance: Big Data between Scientific Paradigm and Ideology." *Surveillance and Society* 12, no. 2 (2014): 197–208. https://doi.org/10.24908/ss.v12i2.4776

Wright, E. O. "Real Utopias." *Contexts* 10, no. 2 (2011): 36–42. https://doi.org/10.1177/1536504211408884

Yu, Y., J. Wang, Y. Liu, et al. "Revisit the Environmental Impact of Artificial Intelligence: The Overlooked Carbon Emission Source?" *Frontiers in Environmental Science & Engineering* 18 (2024): 158. https://doi.org/10.1007/s11783-024-1918-y