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CHAPTER 15

More Compute for a Burning Planet? A Scarcity Approach to AI Infrastructures

Fieke Jansen and Niels ten Oever

Introduction

The advent of Generative AI products like ChatGPT or Bard requires a lot of computing power and exacerbates data centres' environmental impact. For example, Microsoft's water consumption for cooling its data centres has dramatically risen from 4.2 million m^3 in 2020 to 6.4 million m^3 in 2022 (Microsoft, 2024). This rise can partly be attributed to the increased computing power and cooling needed to run ChatGPT, which is hosted on Microsoft Azure. Concerns about the climate and ecological impacts of the technology industry predate Generative AI, as witnessed in the growing academic interest in theorising about the materiality and environmental costs of the internet and the cloud (Edwards et al., 2024; Hesmondhalgh, 2021). Scholars have quantified energy consumption and

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carbon emissions of AI models (Bender et al., 2021; Hao, 2019), water needs to run data centres (Hogan, 2015), and the impact of AI on different earth systems throughout the entire hardware lifecycle (Falk et al., 2024). Falk et al. (2024) show how environmental harms are disproportionately felt in the Global South, while economic benefits are primarily concentrated in the West. In this chapter, we build on this body of work that foregrounds the unsustainable nature of AI to explore how the governance of its infrastructures needs to be reconfigured for society to stay within the planetary boundaries. We are particularly interested in AI infrastructure, as like all other infrastructures, data centres shape the distribution of social and economic activity in a certain way (Bowker & Star, 2008), centralising power in the hands of a few companies and facilitating the free flow of capital while externalising social and environmental costs to society.

In the current AI landscape, environmental concerns occupy a marginal position in policy debates. When governance frameworks address AI's environmental harms, they are narrow in scope, focusing on reducing carbon emissions and energy use, and not the neoliberal calculus of extraction and commodification that underpins this industry, which is inherently at odds with ecological integrity and environmental justice. To explore the reconfiguration of AI governance, we move beyond a critique of what is, "the sum of all environmental harms associated with AI infrastructures" and "the limits of current governance frameworks", to what could be, emancipatory alternatives that go beyond the status quo, by asking experts to design AI infrastructures in scarcity. In our research, we used the term scarcity to counterpose the dominant values that underpin AI development, that of unbridled growth and abundance of resources, in the race for technological hegemony. By combining participatory action research with the method of defamiliarisation in the context of Europe, we show that when experts centre scarcity in governance approaches to AI, the demands change from narrow sustainability efforts to the desire to structurally reconfigure the technology industry. Here, the state is seen as the primary power holder that can operate on the scale needed to limit the environmental externalities of neoliberalism and provide public interest solutions. This imagined state is a normative answer to the status quo of political governance in European democracies. A critique on the current market-state entanglements and interstate competition for AI hegemony, which we observed in full force while participating in the 2025 AI Action

Summit in Paris, where political and industrial leaders pushed for investment in and deregulation of the AI industry, and public interest was reduced to open source.

In this chapter, we use the term Europe to refer to the European project, and while the political and economic integration among European countries is not without strife, the AI strategy of the EU remains uncontested. We will first lay out recent academic debates on infrastructures, materiality, and technology governance, then introduce our methods. Next, we will present our findings and conclude with a discussion on the state's role in AI infrastructure governance. Our core argument is that in re-imagining AI infrastructure governance, participants articulate the need for a completely different state. This imagined state echoes a certain nostalgia for the Western European welfare state, where citizens trust in the competency of the state to ensure that social, environmental, and human rights are protected. This imagined state opposes the state and the market entanglements of contemporary statecraft and is seen as an actor that can act at scale and operate from a rational and democratically established rule-based order to prioritise societal wellbeing over capital accumulation and securitisation.

Infrastructure, Power, and the Shaping of Sustainability Approaches

This chapter takes an infrastructural perspective on the relationship between AI, governance, and the environment. Infrastructure studies allow scholars to engage with the materiality of infrastructure, and move beyond the cultural imagination of AI as immaterial and the carbon tunnel of sustainable AI to account for its operational and embodied harms. The term operational harms captures pollution and resource consumption related to the running of AI infrastructure, particularly data centres, and the term embodied harms is used to account for harms in the mining, manufacturing, transport, and disposal of hardware (Chen & Burrington, 2023; Maphosa et al., 2023; Sutherland, 2022). The focus on infrastructure as an object for AI governance builds on Balayn and Gürses's (2024) argument that contemporary AI governance regimes are inadequate as they focus on services and products and not the engineering environments that produce them. AI-based services, they argue, are likely produced and delivered through computational infrastructures, made up of agile production environments, clouds, and end devices, owned by a

few companies (Balayn & Gürses, 2024). Governing AI to account for environmental harms should therefore not look at the individual model, but the infrastructures that enable this kind of computation. Therefore, we locate the study of AI governance in infrastructure studies, specifically in two key debates in the field: how power is embedded and enacted through infrastructure (ten Oever, 2023) and how engaging with the materiality of media brings environmental questions into a relational understanding of digital infrastructures (Edwards et al., 2024). Integrating environmental considerations into debates on AI infrastructure allows us to engage with questions of power, shed light on the limits of contemporary AI governance approaches, and develop emancipatory futures.

Infrastructure scholars started engaging with questions of power by acknowledging that large-scale systems shape the distribution of social and economic activity by enabling certain practices and restricting others (Bowker & Star, 2008). As such, this chapter starts from the observation that infrastructures are inherently political. They are historically determined and embed and enact particular economic and political interests, making it pertinent to understand who has the power to shape infrastructures, under what conditions, for which purpose, and at what cost. Scholars remind us that infrastructures do not materialise out of nowhere; they are the result of local practices influenced by the norms, values, and practices set by global systems (Brodie & Velkova, 2021; Galloway, 2012; Hesmondhalgh, 2021). In a case study on Ericsson's Vaudreuil-Dorion data centre, Brodie and Velkova (2021) observe that digital infrastructures carry the promise of economic growth and prosperity, which entices the state to create a favourable tax, development, and political climate to attract this industry. However, the economic temporality of the digital, that of financial speculation, and changing corporate strategy, make infrastructures soft, malleable, and disposable. The Vaudreuil-Dorion data centre site and many others (Lehuedé, 2021; Rone, 2024) remind us that digital infrastructure is highly speculative real estate used for financial speculation and capital accumulation.

The political economy of these infrastructures foregrounds that the governance of these industrial sites is shaped through a shared belief system (Maxigas & ten Oever, 2023; ten Oever, 2023), the neoliberal epoch of open market and free flow of capital combined with the belief that progress and economic growth are dependent on technological innovation and dominance. Globally, this is fuelling a geopolitical

race for hegemony, where AI is the latest incarnation of this interstate competition. Locally, data centres have become contested infrastructural sites, making conflict between local interest and global norms and values visible. At the local level, citizens feel excluded from the decision-making process around infrastructure (Rone, 2024), local social and economic activity lose out while global technology companies are given preferential access to the electricity grid (Velkova, 2024), and pollution and waste from manufacturing and discarding of hardware accumulates largely in the Global South hidden out of view of those in power (Chen & Burrington, 2023; Maphosa et al., 2023). Critical media scholars argue that AI will perpetuate and intensify these dynamics as it requires significant computing power, data, and expert knowledge, further increasing global dependency on a few technology companies who are building resource-intensive computational infrastructures. In this chapter, we will contribute to these debates on infrastructure and power by making familiar objects unfamiliar, decentring the dominant worldview in the analysis of data centres, to argue that in Europe, it is not market power that people oppose but the state-market entanglements.

Digital infrastructures have long been represented as immaterial in the cultural imagination (Ensmenger, 2021; Frenzel, 2023; Starosielski, 2015), erasing the connection between their environmental and human costs and placing them outside the realm of traditional governance mechanisms. In the turn to infrastructure, a growing body of media studies scholarship has established that computing infrastructures are very much material and come with a range of environmental harm. Data centres gobble up a significant amount of water and electricity (Hogan, 2015; Velkova, 2024), are based on the exploitation of natural and human resources (Starosielski & Walker, 2016), and have significant pollution associated with the mining, manufacturing, transport, disposal of hardware (Bridges, 2023), and carbon footprint with its operations (Pasek et al., 2023). In response to discussions on the material impact of its infrastructure, the technology industry has positioned the internet, cloud, and AI as indispensable to social and economic wellbeing and argues that while it has a direct negative impact on the environment, it has and will significantly contribute to the decarbonisation of other industries (Jansen, 2025; Sridharan, 2025). This positioning drives a narrow sustainability agenda that mobilizes discourses of efficiency to align environmental goals with economic imperatives (Sridharan, 2025). A proposition which finds political traction with the European Commission and some of its member

states, who want to ensure that Europe does not lose out in the race for AI hegemony and are in search of quick sustainability fixes that do not set limits on their economies. Furthermore, the industry downplays its environmental impact by emphasising that its energy consumption has been moderate in comparison to the growth of computing power (Edwards et al., 2024; Jansen, 2025). The flawed logic that sustainability through efficiency gains is possible in a capitalist system (Alcott, 2005) reinforces the perception of technological exceptionalism. These dynamics reinforce the idea that the technology industry operates outside the realm of traditional governance mechanisms.

Ensmenger argues that "the computer industry has largely succeeded in declaring itself outside of this history, and therefore independent of the political, social, and environmental controls that have been developed to constrain and mediate industrialization" (Ensmenger, 2021, p. 7). These dynamics matter in discussions around the climate crisis and ecological degradation, as the self-declaration of the independence of cyberspace (Barlow, 1996) permeated a belief that the state had no sovereignty over new technological developments and that technology companies and engineers are the primary power-holders, making corporations responsible for how we define sustainability and understand environmental wellbeing. While this notion of an absent state is historically incorrect—the state has intrinsically been involved in the development of the internet, the cloud, and now AI through centuries of public policy (Holt, 2024), public investments (Mazzucato, 2011), and more recently through deregulation and liberalisation (Rone, 2024)—it is local struggle against the arrival and expansion of data centres (Hogan, 2015; Lehuedé, 2021; Rone, 2024) that demands the state to act. In the Dutch context, protests against the development of hyperscale data centres operated by Big Tech companies were directed at the state. Citizens contested allocation of water and renewable energy sources to data centres over the needs of households and other industries and opposed the political vacuum in which citizen voices were not heard (Jansen, 2022; Rone, 2024). In response to the protest, Meta halted its plans to build in the village of Zeewolde, a development which is still considered a local win over global capital, but, in reality, displaced the problem to other territories as it did not stop data centre construction, it merely halted it in the Netherlands. The aftermath of Zeewolde made us interested in re-imagining AI infrastructure governance beyond conflict around individual data centres to address the economic and political relations that are embedded and enacted through

infrastructures. Designing in scarcity is our attempt to challenge the economic logic of the Big Tech industry, which can be characterised as predatory capitalism, where AI is the latest incarnation in a long line of interstate competition and capital accumulation.

Methods

To explore governance approaches that keep AI developments within planetary boundaries, we engaged in a thematic analysis to capture the values, principles, and actors that experts believe should ensure sustainable AI infrastructures by combining participatory action research with the methods of defamiliarisation. Participatory action research is in line with the objective of critical social science, which views the role of academia to expose and explain power structures and relationships to alleviate unnecessary and unwanted suffering (Fay, 1987). This method allows for the co-creation of knowledge on a specific topic through collaborative brainstorming, conversation, and ideation to identify pathways for social change (Greenwood & Levin, 2007; Grønhaug & Olson, 1999). Often used to gain insight into the experiences and needs of impacted communities, we use this method to have academics, civil society organisations, and policymakers jointly try to understand the world, learn together, and articulate shared demands to keep AI developments within planetary boundaries. Participatory action research is layered with the method of defamiliarisation, which originates from literary and critical theory. An approach used to make the familiar unfamiliar and challenge everyday automated perceptions about an object or situation (Bell et al., 2005; Kaomea, 2003). Specifically, the method of critical defamiliarisation, which juxtaposes what could be against what is, aims to allow participants to bring new normative questions to the fore and "search for emancipatory alternatives to transcend the status quo" (Gunderson, 2020: 89). We applied defamiliarisation to the participatory action workshop by asking participants to design AI infrastructure in scarcity. This act of defamiliarisation opens up space to move beyond a critique that is the sum of all environmental harms associated with AI infrastructures to a more conscious articulation of the underlying historically, geographically, and culturally determined worldviews that shape their relationship to data centres and society and imagine different futures.

The sample for this chapter is three participatory action research workshops with a total of 80 participants. These workshops are part of a

larger and ongoing research project into the governance of data centres in Europe. The twin transition, including the AI act, local protests against data centre development in the Netherlands, Ireland, and Spain, soaring energy prices since Russia's full-scale invasion of Ukraine in 2022, and congestion in electricity networks, makes Europe an interesting region to study the governance of AI infrastructures. The first workshop took place in July 2023 as part of a week-long retreat organised by the critical infrastructure lab, Green Web Foundation, and Share Foundation (Jansen et al., 2023). The retreat brought together 25 European academics and civil society organisers interested in infrastructure governance. The second workshop took place at Privacy Camp, in January 2024, and brought together academics, civil society organisers, and policymakers who actively engage in the Brussels policy space and are interested in digital rights issues (Jansen & Cath, 2024). There were three parallel tracks and around 40 people joined our workshop *Down with Data Centres; developing critical policy for environmentally sustainable tech in Europe*. The third workshop, *Rethinking Data Centers in the Age of Scarcity*, was a dedicated event organised at the University of Amsterdam, that brought together 16 academics, civil society practitioners, and policymakers from Western Europe working on and interested in data centre governance. All participants were either from Europe or deeply familiar with the policy landscape of Europe.

Each workshop was tailored to the specific location and group; one started with an outdoor exercise and another with a detailed mapping of social and environmental harms of internet infrastructures. Still, the insights of the workshops are comparable as the participants had a similar profile, all interested in digital rights and the environment, and the workshops had a similar approach, structure, and guiding question, "How can we govern data centres in scarcity?" We designed and facilitated the workshops. Each workshop started with an exercise aimed at identifying the knowledge level of the participants and providing everyone with the opportunity to speak and share their expertise. This was followed by a brief level-setting part, where experts, including one of the authors, would provide insights on harms associated with data centres and frameworks to situate these harms in broader environmental, economic, and political developments. The act of defamiliarisation related to our main research question, "How do we keep infrastructural developments within planetary boundaries?" or, said differently, "How can we design data centre governance in scarcity?" We closed each workshop by briefly summarising

the key points made on designing in scarcity and asked if participants had something to add as a way to validate our findings. When participants struggled to start their brainstorming on "designing in scarcity", we introduced the case of Meta's data centre in the village of Zeewolde and asked how they would distribute the finite amount of renewable energy, would they allocate it to a hyperscale data centre that will be the backbone of the metaverse or to a hospital or a local community. This line of questioning was enough to start a lively discussion. The workshop discussions were documented through self-documentation, where participants took notes of the conversation on flip-charts, and by us taking notes of each sub-group report on how they would design in scarcity.

Findings: Emancipatory AI Infrastructure Governance Futures

The overwhelming feeling that emerged from the workshops is that there are no sustainable AI infrastructures. The technology industry is viewed as the driver of unbridled growth of the AI market while externalising its environment and social cost upon society under a vague promise of progress. In this section, we analyse the emancipatory futures proposed in the workshop to show how designing in scarcity is about governance. Participants' sustainability demands target the state as a power holder, oppose the current focus on efficiency gains by the market, object to the neoliberal political calculus governing AI infrastructures, and demand public interest solutions. This is at odds with contemporary AI governance approaches, which see the market as the main power-holder that should ensure environmental considerations in AI infrastructures. These findings provide insights into what is missing from contemporary AI governance approaches: a European state that wields its economic and technological statecraft to ensure sustainable futures.

Public Interest to Transcend Contemporary Infrastructural Politics

Participants propose different ways to design in scarcity, from small do-it-yourself solutions to structural reconfigurations of the technology industry. What binds these solutions is that they all prioritise social and environmental wellbeing in AI infrastructure governance over that of markets, accumulation of capital, and geopolitical influence—a shift which draws attention to contemporary governance deficits that have led to the

concentration of power and wealth in the hands of a few technology companies, and in its wake a supply chain of injustice, exploitation, and pollution. We found that words like "public interest" and, to a lesser extent, "social justice" and "environmental justice" were used to refer to the values which are considered to align with emancipatory governance processes. Public interest was included in demands like "invest in public interest infrastructure" or "computing for the public interest". Participants did not define "the public interest", they assumed that there is a shared understanding of what is meant by it. Other research observed a similar trend, where public interest is used as a loosely defined concept to describe the role of the state in society vis-à-vis the market. Maxigas describes it as an approach that goes beyond economic logic, "the role of the state is to shape markets towards outcomes that serve the public interest rather than the narrow objectives of capital accumulation" (Maxigas, 2024). By centring public interest in AI infrastructure governance, participants express a desire for a state that prioritises societal wellbeing over capital accumulation. More specifically, while public interest concerns in the governance of technology have traditionally been understood in as privacy, access to knowledge, and freedom of expression (DeNardis, 2014), in the context of AI infrastructures should also include social and economic rights, such as public safety, health, or access to electricity. Departing from public interest helped participants formulate demands that transcend the status quo.

The limitation of the public interest concept is that it assumes that when state actors protect the common good, it will lead to equal access and rights in society. In contrast, the term social justice describes the desire to overcome historically determined inequalities, in terms of access and redistribution of computing power. Social justice concerns were surfaced by participants through questions such as, "How much compute is needed?" or "What is the bare minimum of compute needed for everyone to participate in the digital society?" or "Who gets harmed and who benefits?" This acknowledges that society is stratified and power and resources are distributed unequally, where equity, non-discrimination, and inclusion are achieved through the dismantling of oppressive structures. The concept of environmental justice was used when acknowledging pollution, oppression, and harm in the supply chains of AI hardware. The term emphasises that the climate and biodiversity crises are fundamentally unjust, communities and land that are most impacted by these crises have contributed the least to them, and their voices are not included in

sustainability governance processes (Kazansky et al., 2022). The emphasis on public interest over social or climate justice underlines the participants' positioning of AI infrastructure governance within the framework of Western liberal democracies, where the "rational" state ensures the market also serves the public interest. The absence of abolitionist or more militant approaches to designing in scarcity suggests that participants do not imagine a future without AI infrastructures, emancipatory futures fit within the scope of the liberal rules-based order, and justice approaches relate more to questions of redistribution and access and are less about dismantling colonial, extractive, and exclusionary structures.

Limiting Unnecessary AI

Propositions for structurally reconfiguring the technology industry ranged from sufficient computing, public infrastructure, limiting claims on the electricity grid, and data waste. Two central threads that emerge from these solutions are: the desire to categorise AI—not on its computational techniques but on its uses or contribution to the public interest—and the need to understand AI infrastructure in relation to the broader ecosystem. We'll first discuss the desire for categorisation. Suchman (2023: 1) argued that the question "Just what are we talking about when we talk about 'AI'?" is needed to allow scholars to demystify AI and interrogate relevant genealogies, material practices, and politics. Similarly, when discussing sufficient computing, public infrastructure, and data waste, participants raised a comparable question, though their interest did not lie in differentiating between the computational techniques but in categorising their uses. Participants believed that designing in scarcity requires a governance practice that limits the expansion of AI infrastructures and prioritises public interest in existing computing capacity. To be able to differentiate between public and commercial interest, one "needs to know what compute is used for? Start classifying the purpose of AI; is it health care, education, military, finances, etc." (Workshop 3 2024). The idea is that if we can articulate what are desirable and undesirable uses of AI infrastructures, we can introduce computation taxes that incentivise public interest use and discourage unwanted or commercial uses. Or introduce a public use mandate on all AI infrastructures, meaning that a large percentage of the servers have to be allocated to the public interest (Workshop 1 2023; Workshop 2 2024). Important to recognise is that here desirable use relates to limiting and redistributing computing power and not to

the social impacts, such as perpetuating stereotypes and reinforcing social inequality, that can emerge when AI models are introduced into public services like health care.

The discussions around energy use, the electricity grid, and Europe's sustainability objectives foregrounded the need to situate AI infrastructures in their broader ecosystem. Participants emphasise that currently AI infrastructures drive up the total volume of energy consumed by the tech industry (Jansen & Thorne, 2024) through actual and fictive claims on grid capacity (Velkova, 2024), which gets in the way of the decarbonisation of society. Their claim on renewable energy sources keeps other sectors dependent on fossil fuels and the practice of air-bookings reserves higher amounts of the electricity grid's capacity than needed (Velkova, 2024), pushing a narrative that there is a need for additional capacity. These dynamics make "AI infrastructure management an integral dilemma in our energy transition" (workshop 3). A low-hanging emancipatory future relates the real-time fossil fuel mix used for AI, where participants want the tech industry to move to matching renewable energy supply and demand locally rather than through green energy certificates. More fundamentally, participants believe that when designing in scarcity, an ecosystem approach allows us to prioritise energy allocation in accordance with social needs and Europe's sustainability objectives and not market demand. This shifts the discussion away from making AI infrastructures sustainable to ensuring a sustainable society that stays within planetary boundaries. AI infrastructures could potentially play a role in the energy transition, but not at all costs.

Re-Imagining the Role of the State in AI Infrastructure Governance

Many of the solutions formulated in the workshops speak to the role of the state in AI infrastructure governance. There are three ways in which participants conceptualised the role of the state: as a regulator, facilitator of different governance approaches, and an investor. At Privacy Camp, participants emphasised the regulatory role of the state, "we do not need to start from scratch, but we need to start enforcing existing regulation" (Workshop 2 2024). This emphasis on enforcement stems from civil society's frustration at the tsunami of regulations adopted by the von der Leyen Commission that lack effective implementation and enforcement. Looking towards the future, some participants suggested

the creation of a "compute police", a state entity that could enforce prioritisation of public interest within a framework of sufficiency. This policing proposition was shot down almost immediately due to privacy and surveillance concerns. The second role assigned to the state was facilitator of different governance approaches. Bottom-up policymaking is needed to align European strategy with the reality of and respond to the challenges of communities and local governments, as municipalities are considered to be on the frontline navigating the tension between market interests, social needs, environmental harms, and public opinion. Top-down governance, through mechanisms like the OECD, is needed as participants believe that no single state can control the global technology industry nor develop and enforce a life cycle assessment (LCA) standard to promote transparency and accountability in the mining, production, and use of critical raw materials for AI hardware. The last role was that of the state as an investor. In the Montenegro workshop, participants demanded that "10% of Horizon Europe funding should go to post-silicon computing and community experimentation". This demand builds on Mazzucato's (2011) notion of the entrepreneurial state, where governments have and will continue to play a crucial role in funding research and innovation in new technologies. Participants felt that when the state invests in European AI, a significant part of this research and development funding should be allocated to new and more environmentally friendly types of computing. In addition, at the university workshop, participants argued that the state should invest in its own capacity to experiment with sufficient computing. The state is not merely a regulator, but also a consumer of AI infrastructures, and as such, it can be a testbed for sustainable innovation.

Conclusion: Demanding a Different State

The workshops highlighted a range of emancipatory futures that centre public interest in AI infrastructure governance over the narrow objective of capital accumulation and see the state as a primary power-holder to achieve this. State intervention is of course not the only solution or approach to designing in scarcity, small scale and community approaches were proposed in the workshop, but these did not get traction in the discussions. Confronted with contemporary global power constellations, in which the tech industry and countries are in a race to gain AI hegemony (Bareis & Katzenbach, 2022), people tend to attribute power and agency to those actors they believe can act on a certain scale. In the

Western European context, this is the state and not citizens, users, nor communities. In the process of demanding the state to take up responsibility in AI infrastructure governance, participants articulate the need for a completely different state. This imagined state echoes a certain nostalgia to the Western European welfare state, where the state provided for its citizens and in turn was trusted to be a competent entity that wields its power to ensure that social, economic, and human rights are protected. The attributes ascribed to this imagined state are that it can act at scale, operates from a rational and democratically established rule-based order, and prioritises societal wellbeing over capital accumulation. Societal wellbeing in relation to AI infrastructures is conceptualised as limits and redistribution of computing power, opposing the market-state entanglements that are central in contemporary statecraft. The role of the state in establishing and perpetuating colonial, extractive, and exclusionary structures, that are embedded and enacted through infrastructures, is left unaddressed.

The imagined states can be understood as a critique of the current market-state entanglements and interstate competition for AI hegemony. At present, the tech industry is capitalising on the new moment of geopolitical tension, a consequence of China as the rising hegemon and the United States and Europe as waning hegemons, where technologies such as AI and quantum computing are projected as the main battlegrounds of global competition and a new source for infinite growth (Bareis & Katzenbach, 2022). The techsolutionist imaginaries, where AI is hyped as the solution to societal and environmental problems, while ignoring its direct and immediate harms, masks the transition from neoliberal to predatory capitalism. In Europe, this transition is characterised by an understanding that infinite growth in the Global West is not possible anymore. From this vantage point, global competition becomes a zero-sum game where the development of one comes at the decline of another. The geopolitical anxiety, where states fear losing out to other states, manipulates the state to invest in technological development, promote strategic autonomy by on-shoring the exploitation of nature, to reduce the geopolitical dependency on China (Riofrancos, 2023), and further deregulate the rules and restrictions on the tech industry. Industry leaders are feeding on this global anxiety to push their AI growth agenda, which comes at the expense of society and nature, and suggest the government should bet on AI to solve these problems in the future (Solnit, 2024).

Instead of a wartime economy, where all economic production and natural extraction are coordinated in the interest of interstate economic competition, the emancipatory futures demanded the state to intervene to prevent further deterioration of our lives and environments. Here, the imagined state wields its might, through regulation, investment, and soft power, to prioritise the welfare of its citizens and the environment. In this future, economic and technological statecraft are directed at minimising global warming, ecological deterioration, and rising societal differences, and actively countering the geopolitical competition to the bottom and the accumulation of capital in the hands of the few through an ever-further militarised economy (Galeotti, 2022). Through the articulation of the imagined state, participants offer a fundamental critique of Europe's contemporary political rationalities and demand a radical shift in the state's ideology. Specifically, the European Union's quest for Europe to become a global leader in AI at all costs (European Commission, 2025) is at odds with the proposed public interest approach. In contrast, participants see the social and environmental crises as the real problem of our times, not the ability to cram more processor power on smaller wafers, more storage, or more computing. The current trend towards strategic autonomy could provide an opportunity more than a threat, as it allows Europe to take a step back from the neoliberal growth paradigm and centre on the welfare and wellbeing of people and the planet, as well as the role technologies and regulations play in realising them.

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