

Minds at stake: Generative AI, epistemic power, and the competition for knowledge

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Article Info	Abstract
Editorial Letter Main Object: Humanities & Social Sciences Received: 05 April 2026 Revised: --- Accepted: 05 April 2026 Published online: 11 April 2026 Keywords: algorithmic authority, epistemic power, generative artificial intelligence, knowledge governance, surveillance capitalism.	The rapid diffusion of generative artificial intelligence as a primary interface for information-seeking has introduced a new and underexplored dimension of power in contemporary societies. As hundreds of millions of users worldwide increasingly turn to large language models for answers to everyday questions, the corporations that develop and deploy these systems have gained an unprecedented capacity to shape what people know, how they reason, and whose version of the world prevails. Drawing on Shoshana Zuboff's theory of surveillance capitalism and Michel Foucault's analytics of power/knowledge, this article argues that the competition among major technology firms in the generative AI sector is not merely commercial but fundamentally epistemic. Through a review of recent empirical data on AI adoption and a critical analysis of market concentration, the article demonstrates that a small number of corporate actors—operating with limited public accountability and considerable opacity—are consolidating control over the epistemic infrastructure of daily life. This concentration reproduces and deepens existing asymmetries of knowledge, raising urgent questions for democratic governance. The article concludes by calling for the reconceptualisation of AI information systems as public epistemic infrastructure, subject to transparency requirements, independent auditing, and democratic oversight.
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The emergence of generative artificial intelligence as a primary interface through which people seek answers to questions represents one of the most consequential shifts in the history of information access. Unlike prior technologies that retrieved or organised pre-existing content, generative AI systems synthesise, filter, and present knowledge in ways that are opaque, proprietary, and shaped by the design choices of a small number of corporate actors. This short note argues that what appears on the surface to be a commercial race among technology companies is, more fundamentally, a competition for epistemic authority, that is, for the power to determine what counts as knowledge and whose version of the world prevails in the minds of an increasingly AI-dependent public.

The scale of AI adoption in information-seeking behaviour is no longer a matter of speculation. As of 2025, roughly two-thirds of American teenagers (64%) report using AI chatbots, with searching for information and getting help with schoolwork ranking among the most common use cases (Pew Research Center, 2025). The trend is not limited to younger demographics. Among American adults broadly, 31% reported interacting with AI at least several times a day in 2025, up from 22% in early 2024 (Pew Research Center, 2026). Survey data on search behaviour confirms a structural reorientation: as of 2026, 55% of respondents reported using AI chat tools as their primary or frequent research tool (Crestodina, 2026). Perhaps most telling of all is the attitudinal shift: 44% of respondents agreed that AI chat tools have changed the way they look for information online, the only trust-related metric that consistently improved year over year (ibid). In terms of raw usage, ChatGPT alone attracts approximately 800 million users per week, and roughly 987 million people worldwide now use AI chatbots in some form (Hollenbeck, 2025). Separately, 35% of American consumers say they have used AI chatbots for answering questions as an alternative to traditional search engines (Dean, 2025). These figures, taken together, illustrate a profound change in the epistemological infrastructure of everyday life: for a growing share of humanity, the first and often final point of contact with information is now a large language model.

The companies behind these models are engaged in a competition whose stakes far exceed quarterly revenue targets. Foundation model companies captured \$80 billion in venture funding in 2025, representing 40% of all global AI investment, with OpenAI and Anthropic alone accounting for 14% of all global venture capital across all sectors (France Épargne Research, 2026). The competitive landscape is one of remarkable concentration. ChatGPT currently commands approximately 79.86% of the generative AI chatbot market, followed by Perplexity at 11%, Microsoft Copilot at 4.83%, and Google Gemini at 2.19% (Cherniak, 2026). Meanwhile, Google reports 2 billion monthly users for its AI Overviews feature embedded in search results, and its Gemini app has 650 million monthly active users

(CNBC, 2025). Regulatory bodies have taken note of the competitive implications. The US Federal Trade Commission launched an inquiry in January 2024 into investments and partnerships among major technology firms and AI developers, issuing orders to Alphabet, Amazon, Anthropic, Microsoft, and OpenAI to examine whether these relationships risk distorting innovation and undermining fair competition (Auer & Zúñiga, 2025). The concern, however, is not only economic. It is epistemic.

To understand why the consolidation of AI information systems constitutes a political and not merely a commercial problem, Shoshana Zuboff's theory of surveillance capitalism remains indispensable. In her landmark work, Zuboff argued that the leading technology corporations had constructed an entirely new economic logic in which human experience is unilaterally claimed as raw material for the production of behavioural predictions and even manipulations (Zuboff, 2019). What matters for the present argument, however, is not only the extraction of data but the concentration of what Zuboff calls *epistemic* power. Zuboff characterises surveillance capitalism's developmental thrust as an "epistemic counterrevolution", an antidemocratic project aimed at knowledge dominance that strikes at the conditions necessary for democratic life (Zuboff, 2022). The questions she poses to frame this power are deceptively simple: who knows? Who decides who knows? Who decides who decides who knows? (Zuboff, 2019). In the context of generative AI, these questions acquire renewed urgency. When an AI system tells a user what the facts are, who wrote the code, selected the training data, adjusted the fine-tuning, and determined the system prompt? The answer, almost invariably, is a handful of corporations operating under limited public scrutiny.

This asymmetry resonates with a central claim in Zuboff's analysis of knowledge hierarchies. The division of learning in surveillance capitalism is "asymmetrical and hierarchical in ways that threaten democracy", because it is the surveillance capitalist corporations that know, the market form that decides, and the competitive struggle among surveillance capitalists that determines who gets to decide (Zuboff, 2019, as discussed in Tuomo, 2022). The transition from a world in which search engines retrieved pre-existing content to one in which generative AI synthesises and presents conclusions is a qualitative leap in this asymmetry (see for example Shahghasemi, 2025). A search result points to sources; an AI response often replaces them. The user receives an answer rather than a landscape of competing claims, and the mechanisms by which that answer was assembled are deliberately obscured. Leading AI firms have shrouded important technical details in secrecy, including model size, training data, and training methodology, meaning that users cannot probe their limitations or assess their biases (Eastwood, 2024).

The Foucauldian tradition offers a complementary lens for understanding how this dynamic operates below the level of overt

coercion. For Foucault, power does not only suppress, it produces. It shapes what counts as knowledge, who is authorised to produce it, and through which channels it circulates (Foucault, 1980). AI systems, trained on vast corpora of human-generated text and then fine-tuned by corporate teams, represent precisely such a productive apparatus. Scholars applying Foucault's archaeology of subject formation to AI argue that just as human subjectivity has historically been shaped by disciplinary mechanisms embedded in institutions and norms, AI systems are trained within similarly restrictive epistemic regimes that normalise, classify, and constrain what counts as valid knowledge (Kriger, 2025). The trained outputs of a large language model are not value-neutral summaries of human knowledge; they encode cultural hierarchies, political assumptions, and the specific choices of engineers and product managers who are themselves embedded in particular social contexts. When millions of users treat these outputs as authoritative, as research increasingly suggests they do, the political implications are difficult to overstate. Studies (see for example, Szmyd & Mitera, 2024; Khalkho et al., 2024; Dalisaymo, 2025; Karamuk, 2025; Bacallo et al., 2024) show that many users, particularly students, have come to view AI systems not merely as aids but as "superior knowers", and that this trust tends to bypass critical reflection on model limitations or embedded biases, a phenomenon scholars identify as automation bias (Jose et al., 2025).

The epistemic stakes are magnified by the degree to which the AI industry is structurally converging with the same surveillance capitalist actors Zuboff warned about. The current oligopoly that big technology firms hold over cloud computing infrastructure is rapidly translating into a similar oligopoly over the AI market, given the enormous financial and computational resources required to develop and deploy frontier models (Kersley, 2024). As Zuboff herself has argued, the surveillance capitalist giants control the capital, the data, the technologies, the scientists, and the science, acquiring most AI firms and attracting most AI talent, as scale increasingly generates learning and competitive advantage (Zuboff, 2022). This vertical integration means that the companies best positioned to shape what AI systems say are precisely those with the deepest financial incentives to shape behaviour in ways that serve their commercial interests. The competitive race to dominate AI information access is therefore not incidental to the problem of epistemic power, it is its engine.

It would be incomplete, however, to present this dynamic as the operation of a monolithic, coordinated project. The corporations competing in the AI space have divergent strategies, and some scholars have cautioned against overstating the coherence or intentionality of the harms Zuboff identifies, arguing that concentration is as much a product of regulatory failure as of corporate design, and that the solution lies in democratic governance rather than the wholesale critique of market capitalism (Stanger, 2022). Nevertheless, whether epistemic harm

results from deliberate strategy or from structural market incentives, the effect on users is the same: they receive information filtered through systems whose inner workings they cannot inspect and whose outputs have been optimised for goals that may not coincide with their epistemic wellbeing. The competition for minds, in other words, does not require conspirators; it requires only a market structure in which the ability to shape information flows confers decisive competitive advantage, and in which regulatory institutions have been too slow to respond.

What is required is a reconceptualisation of AI information systems as epistemic infrastructure, a category of public concern analogous to the regulation of broadcasting, education, or the press. Zuboff argues that without new public institutions, charters of rights, and legal frameworks designed for a democratic digital century, citizens are left exposed to new forms of digitally mediated control from both state and market actors (Zuboff, 2022). Such frameworks would need to address not only the data collection practices that feed AI training, but the opacity of the inference process itself, the moment at which a model decides what to say. Transparency requirements, mandated audits of model outputs for systematic bias, and public investment in non-commercial AI alternatives would each represent steps toward redistributing epistemic power from a handful of corporations to the broader public. The competition for minds will not resolve itself through market forces alone. It demands the kind of deliberate democratic intervention that the epistemic stakes of this moment urgently require.

References

- Auer, D. & Zúñiga, M.A. (2025). "AI partnerships and competition: Damned if you buy, damned if you don't". <https://laweconcenter.org/resources/ai-partnerships-and-competition-damned-if-you-buy-damned-if-you-dont/>.
- Bacallo, D.L.D.L.; Bie, P.E.G.; Tulabut, R.Y.C.; Pineda, A.J.M.; Vicente, A.P.; De Vera, A.R.; ... & Dizon, R.C. (2024). "Digital learning revolution: Identifying the influence of dependency on artificial intelligence tools towards the knowledge acquisition of students", *Ignatian International Journal for Multidisciplinary Research*. 2(8): 1338-1362. <https://doi.org/10.5281/zenodo.13359360>.
- Cherniak, C. (2026). "80+ key chatbot statistics for 2026: Perceptions, market growth, trends". <https://masterofcode.com/blog/chatbot-statistics>.
- CNBC. (2025). "OpenAI is under pressure as Google, Anthropic gain ground". December 2. <https://www.cnbc.com/2025/12/02/open-ai-code-red-google-anthropic.html>.
- Crestodina, A. (2026). "The AI-search adoption survey: These 6 charts show where and how people look for things". *Orbit Media Studios*. <https://www.orbitmedia.com/blog/ai-vs-google/>.
- Dalisaymo, L. (2025). "Assessing student dependence on artificial intelligence tools". *The International Journal of Technologies in Learning*. 32(2): 67. <https://doi.org/10.18848/2327-0144/CGP/v32i02/67-81>.
- Dean, B. (2025). "24 amazing chatbot statistics for 2024". <https://backlinko.com/chatbot-stats>.
- Eastwood, B. (2024). "Openness, control, and competition in the generative AI

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- marketplace". *MIT Sloan Management Review*. <https://mitsloan.mit.edu/ideas-made-to-matter/openness-control-and-competition-generative-ai-marketplace>.
- Foucault, M. (1980). *Power/ Knowledge: Selected Interviews and other Writings, 1972–1977*. Gordon, C. (Ed.). Pantheon Books.
- France Épargne Research. (2026). "State of AI 2026: Comprehensive market & technology analysis". February 2. <https://www.france-epargne.fr/research/en/state-of-ai-entering-2026>.
- Hollenbeck, S. (2025). "58+ chatbot statistics for an AI-focused future". <https://www.rev.com/blog/chatbot-statistics>.
- Jose, B.; Cleetus, A.; Joseph, B.; Joseph, L.; Jose, B. & John, A.K. (2025). "Epistemic authority and generative AI in learning spaces: rethinking knowledge in the algorithmic age". *Frontiers in Education*. <https://doi.org/10.3389/feduc.2025.1647687>.
- Karamuk, E. (2025). "The automation trap: Unpacking the consequences of over-reliance on AI in education and its hidden costs". In *Pitfalls of AI integration in education: Skill obsolescence, misuse, and bias*. pp. 151-174. IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3373-0122-8.ch007>.
- Kersley, A. (2024). "Big tech's cloud oligopoly risks AI market concentration". <https://www.computerweekly.com/feature/Big-techs-cloud-oligopoly-risks-AI-market-concentration>.
- Khalkho, R.; Singh, S.; Gupta, N. & Srivastava, P. (2024). "Impact of educational AI on students' studying habits and academic performance". In *2024 International Conference on Artificial Intelligence and Quantum Computation-Based Sensor Application (ICAQSA)*. December: 1-6. <https://doi.org/10.1109/ICAQSA64000.2024.10882178>.
- Kruger, B. (2025). "The disciplinary logic of knowledge and the architecture of subjectivity: Rethinking Michel Foucault in the age of artificial intelligence". *The Common Sense World*, Medium. <https://medium.com/common-sense-world/the-disciplinary-logic-of-knowledge-and-the-architecture-of-subjectivity-rethinking-michel-009657621824>.
- Pew Research Center. (2026). "Key findings about how Americans view artificial intelligence". March 12. <https://www.pewresearch.org/short-reads/2026/03/12/key-findings-about-how-americans-view-artificial-intelligence/>.
- (2025). "Teens, social media and AI chatbots 2025". December 9. <https://www.pewresearch.org/internet/2025/12/09/teens-social-media-and-ai-chatbots-2025/>.
- Shahghasemi, E. (2025). "AI; A Human Future". *Journal of Cyberspace Studies*. 9(1): 145-173. <https://doi.org/10.22059/jcss.2025.389027.1123>.
- Stanger, A. (2022). "The Real Cost of Surveillance Capitalism: Digital Humanism in the United States and Europe". In Werthner, H.; Prem, E.; Lee, E.A.; Ghezzi, C. (eds). *Perspectives on Digital Humanism*. Springer, Cham. https://doi.org/10.1007/978-3-030-86144-5_5.
- Szmyd, K. & Mitera, E. (2024). "The impact of artificial intelligence on the development of critical thinking skills in students". *European Research Studies Journal*. 27(2): 1022-1039. <https://ersj.eu/journal/3876>.
- Tuomo, T. (2022). "Shoshana Zuboff, The age of surveillance capitalism: The fight for a human future at the new frontier of power". *Journal of Social and Political Philosophy*. 1(1). <https://doi.org/10.3366/jspp.2022.0034>.
- Zuboff, S. (2022). "Surveillance capitalism or democracy? The death match of institutional orders and the politics of knowledge in our information civilization". *Organization Theory*. 3(3). <https://doi.org/10.1177/26317877221129290>.
- (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.