RESEARCH PAPER

Do AIs have politics? Thinking about ChatGPT through the work of Langdon Winner

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Submission date: 24 March 2024; Acceptance date: 3 May 2025; Publication date: 5 December 2025

ABSTRACT

Since at least the 1960s, scholars, pundits and the general public have been worried about AI hype – the tendency to project more power, agency and intelligence on AI than it really has. To counter this tendency, academics often warn against anthropomorphizing AI or assuming that its impacts on society are inevitable. While these are sensible cautions, taken too far, they risk ignoring the way the design of AI actually can shape and condition how power and authority is distributed in society – and in academia. How, then, to see AI? Is it merely a tool people use for their own ends? Or can it hijack these ends? This paper argues that Langdon Winner provides provocative frameworks for tackling these questions.

KEYWORDS

AI, Langdon Winner, technological determinism, autonomous technology, Luddism

DOI: 10.13169/Prometheus.40.4.0004

Langdon Winner and the politics of artifacts

Pundits often say that technology is merely a tool, that it is neutral, and that whether it is used for good or bad all depends on who uses it. Such statements are widespread today, even in the age of AI. While this description of technology is the stuff of common sense, it is not a comprehensive description of how technology really works in the world. One of the better-known academics to call this common sense into question is the political scientist Langdon Winner, who, in 1980, wrote an essay titled 'Do artifacts have politics?' For Winner, the answer is yes. He argues that technologies are not neutral but are instead laden with bias – and more particularly with political bias in the sense that they are implicated in how power is distributed in society.

Most famously, Winner claims that Robert Moses, the New York urban planner, built Long Island overpasses deliberately to bring about racial segregation. That claim was contested and sparked so much controversy that people forget that the essay also analyzes a litany of other artifacts and their politics. One example is the use of pneumatic presses in Cyrus McCormick's reaper factory in the 1880s. Prior to the installation of the presses, skilled iron workers made the reapers

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and leveraged their skills to command decent wages and authority in McCormick's factory. Although the new presses did not create as fine a finished product as that made by the artisans, McCormick decided to install them anyway, since they deskilled the artisans and thereby shifted power from labor to management. In short, the presses were used by McCormick as a political tool that (re)arranged where power resided on the factory floor. In other words, the presses had politics (Winner, 1980).

Using this framing, could AI also have politics? Like McCormick's presses could AI be used to take power and authority away from a slew of workers in professions whose work, up to now, has remained secure in the face of technological advances? This concern was on full display in the summer of 2023 when screenwriters worried that Hollywood studio execs would replace human screenwriting with generative AI. That worry was at least temporarily put to rest when the Writers Guild of America extracted a guarantee from Hollywood studios: generative AI would not be used in screenwriting except at the discretion of the screenwriters. But those worries are hardly confined to Hollywood. In the university, there is also concern. Will writing survive in the face of AI? Or will academics who write and teach suffer a fate similar to McCormick's artisan workers?

In the case of McCormick's pneumatic presses, or in the way we might anticipate Hollywood studio executives using AI, artifacts can be used by human actors to (re)arrange how power is distributed among groups of people in society. In these cases, the distribution is largely a story where human actors are the main protagonists. However, in some scenarios, Winner thinks that the technology deserves a more central role and that in such situations, technologies are 'political phenomena in their own right' (Winner, 1980, p.123). To illustrate this, he urges the reader to consider the many ways in which viewing technology as merely tools (as many technology critics insist we should) is no longer an adequate metaphor for framing human-technology interaction. In his view, technology may sometimes *require* authoritarian arrangements of power even when people prefer more egalitarian ones. (To be clear, Winner was not endorsing authoritarianism. Rather, he was describing situations where the technology was requiring it.) To make this point, Winner discusses many 'inherently political technologies', such as a boat at sea (which, in Winner's view, *requires* a captain) and nuclear bombs (which, in Winner's view, *require* a security apparatus to guard the plutonium) or factories which may *require* a hierarchical division of labor in order to operate (Winner, 1980, p.128).

Elaborating on this last example, Winner recalls an exchange between nineteenth-century anarchists and Friedrich Engels. The anarchists hoped to bring about a more egalitarian society by deposing capitalists. But as Engels argued, this was unlikely to happen because the factory system was inherently 'despotic' and required a hierarchical division of labor to run at all. The technology, in other words, might reward humans with creature comforts, greater efficiencies and more mastery over nature. But these blessings were also accompanied by a curse – the curse being that these technologies were incompatible with a more egalitarian distribution of power. In claiming that ships, nuclear technology and factories require hierarchy, Winner takes care to qualify his assertions. It was not that technology could 'require' anything in an absolute sense or that it could determine political outcomes autonomously. But he was arguing that the converse is hardly true either: it is simply not the case that all autonomy and agency is found in humans and that technology is a mere instrument that humans wield at will for any ends they choose. Instead, we are born into technological societies that allow some choice, but this choice is ultimately constrained by the technological milieu in which we live. To make this point, Winner riffed off a line that Marx wrote in *The 18th Brumaire*: Marx observed 'Men make their own history, but they do not make it as they please', and Winner argued 'human beings do make their world, but they are also made by it' (Winner, 1977, p.87).

The larger argument that Winner makes is that, if it is myopic to think of technology as completely autonomous, reserving autonomy and agency for humans alone may muddy the ontological waters just as much. To be sure, it is helpful to ask a classic question which mid-twentieth-century political scientists often asked '*Who* governs?' In so doing, we learn more about

where power resides and whom to hold accountable. But as technology grew more ubiquitous and more powerful, Winner wondered whether an honest and more comprehensive study of where power resides also needed to consider the question '*What* governs?' (Winner, 1977, p.173).

Winner and the politics of AI

This question circles back to the central question of this essay 'Do AIs have politics?' They most certainly do. Technology was used by bosses like McCormick to govern workers. But bosses, too, are governed by technology – in these circumstances, the design of tools may have an inherent politics and a set of affordances that encourage certain behaviors while discouraging others. These affordances also empower some while disempowering others. Until we see technology from this perspective, we are unlikely to appreciate its full political ramifications.[1]

Following Winner's framework, in what category might we place AI? When AI has a particular politics, is this only because of the actors who wield the power? Or is AI inherently political in the way Winner thinks nuclear power plants and nuclear bombs are inherently political? In 'Will AI become the new McKinsey?' – a popular article that appeared in a spring 2023 issue of the *New Yorker* – Ted Chiang entertains a less deterministic conception of AI (Chiang, 2023a). Corporations might use AI, in the same way they have relied on consulting firms like McKinsey, to lay off workers and 'sharpen the knife of capitalism'. But Chiang hoped this would not be an inevitable outcome and that there might be other, more egalitarian, uses of AI where capital and labor might both benefit instead of capital alone. In *Blood in the Machine,* Brian Merchant says something similar. In his view, machines that make things more efficient mostly deskill and put people out of work because they are wielded by entrepreneurs who use them as a pretext for doing so. For Merchant: 'Robots are not sentient – they do not have the capacity to be … stealing … jobs. Management does. Consulting firms and corporate leadership do.' When the fault is placed on the technology, rather on the human actors: 'it has historically helped mask the agency behind the decision to automate jobs. This decision is not made by robots but by business owners. … Pretending otherwise, that robots are inevitable, is technological determinism' (Merchant, 2023, p.401). The implications of these arguments are clear. Nothing is inevitable. And technology does not absolutely determine outcomes. With a stronger, more unionized, labor force, or with less heartless entrepreneurs, or with better regulation, other, more egalitarian effects that do not concentrate power in fewer and fewer hands might be achieved.

These stances are also made more credible by the work of such historians as David Edgerton. In *The Shock of the Old,* Edgerton (2019) argues that, if we look closely at the 'use of things', what is revealed 'is that alternatives exist for nearly all technologies'. Seen thus, the history of technology is not strictly a story about innovators releasing technologies into the world with indomitable deterministic effects. Instead, the story is about 'technology in use' and the way users repurpose technology for their own ends. Readers who are wary of technological determinism will find critics like Chiang, Merchant and Edgerton convincing. But in stressing the importance of human agency and the empirical histories that corroborate that agency, it is important not to overlook the point Winner makes as a political theorist: technology is not deterministic, but the design of technology has affordances that encourage some types of political organization and behavior while discouraging others.

In keeping with Winner's project, it is not surprising that many scholars are asking, as others have asked about the internet, how AI is reshaping democracy, and creating a surveillance state

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[1] Debates about the cogency of Winner's argument have a long history. Especially worth reading are the exchanges between Winner and Bernward Joerges (Winner, 1993; Joerges, 1999). Questions about the inherent politics in artifacts are also informed by debates about the validity of technological determinism. Marx and Smith (1994) collect a number of canonical essays on the subject. In *How Artifacts Afford*, Jenny Davis offers some important reflections on the relationship between Langdon Winner's argument and affordance theory (Davis, 2020).

(Bernholz et al., 2021; Kreps and Kriner, 2023; Buolamwini, 2023; Tessler et al., 2024; Bullock et al., 2025). While these are worthy subjects, Winner's approach can also be used to examine how AI redistributes power at a more granular level. And this is what this paper is intent on doing – examining how the affordances of AI might reshape university authority.

From the standpoint of academia, these affordances are particularly evident in the way ChatGPT (the leading LLM) is designed and trained. LLMs like ChatGPT are composed of two main files. One of the files contains what are called the 'parameters' or 'weights', and the other file is a small program, often written in C or Python, that uses the parameters to output the predictive text or 'answers' in response to a user's prompt. To train the LLM, the parameters are defined by having the LLM scan huge bodies of text that are scraped from the Web. As the LLM is exposed to more and more text, the parameters are adjusted and refined. These refinements enable the LLM to output text that is increasingly fluent. However, while the text is increasingly fluent, and appears from the user's perspective to be more and more knowledgeable, the parameters, unlike the knowledge that is coded in an academic book or academic journal paper, do not contain references or citations to the original data on which the LLM was trained. As a result, while the LLM can generate text that often sounds articulate and authoritative, it is ultimately 'inscrutable'. It cannot back up its claims or answers with standard academic citations. In these senses, ChatGPT, by some definitions of the word, might be a genuine 'plagiarism machine' whose design not only runs completely counter to academic attribution practices, but also disrupts and destabilizes the authority that is legitimated when citation is practiced assiduously and as a matter of course (Keegin, 2023).

One can, of course, quibble and argue about whether ChatGPT's citation deficiencies are bugs and anomalies – that, as many in Silicon Valley confidently believe, can be squashed through iterative improvements in LLM design – or whether they are intrinsic to the LLM (Hoffman, 2023). But mostly it's the latter. As Chiang (2023b) has argued in 'ChatGPT is a blurry jpeg of the Web', an LLM, offers a representation of the Web, but this representation is always going to be fuzzier, less precise and more mediated than the original source. More crucially, because these representations do not have direct referents back to their original sources, they perform a sort of erasure. Yegin Choi describes ChatGPT as a 'mouth without a brain' (Hutson, 2021; Baker and Goodlad, 2023); AI pretends to author, but it performs a pale imitation of real citation, and it is on citation that academic authority ultimately depends.

Academics who are eager to import LLMs into teaching and learning are likely to think they are a flexible technology, that their more poisonous harms can be mitigated through wise use, and that Silicon Valley will make them better through iterative improvement. One sign that on the surface might lend credence to this position is that chatbots actually can insert citations into their generated text that refer and link back to articles on the Web. But this is an inferior type of *post-hoc* footnoting. The chatbots generate text, and then on the basis of what it produces, they find sources on the Web that corroborate what was claimed in the generated text. Or a process being billed as Retrieval-Augmented Generation (RAG) might be employed (Martineau, 2023). But even when a relevant source is found (which is not always the case), there is no guarantee it was the original text on which the model was trained. Clearly, this *post-hoc* footnoting hardly represents good citation. One might hope that through iterative improvement this citation flaw might be overcome, but this flaw is not so much a bug as a feature (Yao et al., 2023). By design, LLMs generate predictive text by consulting the probability information in their parameters file, not by consulting the original information on which they were trained. And this is why ChatGPT, at least in its current form, is inimical to the citation practices which are the foundation of academic power and credibility in the sciences and the social sciences. Its design is at odds with the way academics in these disciplines legitimate and ground knowledge (see Shah and Bender, 2022; Bender, 2024).

AI, Mario Savio and the automation of higher education

This is not to say that universities should categorically oppose the use of LLMs or AI more generally. For example, once computer science students have mastered the basics of coding, they can use

LLMs to accelerate software development with few downsides. AI can be used for translation. And AIs are useful in drug discovery and identifying cancer. However, where instructors are teaching students how to write and cite, ChatGPT is a disruptive presence. Unhappily, instructors who teach writing are encountering many submissions that seem to be generated by LLMs. And in spite of efforts to keep LLMs out of the classroom, the force of the technology sometimes seems irresistible. This is hardly surprising and corroborates what Winner is making patently clear in *Autonomous Technology:* the sense that technology is out of control is a pervasive perception in the world today. Nevertheless, as Winner also says, people do occasionally take successful stands against it. One of his inspirations in this regard is Mario Savio, a student at the University of California at Berkeley in 1964 who voiced his unhappiness with the way the university was being run:

> There is a time when the operation of the machine becomes so odious, makes you so sick at heart, that you can't take part! You can't even passively take part! And you've got to put your bodies upon the gears and upon the wheels … upon the levers, upon all the apparatus, and you've got to make it stop! And you've got to indicate to the people who run it, to the people who own it, that unless you're free, the machine will be prevented from working at all. (Winner, 1977, p.x)

The gears Savio meant to lay his body on were primarily bureaucratic and he, along with a cadre of other student protesters, tried to stop them by occupying the university's administration building. In our own day, we are confronted with a new set of gears brought about by AI. This time, their effects are primarily epistemological, in that they promise a whole new, more efficient and automated way of knowing. But this sort of knowing is a chimera, an imitation. It parrots real knowledge, but cannot ground this knowledge on the authority of reliable citation, quotation or bibliographical reference. If we want to preserve the authority of real knowing and real citation, then these new gears might also be worth stopping.

At the very end of *Autonomous Technology,* Winner offers a few closing suggestions on how humans might recover some autonomy in a world where technology seems to be following its own wants. Although not fully developed, Winner placed his hopes in what he termed 'epistemological Luddism'. Unlike the original Luddites, who physically smashed machines, Winner proposed a non-violent tactic where machines are simply 'unplug[ged] … in order to create a new space for learning'. Winner's semantic update of Luddism reminds readers that while the original Luddites raged against machines restructuring their work, and while the Luddite-like oratory of Savio was raging against a bureaucratic machine, our current rage is directed toward machines that are restructuring our information environments. In other words, while their effects are economic and bureaucratic, they are, perhaps most worryingly, epistemological. They create information without citation, text without authority, and, to paraphrase Yegin Choi, mouths without brains.

In the era of AI, what is threatened, at least on undergraduate college campuses, is intellectual and cognitive autonomy. To safeguard these, we need to call into question the automation of our intellects and our faculties (in both senses of the word). We also need to remember that if people have politics, so too, do artifacts. And as we become more enveloped by our machines and our machines become more enmeshed in us, it is not always easy to tell upon what gears to lay our bodies. For Savio, those gears were a university that was instrumentalizing faculty and students. It was a university that had been turned into a factory – more interested in turning out efficient workers than citizenry able to weigh the difference between right and wrong. In our own day, those gears are an AI that is disrupting current ways of making truth claims, an AI that is colonizing student minds and a university that has failed to wake up to these threats as quickly as it should have done (Garcia et al., 2024). We should rouse ourselves; vital ways of knowing depend on it.

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