Algorithms, Lies, and Social Media

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There was a time when the internet was seen as an unequivocal force for social good. It propelled progressive social movements from Black Lives Matter to the Arab Spring; it set information free and flew the flag of democracy worldwide. But today, democracy is in retreat and the internet's role as driver is palpably clear. From fake news bots to misinformation to conspiracy theories, social media has commandeered mindsets, evoking the sense of a dark force that must be countered by authoritarian, top-down controls.

This paradox — that the internet is both savior and executioner of democracy — can be understood through the lenses of classical economics and cognitive science. In traditional markets, firms manufacture goods, such as cars or toasters, that satisfy consumers' preferences. Markets on social media and the internet are radically different because the platforms exist to sell information about their users to advertisers, thus serving the needs of advertisers rather than consumers. On social media and parts of the internet, users "pay" for free services by relinquishing their data to unknown third parties who then expose them to ads targeting their preferences and personal attributes. In what Harvard social psychologist Shoshana Zuboff calls "surveillance capitalism," the platforms are incentivized to align their interests with advertisers, often at the expense of users' interests or even their well-being.

This economic model has driven online and social media platforms (however unwittingly) to exploit the cognitive limitations and vulnerabilities of their users. For instance, human attention has adapted to focus on cues that signal emotion or surprise. Paying attention to emotionally charged or surprising information makes sense in most social and uncertain environments and was critical within the close-knit groups in which early humans lived. In this way, information about the surrounding world and social partners could be quickly updated and acted on.

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