A Social Media Development Revolution:
Slopaganda and the Firehose of Falsehood

Quinn Sukys
Politics, Philosophy and Economics
March, 2026

Faculty Adviser: Emma Rose, Ph.D.

Essay completed in partial fulfillment of the requirements for graduation with Global Honors, University of Washington, Tacoma

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Introduction

Over the past 15-20 years, we have seen the rise of social media to the preeminent form of interaction across the internet. As a result, news, marketing, activism, dating, and many other core elements of our daily life have been fundamentally altered. The 2025 Reuters Institute Digital News Report found that Social Media became the most used news source (for the first time) in 2025, taking the spot formerly held by TV; in part due to the usage of social media by the current administration[1]. Given the clickbait and sensationalist tendencies of social media, and the lack of accountability for misinformation on these platforms, this shift in the status quo raises concerns about fake news and information. That same Reuters study found that 73% of Americans were concerned over their ability to identify fact from falsehood.

At the same time, discussion over AI has dominated the stock market, with much of its investment being driven by the technology's theoretical capacity to automate vast swathes of white-collar jobs. The AI chief of Microsoft explicitly predicted this would occur by July, 2027[2]. And there are widespread beliefs that the technology will create a permanent division between the upper and lower classes[3]. This discussion around the technology's extraordinary potential and immense risks, whether exaggerated or not, (there is evidence to believe that much of the

[1] N Newman et al., "Digital News Report 2025," Ox.ac.uk, June 17, 2025, https://doi.org/10.60625/risj-8qqf-jt36.

[2] Lloyd Lee and Kelsey Vlamis, "Microsoft AI Leader Predicts Automation in White-Collar Jobs," Business Insider, February 12, 2026, https://www.businessinsider.com/microsoft-ai-ceo-mustafa-suleyman-white-collar-tasks-automation-prediction-2026-2?op=1.

[3] Kyle Chayka, "Will A.I. Trap You in the 'Permanent Underclass'?," The New Yorker, October 8, 2025, https://www.newyorker.com/culture/infinite-scroll/will-ai-trap-you-in-the-permanent-underclass.

Steve Inskeep and Nia Dumas, "AI Could Widen the Wealth Gap and Wipe out Entry-Level Jobs, Expert Says," NPR, August 5, 2025, https://www.npr.org/2025/08/05/nx-s1-5485286/ai-jobs-economy-wealth-gap.

existential-fearmongering of AI is just an advanced marketing tactic[4],) has created an investment frenzy. NVIDIA, manufacturer of graphics cards, and a major player in the AI industry, was worth 4.5 trillion USD as of February of this year[5], which is more than the entire economies of most nations. Considering the public availability of the technology is only 4 years old, this is an unprecedented level of growth. There are doubts over the anticipated return-on-investment for generative AI. After a recent controversy over circular investment between NVIDIA, Oracle, and OpenAI, concerns over an AI-bubble that would dwarf the '.com bubble' have only gotten louder[6]. That said, regardless of whether the dominance of the AI-sector is stable, the fact is that the technology has become an inalienable factor in the tech landscape.

Based on generative AI's rapid development and social media's propensity to serve as a platform for misinformation and propaganda, I believe that there is a crisis relating to generative AI's potential as a propaganda engine. I also believe that this crisis is greatly exacerbated by structural vulnerabilities in the current social media paradigm, that innovative solutions need to be devised in favor of normal, iterative development. This belief is based on comparison between the current situation surrounding social media development, and a famous 1962 paper by Thomas Kuhn: *A Structure of Scientific Revolutions*. Based on this comparison, I believe that Kuhn's methods for resolving scientific crises may serve as a promising starting point for

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[4] Elaine Moore, "Using Fear to Sell AI Is a Bad Idea," @FinancialTimes (Financial Times, August 27, 2024), https://www.ft.com/content/bffafbf1-79f7-4048-9875-ce211af7fd59.
[5] Derek Saul, "$4 Trillion Nvidia Is Now Worth More than the World's 30 Richest People—and Much More," *Forbes*, July 9, 2025, https://www.forbes.com/sites/dereksaul/2025/07/09/whats-nvidia-more-valuable-than-the-uk-economy-worlds-30-richest-and-total-nyc-real-estate-make-the-list/.
[6]Beatrice Nolan, "Wall Street Isn't Worried about an AI Bubble. Sam Altman Is," Fortune, August 19, 2025, https://fortune.com/2025/08/19/wall-street-ai-bubble-sam-altman/.
Jacqueline Gu and Cade Metz, "How OpenAI Uses Complex and Circular Deals to Fuel Its Multibillion-Dollar Rise," *The New York Times*, October 31, 2025, https://www.nytimes.com/interactive/2025/10/31/technology/openai-fundraising-deals.html.

resolving this generative AI-powered propaganda, or slopaganda, crisis in our contemporary social media situation.

'Slopaganda', as defined by Dr. Klincewicz et al, refers to the recent strategy of using generative AI as a mass misinformation tool, relying primarily on quantity[7]. The team admits the term is their neologism, crafted in part from internet meme culture, (the meme reference being the recent characterization of the word 'slop' to describe AI-generated content,) and that there is little other work in the field that uses the term. I will use the term 'slopaganda' to specifically refer to AI-generated propaganda created underneath the Firehose of Falsehood strategy throughout this paper.

In this paper, I will analyze Kuhn's structure of scientific revolutions, and compare it to the current conditions surrounding generative AI and propaganda on social media. First, I will provide an overview for the important concepts in this paper. This will include Kuhn's Structure of Scientific Revolutions, Dead Internet Theory, the Firehose of Falsehood propaganda model, and Generative AI. Second, I will demonstrate how Kuhn's structure can be applied to social media development. Third, I will provide evidence for the existence of a slopaganda crisis. I will lay out the synergies between currently available generative AI models and the Firehose of Falsehood propaganda model, and I will demonstrate their applications to Dead Internet theory. Then, I will analyze Kuhn's concept of the crisis, and compare it to the current slopaganda crisis. Finally, using Kuhn's concept of Paradigm Shift and Extraordinary science, I will

[7] Michał Klincewicz, Mark Alfano, and Amir Ebrahimi Fard, "Slopaganda: The Interaction between Propaganda and Generative AI," *ArXiv (Cornell University)*, March 3, 2025, https://doi.org/10.48550/arxiv.2503.01560.

identify some potential avenues to resolve the current slopaganda crisis, and reinforce how I believe Kuhn's structure can function as a foundation for resolving this crisis.

Global and Community Relevance

As its former moniker, the 'World Wide Web' would imply, issues and development on the internet have a global impact. Networks affect everyone connected through them when they are significantly altered. If that network is global, then naturally, the impacts would be global as well. As will be discussed in further detail later throughout this paper, the Dead Internet is an internet hijacked by a robust propaganda network, made possible through the advent of generative AI producing slopaganda. A Dead Internet would be capable of effectively distributing propaganda to people all across the globe. But there are other degrees of global impact, as well. For example, social media-based propaganda targeted towards Americans can shift political balance in state and national government; which given the United States' role as a global imperial power, can have worldwide consequences. Additionally, as we saw during COVID-19, propaganda and misinformation surrounding vaccinations, masks, and other health guidelines can play a significant role in the international spread of diseases. Thus, not only are the direct global impacts of slopaganda or the dead-internet globally-spanning, but their effects on local policy are also worldwide, as well.

Overview of Concepts

There are multiple theories that are necessary for this essay's claim to make sense: These are Kuhn's Structure of Scientific Revolutions, the Firehose of Falsehood propaganda strategy, and Dead Internet Theory. There is also background information on generative AI and this

essay's usage of specific terms (such as slopaganda) that are also necessary to understand the argumentation that will follow. The following section will fill in this information, laying out the arena of argumentation.

Kuhn's Structure of Scientific Revolutions

Kuhn wrote *A Structure of Scientific Revolutions* in 1962, in an effort to understand the process by which scientific revolution occurs. He created this work to combat the, at the time, prevailing theory that scientific progress only occurred through iterative development. And while Kuhn agreed that iterative development played a role in scientific progress; he advocated for a more nuanced phase-based model whereupon scientific progress alternated between periods of iterative development, and revolutionary upheaval. The structure is outlined in 5 phases, and functions as such:

The first phase is the Pre-Paradigmatic phase. It exists only once, and is the phase before the existence of any particular paradigm. But as wild experimentation starts supporting a cohesive theory, the second phase quickly begins.

The second phase is the phase of normal science. This is the iterative phase of science, and is the most common phase for science to exist within. Normal science consists of targeted experiments to fill gaps of knowledge within an existing knowledge-base. It primarily seeks to comply with and elaborate on existing theories. It is precise, iterative, and collaborative. Kuhn compares it to 'puzzle solving'[8]. The previous findings and theories that normal science builds upon form what Kuhn refers to as a paradigm. It represents the accumulation of accepted knowledge, popular theories, and the underlying

[8] Thomas S Kuhn, *The Structure of Scientific Revolutions* (Chicago: The University of Chicago Press, 1962), 35

assumptions that those theories are based on. But normal science is limited by the paradigm. To continue the puzzle-solving allegory: sometimes there aren't enough pieces (or the right pieces) to solve a problem. There is a fault in the paradigm. These problems are called anomalies in Kuhn's model. Anomalies are an expected part of science, or at least within a certain quantity. Not all questions can be answered immediately.

But, if the paradigm demonstrates itself to be inadequately equipped to resolve anomalies, it enters the third phase: crisis. Crises can be resolved with normal science, but there are instances where the paradigm has too many faults for this to be a valid path forward. In these instances, a different method of science: extraordinary science, is necessary. Unlike normal science, extraordinary science takes a critical eye towards the paradigm, with the intent to find another underlying theory. A third phase that results in extraordinary science is characterized by prevalence of competing theories, more sporadic and desperate experimentation, and a use of debate and philosophy over hard sciences.[9] If normal science resolves the crisis, the second phase resumes. But, if extraordinary science succeeds in finding a new cohesive theory, the fourth phase begins.

The fourth phase is the scientific revolution, or the paradigm shift. This phase is represented by the dominance of extraordinary science, and it culminates in the establishment of a new paradigm. This is similar to the first phase, but it differs in that there is still some precedent to inform the development of a new paradigm (even if it serves as an example of what 'not' to do.).

Finally, the fifth phase is the post-revolution. A new paradigm has been established, and normal science resumes. From a certain perspective, similar to the first

[9] Thomas S Kuhn, *The Structure of Scientific Revolutions* (Chicago: The University of Chicago Press, 1962), 91

phase, the second phase can also only happen once – with every subsequent second phase just being a reinterpretation of the fifth phase.

Dead Internet Theory

Dead Internet Theory is a conspiracy theory that holds that the majority of content on the internet is (or in some versions, soon will be) created by bots, for the purposes of mass-manipulation and advertising. In the original theory, the term 'bots' referred to web-crawling programs and people paid to falsify engagement online. However, in the current technological context and in current versions of Dead Internet theory, the term 'bot' also refers to AI-powered internet-bots[10].

The initial theory likely began on message boards in 2016[11] with a post by a user called "IlluminatiPirate". But in 2021, the theory started getting popular traction online, first as a meme, and then it started to gain attention in more reputable sources, such as the Atlantic[12]. And while the article broadly dismissed the theory for being ridiculous – the theory was starting to gain popularity. But as I will discuss throughout this paper, unlike ancient aliens or flat earth, this particular theory has a lot of resonance with evidence-backed reality. And a more nuanced

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[10] Wikipedia Contributors, "Internet Bot," Wikipedia (Wikimedia Foundation, February 28, 2026), https://en.wikipedia.org/wiki/Internet_bot#cite_note-Etymology,_origin_and_meaning_of_bot_by_etymonline_1922_e339-1.
IONOS editorial team, "What Is a Bot: Types and Functions," IONOS Digitalguide, November 16, 2021, https://www.ionos.co.uk/digitalguide/online-marketing/online-sales/what-is-a-bot/.

[11] IlluminatiPirate (January 5, 2021). "Dead Internet Theory: Most of the Internet is Fake". Agora Road's Macintosh Cafe. Retrieved November 14, 2024.

[12] Kaitlyn Tiffany, "Maybe You Missed It, but the Internet 'Died' Five Years Ago," The Atlantic (theatlantic, August 31, 2021), https://www.theatlantic.com/technology/archive/2021/08/dead-internet-theory-wrong-but-feels-true/619937/?utm_source=copy-link&utm_medium=social&utm_campaign=share.

version of the theory may very well reflect or point to a current (or imminent) truth in our current social media ecosystem.

In recent years the prominence of internet-bots have escalated. After Elon Musk purchased Twitter, he infamously ran into issues with advertiser retention, because of how rampant bot activity was on his platform[13]. And Russian bots have been a known quantity for a long time, with a major bot farm being uncovered a little under 2 years ago[14].

The AI-only, parody/experiment social media platform, Moltbook provides interesting evidence towards the Dead Internet theory[15]. This platform simulates an active social media platform, with posts, comments, and trends, without any human participation – all interaction is performed through AI-generated simulacrums. And though Moltbook has quirks and glitches, it proves that the technology is capable of artificially mimicking engagement online, en masse. Additionally, Facebook announced in early 2025 that it would begin supporting artificial AI-generated accounts[16]. A study from nearly the same time found that nearly half of all articles published on the internet were generated by AI. That's a number up from nearly 0 AI generated articles in early 2022 (because the technology hardly existed then). And that Russian bot farm uncovered in 2024? It utilized generative AI to massively increase its capabilities[17].

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[13] Hanna Ziady, "Advertisers Plan to Withdraw from X in Record Numbers," CNN, September 5, 2024, https://www.cnn.com/2024/09/05/business/advertisers-x-withdrawal.
[14] Mike Wendling, "US Officials Uncover Alleged Russian 'Bot Farm,'" www.bbc.com, July 9, 2024, https://www.bbc.com/news/articles/c4ng24pxkelo.
[15] "Moltbook - the Front Page of the Agent Internet," moltbook, 2026, https://www.moltbook.com/.
[16]Chris Westfall, "Meta Opens Floodgates for AI-Generated Accounts on Facebook, Instagram," Forbes, January 3, 2025, https://www.forbes.com/sites/chriswestfall/2025/01/02/meta-opens-floodgates-on-ai-generated-accounts-on-facebook-instagram/.
[17] Emily Harding, "A Russian Bot Farm Used AI to Lie to Americans. What Now?," Www.csis.org, July 16, 2024, https://www.csis.org/analysis/russian-bot-farm-used-ai-lie-americans-what-now.

Generative AI

As I use the term 'generative AI' throughout this paper, I am primarily referring to publicly-available, machine-learning algorithms, which are capable of producing content similar in form to what a human might produce. This includes large language models (LLMs) like chatGPT, Claude, or DeepSeek; as well as image or video-generation platforms like Midjourney, Stable Diffusion, or Sora. And while a nuanced breakdown of the mechanics at play in these models is outside the scope of this paper, I believe there are certain well-documented technical flaws and limitations that are worth specifying for the purposes of this paper.

First, generative AI is prone to an error called a hallucination[18]. This is when it responds to a prompt in a way that isn't representative of its training data: it just hallucinated the result. This has become less common as models have advanced, but LLMs are still prone to "just make up" answers if pressed. A second error is known as reward hacking. This is when the training process in machine learning goes awry; and the model develops tendencies (or hacks) that were not expected. Finally, generative models inherit the biases of the data they're trained on.

A formative paper on the topic (at least, in that it relates to modern LLMs and similar generative models,) *Concrete Problems in AI Safety* by Amodei et al[19] found that accidents in AI-development stemming from these limitations could compound into privacy, security, and policy issues. But these same issues apply to all intentional action, including malicious actors. Elon Musk's LLM, Grok, has been memed as being 'woke' for its resistance to adopt alt-right

[18] MIT Management, "When AI Gets It Wrong: Addressing AI Hallucinations and Bias," MIT Sloan Teaching & Learning Technologies (MIT, 2024), https://mitsloanedtech.mit.edu/ai/basics/addressing-ai-hallucinations-and-bias/.
[19] Dario Amodei et al., "Concrete Problems in AI Safety," July 25, 2016, https://arxiv.org/pdf/1606.06565.

talking points[20]. This is despite the fact that it has also swung the opposite political direction, referring to itself as 'MechaHitler' early after its adoption.

At this stage in their development, these models are far from precision instruments, limiting their capability. And, as I discuss under the 'Synergies between Generative AI and the Firehose of Falsehood' section; I believe that this limitation is why it is important to analyze the specific means by which generative AI could be used for propaganda.

Slopaganda and The Firehose of Falsehood

Throughout this paper I will use the term slopaganda and the Firehose of Falsehood. Both describe the propagandistic threat that I will argue has put us in a state of crisis; but in different fashions. In brief, the Firehose of Falsehood is the term for the propagandistic technique, and the one I believe best benefits from generative AI.

The term 'Firehose of Falsehood' was coined by Christopher Paul and Miriam Matthews in a 2016 paper sponsored by the RAND corporation (a nonpartisan, non-for-profit US security thinktank)[21]. In essence, the strategy of the Firehose of Falsehood is to overwhelm critical thought, displacing reality in favor of the propagandized narrative. In the 2016 paper, the Firehose of Falsehood was also referred to as Russian propaganda because of its infamous utilization by Putin's regime; although the propagandistic technique need not be limited to use in Russia. And based on this technique's similarities to Steve Bannon's "Flooding the Zone"

[20] sakshi, "Woke Grok AI," Know Your Meme, May 2, 2025, https://knowyourmeme.com/memes/woke-grok-ai.
[21] Christopher Paul and Miriam Matthews, "The Russian 'Firehose of Falsehood' Propaganda Model," RAND (RAND Corporation, July 11, 2016), https://www.rand.org/pubs/perspectives/PE198.html.

(discussed later in this section), I believe that there is substantial reason to be wary of this technique, even outside of the Russian context.

Paul and Matthews identified four distinctive features of the Firehose of Falsehood that have come to define the strategy:

First, the Firehose of Falsehood is 'High-volume and Multichannel', referring to the variety of platforms that propaganda is presented on and the quantity of propaganda received.

Second, the Firehose is 'Rapid, Continuous, and Repetitive'. The Firehose works to gain control of the narrative on any given topic, and it does not let up; leaving little opportunity for a counter narrative to establish itself. Its repetitive nature helps its message stick.

Third, firehosing 'lacks commitment to objective reality'. Those operating under this model care more about the narrative than the truth, and have no hesitation to tweak information, alter situations, or outright lie if any such techniques would align better with their values. Paul and Matthews also draw attention to several psychological phenomena such as the 'sleeper effect' and 'confirmation bias' that help mitigate the hit to credibility that these sources suffer from lying.

Fourth, firehosing also 'lacks commitment to consistency'. Firehosed propaganda doesn't feel the need to stick to an internally-consistent set of facts, and it doesn't hesitate to alter to a different set of falsifications as necessary. Intuitively, the common belief is that a source outed for false reporting would lose credibility, but Paul and Matthews point out several unintuitive ways this loss can be mitigated, allowing these sources to maintain relative credibility despite their consistent falsehoods. A shift in messaging can result in a level of interest for this reason behind the shift (resulting in more attention, and a higher volume for the propaganda), and

sources who adapt their opinions can be seen as more open to changing facts and critique, increasing their credibility (despite whether or not they ever actually change to a truer response).

The Firehose of bears many resemblances (and has a lot overlap with) Steve Bannon and the Trump administration's 'Flood the Zone' political strategy[22] [23] [24]– with a few notable differences. While both rely on mass-production of media, distraction, and confusion to remain effective, 'Flooding the Zone' is a political strategy to subjugate the media; more than a propaganda strategy in and of itself. Another difference is that someone operating under the Firehose of Falsehood model seeks to stay ahead of the news, and control the narrative. Meanwhile someone who is "Flooding the Zone", has no concern about the narrative, instead seeking to create news faster than it can be covered or processed. To re-iterate, the Firehose is effective once you control the me'dia, or have substantial control over communication; as opposed to "Flooding the Zone", which is a tactic for when there isn't direct control over the media. I believe that generative AI is also a potent tool for flooding the Zone, although specific mechanics of that relationship are outside the scope of this paper's research.

Applying Kuhn's Structure to Social Media Development

Kuhn's structure is argued from a combination of rhetorical argument, history, and philosophy, rather than hard science and quantitative studies. Thus, I believe that it is more

[22] Brian Stelter, "This Infamous Steve Bannon Quote Is Key to Understanding America's Crazy Politics," CNN, November 16, 2021, https://www.cnn.com/2021/11/16/media/steve-bannon-reliable-sources.
[23] Luke Broadwater, "Trump's 'Flood the Zone' Strategy Leaves Opponents Gasping in Outrage," Nytimes.com (The New York Times, January 28, 2025), https://www.nytimes.com/2025/01/28/us/politics/trump-policy-blitz.html.
[24] Peter Aitken, "Steve Bannon's 'Flood the Zone' Strategy Explained amid Trump Policy Blitz," Newsweek, February 6, 2025, https://www.newsweek.com/steve-bannon-flood-zone-strategy-explained-trump-policy-blitz-2027482.

broadly applicable than its title would imply. And, based on the pervasiveness of the term 'paradigm shift', I believe that this isn't a revolutionary claim. Though not explicitly, Kuhn's structure has made its way into all manner of other fields and understandings – primarily by way of the 'paradigm shift' concept.

However, since this paper seeks to use Kuhn's concept of extraordinary science as a starting point for resolving a specific social media crisis, I believe it is worthwhile to analyze how this model can be specifically applied to social media development, alongside the specific methods by which social media development has to be thought about in order for a direct comparison to be possible.

Social Media in place of Research Science

Kuhn's structure is based on an assumption of scientific progress; that iterative development and revolution are cumulative, and moving toward a tangible end-goal. In the context of scientific development, this is an obvious conclusion: science seeks to uncover universal truth. Thus, when using Kuhn's cyclical framework of progress to analyze history and speculate about the future, it is clear that moments of crisis were the fracturing of a flawed paradigm. But when applying Kuhn's structure to revolutions outside research science, the assumption of progress is more difficult to justify – and quickly falls into the realm of philosophy. What purpose does social media serve, how do we evaluate if it is in a moment of crisis or not?

Because most social media platforms are private, for-profit enterprises, a neoliberal, free-market line of argumentation may propose that the purpose of social media is to generate revenue. And while this is a guiding principle of business who create these platforms, this is a fundamentally flawed philosophy. By this logic, the purpose for cinema, investment banking,

and weapons development would all be identical. Thus, while the purpose of a social media company may be to generate revenue, the purpose of social media – why it has come to exist in our society, and what it does for us, is more significant than the accumulation of currency.

If the purpose of social media, and therefore the metric we use to analyze whether it is in crisis by Kuhn's structure, isn't profit, what is it? Based on other authors in the literature, an ethics model built off Rousseau and Locke, (philosophers who inspired America's founding fathers,) and UW Tacoma's IIGE's global and community values, this paper argues that the purpose of social media is to, by way of the internet, connect human communities across the globe, foster creative expression and human social connection, while maintaining a "free, egalitarian, and democratic public sphere"[25]. Thus, anomalies and crises in a social-media paradigm would be defined as anything that bars human connection, sabotages the democratic public sphere, or otherwise stands in the way of this purpose.

Phases of the Social Media Paradigm

Another critical component of Kuhn's Structure of Scientific Revolutions are his phases of scientific development. I believe that historical social media development fits within this model, and can be charted out to further understand the relations between Kuhn's structure and social media development.

The first phase in Kuhn's model is the pre-paradigmatic phase. While in the context of scientific development, this was likely sometime in prehistory, social media likely has a more

[25] Ugur Aytac, "What Is the Point of Social Media? Corporate Purpose and Digital Democratization," *Philosophy & Technology* 38, no. 1 (February 20, 2025), https://doi.org/10.1007/s13347-025-00855-y.

recent pre-paradigmatic phase. I would argue that this would be shortly after its invention, before the dotcom bubble.

The second phase is the phase of normal science; of standard procedure and iteration. In the context of social media development, this can be compared to the progressive iteration, rising, and algorithm tweaks of dominant platforms. During this phase, social media platforms do change, but the user experience won't be drastically altered. I believe that social media development is currently either in the latter half of this phase, or in the beginning of the next one.

The third phase is the phase of crisis. An anomaly (or anomalies) rise to the point where faith in the paradigm collapses. This phase is characterized by conflict between those who try to salvage the previous paradigm, and those who are trying to discover a new one. It is important to note that this phase does not always result in a paradigm shift, although under Kuhn's structure, a paradigm shift can only come out of a period of crisis. I believe that it is possible that we are currently in this phase, but another example of a time when I believe the social media paradigm was in crisis, was in 2018, when the user-data privacy scandal was in full swing: with Mark Zuckerberg even testifying before congress[26].

The fourth phase is paradigm shift, or scientific revolution. In the original context of the paper, this is when the previous academic paradigm collapses fully, and the search for a new one begins.

Finally, the fifth phase: post-paradigmatic. Or, the new paradigm. Once the paradigm shifts, it takes a brief period for the new one to get settled, which is this phase. Then the cycle begins back at the second phase.

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[26] CBS News, "Zuckerberg to Testify before Congress about User Data Privacy Scandal," Cbsnews.com (CBS News, April 9, 2018), https://www.cbsnews.com/video/facebook-ceo-mark-zuckerberg-congressional-hearings-cambridge-analytica-data-scandal-analysis/.

Throughout this paper, I leave the possibility of the slopaganda crisis being either current or imminent open. This is because of the 'fuzziness' between the second and third phases of Kuhn's structure. Because anomalies can exist without being crises, previous instances of mass-propaganda in social media might have been excusable as a one-time anomaly, or the exception to the norm. However, as generative AI makes slopaganda possible, and mass-propaganda becomes the norm, we will be certifiably within a point of crisis.

If we are well into a paradigmatic crisis, it likely had not begun earlier than 2016, which was when the Dead Internet Theory was first created. More likely, it began in 2019 when Robert Mueller's special council found social-media based interference into the presidential election[27]. Or later, in 2021, when short-form content rose to prominence, the January 6th insurrection was organized in part due to social media, and the Dead Internet Theory gained mass popularity. If these events were merely anomalies, and social media development has yet to enter a phase of crisis; then the crisis threatened by slopaganda is likely significantly more impactful than these historical events listed prior.

Synergies between Generative AI and the Firehose of Falsehood

While generative AI possesses fundamental limitations in several fields: namely the arts (although the specific inadequacies of AI-generated art are outside the scope of this paper), it does live up to its hype in several other fields. Of specific importance to this paper, is its exceptional potential as a propaganda engine, specifically underneath the Firehose of Falsehood model.

[27] Special Counsel Robert S. Mueller, III, "Report on the Investigation into Russian Interference in the 2016 Presidential Election" (U.S. Department of Justice, March 2019).

As discussed previously, generative AI has limitations in generation. Namely, it struggles with consistency and factual accuracy. Although recent models have proven more reliable than their predecessors, AI-generated content is still far from free of hallucinations and similar aberrations. This has limited the technology's capacity to revolutionize media production. And while there is a debate to be had about the efficacy of controversy in advertising, the poor reception of the AI-generated Coca-Cola[28] and superbowl Svedka Vodka[29] showed the technology didn't please audiences. But this isn't an obstacle to the Firehose of Falsehood; which makes slopaganda an application that generative AI is perfectly suited for.

First, generative AI can write faster than most humans; and can run without rest. Properly scaled, slopaganda can be far higher-volume than traditional methods. Additionally, generative AI is excellent at producing and modifying content into something that is believable at first glance, but which falls apart under casual inspection by someone with a critical eye. That initial impression is about all the Firehose of Falsehood cares about; and generative AI is far more efficient at faking images than a human using photoshop. The multimedia capabilities of generative AI (generating voice, video, images, and text) further compound this, simplifying the content production pipeline for multichannel propaganda down to little more than simply asking for an image.

Second, generative AI can run continuously (save for brief periods of maintenance for the serverfarm) and as previously mentioned, can generate content far quicker than most human beings can. The information cutoff date for generative models may slow down the process of

[28] Bruna Horvath, "Coca-Cola Causes Controversy with AI-Made Ad," NBC News (NBC News, November 18, 2024), https://www.nbcnews.com/tech/innovation/coca-cola-causes-controversy-ai-made-ad-rcna180665.
[29] USA TODAY AdMeter Staff, "AI-Generated Super Bowl Commercials Arrive with Svedka Vodka ," AdMeter, February 3, 2026, https://admeter.usatoday.com/story/sports/ad-meter/2026/02/03/svedka-super-bowl-commercial-2026-ai/88495237007/.

generation (for example, ChatGPT 5.2 has an information cutoff in August 2025[30]) but would be far from a barrier to using this technology. Keeping a custom-trained model up-to-date in the news is one option. However ignoring this limitation would also be valid; as previously mentioned, the Firehose of Falsehood is not committed to objective reality. Fulfilling the second feature of the Firehose of Falsehood: the rapid, continuous, and repetitive production of propaganda, would be a simple task for any would-be slopagandist.

The third and fourth features of the Firehose of Falsehood similarly synergize with generative AI. Those features refer to the strategy's lack of commitment to reality or a consistent narrative. The former is a simple check. Generative AI hallucinates even when trained on only factual data; and it is certainly possible to poison a model's training data with an explicit intent to reflect bias. The latter has a synergy with one of the greatest limitations of current generative AI models, their short term memory. Similar to how LLMs struggle to maintain consistent detail across long lengths; maintaining a widespread propaganda campaign with consistent messaging and established canon would likely be impossible for current models. But the Firehose of Falsehood isn't restricted by consistency The above synergies make generative AI well-suited for propaganda production underneath the Firehose of Falsehood model.

Vulnerabilities of the Paradigm

The dangers of slopaganda are enabled and exacerbated by various elements of our current Social Media paradigm. As discussed previously, the most relevant of these are: the ad-revenue model, the ultramassive userbases of these platforms, and the algorithmic distribution of content.

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[30] "Using GPT-5.2 | OpenAI API," Openai.com, 2025, https://developers.openai.com/api/docs/guides/latest-model.

The goal of this section is to highlight the unique difficulties of addressing this crisis within the current paradigm; any more specific interactions of these features of the paradigm with slopaganda are beyond the scope of this paper. That said, I believe there is sufficient evidence here to argue that slopaganda does present either a current or imminent crisis under Kuhn's structure of scientific revolutions.

Current social media platforms primarily generate revenue from their positions as advertising platforms. Thus, in order to be competitive in the market, platforms need to be friendly to advertisers and advertising, and have an audience primed to be receptive to advertising. Under the current model, the customer is the advertiser; who pays the platform to offer their message to this primed audience. This isn't a revolutionary model; it's driven all sorts of ventures for a long while: notably, sports. But what is, or rather, was revolutionary, was the specific appeal of social media advertising: targeted advertising. This allows advertisers to refine their audience to a degree not possible before, and it made advertising over social media more efficient than nearly every other method. In their book, *Propaganda and Persuasion,* Jowett and O'Donnell provide a broad overview of how propaganda works, who it affects, and how new tools are methods of communication are favored by propagandists[31]. Covering the entirety of their work is outside the scope of this paper, but there are multiple points where advertising is compared to propaganda. Both seek to influence a receiver's action with a message, which may not necessarily be in the interest of the receiver; both are forms of mass-media persuasion. Thus, when a platform is optimized for advertising distribution on the behalf of the advertiser, a vulnerability to propaganda is also built in. There are methods by which advertising and propaganda can be separated on these platforms, with government regulation and direct

[31]Garth Jowett and Victoria O'Donnell, *Propaganda & Persuasion* (Thousand Oaks, Calif.: Sage, 2012).

moderation both being excellent examples. But much of the danger of propaganda comes from the government, making regulation an unreliable prospect (the rise of the Trump administration also saw significant cutbacks in fact-checking and moderation for these platforms[32]); and as will be discussed next, these platforms have become too large to adequately moderate.

Slopaganda finds shelter within the ultramassive userbases of social media platforms. Direct moderation would serve as an excellent means by which slopaganda could be restricted: crackdowns on misinformation, low-effort content, and nonhuman accounts may all prove effective. But, these solutions all require resources proportional to the user base to implement– and these social media platforms have massive userbases. This makes adequately robust moderation infeasible. Additionally, part of the power of slopaganda is that it can produce propaganda cheaper and faster than it can be moderated. If there were smaller userbases, however, these features could likely be more easily managed by moderators and perhaps the users themselves. Additionally, by limiting the userbases of these platforms, their centralization is also limited. Each platform would likely still have misinformation, propaganda, and bias; but the terrifying scope and speed of slopaganda would likely be undercut by the logistical impossibility of propagandizing thousands of different social media platforms. In effect, compartmentalizing the danger of slopaganda.

Slopaganda also exploits the fact that content is algorithmically distributed. In their paper: Kuznetsove and Makhortykh discuss the political impacts of Facebook's algorithm, specifically as it related to the spread of Russian misinformation in the context of the 2020

[32] Clare Duffy, "Meta Is Getting Rid of Fact Checkers. Zuckerberg Acknowledged More Harmful Content Will Appear on the Platforms Now," CNN, January 7, 2025, https://www.cnn.com/2025/01/07/tech/meta-censorship-moderation.

election[33]. These researchers found that Facebook's algorithm pushed authoritative news sources more following the 2020 election, but in the time leading up to the election, polarizing political rhetoric and misinformation were shown about as often as legacy news sources; demonstrating capacity for regulation, and thus implying an intentional distribution of misinformation.

There are limitations in this study which restrict the conclusiveness of Kuznetsove and Makhorykh's claims against Facebook; there isn't enough evidence for this to hold up in a court of law. However, the claims are strong enough to arouse suspicion; and since many of the limitations stem from the lack of transparency with the Facebook algorithm: its ever-shifting nature, its extreme personalization, and its inherent randomness, it is further demonstrated that the algorithms Facebook and similar social media platforms use (despite their impact on the global information ecosystem,) have no adequate oversight or regulation.

In applying this to the slopaganda crisis, this would mean that a sufficiently influential slopagandist could curry favor with the private corporations who own these platforms, and massively increase the scope and speed at which their content is distributed. And since slopaganda benefits massively from making the first impression, en masse, (both traits of the firehose of falsehood,) this is a major vulnerability; which exists in addition to whatever agenda these platforms may hold in influencing the narrative around any particular issue as well.

The danger here is less that content is algorithmically curated: with the scale of the internet, algorithmic sorting methods are going to be necessary, (although the necessity of algorithmic curation is likely a derivative consequence of ultramassive userbases,) rather, it is the secretiveness with which these platforms employ algorithmic curation that is the issue. There

[33]Weizenbaum Institute and Germany Mykola Makhortykh, "Blame It on the Algorithm? Russian Government-Sponsored Media and Algorithmic Curation of Political Information on Facebook ELIZAVETA KUZNETSOVA," *International Journal of Communication* 17 (2023): 971–92.

currently is not adequate oversight to prevent these algorithms from manipulating the narrative for the economic or political gain of the platform's owners (or the political or economic gain of their benefactors,) to the detriment of the public sphere. So long as these platforms can iterate their algorithms in an opaque environment without accountability, the potential for exploitation by slopaganda will remain.

slopaganda exploits several key aspects of our current social media paradigm; and I believe that there needs to be fundamental change, either to the funding model, to platform scope (ultramassive userbases), or to the content-curation algorithms; or perhaps all three.

High Stakes: Dead Internet Theory

The synergies between generative AI and the Firehose of Falsehood suggest a state of crisis. But what does that mean in the context of Kuhn's structure?

In the *Structure of Scientific Revolutions*, the benefit of scientific development is more-or-less self-evident: A crisis in a scientific paradigm is a negative, because it threatens to halt scientific development. This makes revolution a positive, because it breathes new life into science and leads toward new discoveries. But as we apply Kuhn's structure to understand crises outside research science, we lose this self-evidence. What are the consequences should this crisis be left unaddressed? Based on the nature of slopaganda, and the features of our current paradigm, I believe that a reality comparable to the one described in Dead Internet Theory would be made manifest: omnipresent slopaganda would make an egalitarian and democratic public sphere impossible. Thus destroying the core purpose of social media, at least as it was defined in the beginning of this paper.

Dead Internet theory proposes a world where the majority of content on the internet is viewed and created by bots, with the intent to persuade and misinform the public. This

proposition could be realized if slopaganda goes unaddressed. Content, comments, reviews, political discourse: all of it could be faked, and could be crafted to mislead populations. Any real, human-generated content could be buried under vast swathes of 'slop', and suppressed by algorithms that favor falsified content. If anyone did see that human content, any engagement surrounding it could be overwhelmingly falsified.

Steven Feldstein, an accomplished senior fellow at the Carnegie Endowment for International Peace outlined a similar eventuality from the fusion of generative AI and modern propaganda tactics, in his article: *The Consequences for Generative AI, Democracy, Governance and War*[34], where he outlines the technology's potential to undermine democracy. Similarly, the significant impact of falsified interaction was also described by researchers Zixuan Weng and Aijun Lin in their article: *Public Opinion Manipulation on Social Media: Social Network Analysis of Twitter Bots during the COVID-19 Pandemic,* where bots were found to have a significant impact in distributing misinformation even before the wide-availability of generative AI[35]. And researchers Ahmed et al openly discussed the possibility of a dead internet in a 2024 paper[36].

And though these sources rarely cite Dead Internet theory directly, both the dystopian conditions they describe (and the dystopian conditions this paper describes) as possible are nearly identical to the popular interpretations of Dead Internet theory.

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[34] Steven Feldstein, "The Consequences of Generative AI for Democracy, Governance and War," *Survival* 65, no. 5 (September 3, 2023): 117–42, https://doi.org/10.1080/00396338.2023.2261260.

[35] Zixuan Weng and Aijun Lin, "Public Opinion Manipulation on Social Media: Social Network Analysis of Twitter Bots during the COVID-19 Pandemic," *International Journal of Environmental Research and Public Health* 19, no. 24 (December 7, 2022): 16376, https://doi.org/10.3390/ijerph192416376.

[36] Amna Ahmed et al., "Dead Internet Theory," *Pakistan Journal of Engineering Technology & Science* 12, no. 1 (June 28, 2024): 37–48, https://doi.org/10.22555/pjets.v12i1.1077.

So how do we prevent this? How do we address this slopaganda crisis?

Using Kuhn as a Crisis-Resolution Foundation

Based on this comparison between the Structure of Scientific Revolutions, and social media development; I propose that Kuhn's concept of revolutionary science, or in this case, revolutionary social media development, holds the key to resolving this crisis. Because the nature of extraordinary science is inherently unpredictable, the following proposals are highly speculative. But based on my argumentation in this paper, I believe that there are a few research questions that may bear fruit from revolutionary development:

First, I believe that the underlying faults in the paradigm would make for excellent starting points for extraordinary development. Can a more equitable funding model for social media be devised? One that solves the problematic incentives of the current ad-based one? Second, would a shift in platform population size have a meaningful impact on the spread of propaganda? How would this affect the strategies of propagandists? And third, are there policies or community movements that could make the curation algorithms used by these platforms more transparent? Is it possible to design a curation algorithm that preserves freedom of expression while also restricting the flow of harmful propaganda or misinformation?

A period of extraordinary development would serve as an excellent opportunity to bring new voices into positions of influence, and to potentially resolve other significant issues with our social media paradigm, including but not limited to: the exploitation of content creators, harassment and doxxing, invasions of privacy and mass surveillance, and addictive platform design. But precious few people are positioned to directly influence policy at social media companies, perform upper-end research, or to build and maintain alternative social media platforms. And not everyone can be expected to drop their own important work to begin work on

extraordinary social media development. But this doesn't mean that the crisis is unaddressible for the average person. I propose a few low-commitment, individual-scale actions that could aid in mitigating or resolving this crisis.

First, Paul and Matthews lay out an individual-scale defense to the Firehose of Falsehood that I believe would be similarly effective against slopaganda at an individual-scale. The firehose of falsehood relies on controlling first impressions and confirmation bias to control populations. Keeping an awareness about the potential of AI-generated content, and the potential of slopaganda can be effective in mitigating its effects. Additionally, staying open to developing information; and maintaining a fact-based perspective on the news both can mitigate the individual effect of the firehose of falsehood (and thus, slopaganda). Second, because of their ad-revenue model, social media platforms rely on user participation to maintain value. Coordinated mass action, in leaving, has immense potential to alter how these social media companies operate. Mass action begins at an individual level, so maintain an openness to leaving social media platforms that no longer serve you. Third, try new platforms as they arise. Platforms such as Cara and BlueSky ban generative AI; and Vero proposes an Ad-free experience. It remains to be seen if these platforms will build a new paradigm, but the selective participation of interested individuals is how extraordinary science gains momentum.

Conclusion

When viewed through Kuhn's Structure of Scientific Revolutions, social media is in crisis. Generative AI has transformed an already formidable threat in the firehose of falsehood propaganda model into a pressing and existential threat for the internet. The stakes of this crisis are described in Dead Internet theory, a fringe conspiracy theory turned popular theory, which holds that the majority of content on the internet either is, or soon will be, created and consumed

by nonhuman actors with the intent to misinform. Due to the nature of modern political society, and the internet, this would have a global impact. This crisis is especially dangerous because it exploits faults in the social media paradigm, namely the ad-revenue model, ultramassive userbases, and the algorithmic distribution of content. This paper proposes that this crisis will need to be addressed, and that extraordinary development around regulation, transparency, and individual usage could offer starting points to addressing it.

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