

Generative AI and Democracy: Rebooting Trust, Bit by Bit

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The democratic experiment is facing an existential crisis in the United States. Our legislatures are historically unproductive¹, public trust in our institutions has hit an all-time low², and our Constitutional norms are being eroded³ — under attack are the independent judiciary, freedom of the press, and peaceful transfer of power.

To think that, here, tech could be a solution and not a problem has been simply out of the question for the last decade. The images are practically seared into our collective memory: Facebook getting torn apart on the floor of Congress for pawing 87 million users' data off to Cambridge Analytica to sway election results⁴, Russian bots messaging voters — mostly Black Americans — by the tens of thousands to stay home⁵, and states deploying algorithms to gerrymander their districts, playing arts and crafts until districts look like "Goofy kicking Donald Duck."⁶ The overwhelming impression is that tech sometimes does nice things for us — even life-saving things — but when it comes to our politics, it would do better to stay out.



Mark Zuckerberg being grilled before reporters in a Senate Judiciary Committee hearing.

In the age of generative artificial intelligence (AI), however, many political experts have branded themselves techno-optimists⁷, and I, too, gleefully join their ranks. Many understand the massive risks of generative AI in politics; the next time you're on your phone, you'll no doubt scroll through realistic images of Trump getting handcuffed on Instagram⁸, or watch a TikTok of Obama's iconic voice narrating a Minecraft play-by-play⁹ — the entertaining but hair-raising creations of generative AI. But what too few understand is how to not just withstand AI, but harness it in service of our democratic values. In this scoping review, we trek through the places democracy is most wounded

in 2024 — (1) a campaigning status quo that favors the wealthy and powerful, (2) widespread distrust in how votes are counted on Election Day, and (3) poor accountability for politicians when in office — and discuss how generative AI, if implemented correctly, could heal them.

I. Running for office: democracy requires equality of opportunity

Amanda Edwards whips out her clipboard. It's the 15th door she has knocked today, and she's already panting — half from exhaustion, half from annoyance at the 45-minute screaming match she had with the last resident about gun control ordinances. This election cycle, she's somehow supposed to balance a full-time job with challenging the decades-long Democratic incumbent — Sheila Jackson-Lee — with her own Democratic campaign. The party apparatus refuses to stand behind challenges to incumbents, so Amanda was forced to bootstrap her own volunteer team, piece together a makeshift digital marketing plan, and paint her slogans on posters.

In November, she loses.

94% of incumbents were re-elected to the U.S. House in 2020.¹⁰ 100% to the Senate. Incumbent advantage, as it's known, has become a reliable fact of modern American politics. It comes down to it being hard, if not impossible, for a challenger to match an incumbent's million-point datasets, experienced analyst teams, or billionaire-financier funding dollars.¹¹ This is one of the biggest contributors to the salient notion that our democracy does not afford political opportunity to all — because power seems to be doled out to the already powerful, no matter how dissatisfied we are with them. But generative AI threatens to shake this norm to its core.

In the 2010s, political campaigns underwent an “empirical revolution”; they realized that the televised debates, massive campaign rallies, and attack ads weren't what made the biggest difference in what happens on election night. It's a campaign's raw analytical power.¹² With Big Data, campaigns tailor messages by the word, crunch neighborhood-by-neighborhood support to the fifth decimal place, and call lists of algorithmically-calculated likely voters narrowed by age, race/ethnicity, gender identity, and sexual orientation — all to stunning success.¹³ But it's only big-ticket, well-connected incumbents who can usually afford the expensive pre-AI-age programs like *NGP VAN*,¹⁴ *Aristotle*,¹⁵ or *NationBuilder*¹⁶ that make such data-driven insights possible.

It's no huge jump to think that generative AI has enormous potential to bring these insights to first-time and underfunded campaigns. *Persado*¹⁷ and *Phrasee*¹⁸ leverage *Open AI*'s ChatGPT and DALL-E to analyze open-source voter data and personalize campaign messaging by subdemographics, *Civis Analytics*¹⁹ takes a good look at history to produce voter logs where campaigns should focus their attention to optimize their impact, and *ManyChat*²⁰ and *Drift*²¹ supplement understaffed teams with

values-oriented bots that chat with supporters. The biggest advance, it seems, is in digital fundraising. Even if we can't reverse *Citizens United* or pass sweeping campaign finance reform, with generative AI, a nurse can now send mass fundraising emails between seeing patients, or an electrician can access the equivalent of a big political consulting firm from the palm of their hand. "I don't think there have ever been this many down-ballot candidates with some level of digital fundraising operation," says Martin Kurucz, founder of a new-age generative AI fundraising platform. "These candidates now have access to a proper campaign infrastructure."²²

There is obviously potential, too, for manipulation. We've already seen dirty tactics play out with the tech of the past, but AI turbocharges them with new capabilities. Most recently, calls went out to New Hampshire Democratic voters from "President Biden" (a generative AI robocaller) telling them to boycott the primary and "save their vote for November,"²³ and we're no stranger to hyperrealistic deepfakes. But it's also clear that we have a remarkable capacity to adapt; we've already met generative AI content with community flags on Twitter,²⁴ a nationwide sense of skepticism when it comes to viral audiovisual content,²⁵ and increasingly accurate detectors.²⁶ Taken together with policy solutions — like bans on AI generating for political campaigning — the political needle could be pushed, on average, to the good.²⁷

Thus far in the discussion, we have merely slotted generative AI into the old model of campaigning, but the entire modus operandi of political campaigning could shift. In the past, campaigns have typically directed their resources toward mobilizing people who are already likely to vote for their candidate, but perhaps may not show up at the voting booth.²⁸ Here is where analytical capacity proves to be the biggest aid. But AI also enables bespoke persuasive abilities that operate at the level of the individual. This could mean people previously deemed "lost causes" could suddenly be open terrain for mobilization. The start-up *Opn Sesame* employs AI-driven natural language processing to deliver custom text messages that fit calculated "political personas" and sway likely and unlikely voters alike to throw a ballot down for conservative candidates.²⁹ High-powered consultants and marketing agents work overtime on behalf of powerful special interests like big banks, insurance companies, and pharma giants, but generative AI could empower individuals — everyday Americans — to make a stand and feel they can make a difference.

Persuasion comes with enormous responsibility as well. The same tech that propels forward marginalized groups could embolden terrorist groups, radical elements, and authoritarian governments to disenfranchise an already polarized American electorate with misinformation or disinformation. We've already seen it with "pink slime" journalism sites like Journatic, which comprise entirely fake news, yet got reprinted in the *Chicago Tribune*, *San Francisco Chronicle*, and *Houston Chronicle*.³⁰ We stand at a fork in the road, and there are two clear paths forward: one where the existing power is cemented because access to emerging tech is limited to those who already entrenched in power, or one where technology is democratized to grassroots activists and civil society so that everyone can share in

its newfound persuasive powers, all while we grapple with ways to regulate its negative externalities through algorithm licensing or article vetting standards. Today, running for office feels out of reach for ordinary working people to the extent that nearly two-thirds of all seats nationwide go uncontested³¹, but one day, generative AI could change that.

II. The ballot box: democracy requires trust

The setting: September 24th, the White House South Lawn

“Will you call the election results into question if you lose?” a reporter asks.

“We have to be very careful with the ballots,” Trump says. “The ballots, that’s a whole big scam. We want to make sure the election is honest, and I am not sure that it can be. I don’t know that it can be with this whole situation of unsolicited ballots.”³²

Ever since *Bush v. Gore*, counting Americans’ votes has felt politically fraught, but never has such a wide swathe of the body politic so starkly questioned the institution of elections: Nearly a third of Americans still believe the claim — debunked by the media, courts, and Trump’s voting integrity commission itself — that Biden won the 2020 election due to widespread voter fraud.³³ Even if the evidence is stacked overwhelmingly on the side of fair and free elections, we must assuage the underlying concerns; AI could do the trick.

Today, poll workers do much of the work of vote-counting by hand, digging for irregularities in mail-in ballots, scanning in paper ballots and double-checking the count, and determining if provisional ballots should be included in the final count.³⁴ With generative AI, election clerks could pick out irregularities and produce fraudless voting lists, which tabulators could then scan far more quickly than poll workers, producing dramatically fewer accusations of fraud and mandatory recounts³⁵ — especially as the roster of “swing states” grows and races are becoming closer and more controversial. (These algorithms require careful implementation to not introduce a partisan skew in the cleaning process or unfairly.)

But is a government implementing automation in an age-old system just a pipedream that is likely to stay in student analysis papers? Of course, there’s a political old guard resistant to automation, but localities are increasingly interested in GovTech, an optimistic vision of public sector modernization.³⁶ Partnering with government leaders, *Voatz* uses blockchain to enable voters to cast their ballots on their smartphones,³⁷ *Clear Ballot* automates the counting and auditing of paper ballots,³⁸ and *Smartmatic*’s electronic voting machines are powered wholly by AI.³⁹ And if the government won’t take the big AI leap forward, individual actors are ahead of them; conservative

vigilantes are already on the hunt for voter fraud with their *EagleAI NETWORK*, which vows to take a look at any given voter roll and find suspicious registrations based on its growing database.⁴⁰

But AI also threatens the order. AI-driven cyberattacks threaten personally protected information of voters and digital safety of election officials, who often have access to confidential government data, and the introduction of AI could breed mistrust in elections from technocynics.⁴¹ The former necessitates formal training for vendors on how to spot phishing attacks and federal investment in counter-cyber attacks, the latter a cultural movement of truth-telling from journalists, social media companies, AI developers, and government agencies.

III. In office: democracy requires accountability

“Man is, by nature, a political animal,” or so Aristotle’s famous pronouncement went.⁴² But most people don’t have the time, energy, or will to be 24/7, full-time political animals. And it seems that here’s where much of the disconnect between people and their leaders emerges. Our leadership doesn’t tell us exactly what it is up to, so we’re forced to resort to our elaborate system of middlemen — broadcast personalities, party pundits, magazine op-eds, podcasts. Here, hesitation becomes distrust, skepticism becomes cynicism, and partisanship becomes tribalism. In the United States, it’s easy to go entire years without feeling like you have a stake in politics, and that’s where much of the danger lies: democracy is a participation sport.

But with generative AI, people can get a more accurate morning briefing on exactly what they care about, whether their leaders in the statehouse and D.C. are voting in ways they’d disagree with, and get complex legislation in committee (often thousands of provisions long) broken down into language they’d understand. Might seem like a rosy spin, but these information aggregation capabilities are already being built by *FiscalNote*⁴³, which promises to close the chasm between everyday person and politician.

Generative AI’s capabilities here go beyond mere education; it can play a commanding role in holding our elected leaders to account. Many of us don’t choose to call our representatives, engage in a regulatory agency’s public comment process for rulemaking, or organize movements marching for justice, lacking either competency or desire. But imagine a country where we could feed our policy preferences and values into bots that engage our leaders in a concerted way; we could then begin to be as prolific as lobbyists in speaking our truth to power. Imagine a country where we could be personally mentored by an AI to mobilize communities to fight for issues we care about. It’s not just a daydream; We’ve seen basic examples of such *civic tech*, which aim to connect citizens to decision-making like *Change.org* — which allows anyone to popularize a petition of their own making — but generative AI could change what it means to be an “activist” entirely, no longer reserved for a select few but almost anyone dissatisfied with the status quo.

Introducing a capability opens up room for others to take advantage, like when AI bots overwhelmed the Federal Communications Commission’s comment system.⁴⁴ But as always, we can project that the technology develops in parallel, that defenses against spam will advance just as the technologies to deploy it will.

III. The wrap-up

At the turn of the millennium, it seemed that Western-style liberal democracy was ascendant. “The end of history,” American political scientist Francis Fukuyama called it.⁴⁵ But in 2024, we’re far from that: across the world, fundamental civil liberties are being attacked, autocrats are gaining steam, and the rule of law is falling apart at the seams — the 12th consecutive year of global freedom decline.⁴⁶ Generative AI has the potential to breathe new life into dying faith in our institutions, and we should be more than willing to use it at this critical political moment, when democracy’s fate in America has resounding repercussions for the fate of democracy worldwide. 2024 is the year of democracy, with more human beings having the chance to vote this year than in any single year before, with elections in the United States, European Union, India, Mexico, and more.⁴⁷

Being a Luddite is always an option — we can choose to fearmonger, to gawk at generative AI’s horrific potential for our republic while sitting paralyzed. Or we can, as many a generation before us have done, rise to the occasion and just ask ChatGPT how we can continue our three-century legacy of “We the people.”

References

- 1: <https://www.npr.org/2023/12/21/1221040449/118th-congress-to-be-the-most-unproductive-in-decades>
- 2: <https://news.gallup.com/poll/394283/confidence-institutions-down-average-new-low.aspx>
- 3: <https://onlinelibrary.wiley.com/doi/full/10.1111/raju.12345>
- 4: <https://www.nytimes.com/2018/04/04/technology/mark-zuckerberg-testify-congress.html>
- 5: <https://www.bbc.com/news/technology-49987657>
- 6: <https://www.nytimes.com/2018/01/26/us/pennsylvania-gerrymander-goofy-district.html>
- 7: <https://www.brookings.edu/articles/ai-can-strengthen-u-s-democracy-and-weaken-it>
- 8: <https://apnews.com/article/fact-check-trump-nypd-stormy-daniels-539393517762>
- 9: <https://www.youtube.com/watch?v=-pGT5jLlx4>
- 10: <https://www.opensecrets.org/elections-overview/reelection-rates>
- 11: <https://www.jstor.org/stable/2111633>
- 12: Issenberg, S. (2012). *The victory lab: The secret science of winning campaigns*. Crown.
- 13: <https://www.forbes.com/sites/neilsahota/2024/01/12/the-ai-factor-in-political-campaigns-revolutionizing-modern-politics/?sh=48c7714e7c8f>
- 14: <https://www.ngpvan.com>
- 15: <https://www.aristotle.com>
- 16: <https://nationbuilder.com>
- 17: <https://www.persado.com>
- 18: <https://phrasee.co>
- 19: <https://www.civisanalytics.com>
- 20: <https://manychat.com>
- 21: <https://www.drift.com>
- 22: <https://www.theatlantic.com/politics/archive/2023/05/ai-political-campaigns-2024-election-democracy-chatgpt/674182>
- 23: <https://www.reuters.com/world/us/fake-biden-robo-call-tells-new-hampshire-voters-stay-home-2024-01-22>
- 24: <https://www.standard.co.uk/news/tech/twitter-ai-images-community-notes-new-feature-b1084836.html>
- 25: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9453721>
- 26: <https://aicontentfy.com/en/blog/future-of-ai-detectors-comprehensive-evaluation#:~:text=Advancements%20in%20AI%20detectors,-Emerging%20technologies%20in&text=Additionally%2C%20advancements%20in%20computer%20vision.and%20objects%20with%20high%20precision>
- 27: <https://www.wsj.com/tech/ai/openai-bans-use-of-ai-tools-for-campaigning-voter-suppression-2308fb98>
- 28: <https://www.jstor.org/stable/3647691>
- 29: <https://opnsesame.com>

- 30: <https://www.npr.org/2012/07/06/156311078/fake-bylines-reveal-true-costs-of-local-news>
- 31: <https://www.prnewswire.com/news-releases/more-than-60-of-2023-local-elections-were-uncontested-302015233.html>
- 32: <https://www.politico.com/news/2020/09/24/trump-casts-doubt-2020-election-integrity-421280>
- 33: https://www.monmouth.edu/polling-institute/reports/monmouthpoll_US_062023/
- 34: <https://campaignlegal.org/update/what-happens-my-ballot-after-i-vote>
- 35: <https://www.forbes.com/sites/markminevich/2020/11/02/7-ways-ai-could-solve-all-of-our-election-woes-out-with-the-polls-in-with-the-ai-models/?sh=436e6c14622c>
- 36: <https://www.govtech.com/computing/digital-states-2016.html>
- 37: <https://voatz.com>
- 38: <https://www.clearballot.com>
- 39: <https://www.smartmatic.com/us>
- 40: <https://www.nbcnews.com/politics/2024-election/conservatives-voter-fraud-hunting-tool-eagleai-cleta-mitchell-rcna97327>
- 41: <https://www.brennancenter.org/our-work/research-reports/how-counter-ai-threats-election-security>
- 42: Aristotle. (1905). *Aristotle's Politics*. Oxford: Clarendon Press
- 43: <https://fiscalnote.com>
- 44: <https://www.wired.com/story/bots-broke-fcc-public-comment-system>
- 45: <https://www.jstor.org/stable/24027184>
- 46: <https://freedomhouse.org/report/freedom-world/2018/democracy-crisis>
- 47: <https://www.npr.org/2024/01/20/1225795005/2024-is-a-big-election-year-around-the-globe-will-democracy-win>