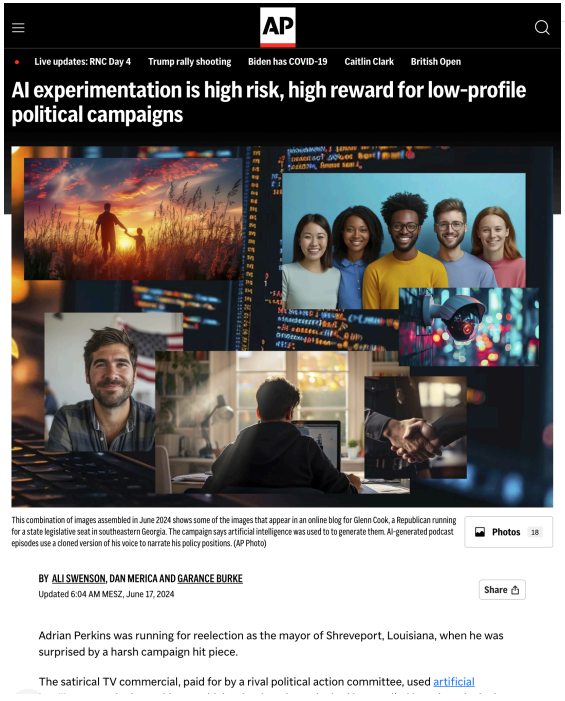
Deceptive uses of Artificial Intelligence in elections strengthen support for AI ban

Andreas Jungherr, Adrian Rauchfleisch, and Alexander Wuttke

Campaigning with AI



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AI experimentation is high risk, high reward for low-profile political campaigns

This combination of images assembled in June 2024 shows some of the images that appear in an online blog for Glenn Cook, a Republican running for a state legislative seat in southeastern Georgia. The campaign says artificial intelligence was used to to generate them. AI-generated podcast episodes use a cloned version of his voice to narrate his policy positions. (AP Photo)

Photos 18

BY ALI SWENSON, DAN MERICA AND GARANCE BURKE
Updated 6:04 AM MESZ, June 17, 2024

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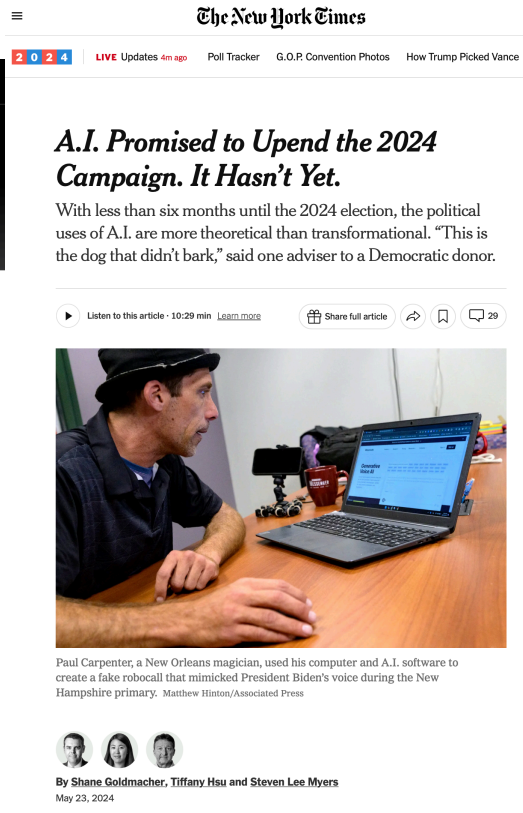
Adrian Perkins was running for reelection as the mayor of Shreveport, Louisiana, when he was surprised by a harsh campaign hit piece.

The satirical TV commercial, paid for by a rival political action committee, used artificial



The New York Times

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A.I. Promised to Upend the 2024 Campaign. It Hasn't Yet.

With less than six months until the 2024 election, the political uses of A.I. are more theoretical than transformational. "This is the dog that didn't bark," said one adviser to a Democratic donor.

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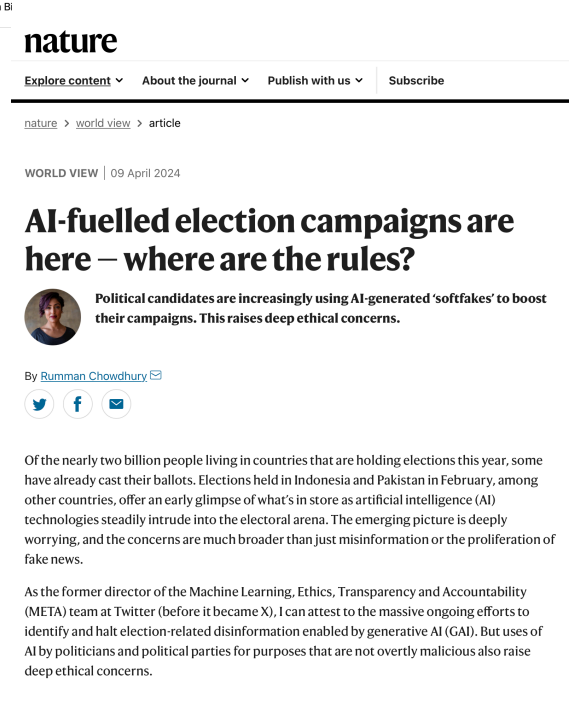
Paul Carpenter, a New Orleans magician, used his computer and A.I. software to create a fake robocall that mimicked President Biden's voice during the New Hampshire primary. Matthew Hinton/Associated Press

By Shane Goldmacher, Tiffany Hsu and Steven Lee Myers
May 23, 2024



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WORLD VIEW | 09 April 2024

AI-fuelled election campaigns are here — where are the rules?

Political candidates are increasingly using AI-generated 'softfakes' to boost their campaigns. This raises deep ethical concerns.

By Rumman Chowdhury

Of the nearly two billion people living in countries that are holding elections this year, some have already cast their ballots. Elections held in Indonesia and Pakistan in February, among other countries, offer an early glimpse of what's in store as artificial intelligence (AI) technologies steadily intrude into the electoral arena. The emerging picture is deeply worrying, and the concerns are much broader than just misinformation or the proliferation of fake news.

As the former director of the Machine Learning, Ethics, Transparency and Accountability (META) team at Twitter (before it became X), I can attest to the massive ongoing efforts to identify and halt election-related disinformation enabled by generative AI (GAI). But uses of AI by politicians and political parties for purposes that are not overtly malicious also raise deep ethical concerns.

Figure 1: Elections campaigns all over the world are starting to use AI.

Why does AI-use in campaigns matter beyond politics?

Elections are times of high public attention on campaigns and their tools of communication. Many campaigns have become key exemplars (Murphy 2002) for the perceived power of new technology for communication, coordination, and organizing:

- Campaigns by Howard Dean and Barack Obama contributed to largely positive and aspirational narratives about the empowering role of digital media for society (Kreiss 2016; Shirky 2008).
- Narratives about the supposed role of *Cambridge Analytica* in the Brexit and Trump campaigns are regularly used to illustrate perceived dangers of data-driven profiling and surveillance and have contributed strongly to a demand for heightened regulatory oversight and control of digital media companies (West and Allen 2020; Weiss-Blatt 2021).

Three uses of AI: Operations, Outreach, and Deception

Support of *campaign operations*, including automated idea and content generation, automated interactions through chatbots, or the automated segmentation of donor and walk lists.

Three uses of AI: Operations, Outreach, and Deception

Improving *voter outreach*, including the AI-enabled identification of people likely to be susceptible to volunteer approaches, AI-enabled optimization of messages to increase their persuasive appeal either on mass or targeted to individuals, or automated generation and targeted roll-out of personalized ads in digital communication environments.

Three uses of AI: Operations, Outreach, and Deception

Deception, including undeclared uses of AI to generate false or misleading audio or video content misrepresenting a candidate's actions to make them look better or an opponent worse, impersonate a candidate's likeness in video or audio formats and have them communicate misleading messages, or automated and interactive astroturfing by bots enabled through large language models in digital communication spaces or in email communication with journalists or members of the public.

Research Design

Observational Survey (n = 1,200)

Quota Sampling: Age, gender, region, & education
Representative for American population 18+
Provider: Ipsos
Field Time: April 4 - April 17, 2024

STUDY 1

STUDY 2

Survey Experiment (n = 2,000)

Stratified Sampling: Age, sex, & ethnicity
Representative for American population 18+
T1: Treatment, AI for Deception (n = 500)
T2: AI for Campaign Operations (n = 501)
T3: AI for Voter Outreach (n = 498)
C: Control, No Information (n= 501)
Provider: Prolific
Field Time: June 19 and June 21, 2024

Survey Experiment (n = 3,500)

Sample: Republican Partisans (n = 1,500)
Sample: Democrat Partisans (n = 1,500)
Sample: Independents (n = 1,500)
T1: Deceptive Uses of AI by Democrats
T2: Deceptive Uses of AI by Republicans
C: Control, No Information
Provider: Proflific
Field Time: June 25 and June 30, 2024

STUDY 3

Figure 2: Research Design.

Study 1: Observational Survey (n = 1,200)

AI Uses: Operations

- Writing: Many campaigns are turning to AI to help **craft emails, speeches, and policy documents**. This technology offers a cost-saving advantage.
- Transcription: Campaigns are turning to AI for the **transcription of meetings, speeches, and broadcasts**. This saves valuable time and resources.
- Resource Allocation: Campaigns employ AI to **optimize walk lists for door-to-door voter outreach**. These AI-generated lists help volunteers visit as many homes as possible in a limited time.
- Deepfakes (benign): Some campaigns use AI to **make funny and creative pictures of their candidates**, drawing from fantasy and pop culture. This can make candidates feel more like regular people and connect with voters better.
- Automating Interactions: Campaigns are now using AI to **create digital characters that look and sound very real**. These artificial characters can talk and interact with people on their own. They can answer questions or even start conversations with visitors on websites or in online ads, always presenting the campaign's topics and positions.

AI Uses: Voter Outreach

- Message Testing & Opinion Research: Campaigns are using AI to **simulate virtual focus groups, testing how different messages resonate with a wide range of audiences**. This helps campaigns shape their approach and understand what voters care about.
- Data Driven Targeting: Campaigns are using AI to **pinpoint the best contacts for voter outreach**. By predicting how individuals might respond to campaign efforts, AI helps campaigns concentrate on those who are more likely to be receptive or motivated to vote.
- Fundraising: Campaigns are harnessing AI to **enhance their fundraising** efforts. By identifying supporters most likely to donate and optimizing outreach materials, like emails or call scripts, AI can significantly boost a campaign's financial resources.
- Ad Optimization: Campaigns use AI to **craft tailored digital ads**. Depending on an individual's interests, concerns, or characteristics, AI can produce optimized variations of campaign ads. It can also swiftly adapt ads in response to current events, making them timely and relevant.
- Outreach Optimization: Campaigns employ AI to **craft tailored texts for emails and call center scripts**. By anticipating how individuals might respond to outreach, AI helps fine-tune messages to inspire actions like voting, volunteering, or donating.

AI Uses: Deception

- Deceptive Robocalls: Campaigns leverage AI technology for **automated, lifelike robocalls** pretending the caller is the candidate or a volunteer. Within these calls, AI systems can independently engage with individuals, initiating conversations or responding to queries.
- Deepfakes (self-promotional): Campaigns are using AI to **produce synthetic images, videos, or voice recordings**, commonly known as deepfakes. These can **convincingly portray candidates in a positive light**, often impressing even discerning viewers.
- Deepfakes (negative campaigning): Campaigns are using AI to **produce synthetic images, videos, or voice recordings**, commonly known as deepfakes. These can **convincingly portray opposing candidates in a negative light**, often deceiving even discerning viewers.
- Astroturfing (social media): Some campaigns employ AI to **create fake social media posts**, seemingly from supporters of their candidate. The aim is to sway sentiment in digital communication environments in their favor.
- Astroturfing (interactive): Some campaigns utilize AI to **craft emails and social media messages aimed at journalists and news editors**, pretending to be genuine supporters to simulate strong public backing.

People express greater sense of norm violation for AI-enabled deception than for other AI uses

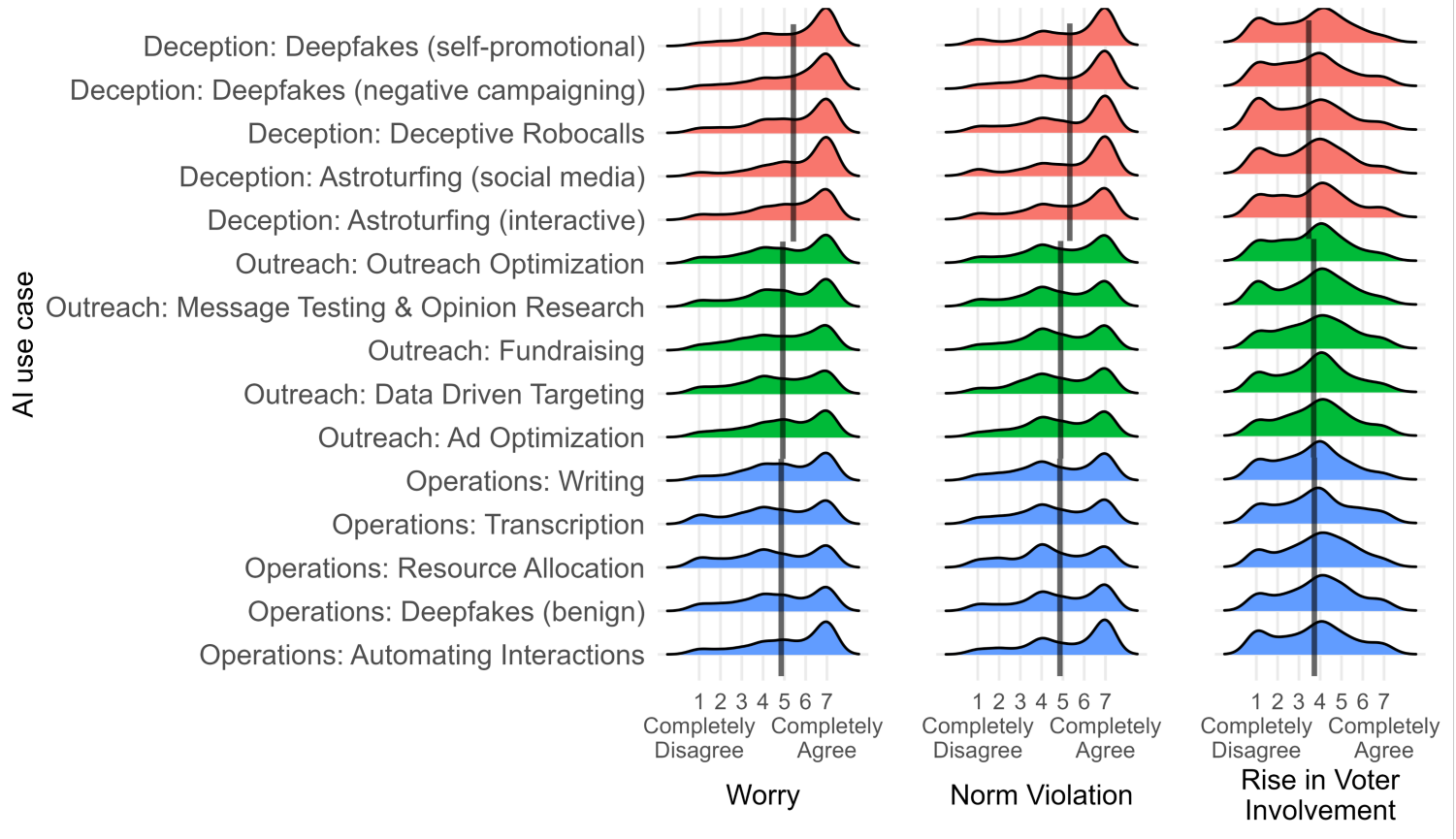

Figure 3: Attitudes toward AI uses in elections by type, vertical line indicates the mean per category.

Attitudes toward AI uses in campaigns are correlated with general attitudes toward AI.

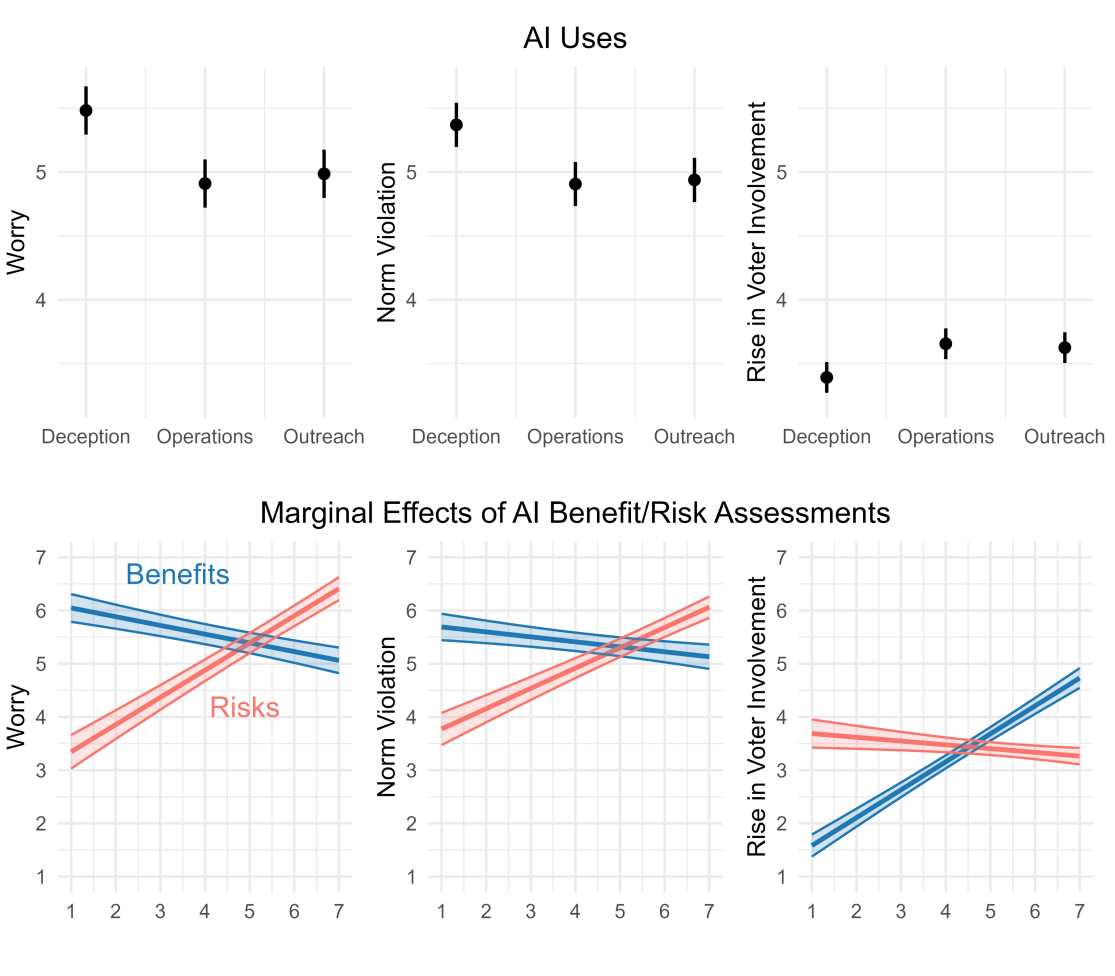

Figure 4: Attitudes toward AI uses in elections, regressions (for campaign tasks, deception is used as a reference group). Estimates with 95%-CIs.

Take away?

We see that people treat different electoral uses of AI differently, are more worried about deceptive uses than others, and that these attitudes tend to align with deeper assessments of AI's role in society.

Study 2: Survey Experiment(n = 2,000)

- Three treament groups compared against one control group.

Treatment 1: Deception

Candidates from all parties, including Republicans and Democrats, and candidates from various third partiesuse AI in their campaigns.

They use AI technology to produce videos depicting fictional scenarios involving their opposing candidates.Picture a scenario where a video portrays an opposing candidate making controversial statements orengaging in questionable conduct – all generated using AI.

These resulting videos are frequently captivating and occasionally gain substantial traction, especially among demographics typically tricky to engage with for political parties. However, it's essential to note thatthese videos are pure fiction and do not reflect actual events or actions.

Treatment 2: Campaign Operations

Candidates from all parties, including Republicans and Democrats, and candidates from various third partiesuse AI in their campaigns.

For example, they use AI to automatically generate emails, speeches, and policy documents.

By leveraging AI, campaigns can conserve valuable resources through the automation of repetitive tasks andhelp with the allocation of funds and volunteer hours. This enhanced efficiency aids campaigns in pursuingtheir objectives effectively and is particularly beneficial for financially constrained campaigns.

Treatment 3: Voter Outreach

Candidates from all parties, including Republicans and Democrats, and candidates from various third partiesuse AI in their campaigns.

They use AI technology to create customized voter outreach strategies. By meticulously analyzing consumerdata, online activities, and voting histories, AI has the capacity to create and distribute personalizedcampaign messages that align with each voter's specific interests. For instance, a tech-savvy urban dwellermight receive information about the party's innovation initiatives, while a young parent could receiveinsights on education reform.

Campaigns rely on AI-enabled outreach to distinguish themselves in a sea of generic politicalcommunications and to effectively connect with voters on subjects that resonate with them.

Study 3: Survey Experiment (n = 3,500)

- 3 Samples (Democrat Partisans, Independents, Republican Partisans).
- Each sample is divided into two treatments and one control group.

Treatment 1: Democrat Deception

It was recently reported that candidates from the Democratic Party use AI in their campaigns.

Democrats use AI technology to produce videos depicting fictional scenarios involving their opposing candidates. Picture a scenario where a video portrays an opposing candidate making controversial statements or engaging in questionable conduct – all generated using AI.

These resulting videos are frequently captivating and occasionally gain substantial traction, especiallyamong demographics typically tricky to engage with for political parties. However, it's essential to note thatthese videos are pure fiction and do not reflect actual events or actions.

Treatment 2: Republican Deception

It was recently reported that candidates from the Republican Party use AI in their campaigns.

Republicans use AI technology to produce videos depicting fictional scenarios involving their opposing candidates. Picture a scenario where a video portrays an opposing candidate making controversial statements or engaging in questionable conduct – all generated using AI.

These resulting videos are frequently captivating and occasionally gain substantial traction, especially among demographics typically tricky to engage with for political parties. However, it's essential to note thatthese videos are pure fiction and do not reflect actual events or actions.

Effects of different AI uses in campaigns (Study 2)

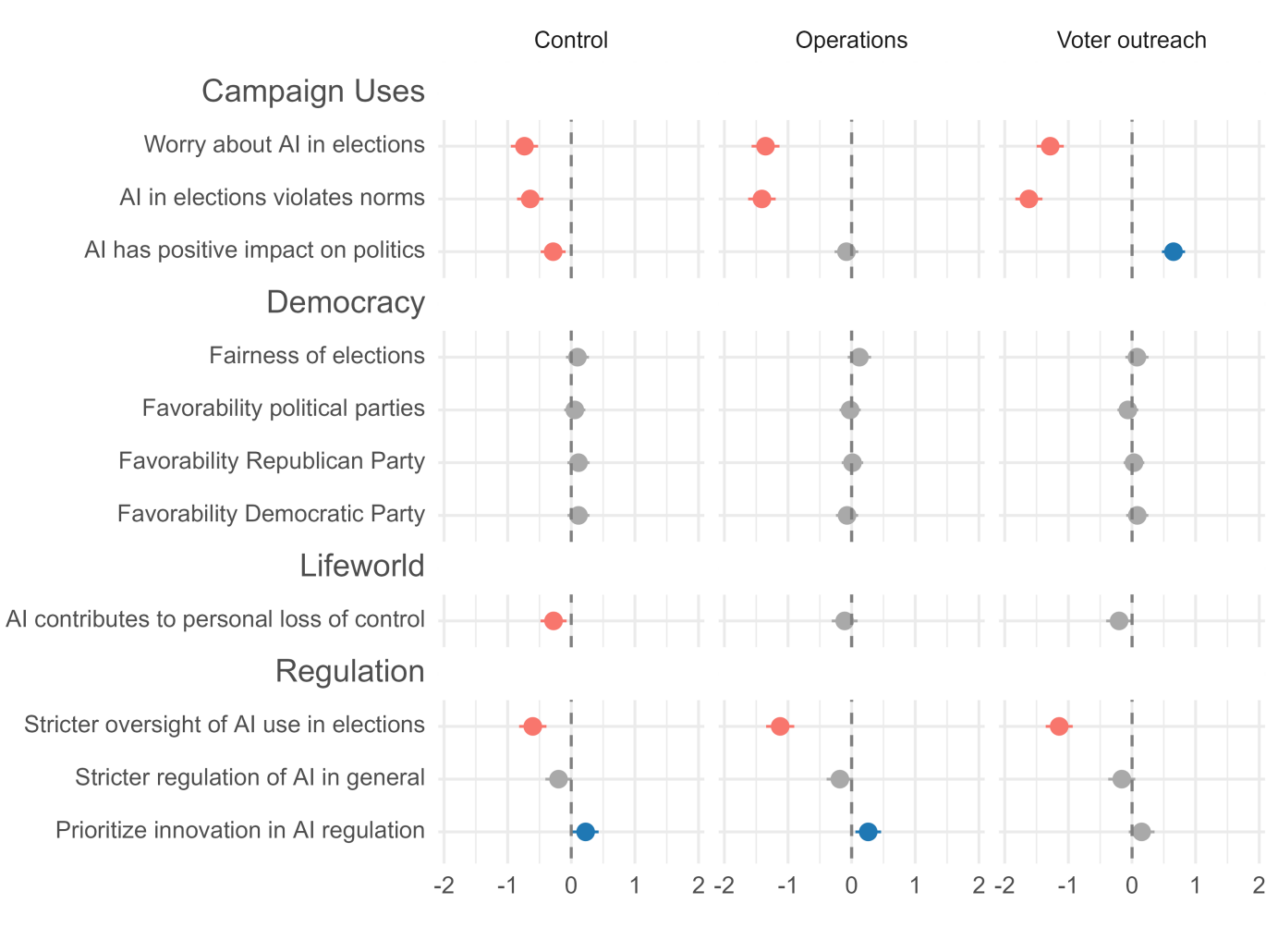

Figure 5: Effects of Information about Different Uses of AI in Elections (Reference Category: Deception). Estimates with 95%-CIs.

Effects of different AI uses in campaigns (Study 3)

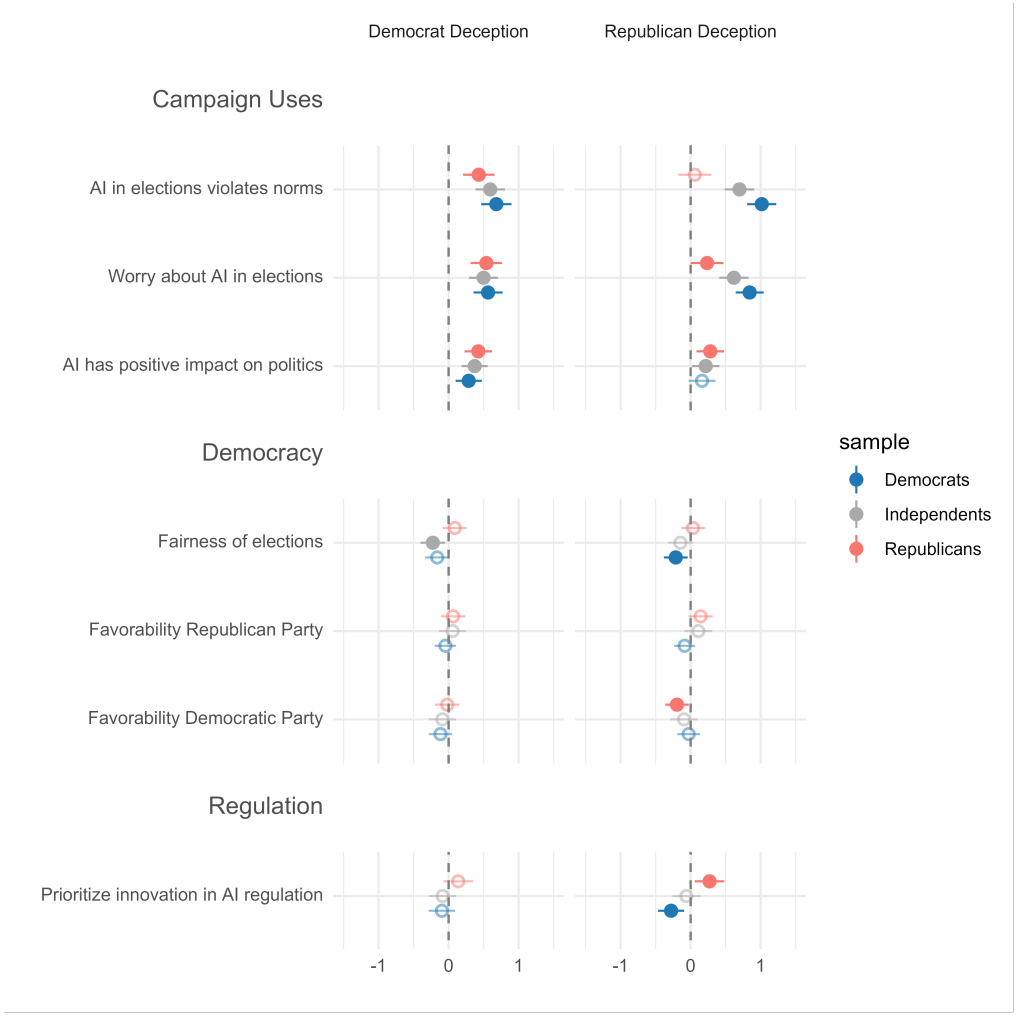

Figure 6: Effects of Information About Alleged Deceptive Uses of AI for Partisans and Independents (Reference Category: Control). Estimates with 95%-CIs.

Take away? No favorability penalty for parties.

Compared to the control groups, neither Democrats nor Republicans significantly lowered their favorability assessment of their party when learning of alleged deceptive uses of AI. Partisans of both parties disapprove of AI-enabled deception but do not punish the party they support for this violation. We also see that independents are not adjusting their favorability ratings of parties allegedly using AI deceptively.

Effects on governance preferances (Study 2)

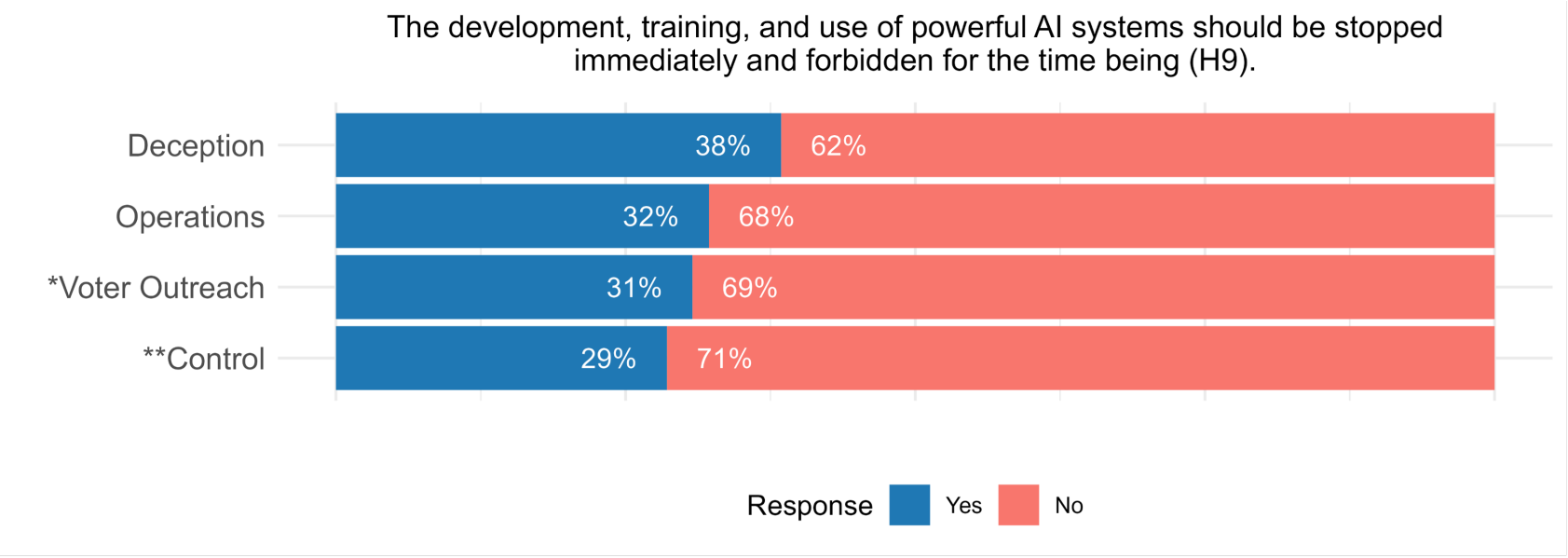

Figure 7: Effects of Information about Different Uses of AI in Elections on Governance Preferences (Reference Category: Deception), $p < 0.05$ *), $p < 0.01$ (**), $p < 0.001$ (***).

Effects on governance preferances (Study 3)

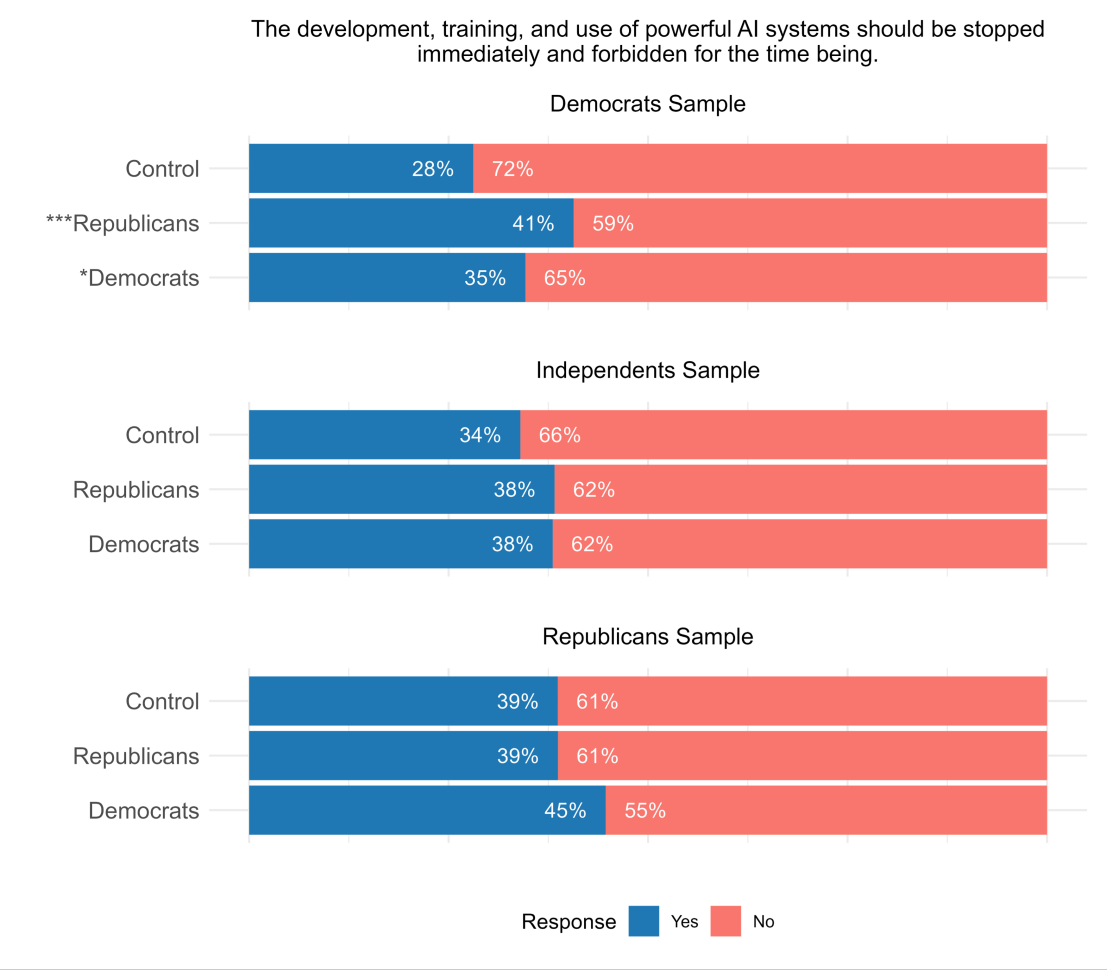

Figure 8: Effects of Information About Alleged Deceptive Uses of AI on Governance Preferences for Partisans and Independents (Reference Category: Control), $p < 0.05$ (*), $p < 0.01$ (**), $p < 0.001$ (***).

Misaligned incentives for deceptive use.

These findings reinforce that deceptive uses of AI in elections come with negative externalities. But while **people clearly disapprove** of deceptive uses, **parties face no attitudinal punishment** for alleged deceptive uses.

Deceptive uses **increase the demand for an AI ban** across partisans and independents, although to somewhat different degrees.

While the perpetrators of deceptive uses of AI might thus face no attitudinal adjusments, their actions clearly impact the public demand for more a strict and potentially downright hostile regulatory environment for the development and use of AI.

Further reading

Jungherr, Rauchfleisch, and Wuttke (2024)

Thank you!

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