Buying Followers: The Political Consequences of the Twitter Acquisition*

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Abstract

A handful of individuals control social media platforms that collectively reach billions. Does this control give those owners influence over their platforms' users? To investigate this question we study the acquisition of Twitter by Elon Musk in October 2022. Musk changed Twitter from a predominantly liberal platform to one favored by conservatives. Using panel survey data on over 8,000 respondents and 145 survey questions, we find that the issue preferences of pre-acquisition Twitter users became more conservative post-acquisition. Twitter users moved right on economic and social issues—especially racial issues—but not on climate, an issue where Musk is less conservative. Republican Twitter users became more pro-Republican, but there was no aggregate move toward the Republican Party, in part due to backlash by strong Democratic partisans who left the site. Social media platforms empower their owners to persuade and polarize, but this power is constrained by which users choose to remain on the platform.

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1 INTRODUCTION

Does it matter who owns social media? The average American spends 2.4 hours per day interacting with social networks.[1] Social networks have audiences several orders of magnitude larger than traditional media. In the second quarter of 2022—the last the company reported—Twitter had 41.5 million daily active users in the US, relative to a prime time viewership for Fox News of 2.27 million.[2] The market for social media is extremely concentrated, and made up of companies which are either private or controlled by their founders. A major concern about the size, ubiquity, and concentration of social media is that it gives the owners of social media platforms enormous political power, if platforms are able to manipulate the political beliefs of their users. Such concentrations of political power are incompatible with the political equality necessary for meaningful democracy (Dahl, 1998).

While the consequences of social media ownership are important for democracy, they are difficult to study. Social media use is endogenous and so the correlation between use of a given platform and political preferences does not necessarily reveal the causal impact of platform exposure. Social media companies may not seek to politically persuade their users at all times, but the ability to analyze the effects of social media often requires company permission (Wagner, 2023). The acquisition of Twitter in 2022 by Elon Musk provides an opportunity to circumvent this challenge.

Active Twitter users before the acquisition were exposed—if they stayed on the site—to the changes brought about by Musk: most importantly an increase in exposure to conservative content due to both more organic conservative engagement, unbanning, and algorithmic amplification. If platform owners are able to influence voters' political preferences by buying social networks, we would expect pre-acquisition Twitter users to shift right. The sudden change in the political character of the site pushes against endogeneity concerns: pre-acquisition users had selected onto a particularly liberal platform.

We use the American Trends Panel, a panel survey of over 8,000 respondents. Our research design is a difference-in-differences, comparing the differences in issue preferences between daily Twitter users and non- and less-frequent users, before and after the acquisition. This strategy enables us to track respondents over time and hold fixed time-invariant factors affecting respondents' preferences. Twitter use is defined pre-acquisition both because we are interested in how the changing ownership of Twitter affected its users, and to avoid

[1] https://www.spglobal.com/market-intelligence/en/news-insights/research/2025/12/social-media-in-the-us-is-still-driven-by-a-generational-divide

[2] https://www.sec.gov/Archives/edgar/data/1418091/000141809122000147/twtr-20220630.htm, https://www.adweek.com/tvnewser/q2-2022-ratings-fox-news-holds-steady-as-most-watched-network-on-basic-cable. Twitter was renamed X in July 2023, but we refer to the platform as Twitter throughout this paper.

identifying off individuals who select into post-acquisition Twitter.[3]

We measure issue preferences by aggregating 145 survey questions asked both before and after the acquisition and estimate models with respondent-by-question and question-by-survey wave fixed effects. This approach allows us to hold fixed idiosyncratic preferences on particular issues and the set of survey questions answered while mitigating measurement error (Ansolabehere, Rodden and Snyder, 2008). These survey questions, detailed in Table A1, focus on socio-political attitudes, such as on gender, race, and religion, as well as more explicit policy questions on topics like federal spending, immigration, and foreign policy. They exclude direct evaluations of parties and their leaders.

We document a post-acquisition rightward shift in issue preferences of approximately 0.04–0.06 standard deviations among pre-acquisition Twitter users, relative to less frequent users and non-users. The most conservative estimate amounts to 15% of the gap in preferences between Black and White respondents, and 34% of the gender gap. These effects are comparable to the estimated effects of switching from Fox News to CNN (Broockman and Kalla, 2025). Twitter users were not trending more conservative prior to the acquisition, and our results are robust to allowing for nonlinear question-specific trends for each unique combination of gender, race, education, age, and partisanship. Our estimates are not an artifact of the particular survey used. We document a similar rightward shift among pre-acquisition Twitter users in the American National Election Survey panel.

We consider three extensions to the main results. We find that estimates on issue preferences are not driven by any one issue area; we obtain similar coefficients subsetting to survey questions related to economic, social, or foreign policy, though not climate, an issue on which Elon Musk is less conservative. Disaggregating further, we find the largest effects for questions relating to racial attitudes and economic fairness. We additionally consider direct evaluations of parties and their leaders. Republicans (measured pre-acquisition) become relatively more favorable toward the Republican Party, and more likely to vote Republican, while Democrats did not become more pro-Republican. Finally, we find that liberals were substantially more likely to leave the platform. This result illustrates a key limitation to the power of social media platforms. While platforms can persuade their users towards the preferences of their wealthy owners, attempts to do so can be constrained by pushing a subset off the platform.

Social Media and The Influence of the Rich

Gilens (2012) finds that policy outcomes tend to accord with the preferences of the wealthy. This paper documents a specific pathway by which the super-wealthy exert unequal influence

[3]While one can think of this variable as an instrument for participation on post-acquisition Twitter, we caution against that interpretation because we are also interested in whether individuals stop using Twitter.

in American politics. Typical explanations for the outsized power of the wealthy emphasize lobbying and campaign finance (Bonica et al., 2013; Gilens, 2012; Page, Bartels and Seawright, 2013), though studies of that mechanism fail to consistently find pro-donor or pro-lobbyist outcomes (Fouirnaies and Fowler, 2022; Fowler, Garro and Spenkuch, 2020; Baumgartner et al., 2009).

Can wealthy ownership of media distort political outcomes? Grossman, Margalit and Mitts (2022) study the political consequences of a free and lossmaking conservative Israeli newspaper. They argue it enabled its owner to shift Israeli politics right. Their findings suggest media ownership offers the very wealthy a way to influence politics, but it is unclear whether this conclusion travels to a country like the US with a much more competitive media market. Evidence of the effects of biased media on US politics are, to quote Strömberg (2015, 190), "mixed." A number of papers document the pro-Republican and conservative effects of Fox News on voters (DellaVigna and Kaplan, 2007; Martin and Yurukoglu, 2017; Broockman and Kalla, 2025), but the effect of partisan newspapers is limited (Gentzkow, Shapiro and Sinkinson, 2011; Gerber, Karlan and Bergan, 2009; Chiang and Knight, 2011).

Relative to those studies, this paper considers social media, which reaches an order of magnitude more voters than traditional media. In 2022, 14% of Americans reported getting their news through Twitter.[4]

Can social media shift mass political preferences? A number of experiments study how manipulating different parts of the social network experience affects users' politics. Because social media companies have a financial incentive to retain users and are able to deliver personalized content, much of this research concerns echo chambers and polarization, testing whether existing preferences become more intense.

Researchers have considered many treatments. Nyhan et al. (2023) reduce users' exposure to like-minded sources on Facebook, Guess et al. (2023*a*) shift users from Facebook's algorithmic newsfeed to a chronological newsfeed, Guess et al. (2023*b*) switch off reshared content on Facebook newsfeeds, Allcott et al. (2025) switch off campaign ads on Facebook, and Allcott et al. (2020, 2024) deactivate Facebook and Instagram entirely. Guess et al. (2021) and Levy (2021) both manipulate the partisan content that Facebook users encounter. While these studies show Facebook affects its users' political participation (Allcott et al., 2024) and knowledge (Guess et al., 2023*b*) they tend to find null effects on users' issue preferences and polarization.[5]

In the aggregate, these studies provide robust evidence that particular types of treatments

[4] `https://www.pewresearch.org/journalism/fact-sheet/social-media-and-news-fact-sheet/`

[5] A notable exception is Levy (2021), who finds that increasing the rate at which Facebook users follow other-party news reduces polarization, though Guess et al. (2021) and Nyhan et al. (2023) find null effects of similar interventions.

on Facebook and Instagram have had minimal effects on users' issue preferences. What they do not tell us is whether Facebook, Instagram, or other platforms, could be used to persuade users toward their owner's views. Findings from other social media sites certainly suggest that this may be possible.

The study most similar to ours is Gauthier et al. (2026), which randomizes whether post-acquisition Twitter users encounter a personalized algorithmic or chronological (with only followed accounts) newsfeed. They find that switching users from the chronological to the algorithmic newsfeed shifts their political preferences right. Our study also relates to Bail et al. (2018) and Piccardi et al. (2025), which experimentally manipulate the level of political content on Twitter newsfeeds and find doing so affects polarization.

Some studies use aggregated data and suggest that social media sites affect vote choice. Enikolopov, Makarin and Petrova (2020) use city-level variation in early VK adoption and found that social media increased pro-government vote shares in Russia.[6] Fujiwara, Müller and Schwarz (2024) study cross-county variation in early Twitter usage, and find that exposure to pre-acquisition Twitter decreased voting for Trump in the 2016 and 2020 elections.

Our findings suggest that changes in platform ownership can change the politics of pre-existing users of that platform, and our design addresses limitations of prior work. Like the studies using aggregate data, we estimate the effects of the full bundle of changes brought about by social media sites. However, we are also able to directly compare the preferences and use patterns of users and non-users. Similar to the experimental designs, we are able to observe preferences from the same individuals both before and after treatment. Unlike the experimental studies, our dependent variables are measured up to two years post-treatment, indicating that effects are very durable.

2 CONTEXT

In April 2022, Musk revealed he had bought 9% of Twitter's shares and made an offer to buy the remainder of the company, which was accepted by the board. The deal closed in October 2022.[7] During the period of the acquisition, Musk criticized Twitter's content moderation policies and pledged to "reverse the permanent ban" on Donald Trump tweeting.[8] Immediately after closing the deal, Musk fired the company's top executives, followed by

[6] A related literature finds strong effects of social media on political participation, especially protesting (Larson et al., 2019; Enikolopov, Makarin and Petrova, 2020; Qin, Strömberg and Wu, 2024). These papers find social media facilitated coordination and information diffusion, but did not persuade people toward protest causes.

[7] https://www.nbcnews.com/business/business-news/twitter-elon-musk-timeline-what-happened-so-far-rcna57532

[8] https://www.nytimes.com/2022/05/10/technology/elon-musk-donald-trump-twitter-ban.html

half its workforce.[9] In November 2022, the company unbanned Donald Trump and several far-right figures.[10] In 2023 the company expanded revenue-sharing for top content creators and introduced an algorithmic newsfeed and altered its recommendation algorithm to bring in more content from accounts a user does not follow, and from Elon Musk.[11] This algorithmic feed served as the default, though users were able to choose a feed comprised of only accounts that the user chose to follow. The algorithm increased the reach of conservative accounts (Ye, Luceri and Ferrara, 2025; Gauthier et al., 2026). These changes were accompanied by a notable increase in the prevalence of hate speech on the platform (Hickey et al., 2025).

These changes brought about an ideological reversal in the Twitter user experience. Figure 1 plots the within-respondent change in a range of Twitter-related outcomes between 2021 and 2024 against a measure of the respondent's ideology (data are described in the following section). Liberals became less likely to use Twitter or view Twitter as good for democracy, and conditional on using Twitter became less likely to post about politics, but more likely to report seeing misleading content. These changes reversed pre-acquisition patterns, in which liberals were more likely to engage with the site (Figure A1).

3 DATA AND EMPIRICAL STRATEGY

Our empirical strategy is a difference in differences design with individual-level panel data, comparing those using Twitter to those not using it (first difference), before and after the acquisition of Twitter by Elon Musk in October 2022 (second difference). Because only those using Twitter are exposed to changes in content on the platform, non-users are a valid control group for users. Since individuals may sort into or out of using Twitter as the content of the site changes, we use a measure of Twitter usage from 2021, before the acquisition. If changing the content on Twitter makes Twitter users more conservative, we would expect pre-acquisition Twitter users to shift right, relative to non-users.

3.1 *Data*

We use data from waves 59–151 of the American Trends Panel, ranging from January 2020 to September 2024. The American Trends Panel is a panel survey administered by the Pew Research Center, a nonpartisan, nonadvocacy group that aims to measure voters' preferences and issue priorities. The sample is constructed from the universe of US adults through a mix of random digit dialing and address based sampling. Throughout, we use the sampling weights

[9] https://www.nytimes.com/2022/11/03/technology/twitter-layoffs-elon-musk.html
[10] https://edition.cnn.com/2022/11/19/business/twitter-musk-trump-reinstate
[11] https://www.nytimes.com/2023/04/07/technology/elon-musk-twitter-changes.html

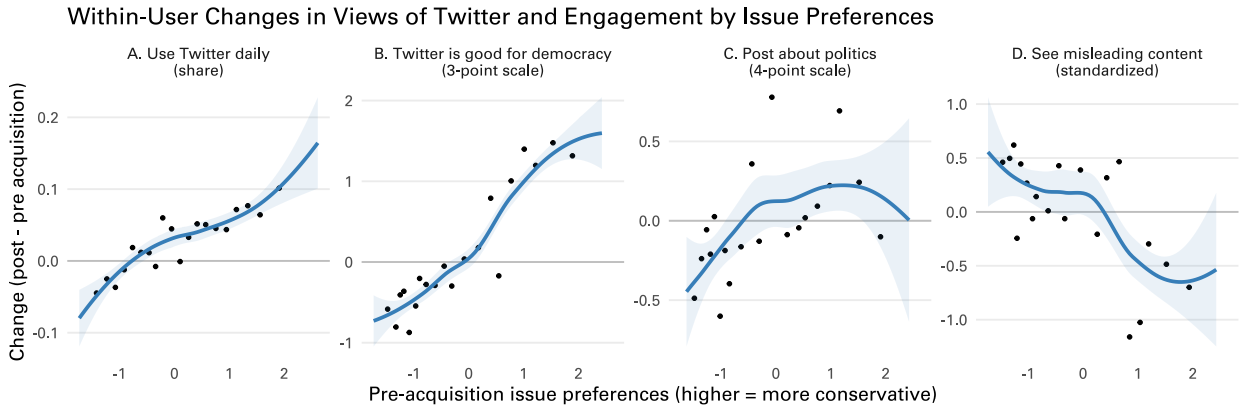

Figure 1: Ideological reversal in engagement and perceptions of misleading content on Twitter

Each panel plots the change in the respondent's outcome pre and post-acquisition against their pre-acquisition ideology, estimated by principal components. Panel A shows the share of respondents using Twitter every day, among all respondents. B shows responses to the question "Overall do you think Twitter/X is..." with answers ranging from "mostly BAD for American democracy" to "mostly GOOD for American democracy." C plots answers to the questions "How much of what you tweet about is related to political or social issues?" (2021) and "How much of what you post or share on X (formerly Twitter) is about politics or political issues?" (2024); we collapse the 2024 measure from a 5-point scale to the same 4-point scale as the 2021 measure. D plots answers to the questions "How much inaccurate or misleading information do you come across when using Twitter?" (2021) and 'How often do you see news on X (formerly Twitter) that seems inaccurate?" (2024). Because both are on different scales, we subtract the mean and divide by the standard deviation in each period. Lines are loess fits with 95% confidence intervals, dots are binned averages.

provided by Pew to reweight to the characteristics of the US population. We have data on initial Twitter usage and both pre- and post-acquisition preferences for 8,362 respondents.

In the appendix, we also consider data from the American National Election Studies (ANES) 2020–2024 Panel. The questions asked in the ANES are distinct from those asked within the American Trends Panel, thereby providing additional leverage for the study of issue preferences. The ANES panel is a subset of the overall cross-sectional ANES data collection. We use data from 2,171 respondents. In addition to the larger sample size, a key advantage of the Pew data over the ANES is that surveys are continuously administered instead of every four years.

TWITTER USAGE We measure Twitter usage prior to the acquisition. Wave 85 of the American Trends Panel asks those with internet access "Do you use Twitter?" Of those answering "yes," wave 90, in May 2021, asks how "How often would you say you visit Twitter?," the options ranging from "every day" to "less often" than "a few times a month." We use daily usage in wave 90 as our main measure of Twitter usage. We focus on daily users because we expect Twitter usage to only matter for the political preferences of those who actually use Twitter. Those reporting daily usage are far more likely to report using

Twitter in subsequent surveys, including those carried out prior to the acquisition (Figure 5). In additional analyses, we find positive but non-significant effects for those using Twitter less than daily in this initial wave. We categorize survey waves after October 2022, when the acquisition was completed, as post-treatment. Our treatment variable is an indicator that the respondent both used Twitter daily in wave 90 and that the survey in question takes place after October 2022.

ISSUE PREFERENCES Our main outcome concerns the issue preferences of American Trends Panel respondents. We gather data on every socio-political and policy question, excluding questions explicitly about parties, their leaders, and vote preference (see below), asked in our data both before and after the Twitter acquisition, giving 145 unique questions.

With this data, we take two approaches. First, we rescale the survey answers so each question has a mean of 0 and a standard deviation of 1, and so that the average answer by Republican respondents is higher than the average answer for Democrats.[12] We estimate models at the respondent-by-question-by-wave level, with fixed effects for each respondent-question and question-wave combination. This approach essentially averages over the survey measures. Relative to simply taking the average by respondent pre- and post-acquisition, this approach lets us hold fixed factors that make some respondents more conservative on some questions through the respondent-question fixed effects, and lets us account for movement right or left on a given question among all respondents, through the question-wave fixed effects.

Second, we scale respondents using principal components. We create a matrix where each row is a respondent before or after the acquisition, each column a survey question, and each cell the respondent's response to the question before or after the acquisition, averaged if the question was asked multiple times before or after. We use the first principal component of this matrix as our measure of issue preferences across multiple political questions, which we estimate using the *softImpute* algorithm of Mazumder, Hastie and Tibshirani (2010) to account for missingness because not every respondent answers every question in every period.[13] The left panel of Figure A2 shows the distribution of this variable, split by partisanship. Table A1 reports the survey questions, waves they appear in, and PCA weights.

We use a large number of survey items to mitigate measurement error. Survey measures of issue preferences are inherently noisy, and unit fixed effects exacerbate measurement error.

[12]Using liberal-conservative self-placement instead of party identification does not meaningfully change results: for all but one question (the final question in Table A1, which is also the only question with a negative weight), conservatives and Republicans occupied the same side of the answer scale.

[13]We restrict this sample to respondent-period combinations with non-missing answers to at least 30 questions.

Measurement error in the dependent variable reduces precision, which would make it hard for us to draw clear conclusions about the effects of social media control. Our solution builds on Ansolabehere, Rodden and Snyder (2008), who discuss the problem of measurement error when studying political ideology. They recommend using a large number of survey items and constructing indices either by averaging the items or through factor analysis.

PARTY FAVORABILITY A secondary set of outcomes relate to party favorability. We create three measures of individual preferences toward the two main parties. The first considers survey questions on favorability toward the Republican and Democratic Parties, and the parties' leaders: Trump, Biden, and Harris. Lelkes, Sood and Iyengar (2017) use views of party leaders to measure affective polarization. Similar to the issue preferences data, we also aggregate these questions into a single dimension using PCA. The right panel of Figure A2 shows the distribution of this measure. The third outcome is candidate preference in the 2020 and 2024 presidential elections, among those who plan to vote for a Democratic or Republican candidate. We use these answers to measure pro-Republican outcomes, and standardize and rotate these variables so that higher scores indicate positive views of Republicans and negative scores of Democrats.

3.2 *Empirical Strategy*

For the outcomes which are individual survey questions, we estimate models of the form

$$\textit{Survey answer}_{iqt} = \beta\, \textit{Daily Twitter user}_i \times \textit{post-acquisition}_t + \gamma_{iq} + \delta_{qt} + \varepsilon_{iqt}, \qquad (1)$$

in which $\textit{Survey answer}_{iqt}$ is respondent i's answer to survey question q in wave t, scaled so higher answers are more conservative or more Republican. Our independent variable is $\textit{Daily Twitter user}_i \times \textit{post-acquisition}_t$, an indicator that respondent i uses Twitter daily prior to the acquisition, and that the survey wave is after the acquisition. γ_{iq} is an individual-by-survey question fixed effect, which accounts for any unobserved time-invariant factors that make a particular respondent more or less conservative on a given question. δ_{qt} is a survey wave-by-question fixed effect, which accounts for aggregate shocks that move all respondents right or left on a given question. ε_{iqt} is an error term. Pre-acquisition Twitter usage is absorbed by the respondent-question fixed effects, and the post-acquisition indicator is absorbed by the period-question fixed effects. This specification is equivalent to estimating a separate regression with respondent and period fixed effects for each survey question, and then calculating a precision-weighted average of these individual question difference in differences estimates. In more restrictive specifications, we interact the period-by-question

fixed effects with all combinations of individual demographics.

When using our PCA measures as the dependent variable, we estimate models of the form

$$PCA_{it} = \beta\, Daily\ Twitter\ user_i \times post\text{-}acquisition_t + \gamma_i + \delta_t + \varepsilon_{it}, \tag{2}$$

where PCA_{it} is individual i's measure of issue or partisan preferences in period t (pre/post acquisition), and γ_i and δ_t are respondent and period fixed effects.

We estimate these equations by OLS and cluster standard errors by respondent.[14] A substantial literature notes that two-way fixed effects regressions of the form of equations 1 and 2 do not recover convex-weighted averages of individual treatment effects in the presence of both heterogeneous treatment effects and heterogeneous treatment timing (see Roth et al., 2023). Because there is only one treatment event, these concerns do not apply to our context. Therefore, we use OLS because it is more efficient than alternative estimators.

Our research design builds on Ladd and Lenz (2009) who use panel data to study how changing newspaper endorsements in the UK influenced voter preferences. Recent papers on media and politics with similar designs include Djourelova (2023), who studies how a change in the language used to describe immigrants by the Associated Press affected immigration attitudes in media markets more reliant on that source, and Schneider-Strawczynski and Valette (2025), who study how greater coverage of immigration by a channel affects immigration attitudes among viewers. Beyond the study of media and politics, Komisarchik and White (2025) and Slothuus and Bisgaard (2021) also use a difference-in-differences approach to analyze change following a common shock.

3.3 *Identification*

The assumption to interpret β as causal is parallel trends. One would need to assume that in the absence of the Twitter acquisition, those using Twitter daily in May 2021 would have followed the same trajectory as those not. We take three steps to assess the plausibility of this assumption. First, we estimate event-study specifications to verify that Twitter users were not trending more conservative prior to the acquisition. Second, we interact the question-wave or period fixed effects with fixed effects for each unique combination of the respondent's age (in four categories), gender, education (high school/some college/college), race/ethnicity, and party identification, all measured before the acquisition. This approach is similar to

[14]Baker et al. (Forthcoming) discuss how standard errors in difference in differences designs can be thought of as capturing uncertainty either from sampling—as in traditional statistics—or from stochastic treatment assignment, with the latter generally motivated by contexts where the entire population is sampled. In our context, the parameter of interest is the population difference in differences that we estimate using a sample of the total population. Our standard errors should be understood as capturing sampling uncertainty, not uncertainty over treatment assignment.

using exact matching to match each Twitter user to a non-user with the same characteristics and then using this matched sample for estimation. It relaxes the identification assumption to parallel trends within each unique combination of attributes, allowing individuals with different characteristics to follow different trajectories. Third, we verify that these results are specific to regular Twitter users. Non-users similar to Twitter users—either in use of other social networks, or in demographic characteristics—did not move right post-acquisition.

4 EVIDENCE

4.1 *Effects of the Acquisition on Preferences*

Table 1 shows the effects of the Twitter acquisition on issue preferences. Model (1) corresponds to Equation 1. Pre-acquisition daily users give survey answers that are 0.036 standard deviations more conservative post-acquisition relative to non-users.

Table 1: Difference in differences estimates of the effect of the Twitter acquisition on the ideology of Twitter users

	Conservative survey answer				Preference PCA	
	(1)	(2)	(3)	(4)	(5)	(6)
Daily user × post	0.036**	0.038**	0.037**	0.040**	0.044†	0.057**
	(0.013)	(0.012)	(0.014)	(0.012)	(0.022)	(0.021)
FE: Respondent (x question)	x	x	x	x	x	x
- Period (x question)	x		x		x	
x Respondent characteristics		x		x		x
PCA weights			x	x		
N	2276984	2276984	2255316	2255316	19431	19431
R^2	0.784	0.835	0.796	0.843	0.982	0.985

This table reports difference in differences estimates of the effect of the Twitter acquisition on the issue preferences of Twitter users. All estimates are from OLS regressions with American Trends Panel population weights. The independent variable of interest takes a value of 1 if the individual was a daily Twitter user prior to the acquisition and if the survey took place after the acquisition, 0 otherwise. Models (1)–(4) are estimated at the respondent-question-survey wave level; the dependent variable is the respondent's answer, scaled to have standard deviation of 1 and rotated so that Republicans' scores are higher than those of Democrats. Models (3) and (4) additionally weight survey questions by the weight they are given in the first principal component, dropping one question with a negative weight. Models (5) and (6) are estimated at the respondent-by-pre and post level; the dependent variable is the first principal component of the respondent's pre and post-acquisition answers to survey questions. All models include respondent and period fixed effects; in (1)–(4) these are interacted with the survey item. Even-numbered models add period-specific fixed effects for each unique combination of gender, race, education, age category, and party, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

Model (2) interacts the survey wave-by-question fixed effects with fixed effects for each

unique combination of age, gender, race, education, and party, which results in an essentially unchanged coefficient. This result is reassuring in that it suggests that the coefficient in (1) is not driven by comparisons of individuals with very different characteristics, who we might not expect to follow the same trajectories in the absence of the Twitter acquisition. Models (3) and (4) weight survey items by their PCA weight. Survey items that map more cleanly onto the main left-right dimension in the data are given more weight. Doing so gives slightly larger coefficients, which is consistent with the idea that the Twitter acquisition moved users right. The acquisition had larger effects on survey items that are relevant to the left-right divide.

Model (5) corresponds to equation 2. The coefficient indicates that Twitter users became 0.044 standard deviations more conservative after the acquisition, using the PCA measure. As in models (3) and (4), this coefficient being larger than in (1) is consistent with the interpretation that the Twitter acquisition shifted users' right on the main ideological dimension. Adding saturated fixed effects for pre-treatment characteristics in (6) gives a slightly larger coefficient of 0.057 standard deviations.

The coefficient in Model (1) is 15% of the pre-acquisition gap between non-Hispanic Blacks and Whites, 21% of the pre-acquisition gap between high-school and college graduates, and 34% of the pre-acquisition gap between men and women. Our estimates are comparable to the effects of partisan television. Broockman and Kalla (2025) incentivize Fox News viewers to watch CNN. Doing so moves respondents' preferences left by 0.07 standard deviations on an index of issues relevant to Fox News coverage, and 0.035 standard deviations on an index of political issues not relevant to Fox News coverage (Broockman and Kalla, 2025, Figures OA14 and OA22).

Our estimates are driven by ideological moderates and those with limited interest in politics. Figures A3, A4, and A5 disaggregate our estimates by respondents' ideology, party, and interest in politics, respectively. We find the largest effects for moderate conservatives, and null effects for the most liberal respondents and strongly-identifying Democrats. This heterogeneity is consistent with existing accounts of persuasion. Bail et al. (2018) incentivized Twitter users to follow an opposite-party bot, and found this did not move Democrats right. Taber and Lodge (2006) find that individuals are less skeptical when presented with confirmatory information, and Levendusky (2013) finds that exposure to like-minded partisan media intensifies attitude extremity. Larger effects for moderates make sense if these users have weakly-held preferences (Zaller, 1992). Consistent with that idea, we find that the effects are driven by those unlikely to discuss or follow politics.

4.2 *Robustness and Threats to Identification*

Our effects are not specific to the American Trends Panel data. In Table A2 we replicate these regressions using data from the ANES panel, which gives slightly larger effects, between 0.05 and 0.15 standard deviations. Additionally, our results remain significant when expanding the definition of Twitter usage. Table A3 reports attenuated but statistically significant effects when including non-daily users in the treatment group. In line with the fact that daily users have more exposure to the platform, treatment effects are largest for daily users (Figure A8). Our estimates are also unchanged dropping survey waves from April–October 2022, during which Musk was in the process of buying Twitter (Table A4).

Figure 2 re-estimates models (1) and (2) in event-study form, interacting the measure of Twitter usage with the number of survey waves before or after the acquisition. After the acquisition, we observe a relative increase in conservative survey answers. Prior to the acquisition, we do not find clear evidence that Twitter users were trending more conservative. In the base specification there is some evidence of Twitter users trending more liberal; in the specification that interacts the wave-question fixed effects with fixed effects for respondent characteristics there is no clear pre-trend. The absence of pre-acquisition differential trends increases our confidence that the parallel trends assumption is satisfied in our case. Figure A6 re-estimates Figure 2, using the calendar timing of the survey, aggregated by year for precision, rather than the ordering of survey waves relative to the acquisition. Doing so gives extremely similar coefficients, and in conjunction with the 2024 ANES results, demonstrates that these results are durable over time.

Our effects are specific to regular Twitter users. A possible concern is that Twitter users could have been affected differently by things other than the acquisition of Twitter that happened after October 2022. The specifications with restrictive fixed effects partially mitigate that concern, ruling out concerns that something happened, for instance, to more educated or younger (or younger and more educated) respondents that could account for our results. We take two steps to further allay this concern. First, we run placebo regressions where we re-estimate Equation 1, substituting Twitter usage for usage of different social networks and subsetting to those not using Twitter daily. If some unobserved shock moved the kinds of people who use social media right, we should see effects comparable to our main coefficients for other social network users. Instead, we obtain small and (with one exception) statistically insignificant coefficients (Figure A7). Second, we predict daily Twitter usage with all available demographic variables and Random Forests. In Table A5, we find that among those not using Twitter daily, there is no post-acquisition change in the political preferences of those predicted to use Twitter.

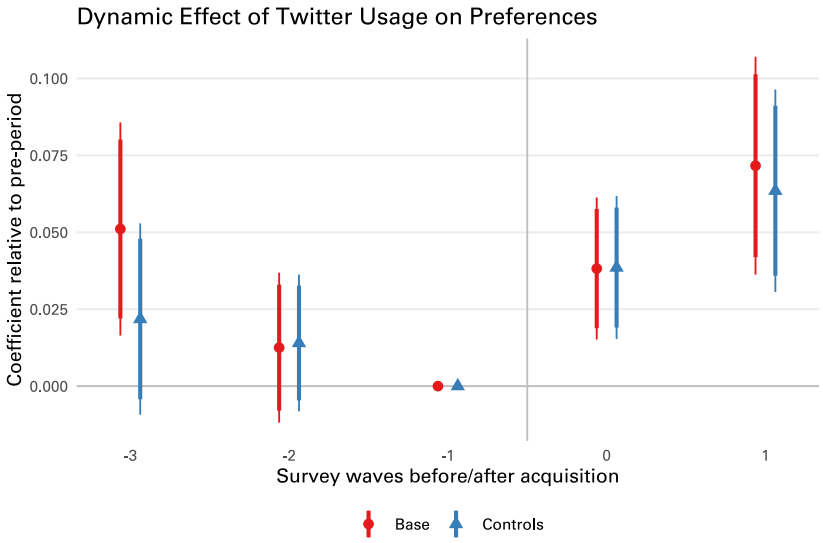

Figure 2: Event-study estimates

This figure shows coefficients from OLS regressions of conservative survey answers against daily Twitter usage interacted with the timing of the survey wave relative to the acquisition. -1, the reference category, is the last wave in which the item was asked pre-acquisition and 0 is the first wave the item was asked post-acquisition. Red dots are from specifications with question-by-respondent and question-by-wave fixed effects, blue triangles interact the question-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard errors clustered by respondent.

4.3 *Effects by Issue Area*

The above results aggregate over several issue topics. In this subsection we disaggregate by issue area. Doing so we find that no single survey question or issue area accounts for the rightward shift, which confirms the robustness of our finding that the acquisition moved users right. Examining variation across issues, we find a rightward shift broadly aligned with Elon Musk's issue preferences. Twitter users moved right on race, economic issues and views of Russia, but not on climate and certain social issues.

Figure 3 disaggregates the effects by issue. In the left panel, we find similar coefficients subsetting to questions on social issues, economic policy, and foreign policy, though smaller effects for climate (Table A1 details the questions in each category). Further disaggregating these estimates shows that the foreign policy effect is entirely driven by survey questions relating to the war in Ukraine. On social issues we find larger effects for questions relating to race and racism. For economic policy issues the largest effects are for questions relating to views of whether the economic and taxation system are fair, such as whether billionaires are "a good thing for the country."

These patterns are broadly consistent with the idea that Elon Musk moved Twitter

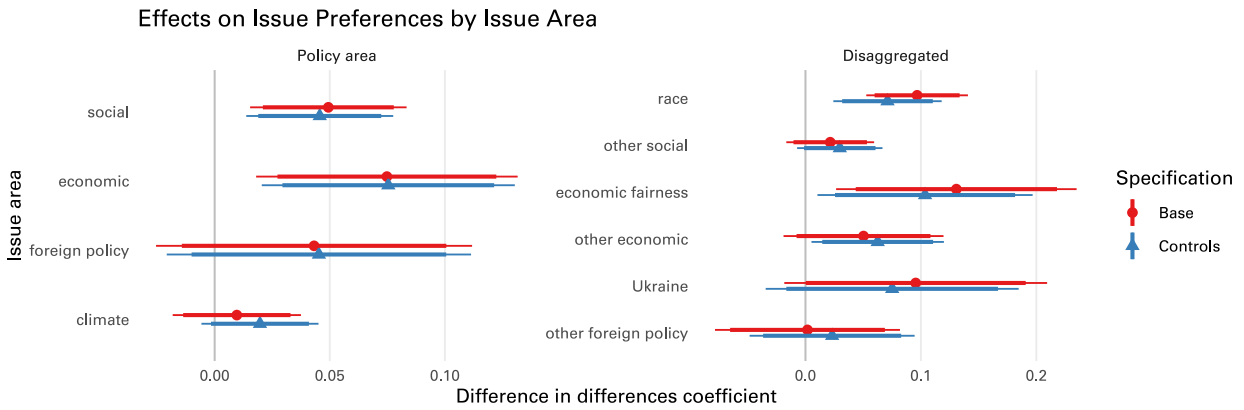

Figure 3: Estimates by issue area

The left panel shows coefficients from the main difference in differences estimation, subsetting by the issue area most relevant to the survey question. Each point is a coefficient from a different regression. Red dots are from specifications with survey item-by-respondent and survey item-by-wave fixed effects, blue triangles interact the item-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard error clustered by respondent. The right panel separates the social issue questions into those about race and those not, economic issues into those concerning economic fairness and not, and the foreign policy questions into those about Ukraine and those not.

users' preferences toward his own. Journalistic accounts characterize Musk as a self-described "libertarian" strongly opposed to "woke" policies especially relating to race and diversity initiatives (Conger and Mac, 2024, 99–100). He was an early proponent of ending the Russia-Ukraine war on terms favorable to Russia.[15] Musk's politics are not however the Republican Party line. As the CEO of an electric car company, Musk has supported green policies. He also opposed efforts to restrict abortion rights.[16] And while many accounts emphasize his opposition to transgender rights, Musk has also boasted of Tesla's support for lesbian, gay and bisexual employees.[17] In the second Trump administration, Musk was an advocate for immigration, at least by skilled technology workers.[18] Our finding of a rightward shift on race, economic issues, and the war in Ukraine, but not climate, broadly fit with this pattern.

Figure A9 considers even more granular categories, which further confirms this impression. In addition to climate change, there is no effect on attitudes to immigration, abortion, and LGBT issues (which almost entirely consists of questions about attitudes to same-sex relationships). Table A6 shows twenty questions with the largest and most precisely-estimated

[15] https://www.nytimes.com/2022/10/26/technology/elon-musk-geopolitics-china-ukraine.html

[16] https://www.nytimes.com/2022/04/16/business/elon-musk-politics-twitter.html

[17] https://fortune.com/2022/06/02/elon-musk-tesla-lgbtq-hrc-corporate-equality-index-personal-choices/

[18] https://www.ft.com/content/0531a4ab-e587-421c-8326-91e0e128ec34

rightward effects.[19]

4.4 *Effects of the Acquisition on Partisanship*

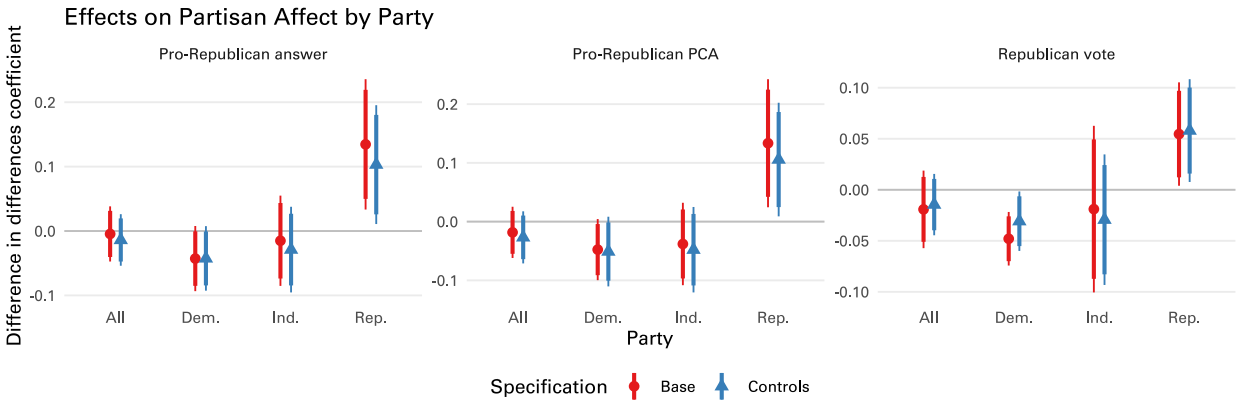

Figure 4: The Twitter acquisition did not move users in a pro-Republican direction in the aggregate, but did make Republicans more pro-Republican

Each point is a coefficient from a separate regression, subset to a different group of partisans. In all regressions the independent variable takes a value of 1 if the individual was a daily Twitter user prior to the acquisition and if the survey took place after the acquisition, 0 otherwise. In the first panel the dependent variable is answers to survey questions about favorability to the two parties and their leaders, standardized and rotated so higher answers are more pro-Republican. In the second panel it is the first principal component of these variables. In the third an indicator that the respondent intends to vote for the Republicans rather than the Democrats. Red dots are from specifications with respondent and period-by-party fixed effects, in the first panel interacted with the question. Blue triangles are from specifications that interact the period fixed effects with each unique combination of race, gender, education, and age category. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard errors clustered by respondent.

Elon Musk buying Twitter moved the issue preferences of users to the right, but did not consistently move the average Twitter user toward the Republican Party. The first panel in Figure 4 shows the results of difference in differences regressions where the dependent variables are pro-Republican (and anti-Democrat) survey answers. These five survey questions are listed in Table A8. The second panel shifts the dependent variable to a principal components aggregate, derived from these five questions. The final panel considers planned vote choice in the upcoming presidential election. Examining the full sample (the leftmost pair of results in each panel), we find null effects for all three outcomes. Our positive effects for preferences but not partisanship make sense given existing evidence that party identification is more stable and harder to manipulate experimentally than preferences (Goren, 2005; Holliday, Lelkes and Westwood, 2025).

[19]Table A7 outlines the biggest ANES-related effects.

This aggregate null masks meaningful across-party heterogeneity. While the issue preferences of moderate Twitter users shifted the most right post-acquisition, the largest effects on party affect are from partisans. In all three panels, Republicans experienced a large shift toward their own party. Democrats experienced a smaller shift in the opposite direction. Figure A10 further disaggregates between strong and weak partisans and finds that not strong Republicans experience the largest pro-Republican effect, while the backlash is concentrated among strong Democrats. In the ANES data, we find the same shift toward the Republicans by Republicans, but no clear effect on Democrats (Table A9).

4.5 *Exit post-acquisition*

Strong Democrats and the most liberal Twitter users are the least likely to be moved towards conservative issue preferences and pro-Republican opinions. There are several reasons why this might be the case. One possibility is that these types of daily Twitter users have curated their filter bubbles to exclude the pro-conservative posts brought on by Musk's algorithm changes.[20] Another possibility is that despite seeing more conservative posts, they are less likely to be persuaded because of strong ideological and partisan commitments. Finally, they may opt to exit the platform. Exit limits the ability of platform owners to meaningfully interact with past-users. While we cannot observe user feeds, we do consider how user exit shapes the persuasive power of platform owners.

Figure 5 shows that among pre-acquisition daily users and non-daily users, the most liberal respondents were least likely to use the platform post-acquisition (see also Figure A12). Conservatives were most likely to switch into using the platform. ANES data in Figure A13 finds the biggest platform drop off among Democrats and liberals. These findings support the idea that social media usage responds to platform content.

Our estimates on issue preferences are driven by individuals who continue to use Twitter. In Table A10, we disaggregate the measure of Twitter usage into those who use Twitter daily in both May 2021 (pre-acquisition) and March 2024 (post-acquisition)—the two waves in which the American Trends Panel measures daily usage—and those who stopped using Twitter daily between these dates. Our aim here is to compare changes in preferences between different groups of pre-acquisition Twitter users who reacted differently to the acquisition, and not to make a causal claim about the effects of quitting Twitter. We find no change in attitudes relative to non-users among those who had stopped using Twitter daily by 2024, and a larger change among those who stayed on the platform.

[20]For instance, Figure A11 shows that in March 2024, the most liberal users were still more likely to report seeing mostly liberal rather than mostly conservative content on X. This question was not asked pre-acquisition and so we cannot assess whether this perceived mix of content changed over time.

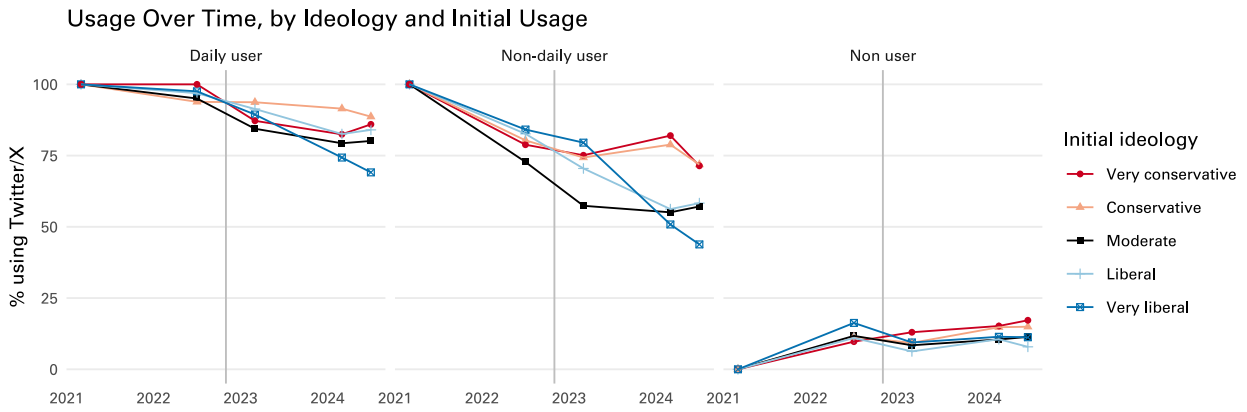

Figure 5: Decline in usage among initial Twitter users

The figure plots the percentage saying they ever use Twitter or X across successive surveys, subset by Twitter usage in the first survey (which we use as our measure of treatment exposure) and stated ideology.

One possible reason that the Twitter acquisition failed to produce pro-Republican party effects on average is backlash among pre-acquisition users who stopped using the site. In Table A11 we study changes in partisan favorability among those staying on or quitting the site. We find null effects for Democratic continuing users but large moves away from the Republican Party among those stopping daily use. This pattern makes sense if the acquisition pushed Democrats off Twitter and onto less ideologically-diverse fora. In contrast, for Republicans, the largest estimates are among those who continued to use the site. This pattern is consistent with exposure to pro-Republican content on Twitter reinforcing Republican identity.

5 CONCLUSION

We have studied whether the owners of social networks are able to influence their users, exploiting the change in ownership of Twitter in October 2022. After Twitter was bought by a Republican donor, pre-acquisition Twitter users became more conservative relative to non-users. Conservatives and moderates shifted the most to the right, and Republicans to higher levels of pro-Republican and anti-Democratic affect. However, strong liberals and Democrats remained close to their pre-acquisition preferences, offsetting the move toward the Republicans by Republicans. Social network owners do have substantial power to persuade their users, though power is limited by voters' already strongly-held views and partisan identities.

Our estimates are likely a lower bound on the ability of social media owners to persuade. Twitter differs from other social networks in that its user base, before the acquisition, was more interested in politics (Figure A14) and leaned to the left (Fujiwara, Müller and Schwarz,

2024), making it less persuadable by conservative content. Exposing the user base of a less political platform, such as Snapchat, TikTok, or Instagram, to a similar change in political content might more reliably shift users' political preferences.

We find that preferences over policies and issues shift to the right, though results on presidential preferences are null. Shifts in preferences may still have consequences for policy, for instance by influencing political participation. Public opinion greatly constrains legislative, judicial, and executive behavior (Canes-Wrone and Shotts, 2004; Page and Shapiro, 1983; Giles, Blackstone and Vining Jr, 2008).

This study brings a real-world treatment to a largely experimental literature. Instead of measuring whether a given treatment has the ability to shift political preferences or polarization, we document that changes following Musk's acquisition did indeed shift preferences on one of the nation's largest social media platforms. While experimental studies often require subjects to make changes that they otherwise may not opt into, such as following a politically charged account, using a setting that is not publicly available, or using a specific account setting, we observe Twitter/X users interacting with the platform however they wish—including exiting the platform. Finally, we document effects that persist over two years, well beyond the typical experimental study.

Ownership of social networking platforms—and the ability to present personalized political content to millions at scale—is a new potential form of influence available only to the super-wealthy. When owners exercise this ability, they are able to persuade a sizeable share of the population.

REFERENCES

Allcott, Hunt, Luca Braghieri, Sarah Eichmeyer and Matthew Gentzkow. 2020. "The Welfare Effects of Social Media." *American Economic Review* 110(3):629–676.

Allcott, Hunt, Matthew Gentzkow, Ro'ee Levy, Adriana Crespo-Tenorio, Natasha Dumas, Winter Mason, Devra Moehler, Pablo Barbera, Taylor W Brown, Juan Carlos Cisneros et al. 2025. The Effects of Political Advertising on Facebook and Instagram Before the 2020 US Election. Technical report National Bureau of Economic Research.

Allcott, Hunt, Matthew Gentzkow, Winter Mason, Arjun Wilkins, Pablo Barberá, Taylor Brown, Juan Carlos Cisneros, Adriana Crespo-Tenorio, Drew Dimmery, Deen Freelon et al. 2024. "The Effects of Facebook and Instagram on the 2020 Election: A Deactivation Experiment." *Proceedings of the National Academy of Sciences* 121(21):e2321584121.

Ansolabehere, Stephen, Jonathan Rodden and James M Snyder, Jr. 2008. "The Strength of Issues: Using Multiple Measures to Gauge Preference Stability, Ideological Constraint, and Issue Voting." *American Political Science Review* 102(2):215–232.

Bail, Christopher A, Lisa P Argyle, Taylor W Brown, John P Bumpus, Haohan Chen, MB Fallin Hunzaker, Jaemin Lee, Marcus Mann, Friedolin Merhout and Alexander Volfovsky. 2018. "Exposure to Opposing Views on Social Media Can Increase Political Polarization." *Proceedings of the National Academy of Sciences* 115(37):9216–9221.

Baker, Andrew, Brantly Callaway, Scott Cunningham, Andrew Goodman-Bacon and Pedro HC Sant'Anna. Forthcoming. "Difference-in-Differences Designs: A Practitioner's Guide." *Journal of Economic Literature* .

Baumgartner, Frank R, Jeffrey M Berry, Marie Hojnacki, Beth L Leech and David C Kimball. 2009. *Lobbying and Policy Change: Who Wins, Who Loses, and Why*. University of Chicago Press.

Bonica, Adam, Nolan McCarty, Keith T Poole and Howard Rosenthal. 2013. "Why Hasn't Democracy Slowed Rising Inequality?" *Journal of Economic Perspectives* 27(3):103–124.

Broockman, David E and Joshua L Kalla. 2025. "Consuming Cross-Cutting Media Causes Learning and Moderates Attitudes: A Field Experiment with Fox News Viewers." *The Journal of Politics* 87(1):246–261.

Canes-Wrone, Brandice and Kenneth W Shotts. 2004. "The Conditional Nature of Presidential Responsiveness to Public Opinion." *American Journal of Political Science* 48(4):690–706.

Chiang, Chun-Fang and Brian Knight. 2011. "Media Bias and Influence: Evidence from Newspaper Endorsements." *The Review of economic studies* 78(3):795–820.

Conger, Kate and Ryan Mac. 2024. *Character Limit: How Elon Musk Destroyed Twitter*. Penguin Group.

Dahl, Robert A. 1998. *On Democracy*. Yale University Press.

DellaVigna, Stefano and Ethan Kaplan. 2007. "The Fox News Effect: Media Bias and Voting." *The Quarterly Journal of Economics* 122(3):1187–1234.

Djourelova, Milena. 2023. "Persuasion Through Slanted Language: Evidence from the Media Coverage of Immigration." *American Economic Review* 113(3):800–835.

Enikolopov, Ruben, Alexey Makarin and Maria Petrova. 2020. "Social Media and Protest Participation: Evidence from Russia." *Econometrica* 88(4):1479–1514.

Fouirnaies, Alexander and Anthony Fowler. 2022. "Do Campaign Contributions Buy Favorable Policies? Evidence from the Insurance Industry." *Political Science Research and Methods* 10(1):18–32.

Fowler, Anthony, Haritz Garro and Jörg L Spenkuch. 2020. "Quid Pro Quo? Corporate Returns to Campaign Contributions." *The Journal of Politics* 82(3):844–858.

Fujiwara, Thomas, Karsten Müller and Carlo Schwarz. 2024. "The Effect of Social Media on Elections: Evidence from the United States." *Journal of the European Economic Association* 22(3):1495–1539.

Gauthier, Germain, Roland Hodler, Philine Widmer and Ekaterina Zhuravskaya. 2026. "The Political Effects of X's Feed Algorithm." *Nature* pp. 1–8.

Gentzkow, Matthew, Jesse M Shapiro and Michael Sinkinson. 2011. "The Effect of Newspaper Entry and Exit on Electoral Politics." *American Economic Review* 101(7):2980–3018.

Gerber, Alan S, Dean Karlan and Daniel Bergan. 2009. "Does the Media Matter? a Field Experiment Measuring the Effect of Newspapers on Voting Behavior and Political Opinions." *American Economic Journal: Applied Economics* 1(2):35–52.

Gilens, Martin. 2012. *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton University Press.

Giles, Micheal W, Bethany Blackstone and Richard L Vining Jr. 2008. "The Supreme Court in American Democracy: Unraveling the Linkages Between Public Opinion and Judicial Decision Making." *The Journal of Politics* 70(2):293–306.

Goren, Paul. 2005. "Party Identification and Core Political Values." *American Journal of Political Science* 49(4):881–896.

Grossman, Guy, Yotam Margalit and Tamar Mitts. 2022. "How the Ultrarich Use Media Ownership as a Political Investment." *The Journal of Politics* 84(4):1913–1931.

Guess, Andrew M, Neil Malhotra, Jennifer Pan, Pablo Barberá, Hunt Allcott, Taylor Brown, Adriana Crespo-Tenorio, Drew Dimmery, Deen Freelon, Matthew Gentzkow et al. 2023*a*. "How Do Social Media Feed Algorithms Affect Attitudes and Behavior in an Election Campaign?" *Science* 381(6656):398–404.

Guess, Andrew M, Neil Malhotra, Jennifer Pan, Pablo Barberá, Hunt Allcott, Taylor Brown, Adriana Crespo-Tenorio, Drew Dimmery, Deen Freelon, Matthew Gentzkow et al. 2023*b*. "Reshares on Social Media Amplify Political News but Do Not Detectably Affect Beliefs or Opinions." *Science* 381(6656):404–408.

Guess, Andrew M, Pablo Barberá, Simon Munzert and JungHwan Yang. 2021. "The Consequences of Online Partisan Media." *Proceedings of the National Academy of Sciences* 118(14):e2013464118.

Hickey, Daniel, Daniel MT Fessler, Kristina Lerman and Keith Burghardt. 2025. "X Under Musk's Leadership: Substantial Hate and No Reduction in Inauthentic Activity." *PLoS One* 20(2):e0313293.

Holliday, Derek E, Yphtach Lelkes and Sean J Westwood. 2025. "Why Depolarization Is Hard: Evaluating Attempts to Decrease Partisan Animosity in America." *Proceedings of the National Academy of Sciences* 122(39):e2508827122.

Komisarchik, Mayya and Ariel White. 2025. "Throwing Away the Umbrella: Minority Voting After the Supreme Court's Shelby Decision." *Quarterly Journal of Political Science* 20(2):269–305.

Ladd, Jonathan McDonald and Gabriel S Lenz. 2009. "Exploiting a Rare Communication Shift to Document the Persuasive Power of the News Media." *American Journal of Political Science* 53(2):394–410.

Larson, Jennifer M, Jonathan Nagler, Jonathan Ronen and Joshua A Tucker. 2019. "Social Networks and Protest Participation: Evidence from 130 Million Twitter Users." *American Journal of Political Science* 63(3):690–705.

Lelkes, Yphtach, Gaurav Sood and Shanto Iyengar. 2017. "The Hostile Audience: The Effect of Access to Broadband Internet on Partisan Affect." *American Journal of Political Science* 61(1):5–20.

Levendusky, Matthew S. 2013. "Why Do Partisan Media Polarize Viewers?" *American Journal of Political Science* 57(3):611–623.

Levy, Ro'ee. 2021. "Social Media, News Consumption, and Polarization: Evidence from a Field Experiment." *American Economic Review* 111(3):831–870.

Martin, Gregory J and Ali Yurukoglu. 2017. "Bias in Cable News: Persuasion and Polarization." *American Economic Review* 107(9):2565–2599.

Mazumder, Rahul, Trevor Hastie and Robert Tibshirani. 2010. "Spectral Regularization Algorithms for Learning Large Incomplete Matrices." *The Journal of Machine Learning Research* 11:2287–2322.

Nyhan, Brendan, Jaime Settle, Emily Thorson, Magdalena Wojcieszak, Pablo Barberá, Annie Y Chen, Hunt Allcott, Taylor Brown, Adriana Crespo-Tenorio, Drew Dimmery et al. 2023. "Like-Minded Sources on Facebook Are Prevalent but Not Polarizing." *Nature* 620(7972):137–144.

Page, Benjamin I, Larry M Bartels and Jason Seawright. 2013. "Democracy and the Policy Preferences of Wealthy Americans." *Perspectives on Politics* 11(1):51–73.

Page, Benjamin I and Robert Y Shapiro. 1983. "Effects of Public Opinion on Policy." *American Political Science Review* 77(1):175–190.

Piccardi, Tiziano, Martin Saveski, Chenyan Jia, Jeffrey Hancock, Jeanne L Tsai and Michael S Bernstein. 2025. "Reranking Partisan Animosity in Algorithmic Social Media Feeds Alters Affective Polarization." *Science* 390(6776):eadu5584.

Qin, Bei, David Strömberg and Yanhui Wu. 2024. "Social Media and Collective Action in China." *Econometrica* 92(6):1993–2026.

Roth, Jonathan, Pedro HC Sant'Anna, Alyssa Bilinski and John Poe. 2023. "What's Trending in Difference-in-Differences? a Synthesis of the Recent Econometrics Literature." *Journal of Econometrics* 235(2):2218–2244.

Schneider-Strawczynski, Sarah and Jérôme Valette. 2025. "Media Coverage of Immigration and the Polarization of Attitudes." *American Economic Journal: Applied Economics* 17(1):337–368.

Slothuus, Rune and Martin Bisgaard. 2021. "How Political Parties Shape Public Opinion in the Real World." *American Journal of Political Science* 65(4):896–911.

Strömberg, David. 2015. "Media and Politics." *Annual Review of Economics* 7(1):173–205.

Taber, Charles S and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50(3):755–769.

Wagner, Michael W. 2023. "Independence by Permission." *Science* 381(6656):388–391.

Ye, Jinyi, Luca Luceri and Emilio Ferrara. 2025. Auditing Political Exposure Bias: Algorithmic Amplification on Twitter/X During the 2024 US Presidential Election. In *Proceedings of the 2025 ACM Conference on Fairness, Accountability, and Transparency*. pp. 2349–2362.

Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. Cambridge University Press.

Online Appendix for Buying Followers: The Political Consequences of the Twitter Acquisition

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A ADDITIONAL TABLES

Table A1: Pew issue questions

Variable	Highest	Levels	Flipped	Waves	Weight	Topic
From what you've read and heard, how do you feel about the Black Lives Matter movement?	Strongly support	4	Yes	68, 74, 95, 105, 126	0.070	Race
In your view, is global climate change a...	Extremely serious problem	5	Yes	106, 135, 146	0.070	Climate
How much do you think human activity, such as the burning of fossil fuels, contributes to global climate change?	A great deal	4	Yes	67, 89, 102, 135	0.067	Climate
Do you support or oppose the U.S. participating in international efforts to help reduce the effects of global climate change?	Strongly support	4	Yes	102, 128	0.067	Climate
In general, how much do white people benefit from advantages in society that black people do not have?	A great deal	4	Yes	71, 92, 116, 146	0.066	Race
Right now, which ONE of the following do you think should be the more important priority for addressing America's energy supply?	Developing alternative sources, such as wind, solar and hydrogen technology	2	Yes	67, 89, 102, 108, 128, 148	0.065	Climate
Next are a few more pairs of statements. Again, please choose the statement that comes closer to your own views - even if neither is exactly right	Stricter environmental laws and regulations cost too many jobs and hurt the economy	2	No	89, 108, 128, 146	0.065	Climate
Which of the following statements comes closest to your overall view of gun laws in this country? Which of the following statements comes closest to your overall view of gun laws in this country?	Gun laws should be MORE strict than they are today	3	Yes	87, 129	0.063	Guns

When it comes to racial discrimination, which do you think is the bigger problem for the country today?	People seeing racial discrimination where it really does NOT exist	2	No	74, 113, 126	0.062	Race
Do you favor or oppose the U.S. taking steps to become carbon neutral by 2050?	Favor	2	Yes	102, 148	0.062	Climate
Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? Getting the U.S. to net-zero carbon emissions as quickly as possible	Very important	4	Yes	89, 128	0.062	Climate
What do you think is more important?	To protect the right of Americans to own guns	2	No	110, 146	0.061	Guns
How would you rate the job police around the country are doing when it comes to each of the following? Treating racial and ethnic groups equally	Excellent	4	No	69, 120	0.061	Race
Please indicate whether you would favor or oppose / oppose or favor the following proposals about gun policy. Allowing people to carry concealed guns in more places	Strongly favor	4	No	87, 129	0.061	Guns
Do you think it is the responsibility of the federal government to make sure all Americans have health care coverage?	Yes, it is	2	Yes	71, 92, 146	0.061	Size of government
Do you favor or oppose EXPANDING each of the following sources of energy in our country? More coal mining	Favor	2	No	67, 89, 108, 128, 148	0.061	Climate
Which of these three statements about the Earth's temperature comes closest to your view? Which of these three statements about the Earth's temperature comes closest to your view?	The Earth is getting warmer mostly because of human activity such as burning fossil fuels	4	Yes	106, 128	0.060	Climate
Do you favor or oppose EXPANDING each of the following sources of energy in our country? More offshore oil and gas drilling in U.S. waters	Favor	2	No	67, 89, 108, 128, 148	0.060	Climate

Do you think each of the following is generally good or bad for our society? An increase in the number of guns in the U.S.	Very good for society	5	No	92, 146	0.060	Guns
Overall, how does each of the following affect people's ability to get ahead in our country these days? Being Black	Helps a lot	5	No	74, 126	0.059	Race
Would you say that [(Black people are treated less fairly than White people), (White people are treated less fairly than Black people)], or both are treated about equally? In hiring, pay and promotions	Black people are treated less fairly than White people	3	Yes	74, 126	0.059	Race
Which of the following statements comes closest to your overall view of gun laws in this country? Banning high-capacity ammunition magazines that hold more than 10 rounds	Strongly favor	4	Yes	87, 129	0.059	Guns
Would you say that [(Black people are treated less fairly than White people), (White people are treated less fairly than Black people)], or both are treated about equally? When voting in elections	Black people are treated less fairly than White people	3	Yes	74, 126	0.059	Race
Do you favor or oppose EXPANDING each of the following sources of energy in our country? More hydraulic fracturing, sometimes called "fracking," for oil and natural gas	Favor	2	No	67, 89, 108, 128, 148	0.059	Climate
How much, if at all, do you think the legacy of slavery affects the position of Black people in American society today?	A great deal	4	Yes	97, 146	0.058	Race
Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views - even if neither is exactly right.	Racial discrimination is the main reason why many black people can't get ahead these days	2	Yes	97, 146	0.058	Race
Overall, how does each of the following affect people's ability to get ahead in our country these days? Being White	Helps a lot	5	Yes	74, 126	0.058	Race
Which statement comes closer to your own views - even if neither is exactly right?	Government should do more to solve problems	2	Yes	71, 87, 107, 125, 146	0.058	Size of govern-ment

Please indicate whether you would favor or oppose / oppose or favor the following proposals about gun policy. Allowing teachers and school officials to carry guns in K-12 schools	Strongly favor	4	No	87, 129	0.057	Guns
Please indicate whether you would favor or oppose / oppose or favor the following proposals about gun policy. Banning high-capacity ammunition magazines that hold more than 10 rounds	Strongly favor	4	Yes	87, 129	0.057	Guns
Do you favor or oppose phasing out the production of new gasoline cars and trucks by the year 2035?	Favor	2	Yes	89, 108, 128	0.057	Climate
If you had to choose, would you rather have...	A smaller government providing fewer services	2	No	71, 92, 125, 146	0.057	Size of government
Black people // Please tell us how much discrimination there is against each of these groups in our society today.	A lot	4	Yes	84, 118, 143	0.057	Race
Would you say that [(Black people are treated less fairly than White people), (White people are treated less fairly than Black people)], or both are treated about equally? In dealing with the police	Black people are treated less fairly than White people	3	Yes	74, 126	0.057	Race
Thinking about the assistance government provides to people in need. Do you think the government...	Should provide more assistance	3	Yes	92, 116, 125, 146	0.056	Size of government
Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views - even if neither is exactly right	Government regulation of business is necessary to protect the public interest	2	Yes	95, 116, 146	0.056	Business
Do you favor or oppose the following proposals to reduce the effects of global climate change? Taxing corporations based on the amount of carbon emissions they produce	Favor	2	Yes	67, 89, 108, 128	0.056	Climate

Would you say that [(Black people are treated less fairly than White people), (White people are treated less fairly than Black people)],or both are treated about equally?When applying for a loan or mortgage	Black people are treated less fairly than White people	3	Yes	74, 126	0.056	Race
Should tax rates on large businesses and corporations be...	Raised a lot	5	Yes	95, 125	0.056	Business
Would you say that [(Black people are treated less fairly than White people), (White people are treated less fairly than Black people)], or both are treated about equally?When seeking medical treatment	Black people are treated less fairly than White people	3	Yes	74, 126	0.055	Race
Next are a few more pairs of statements. Again, please choose the statement that comes closer to your own views - even if neither is exactly right	The obstacles that once made it harder for women than men to get ahead are now largely gone	2	No	71, 92, 116, 125, 146	0.054	Abortion/women
The next time you purchase a vehicle, how likely are you to seriously consider purchasing an electric vehicle?	Very likely	5	Yes	89, 108, 128, 148	0.054	Climate
Which statement comes closer to your views, even if neither is exactly right?	Whether someone is a man or a woman is determined by the sex they were assigned at birth	2	No	91, 109, 146	0.054	Lgbt
How would you rate the job police around the country are doing when it comes to each of the following? Using the right amount of force for each situation	Excellent	4	No	69, 120	0.053	Race
Do you think each of the following is generally good or bad for our society? Same-sex marriages being legal in the U.S.	Very good for society	5	Yes	92, 146	0.053	Lgbt

Please choose the statement that comes closer to your own views - even if neither is exactly right.	Government aid to the poor does more harm than good, by making people too dependent on government assistance	2	No	92, 107, 146	0.053	Size of government
What role should the federal government play in each of the following activities? Coal mining	Encourage this activity	3	No	102, 123	0.053	Climate
Do you think abortion should be...	Legal in all cases	4	Yes	104, 110, 125, 146	0.052	Abortion/women
What role should the federal government play in each of the following activities? Oil and gas drilling	Encourage this activity	3	No	102, 123	0.052	Climate
Would you say that [(Black people are treated less fairly than White people), (White people are treated less fairly than Black people)], or both are treated about equally? In stores or restaurants	Black people are treated less fairly than White people	3	Yes	74, 126	0.052	Race
Which of the following statements comes closer to your own view - even if neither is exactly right?	If election rules were changed to make it easier to register and vote, that would also make elections less secure	2	No	69, 84, 148	0.052	Political institutions
White people // Please tell us how much discrimination there is against each of these groups in our society today.	A lot	4	No	84, 118, 143	0.051	Race
Please indicate whether you would favor or oppose / oppose or favor the following proposals about gun policy. Allowing people to carry concealed guns without a permit	Strongly favor	4	No	87, 129	0.051	Guns

Which statement comes closer to your own views - even if neither is exactly right?	A voter should only be allowed to vote early or absentee if they have a documented reason for not voting in person on El	2	No	69, 87, 148	0.051	Political institutions
Regardless of whether you think abortion should be legal or illegal, how well do each of the following statements describe your views? Human life begins at conception, so a fetus is a person with rights	Extremely well	5	No	104, 146	0.051	Abortion/women
How would you rate the job police around the country are doing when it comes to each of the following? Holding officers accountable when misconduct occurs	Excellent	4	No	69, 120	0.051	Race
All in all, do you have a favorable or unfavorable view of Christian nationalism?	Very favorable	6	No	114, 143	0.051	Religion
Thinking about the situation at the U.S. border with Mexico, how important, if at all, are each of the following for the U.S.? Making it harder for asylum seekers to be granted legal status in the U.S.	Very important	4	No	87, 129	0.050	Immigration
How much, if at all, does each of the following bother you about the federal tax system? The feeling that some wealthy people don't pay their fair share	A lot	4	Yes	87, 125	0.050	Economic fairness
Thinking about the country's energy supply, do you think the U.S. should...	Phase out the use of oil, coal and natural gas completely, relying instead on renewable energy sources such as wind and	2	Yes	89, 102, 128, 148	0.050	Climate

Regardless of whether you think abortion should be legal or illegal, how well do each of the following statements describe your views? The decision about whether to have an abortion should belong solely to the pregnant woman	Extremely well	5	Yes	104, 146	0.049	Abortion/women
Which comes closer to your own view - even if neither is exactly right?	Technology companies should take steps to restrict false information online, even if it limits people from freely publis	2	Yes	93, 109, 112, 129	0.049	Technology
Again, please choose the statement that comes closer to your own views - even if neither is exactly right.	The government should do more to help needy Americans, even if it means going deeper into debt	2	Yes	69, 146	0.049	Size of government
Again, please choose the statement that comes closer to your own views - even if neither is exactly right.	America's openness to people from all over the world is essential to who we are as a nation	2	Yes	92, 116, 146	0.049	Immigration
On a different topic...Which comes closer to your view about how to handle undocumented immigrants who are now living in the U.S.?	They should not be allowed to stay in the country legally	2	No	68, 87, 146, 151	0.049	Immigration
Again, please choose the statement that comes closer to your own views - even if neither is exactly right.	The best way to ensure peace is through military strength	2	No	92, 125	0.049	Other foreign policy
Overall, how does each of the following affect people's ability to get ahead in our country these days? Being Hispanic	Helps a lot	5	No	74, 126	0.049	Race
Do you favor or oppose EXPANDING each of the following sources of energy in our country? More wind turbine "farms"	Favor	2	Yes	67, 89, 108, 128, 148	0.048	Climate

Overall, how does each of the following affect people's ability to get ahead in our country these days? Being a man	Helps a lot	5	Yes	74, 126	0.048	Abortion/women
What role should the federal government play in each of the following activities? The use of electric vehicles	Encourage this activity	3	Yes	102, 123	0.048	Climate
How much, if at all, does each of the following bother you about the federal tax system? The feeling that some corporations don't pay their fair share	A lot	4	Yes	87, 125	0.048	Economic fairness
What role should the federal government play in each of the following activities? The production of wind and solar power	Encourage this activity	3	Yes	102, 123	0.048	Climate
Thinking about the situation at the U.S. border with Mexico, how important, if at all, are each of the following for the U.S.? Providing safe and sanitary conditions for asylum seekers once they arrive in the U.S.	Very important	4	Yes	87, 129	0.047	Immigration
Hispanic people // Please tell us how much discrimination there is against each of these groups in our society today.	A lot	4	Yes	84, 118, 143	0.047	Race
Please indicate whether you would favor or oppose / oppose or favor the following proposals about gun policy. Shortening waiting periods for people who want to buy guns legally	Strongly favor	4	No	87, 129	0.047	Guns
As you may know, over the past several decades there has been a large reduction in the percentage of workers who are represented by unions. Do you think this has been...	Very good for the country	4	No	87, 101, 125, 140	0.047	Business
Thinking about the size of America's military, do you think it should be...	Reduced a great deal	5	Yes	92, 125	0.046	Other foreign policy
Please choose the statement that comes closer to your own views - even if neither is exactly right.	Other countries generally treat the United States about as fairly as we treat them	2	Yes	92, 125	0.046	Other foreign policy

Do you think each of the following is generally good or bad for our society? A decline in the share of Americans belonging to an organized religion	Very good for society	5	Yes	92, 146	0.046	Religion
How much influence should the Bible have on the laws of the United States?	A great deal	4	No	61, 114, 143	0.046	Religion
Muslims // Please tell us how much discrimination there is against each of these groups in our society today.	A lot	4	Yes	84, 118, 143	0.045	Other social
Compared to other countries with large economies, how much do you think the U.S. is doing to help reduce the effects of global climate change?	More than other countries with large economies	3	No	102, 128	0.045	Climate
Should tax rates on household income over $400,000 be...	Raised a lot	5	Yes	95, 125	0.045	Size of government
Thinking about the situation at the U.S. border with Mexico, how important, if at all, are each of the following for the U.S.? Providing more assistance to countries in places like Central America, where many asylum seekers are coming from	Very important	4	Yes	87, 129	0.045	Immigration
Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views - even if neither is exactly right.	Government is almost always wasteful and inefficient	2	No	92, 146	0.045	Size of government
Do you favor or oppose EXPANDING each of the following sources of energy in our country? More solar panel "farms"	Favor	2	Yes	67, 89, 108, 128, 148	0.044	Climate
Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? Limiting the burden of regulations on businesses	Very important	4	No	89, 128	0.044	Climate

Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views - even if neither is exactly right.	In foreign policy, the U.S. should take into account the interests of its allies even if it means making compromises with them	2	Yes	92, 116, 146	0.044	Other foreign policy
Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? Making sure proposals help lower-income communities	Very important	4	Yes	89, 128	0.044	Climate
Evangelical Christians // Please tell us how much discrimination there is against each of these groups in our society today.	A lot	4	No	84, 118, 143	0.044	Religion
Overall, how does each of the following affect people's ability to get ahead in our country these days? Being a woman	Helps a lot	5	No	74, 126	0.044	Abortion/women
Again, please choose the statement that comes closer to your own views - even if neither is exactly right.	Society is better off if people make marriage and having children a priority	2	No	71, 92, 113, 146	0.043	Other social
Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? Protecting the quality of the environment for future generations	Very important	4	Yes	89, 128	0.043	Climate
Thinking about the situation at the U.S. border with Mexico, how important, if at all, are each of the following for the U.S.? Not allowing people to seek asylum in the United States	Very important	4	No	87, 129	0.043	Immigration
Again, please choose the statement that comes closer to your own views - even if neither is exactly right.	Business corporations make too much profit	2	Yes	92, 107, 146	0.042	Business

Thinking about the situation at the U.S. border with Mexico, how important, if at all, are each of the following for the U.S.? Reducing the number of people coming to the U.S. to seek asylum	Very important	4	No	87, 129	0.041	Immigration
Which of these statements best describes your opinion about the United States?	The U.S. stands above all other countries in the world	3	No	92, 113, 130, 146	0.041	Other foreign policy
Which comes closer to your view - even if neither is exactly right?	Immigrants in our country today should adopt American customs and way of life	2	No	113, 151	0.041	Immigration
Do you think the fact that there are some people in this country who have personal fortunes of a billion dollars or more is	A good thing for the country	3	No	59, 92, 149	0.040	Economic fairness
Next are a few more pairs of statements. Again, please choose the statement that comes closer to your own views - even if neither is exactly right	The economic system in this country unfairly favors powerful interests	2	Yes	92, 107, 125, 146	0.040	Economic fairness
Compared to other countries with large economies, how much do you think the U.S. should be doing to help reduce the effects of global climate change?	More than other countries with large economies	3	Yes	102, 128	0.039	Climate
Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views - even if neither is exactly right.	Most people who want to get ahead can make it if they're willing to work hard	2	No	107, 126	0.039	Economic fairness
Which comes closer to your own view - even if neither is exactly right?	The U.S. government should take steps to restrict false information online, even if it limits people from freely publish	2	Yes	93, 112, 129	0.039	Technology

Do you think each of the following is generally good or bad for our society? White people declining as a share of the U.S. population	Very good for society	5	Yes	92, 146	0.038	Race
Do you favor or oppose the following proposals to reduce the effects of global climate change? Providing a tax credit to encourage businesses to develop technology which captures and stores carbon emissions so they do not enter the atmosphere	Favor	2	Yes	67, 89, 108, 128	0.037	Climate
Thinking about police departments in your area, do you think that spending on policing should be...	Increased a lot	5	No	69, 95, 97, 120	0.037	Race
Asian people // Please tell us how much discrimination there is against each of these groups in our society today.	A lot	4	Yes	84, 118, 143	0.036	Race
Please choose the statement that comes closer to your own views - even if neither is exactly right.	Religion should be kept separate from government policies	2	Yes	92, 107, 146	0.036	Religion
How much of a problem, if any, would you say each of the following are in the country today? People being too easily offended by things others say	Major problem	3	No	92, 146	0.035	Other social
Which comes closer to your view about the use of marijuana by adults?	It should be legal for medical AND recreational use	3	Yes	87, 97, 116, 140	0.034	Other social
Thinking about the situation at the U.S. border with Mexico, how important, if at all, are each of the following for the U.S.? Increasing staffing and resources available to patrol and police the border	Very important	4	No	87, 129	0.033	Immigration
How much, if at all, does each of the following bother you about the federal tax system? The feeling that some poor people don't pay their fair share	A lot	4	No	87, 125	0.032	Economic fairness
Please choose the statement that comes closer to your own views - even if neither is exactly right.	Most things in society can be pretty clearly divided into good and evil	2	No	92, 116, 146	0.032	Other social

In the future, do you think...	U.S. policies should try to keep it so America is the only military superpower	2	No	92, 116, 146	0.032	Other foreign policy
Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views - even if neither is exactly right.	Success in life is pretty much determined by forces outside of our control	2	Yes	95, 146	0.031	Economic fairness
Which of these statements comes closer to your views, even if neither is exactly right?	The federal government should stop enforcing separation of church and state	3	No	84, 143	0.031	Religion
Again, please choose the statement that comes closer to your own views - even if neither is exactly right.	It's best for the future of our country to be active in world affairs	2	Yes	109, 124, 146	0.030	Other foreign policy
How would you rate the job police around the country are doing when it comes to each of the following? Protecting people from crime	Excellent	4	No	69, 120	0.030	Race
How much of a problem, if any, would you say each of the following are in the country today? People saying things that are very offensive to others	Major problem	3	Yes	92, 146	0.029	Other social
In general, would you say life in America today is better, worse, or about the same as it was 50 years ago for people like you?	Better	3	Yes	92, 125	0.028	Other social
Do you favor or oppose EXPANDING each of the following sources of energy in our country? More nuclear power plants to generate electricity	Favor	2	No	67, 89, 108, 128, 148	0.027	Climate
Do you think the U.S. Supreme Court has...	Too much power	3	Yes	71, 101, 113, 130, 149	0.026	Political institutions

In general, do you think that free trade agreements between the U.S. and other countries have been a	Good thing for the United States	2	Yes	59, 149	0.024	Other foreign policy
When it comes to Russia's invasion of Ukraine, do you think the U.S. is providing...	Too much support to Ukraine	4	No	104, 107, 114, 120, 129, 139, 145, 149	0.024	Ukraine
How concerned are you about the possibility of each of the following? Ukraine being defeated and taken over by Russia	Extremely concerned	5	Yes	107, 114, 145	0.023	Ukraine
Should health insurance...	Be provided through a single national health insurance system run by the government	2	Yes	71, 92, 146	0.023	Size of government
Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? Keeping consumer costs low	Very important	4	No	89, 128	0.023	Climate
All in all, would you say that the U.S. has...	Gained more than it has lost from increased trade	2	Yes	92, 146	0.022	Other foreign policy
Do you favor or oppose the following proposals to reduce the effects of global climate change? Planting about a trillion trees around the world to absorb carbon emissions in the atmosphere	Favor	2	Yes	67, 89, 108, 128	0.021	Climate
How concerned are you about the possibility of each of the following? Russia invading other countries in the region, not just Ukraine	Extremely concerned	5	Yes	107, 114, 145	0.020	Ukraine
Overall, how does each of the following affect people's ability to get ahead in our country these days? Being Asian	Helps a lot	5	No	74, 126	0.019	Race
How much, if at all, does each of the following bother you about the federal tax system? The amount you pay in taxes	A lot	4	No	87, 125	0.018	Size of government

What role should the federal government play in each of the following activities? The production of nuclear power	Encourage this activity	3	No	102, 123	0.018	Climate
Which of the following statements comes closest to your overall view of gun laws in this country? Banning assault-style weapons	Strongly favor	4	Yes	87, 129	0.016	Guns
When the Bible and the will of the people conflict with each other, which should have more influence on the laws of the United States?	The Bible	2	No	61, 114, 143	0.016	Religion
Considering what you get from the federal government, do you think you pay more than your fair share of taxes, less than your fair share, or about the right amount?	More than fair share	3	No	87, 125	0.012	Size of government
How much of a threat to U.S. interests is Russia's invasion of Ukraine?	A major threat	4	Yes	104, 120, 129, 139, 149	0.012	Ukraine
Next are some pairs of statements that will help us understand how you feel about a number of things. Please choose the statement that comes closer to your own views - even if neither is exactly right.	As Americans, we can always find ways to solve our problems and get what we want	2	No	71, 107, 125, 146	0.011	Other social
Should the government...	Not be involved in providing health insurance at all	2	No	71, 92, 146	0.010	Size of government
On balance, do you think of Russia as a partner of the U.S., a competitor of the U.S. or an enemy of the U.S.?	Partner	3	No	105, 124, 145	0.010	Ukraine
Thinking about the role of the government in regulating major technology companies, do you think they should be regulated...	More than they are now	3	Yes	69, 88, 107, 142	0.010	Technology
Jews // Please tell us how much discrimination there is against each of these groups in our society today.	A lot	4	Yes	84, 118, 143	0.008	Other social

Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? Increasing job and economic growth	Very important	4	No	89, 128	0.007	Climate
How much, if at all, does each of the following bother you about the federal tax system? The complexity of the tax system	A lot	4	No	87, 125	0.000	Size of government
Which of the following statements comes closer to your own view - even if neither is exactly right?	Many of the country's problems could be dealt with more effectively if U.S. presidents didn't have to worry so much	2	Yes	69, 94, 140	-0.001	Political institutions

Note: In Figure 3, the Economic category comprises the Business, Economic fairness, and Size of government topics, the Foreign policy category comprises Ukraine and Other foreign policy, and the Climate category comprises Climate. All other topics are categorized as Social.

Table A2: Replicating the effect on issue opinion change in ANES panel data

	Conservative survey answer		Ideology PCA	
	(1)	(2)	(3)	(4)
Daily user × post	0.086**	0.052**	0.153**	0.066†
	(0.007)	(0.009)	(0.026)	(0.036)
FE: Respondent (x question)	x	x	x	x
- Period (x question)	x		x	
x Respondent characteristics		x		x
N	475625	476754	4118	3112
R^2	0.730	0.750	0.962	0.984

This table reports difference in differences estimates of the effect of the Twitter acquisition on the issue preferences of Twitter users, as measured in the 2020-2024 ANES panel. Using 91 unique issue questions, asked to the same individuals within the 2020 and 2024 ANES, we find results that resemble those from Table 1. Within the ANES panel, we find that post-takeover, Twitter users shift their opinions to the right on issue questions by about 4-8% of a standard deviation. Combining survey responses using PCA, we find that 2020 Twitter users shift to the left by about 6-15% of a standard deviation. These coefficients are generally slightly larger than those from Table 1, but are less precisely measured due to fewer respondents and only two time periods. All models include respondent fixed effects. Odd-numbered models use period fixed effects (period by question for model 1). Even-numbered models add period-specific fixed effects for each unique combination of party (7 point), gender, race, education and age category, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

Table A3: Difference in differences estimates of the effect of the Twitter acquisition on the preferences of Twitter users, including non-daily users

	Conservative survey answer				Preference PCA	
	(1)	(2)	(3)	(4)	(5)	(6)
User × post	0.024**	0.020**	0.027**	0.023**	0.024†	0.029*
	(0.008)	(0.007)	(0.008)	(0.007)	(0.014)	(0.012)
FE: Respondent (x question)	x	x	x	x	x	x
- Period (x question)	x		x		x	
x Respondent characteristics		x		x		x
PCA weights			x	x		
N	2276984	2276984	2255316	2255316	19431	19431
R^2	0.784	0.835	0.796	0.843	0.982	0.985

This table reproduces Table 1, including non-daily users in the treatment group. The independent variable of interest takes a value of 1 if the individual was a Twitter user (daily or non-daily) prior to the acquisition and if the survey took place after the acquisition, 0 otherwise. Models (1)–(4) are estimated at the respondent-survey item-survey wave level; the dependent variable is the respondent's answer, scaled to have standard deviation of 1 and rotated so that Republicans scores are higher than those of Democrats. Models (3) and (4) additionally weight survey questions by the weight they are given in the first principal component. Models (5) and (6) are estimated at the respondent-by-pre and post level; the dependent variable is the first principal component of the respondents pre and post-acquisition answers to survey questions. All models include respondent and period fixed effects; in (1)–(4) these are interacted with the survey item. Even-numbered models add period-specific fixed effects for each unique combination of gender, race, education, age category, and party, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

Table A4: Results are unchanged dropping survey waves from the period of the acquisition

	Conservative survey answer			
	(1)	(2)	(3)	(4)
Daily user × post	0.035*	0.035**	0.035*	0.037**
	(0.015)	(0.012)	(0.016)	(0.013)
FE: Respondent x question	x	x	x	x
- Period (x question)	x		x	
x Respondent characteristics		x		x
PCA weights			x	x
N	2005390	2005390	1983722	1983722
R^2	0.806	0.853	0.817	0.860

This table reports regressions of conservative survey answers against daily Twitter usage interacted with an indicator that the survey takes place post-acquisition, dropping survey waves from April–October 2022, during which Elon Musk was in the process of buying Twitter. All estimates are from OLS regressions with American Trends Panel population weights, estimated at the respondent-survey item-survey wave level; the dependent variable is the respondent's answer to survey questions, standardized and rotated so that average answers are higher among Republicans. All models include respondent-question and period-question fixed effects. Even-numbered models interact the period-question fixed effects with each unique combination of gender, race, education, age category and party, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

Table A5: Those predicted to use Twitter by demographics do not shift right after the acquisition

	Conservative answer			
	(1)	(2)	(3)	(4)
Predicted usage × post	0.006	0.034	−0.028	−0.013
	(0.060)	(0.073)	(0.052)	(0.062)
Daily user × post			0.046*	0.042†
			(0.022)	(0.022)
Sample	Non-users	Non-users	All	All
FE: Respondent x question	x	x	x	x
- Period x question	x		x	
x Respondent characteristics		x		x
N	2085771	2085771	2276984	2276984
R^2	0.782	0.835	0.784	0.835

This table reports regressions of conservative survey answers against predicted daily Twitter usage interacted with an indicator that the survey takes place post-acquisition. All estimates are from OLS regressions with American Trends Panel population weights, estimated at the respondent-survey item-survey wave level; the dependent variable is the respondent's answer to survey questions, standardized and rotated so that average answers are higher among Republicans. Twitter usage is predicted using a Random Forest and all demographic variables available: Metropolitan status, census region, census division, age category, gender, education (3 and 6-level), hispanic status, number of years lived in the US, race, citizenship, country of birth, marital status, religion (at two levels of aggregation), frequency of religious attendance, party ID, party incorporating leaners, ideology, income (in $10,000 increments and lower/middle/upper), voter registration, and frequency of internet use. Models (1) and (2) are restricted to those not using Twitter daily. Models (3) and (4) include daily Twitter users and control for Twitter usage interacted with an indicator that the survey is post-acquisition. All models include respondent-question and period-question fixed effects. Even-numbered models interact the period-question fixed effects with each unique combination of gender, race, education, age category and party, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

Table A6: Pew issue questions with largest and most precise estimates

		Estimate	
Variable	Flipped	Base	Controls
How would you rate the job police around the country are doing when it comes to each of the following? Treating racial and ethnic groups equally ... Excellent	No	0.266 (0.111)	0.495 (0.149)
On balance, do you think of Russia as a partner of the U.S., a competitor of the U.S. or an enemy of the U.S.? ... Partner	No	0.428 (0.187)	0.474 (0.18)
How much, if at all, does each of the following bother you about the federal tax system? The amount you pay in taxes ... A lot	No	0.315 (0.248)	0.443 (0.254)
How would you rate the job police around the country are doing when it comes to each of the following? Using the right amount of force for each situation ... Excellent	No	0.119 (0.144)	0.408 (0.225)
How would you rate the job police around the country are doing when it comes to each of the following? Holding officers accountable when misconduct occurs ... Excellent	No	0.157 (0.125)	0.363 (0.198)
Which statement comes closer to your own views - even if neither is exactly right? ... Government should do more to solve problems	Yes	0.247 (0.091)	0.331 (0.091)
In stores or restaurants ... Black people are treated less fairly than White people	Yes	0.213 (0.1)	0.259 (0.091)
Please choose the statement that comes closer to your own views - even if neither is exactly right. ... Other countries generally treat the United States about as fairly as we treat them	Yes	0.232 (0.108)	0.23 (0.107)
Please indicate whether you would favor or oppose / oppose or favor the following proposals about gun policy. Allowing people to carry concealed guns without a permit ... Strongly favor	No	0.089 (0.129)	0.208 (0.11)
In hiring, pay and promotions ... Black people are treated less fairly than White people	Yes	0.18 (0.079)	0.192 (0.086)
Please indicate whether you would favor or oppose / oppose or favor the following proposals about gun policy. Banning high-capacity ammunition magazines that hold more than 10 rounds ... Strongly favor	Yes	0.184 (0.131)	0.187 (0.098)
Do you think the fact that there are some people in this country who have personal fortunes of a billion dollars or more is ... A good thing for the country	No	0.082 (0.073)	0.176 (0.071)
Asian people // Please tell us how much discrimination there is against each of these groups in our society today. ... A lot	Yes	0.305 (0.061)	0.16 (0.065)
Which comes closer to your own view - even if neither is exactly right? ... Technology companies should take steps to restrict false information online, even if it limits people from freely publis	Yes	0.189 (0.122)	0.157 (0.084)

Evangelical Christians // Please tell us how much discrimination there is against each of these groups in our society today. ... A lot	No	0.14 (0.073)	0.154 (0.076)
Thinking about proposals to reduce the effects of global climate change, how important is each of the following considerations to you personally? Limiting the burden of regulations on businesses ... Very important	No	0.067 (0.086)	0.132 (0.074)
Black people // Please tell us how much discrimination there is against each of these groups in our society today. ... A lot	Yes	0.12 (0.05)	0.114 (0.054)
From what you've read and heard, how do you feel about the Black Lives Matter movement? ... Strongly support	Yes	0.099 (0.048)	0.099 (0.053)
The next time you purchase a vehicle, how likely are you to seriously consider purchasing an electric vehicle? ... Very likely	Yes	0.01 (0.047)	0.073 (0.043)
Do you favor or oppose EXPANDING each of the following sources of energy in our country? More hydraulic fracturing, sometimes called "fracking," for oil and natural gas ... Favor	No	0.037 (0.038)	0.064 (0.037)

Table A7: ANES panel questions with the biggest Twitter user shift right 2020–2024

Variable	Estimate (Base)
how important that more hispanics get elected to political office	0.379 (0.066)
how important that more women get elected to political office	0.264 (0.062)
what should immigration levels be	0.259 (0.076)
government run by a few big interests or for benefit of all	0.259 (0.113)
need to be more sensitive talking or people too easily offended	0.256 (0.071)
would it be good for society to have more or less government regulation	0.255 (0.066)
feeling thermometer black lives matter	0.246 (0.05)
discrimination in the us against gays and lesbians	0.245 (0.074)
discrimination in the us against hispanics	0.206 (0.075)
discrimination in the us against transgender people	0.205 (0.071)
do women demanding equality seek special favors	0.199 (0.074)
how much influence do asians have in us politics	0.196 (0.08)
stereotype blacks hardworking	0.189 (0.081)
votes counted accurately	-0.188 (0.076)
feeling thermometer planned parenthood	0.187 (0.05)
stereotype whites hardworking	-0.174 (0.083)
elections make government pay attn	0.168 (0.082)
feeling thermometer illegal immigrants	0.164 (0.07)
how much is russia a threat to the united states	0.16 (0.081)
discrimination in the us against asians	0.153 (0.085)

Questions are sorted by absolute estimate size. Values in parentheses are standard errors. Questions with a positive coefficient indicate post acquisition user movement to the right.

Table A8: Survey questions used to measure partisan favorability and affective polarization

Variable	Highest	Levels	Waves	Weight
What is your overall opinion of... Donald Trump	Very favorable	4	91, 110, 124, 130, 143, 148, 151	0.401
The Republican Party // Do you have a favorable or unfavorable opinion of each of the following?	Very favorable	4	59, 71, 84, 101, 110, 130, 139, 149	0.365
The Democratic Party // Do you have a favorable or unfavorable opinion of each of the following?	Very favorable	4	59, 71, 84, 101, 110, 130, 139, 149	-0.389
What is your overall opinion of... Kamala Harris	Very favorable	4	91, 110, 120, 130, 148, 151	-0.412
What is your overall opinion of... Joe Biden	Very favorable	4	91, 110, 124, 130, 143, 148, 151	-0.416

Table A9: Results on party polarization, by 2020 party, from ANES panel data

	Repub survey answer		Republican PCA		Republican vote pref	
	(1)	(2)	(3)	(4)	(5)	(6)
Daily×post Democrat	$0.041^{\dagger}$	-0.005	0.044	0.059	0.016	-0.004
	(0.022)	(0.022)	(0.071)	(0.044)	(0.029)	(0.032)
Daily×post Republican	0.128^{**}	0.088^{**}	0.155^{*}	0.128^{*}	-0.037	0.013
	(0.030)	(0.027)	(0.063)	(0.058)	(0.043)	(0.040)
Daily×post Independent	0.036	$0.049^{\dagger}$	0.055	-0.043	0.008	-0.054
	(0.024)	(0.027)	(0.065)	(0.087)	(0.033)	(0.048)
FE: Respondent (x question)	x	x	x	x	x	x
- Period (x question) x Party	x		x		x	
x Respondent characteristics		x		x		x
N	115728	115728	4116	3164	3510	2666
R^2	0.859	0.873	0.961	0.983	0.934	0.977

On average, pre-takeover Twitter users became more pro-Republican in 2024. Within the ANES panel of respondents, this effect is primarily driven by Republicans. All models include respondent-period and period-by-party fixed effects. Even-numbered models add period-specific fixed effects for each unique combination of party (7-point), gender, race, education and age category, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

Table A10: Disaggregating the effect on ideology by switching into and out of Twitter usage

	Conservative answer		Preference PCA	
	(1)	(2)	(3)	(4)
Continues daily use × post	0.064**	0.060**	0.087**	0.100**
	(0.015)	(0.015)	(0.026)	(0.025)
Stops daily use × post	−0.001	0.012	−0.037	−0.019
	(0.024)	(0.018)	(0.044)	(0.036)
Starts daily use × post	0.033*	0.026*	0.037	0.046*
	(0.015)	(0.011)	(0.031)	(0.022)
FE: Respondent (x question)	x	x	x	x
- Period (x question)	x		x	
x Respondent characteristics		x		x
N	1766890	1766890	14053	14053
R^2	0.769	0.828	0.981	0.984

This table reports difference in differences estimates of the effect of the Twitter acquisition on ideology users, breaking out the measure of Twitter usage by both pre and post-acquisition usage. All estimates are from OLS regressions with American Trends Panel population weights. The independent variables are indicators that the respondent was a daily Twitter/X user in both the 90th and 144th survey waves ("Continues daily use"), that the respondent was a daily user before the acquisition but not after ("Stops daily use") and that the respondent was not before but was after ("starts daily use"), all interacted with an indicator that the survey takes place after the acquisition. The reference category is those who never use Twitter/X daily. Models (1)–(2) are estimated at the respondent-survey item-survey wave level; the dependent variable is the respondent's answer to survey questions, standardized and rotated so that average answers are higher among Republicans. Models (3)–(4) are at the respondent-by-pre or post level, the dependent variable is the PCA measure of ideology. All models include respondent and period fixed effects, in (1) and (2) these are specific to each survey question. Even-numbered models interact the period-question fixed effects with each unique combination of gender, race, education and age category, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

Table A11: Disaggregating the effect on partisanship by party and switching into and out of Twitter usage

	Pro-Republican answer					
	(1)	(2)	(3)	(4)	(5)	(6)
Continues daily use × post	0.005	−0.003	−0.022	−0.023	0.188**	0.151**
	(0.024)	(0.026)	(0.035)	(0.036)	(0.063)	(0.056)
Stops daily use × post	0.004	−0.028	−0.046	−0.061*	0.157*	0.079
	(0.047)	(0.033)	(0.035)	(0.028)	(0.065)	(0.064)
Starts daily use × post	0.042	0.018	0.098	0.054	−0.013	−0.030
	(0.029)	(0.024)	(0.070)	(0.048)	(0.024)	(0.027)
Sample	All	All	Dems	Dems	Reps	Reps
FE: Respondent x question	x	x	x	x	x	x
- Period x party x question	x		x		x	
x Respondent characteristics		x		x		x
N	153661	153661	47630	47630	42824	42824
R^2	0.818	0.864	0.641	0.725	0.687	0.742

This table reports difference in differences estimates of the effect of the Twitter acquisition on pro-Republican survey answers, breaking out the measure of Twitter usage by both pre and post-acquisition usage. All estimates are from OLS regressions with American Trends Panel population weights. The independent variables are indicators that the respondent was a daily Twitter/X user in both the 90th and 144th survey waves ("Continues daily use"), that the respondent was a daily user before the acquisition but not after ("Stops daily use") and that the respondent was not before but was after ("starts daily use"), all interacted with an indicator that the survey takes place after the acquisition. The reference category is those who never use Twitter/X daily. Models are estimated at the respondent-survey item-survey wave level; the dependent variable is the respondent's answer to survey questions about favorability towards the Democratic and Republican Parties and leadership. Each survey question is scaled to have a standard deviation of 1. For Democrats it is rotated so positive scores correspond to favorability towards the Democratic Party and negative scores correspond to favorability toward the Republican Party, for Republicans it is the opposite. Models (3)–(4) are restricted to Democrats, (5)–(6) to Republicans. All models include respondent and period-by-party fixed effects. Even-numbered models add period-specific fixed effects for each unique combination of gender, race, education and age category, measured before the acquisition. Standard errors clustered by respondent in parentheses. $^{**}p < 0.01$;$^{*}p < 0.05$; $^{\dagger}p < 0.1$.

B ADDITIONAL FIGURES

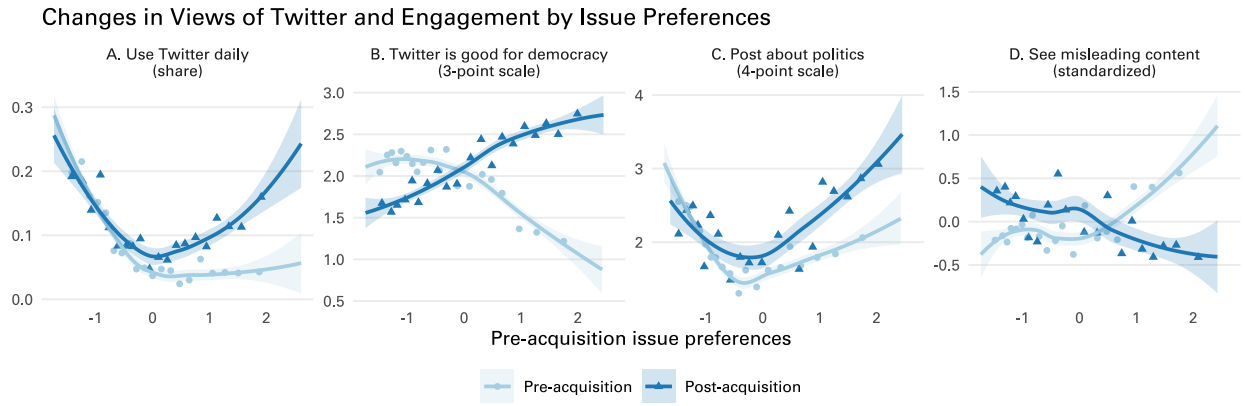


Figure A1: Ideological reversal in engagement and perceptions of misleading content on Twitter, levels pre and post

This figure reproduces Figure 1, showing pre and post-acquisition levels separately. Each panel plots respondent's outcome pre and post-acquisition against their pre-acquisition ideology, estimated by principal components. Panel A shows the share of respondents using Twitter every day, among all respondents. B shows responses to the question "Overall do you think Twitter/X is..." with answers ranging from "mostly BAD for American democracy" to "mostly GOOD for American democracy." C plots answers to the questions "How much of what you tweet about is related to political or social issues?" (2021) and "How much of what you post or share on X (formerly Twitter) is about politics or political issues?" (2024); we collapse the 2024 measure from a 5-point scale to the same 4-point scale as the 2021 measure. D plots answers to the questions "How much inaccurate or misleading information do you come across when using Twitter?" (2021) and 'How often do you see news on X (formerly Twitter) that seems inaccurate?" (2024). Because both are on different scales, we subtract the mean and divide by the standard deviation in each period. Lines are loess fits with 95% confidence intervals, dots are binned averages.

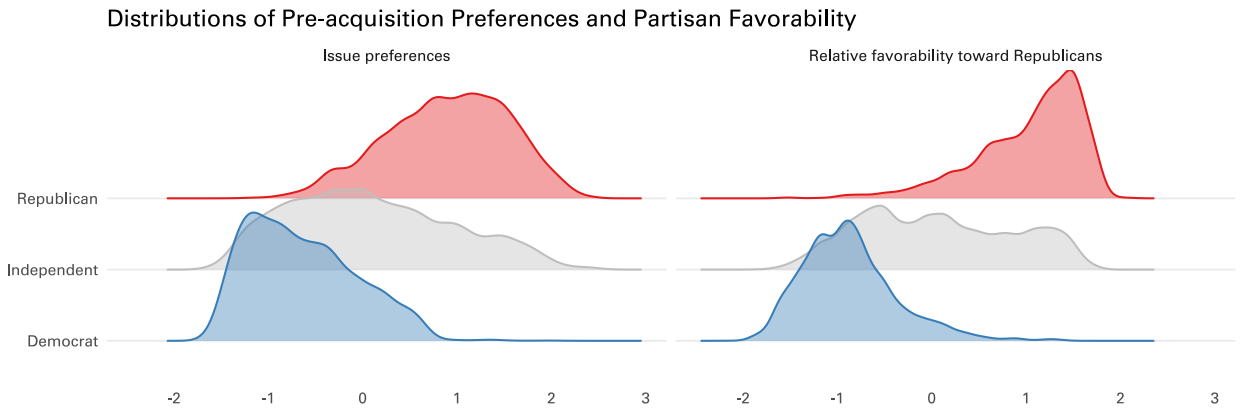


Figure A2: Distribution of pre-acquisition preferences by party

This figure plots the kernel densities for the PCA issue preference measure and PCA of party favorability questions, using pre-acquisition survey responses, split by party. For both variables liberal preferences are negative.

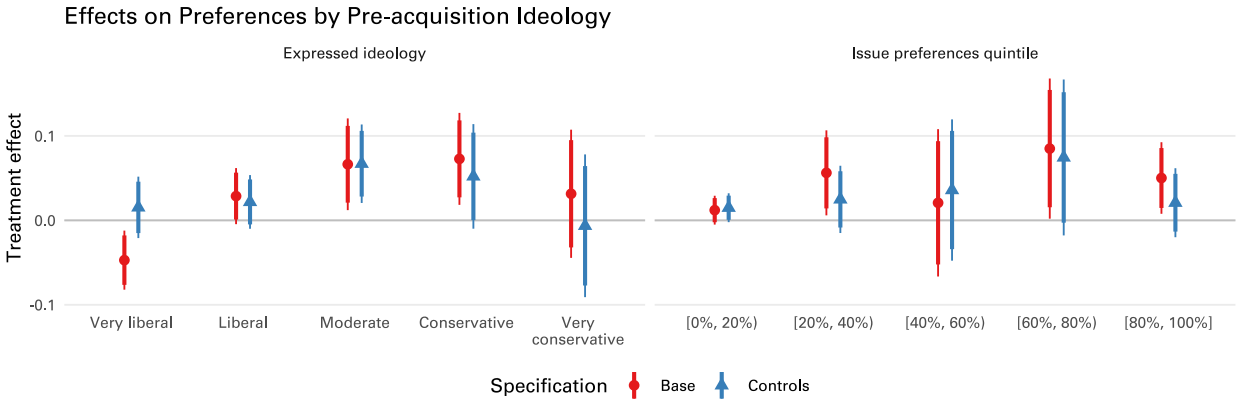


Figure A3: Estimates are driven by political moderates

This figure shows coefficients from the main difference in differences estimation, subset by expressed issue preferences (left) or our issue preferences PCA measure (right). In both cases, issue preference is measured prior to the Twitter acquisition. Each point is a coefficient from a different regression. Red dots are from specifications with survey item-by-respondent and survey item-by-wave fixed effects, blue triangles interact the item-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard errors clustered by respondent.

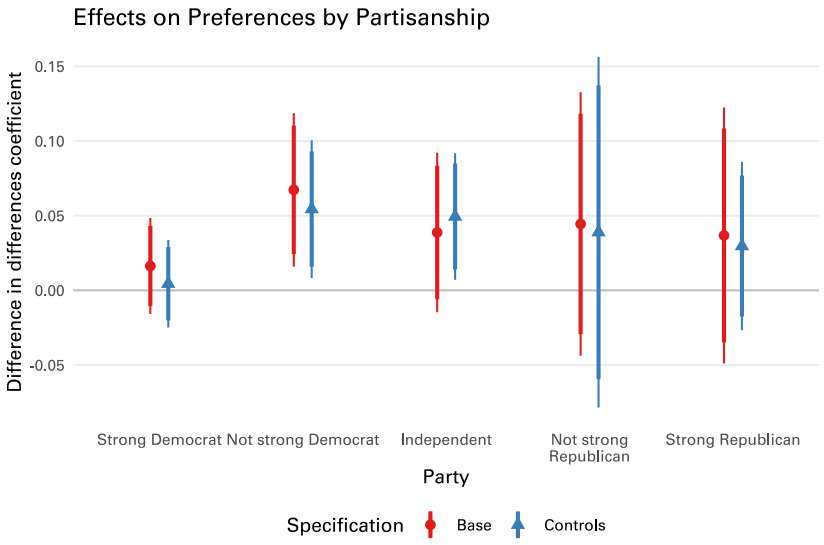


Figure A4: Estimates are driven by moderate partisans

This figure shows coefficients from OLS regressions of survey questions, scaled to have standard deviations of 1 and rotated so that averages for Republicans are higher than for Democrats against daily Twitter usage interacted with an indicator that the survey takes place after the acquisition. Each coefficient is from a different regression, subset to a different group of partisans, as measured in survey wave 84, March 2021, Red dots are from specifications with survey item-by-respondent and survey item-by-wave fixed effects, blue triangles interact the item-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard errors clustered by respondent.

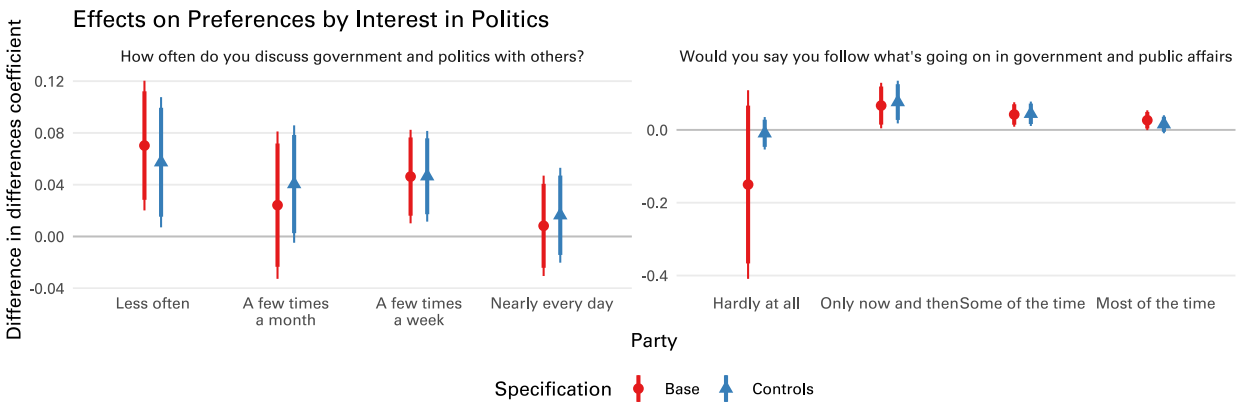


Figure A5: Estimates by degree of interest in politics

The left panel shows coefficients from the main difference in differences estimation for preferences, subsetting by two measures of voter interest in politics. Each point is a coefficient from a regression in which we interact the treatment measure and fixed effects with a measure of voter interest, this gives equivalent coefficients to running separate regressions subset by voter interest. In the left panel, the measure of interest is how often the respondent reports discussing government and politics with others, measured in Wave 112, July 2022, in the right panel it is a measure of how often the respondent reports following government and public affairs, measured in Wave 91, June 2021. Red dots are from specifications with survey item-by-respondent and survey item-by-wave-by-level of interest fixed effects, blue triangles interact the item-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard error clustered by respondent.

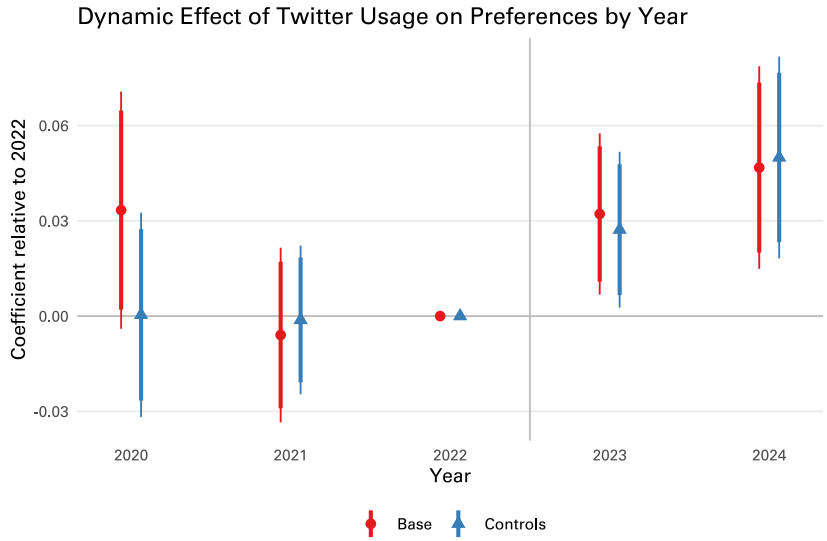


Figure A6: Event-study estimates by year

This figure shows coefficients from OLS regressions of survey questions, scaled to have standard deviations of 1 and rotated so that averages for Republicans are higher than for Democrats against daily Twitter usage interacted with the year of the survey. 2022, the last year before the acquisition, is the base category, and we omit wave 118 which took place in 2022 but after the acquisition. Red dots are from specifications with survey item-by-respondent and survey item-by-wave fixed effects, blue triangles interact the item-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard error clustered by respondent.

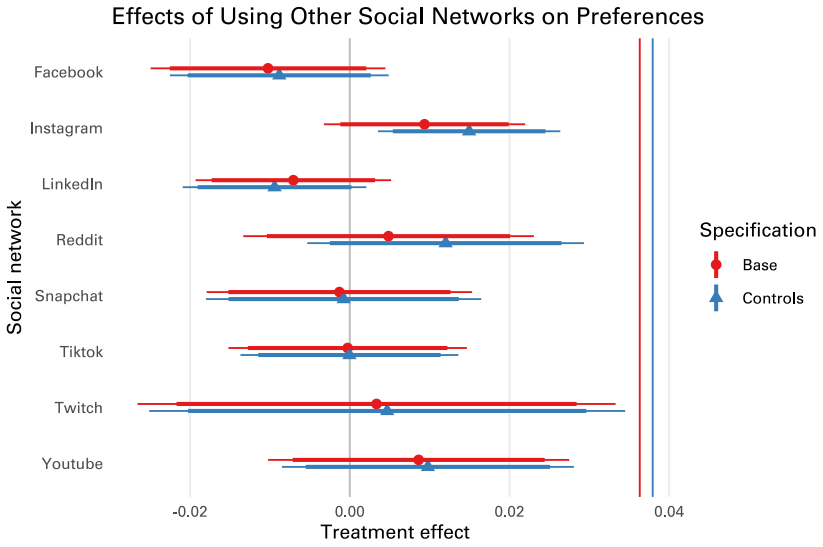


Figure A7: Among those not using Twitter, social media usage is not associated with a shift right post-acquisition

Each point is a coefficient from a regression of conservative survey answers against the interaction between and indicator that the respondent says they ever use a given social network in wave 112 (July 2022) and an indicator that the survey takes place after the acquisition. Red dots are from specifications with respondent-by-question and survey wave-by-question fixed effects, blue triangles interact the survey wave-by-question fixed effects with the full set of demographic controls, as in Table 1 columns (1) and (2). Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals constructed using standard errors clustered by respondent. The data is restricted to those not using Twitter daily. The vertical red and blue lines are the estimated effects of Twitter usage from Table 1 columns (1) and (2).

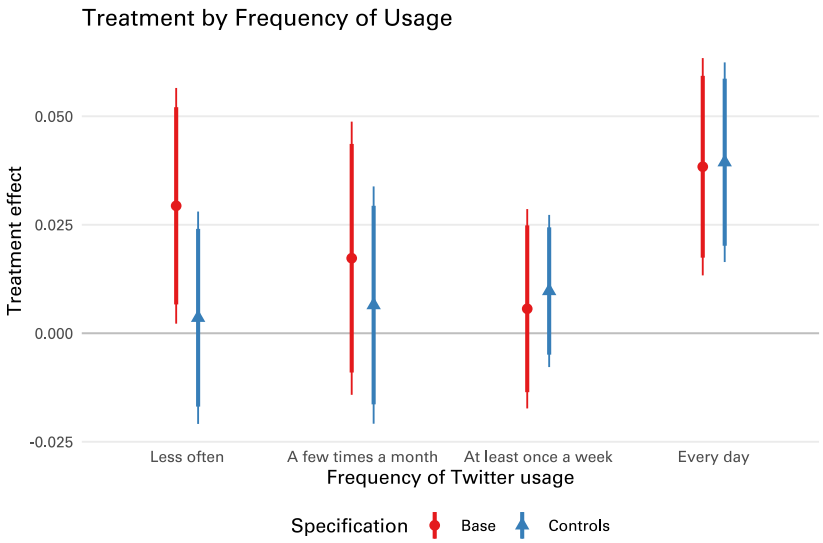


Figure A8: Estimates are driven by high-frequency Twitter users

This figure shows coefficients from OLS regressions of survey questions, scaled to have standard deviations of 1 and rotated so that averages for Republicans are higher than for Democrats against Twitter usage interacted with an indicator that the survey takes place after the acquisition. Red dots are from specifications with survey item-by-respondent and survey item-by-wave fixed effects, blue triangles interact the item-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard errors clustered by respondent. The reference category is non-users.

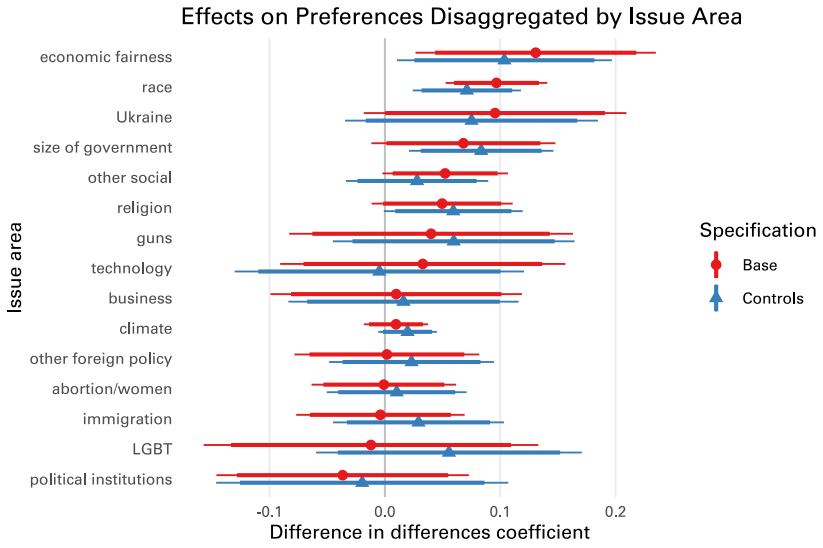


Figure A9: Estimates by issue area with more granular categories

The figure shows coefficients from the main difference in differences estimation, subsetting by the granular issue area most relevant to the survey question. Each point is a coefficient from a different regression. Red dots are from specifications with survey item-by-respondent and survey item-by-wave fixed effects, blue triangles interact the item-wave fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals, constructed using standard error clustered by respondent.

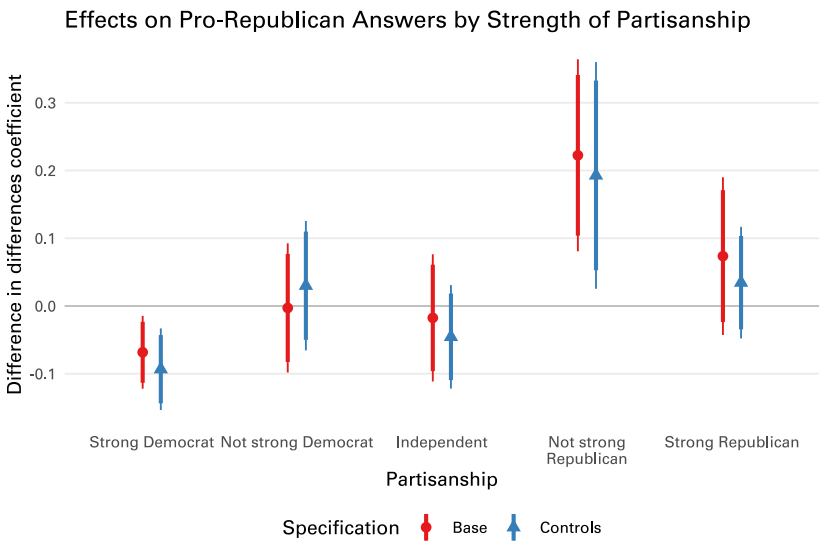


Figure A10: The Twitter acquisition polarizes strong Democrats and weak Republicans

Each point is a coefficient from a regression of pro-Republican survey answers against Twitter usage times post, subset to members of different parties and self described strong and not-strong partisans (measured in Wave 84, March 2021). Red dots are from specifications with respondent-by-question and survey wave-by-question-by-party fixed effects, blue triangles interact the survey wave-by-question fixed effects with the full set of demographic controls. Thick lines are 90% confidence intervals, thin lines are 95% confidence intervals constructed using standard errors clustered by respondent.

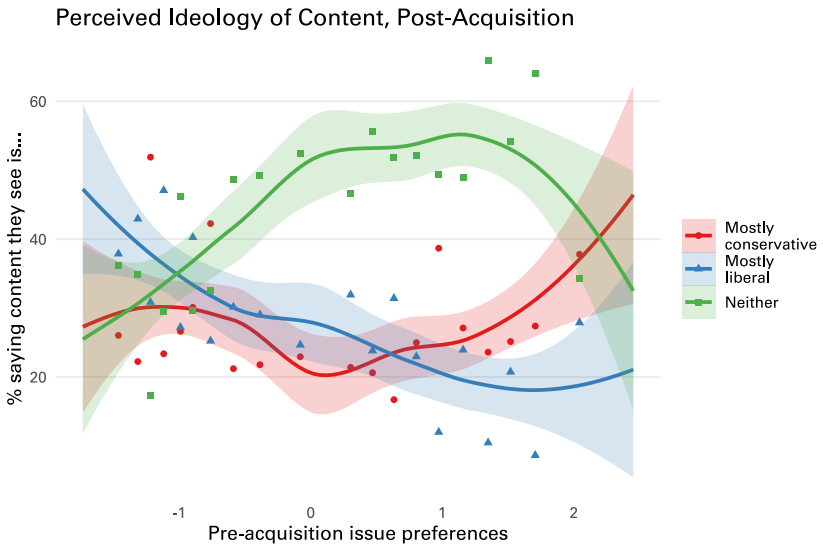


Figure A11: Post-acquisition, the ideological mix of content correlates with respondent preferences

This figure plots the percentage of respondent's saying that the content about politics or political issues that they see on X leans "Mostly conservative," "Mostly liberal" or neither, measured in wave 144, March 2024, against respondent's pre-acquisition issue preferences. Dots are binned averages, lines are LOESS fits with 95% confidence intervals.

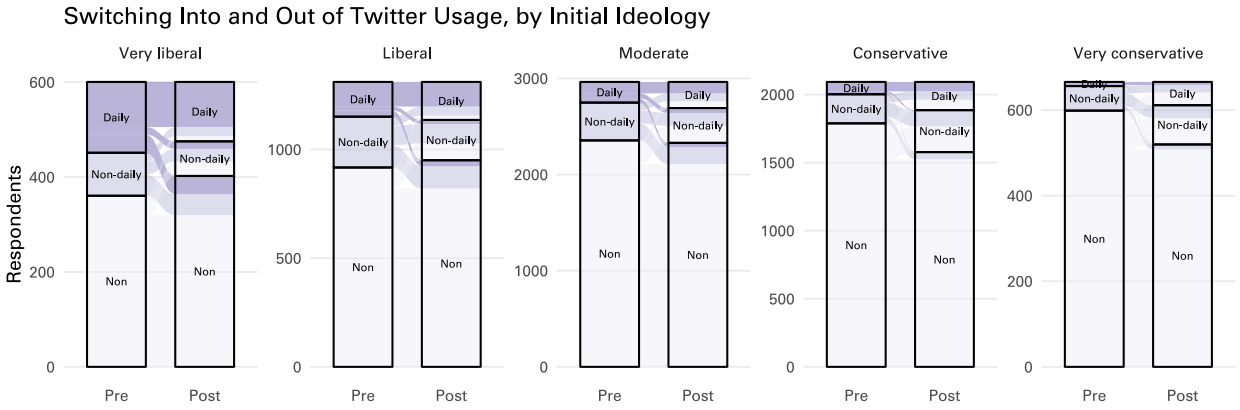
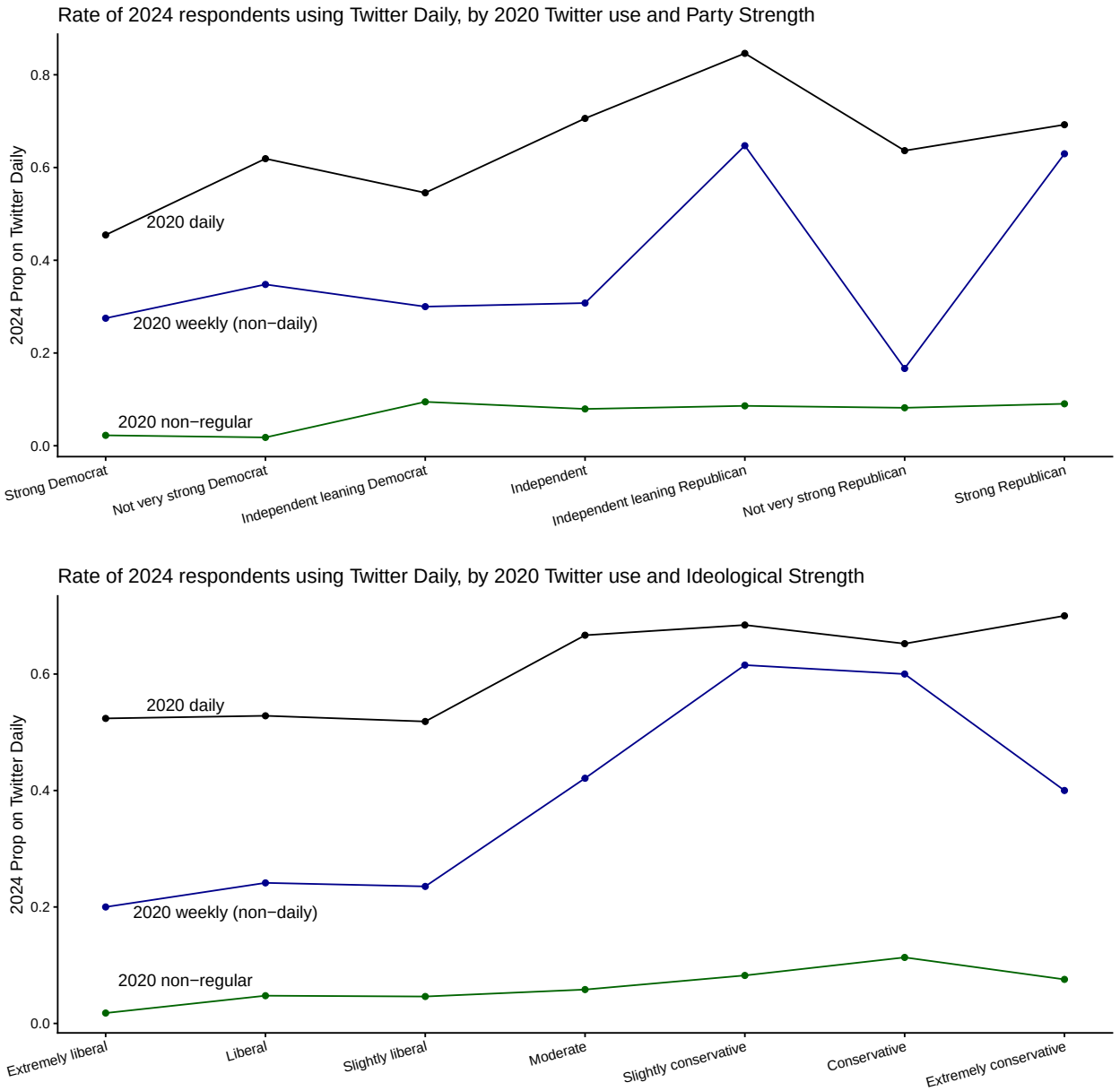


Figure A12: Transitions into and out of Twitter usage by initial ideology

This panel plots transitions from daily, non-daily, and non-usage in waves 85 and 90 (March–May 2021) to the same categories in wave 144 (March 2024). Each figure shows this for a different self-reported ideology in the pre-acquisition period.

Figure A13: In ANES panel data, Democrats and liberals become substantially less likely to be daily Twitter users post-acquisition.



Among all types of 2020-era Twitter usage (daily users, weekly users, and non-regular/non-users), Democrats and liberals are more likely to stop being daily users/not become daily users in 2024. Each point is the proportion (unweighted) of ANES respondents who are 2024 daily Twitter users, for each given 2020-era categorization. The estimate for 2020 weekly, not very strong Republicans is an aberration, but the weekly (non-daily) category has particularly few observations, and that estimate is based on the behavior of 14 survey respondents.

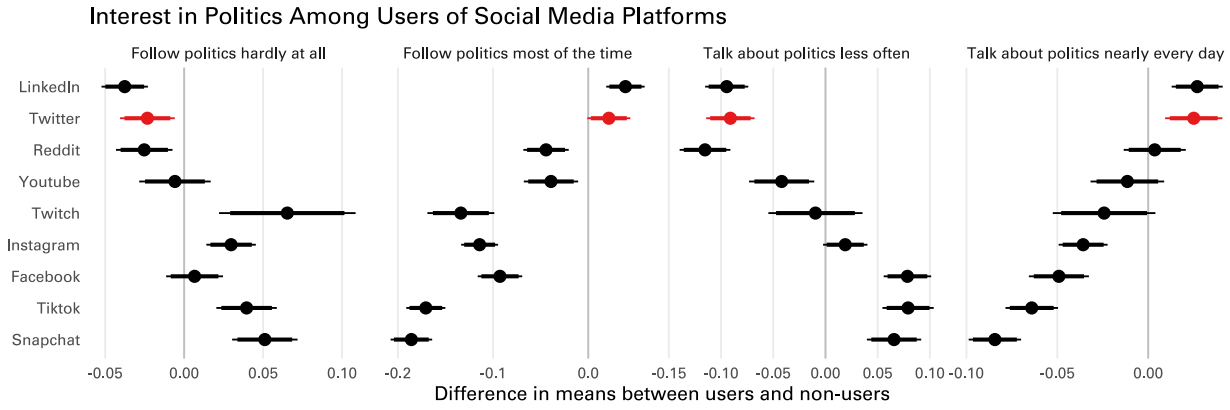


Figure A14: Twitter users tend to be more politically-engaged

Each point is the difference in means between users of a given social network and non-users. Usage is defined if the respondent says they ever use the social network in question in wave 112 (July 2022). Thick lines show 90% confidence intervals, thin lines 95% confidence intervals, constructed from robust standard errors.