

Title: Appendix for “Did the Musk takeover boost contentious actors on Twitter?”

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Note: The material contained herein is supplementary to the article named in the title and published in the Harvard Kennedy School (HKS) Misinformation Review.

Appendix

The screenshot shows a Twitter thread by Elon Musk (@elonmusk) posted on November 1, 2022. The main tweet reads: "Twitter's current lords & peasants system for who has or doesn't have a blue checkmark is bullshit. Power to the people! Blue for \$8/month." It has 68.5K retweets, 49.7K quote tweets, and 612.7K likes. Below the main tweet are five replies, all from Elon Musk, detailing the benefits of the Blue subscription and other platform changes. Each reply includes engagement metrics (replies, retweets, and likes).

Elon Musk @elonmusk · Nov 1, 2022 · Twitter for iPhone

68.5K Retweets 49.7K Quote Tweets 612.7K Likes

5:36 PM · Nov 1, 2022 · Twitter for iPhone

Elon Musk @elonmusk · Nov 1

Replying to @elonmusk

Price adjusted by country proportionate to purchasing power parity

4,010 9,525 118.5K

Elon Musk @elonmusk · Nov 1

You will also get:

- Priority in replies, mentions & search, which is essential to defeat spam/scam
- Ability to post long video & audio
- Half as many ads

8,539 16.8K 133.5K

Elon Musk @elonmusk · Nov 1

And paywall bypass for publishers willing to work with us

3,400 7,942 111.4K

Elon Musk @elonmusk · Nov 1

This will also give Twitter a revenue stream to reward content creators

6,606 13.6K 170.7K

Elon Musk @elonmusk · Nov 1

There will be a secondary tag below the name for someone who is a public figure, which is already the case for politicians

5,875 7,062 100.1K

Figure A1. Full tweet thread by Elon Musk posted on November 1, 2022.

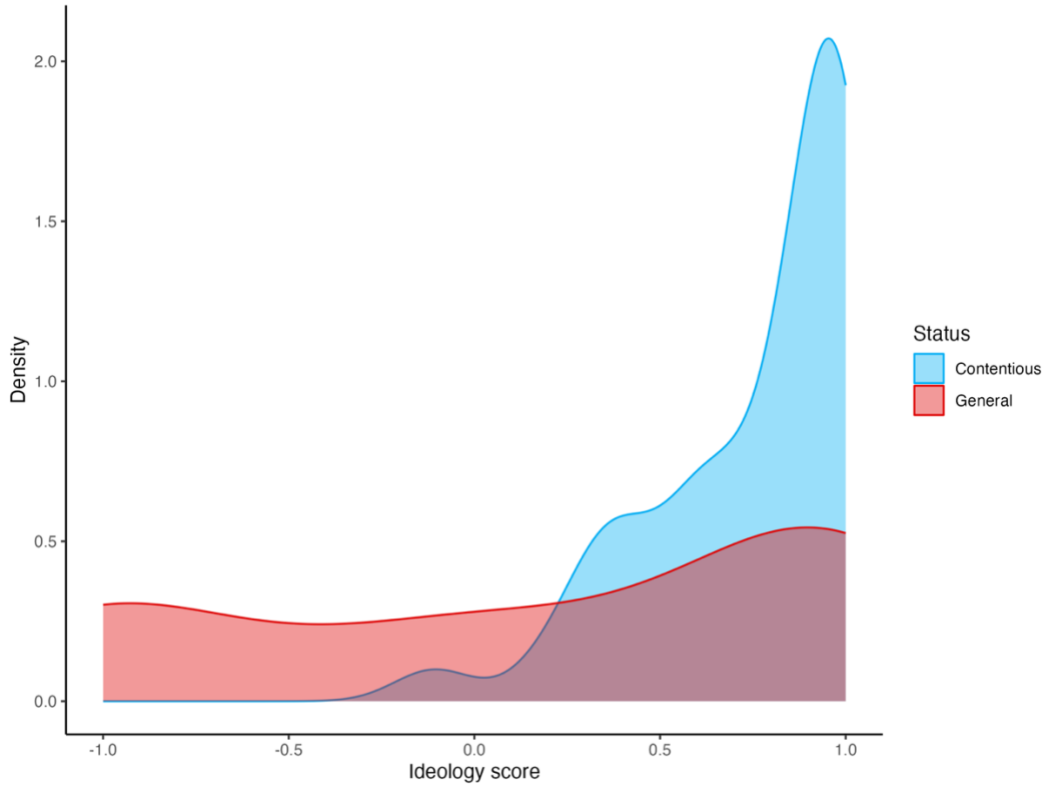


Figure A2. Distribution of ideology labels for contentious and general user samples.

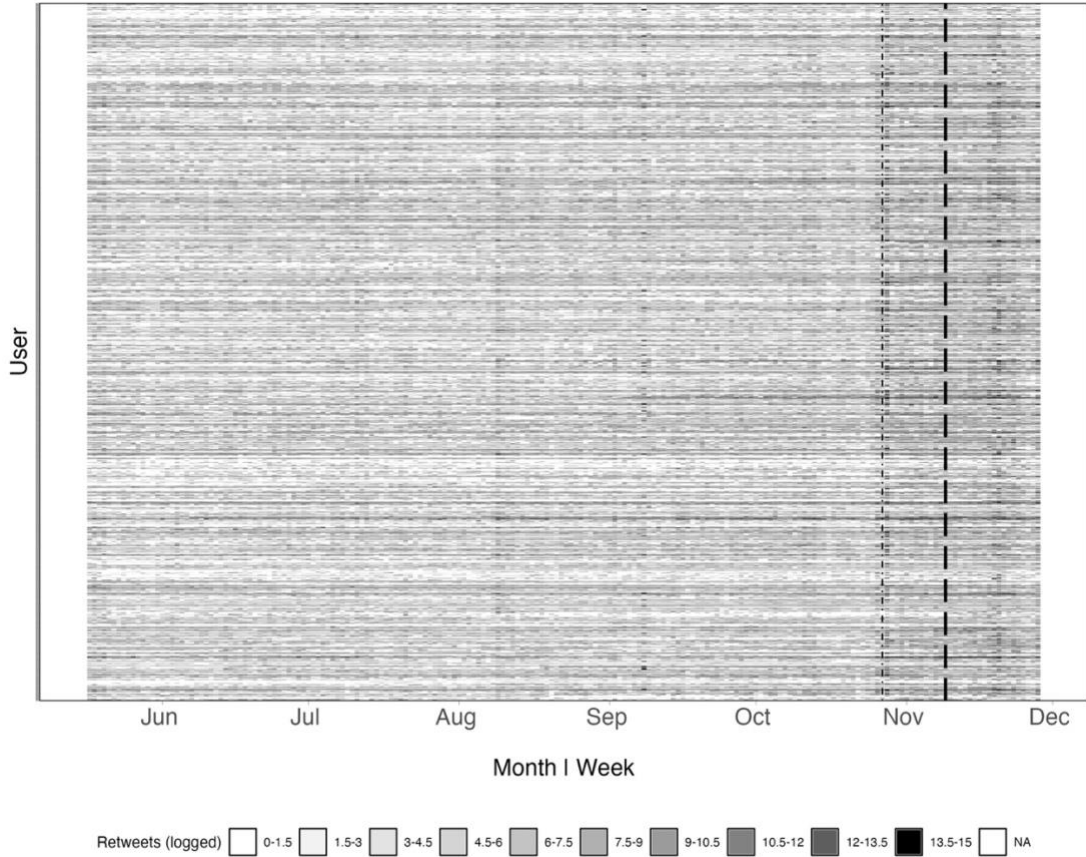


Figure A3. User-day tile plot of retweets, May 17–November 29, 2022 for contentious users. Thin dotted vertical line denotes date of Musk acquisition. Thick vertical dotted line denotes approximate date of blue-tick verification.

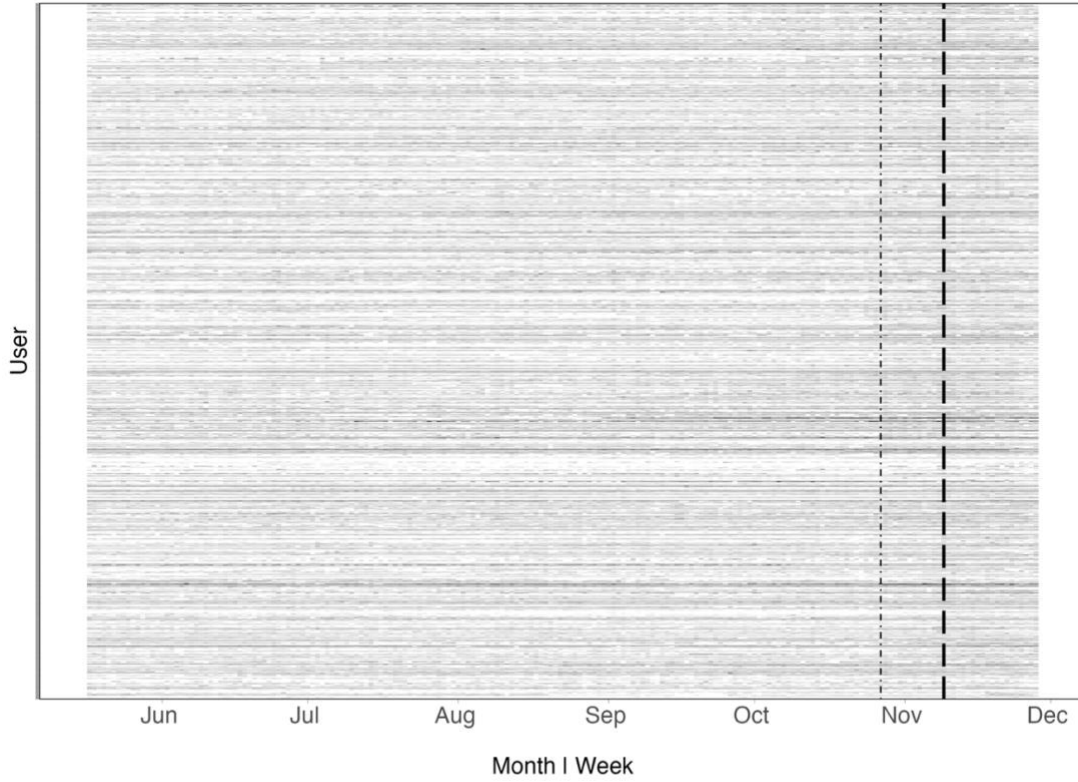


Figure A4. User-day tile plot of likes, May 17–November 29, 2022 for contentious users. Thin dotted vertical line denotes date of Musk acquisition. Thick vertical dotted line denotes approximate date of blue-tick verification.

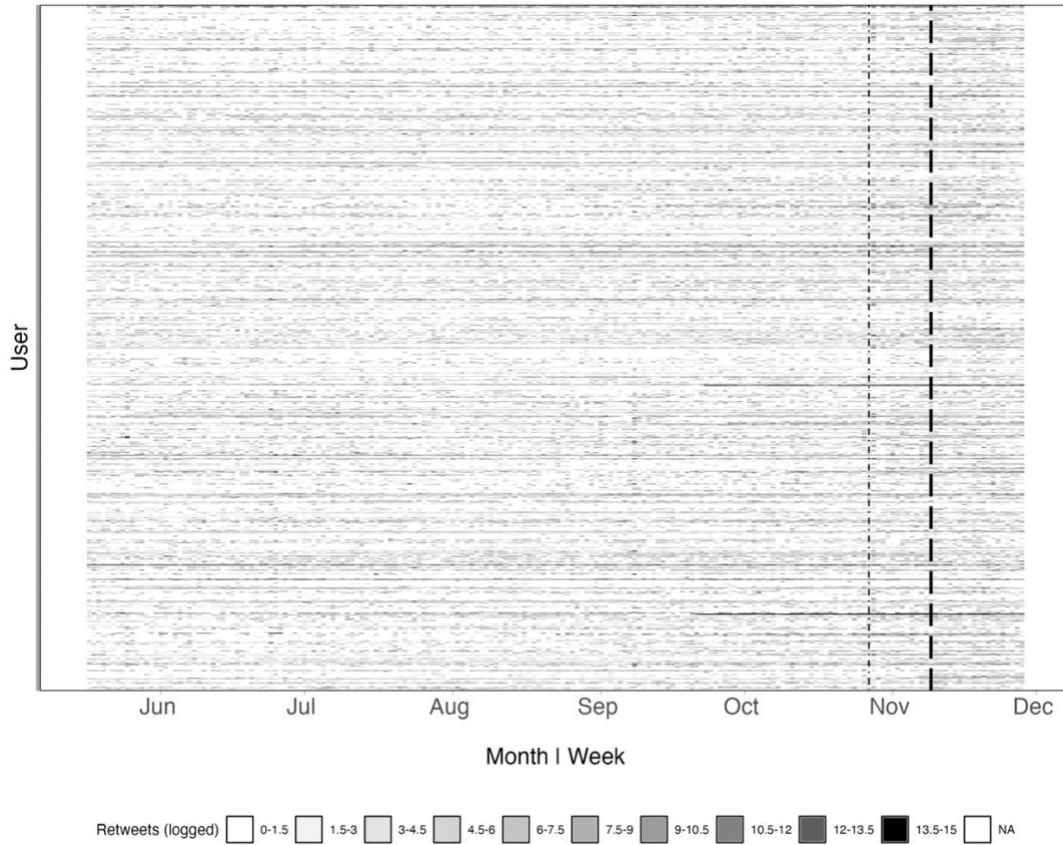


Figure A5. User-day tile plot of retweets, May 17–November 29, 2022 for general users. Thin dotted vertical line denotes date of Musk acquisition. Thick vertical dotted line denotes approximate date of blue-tick verification.

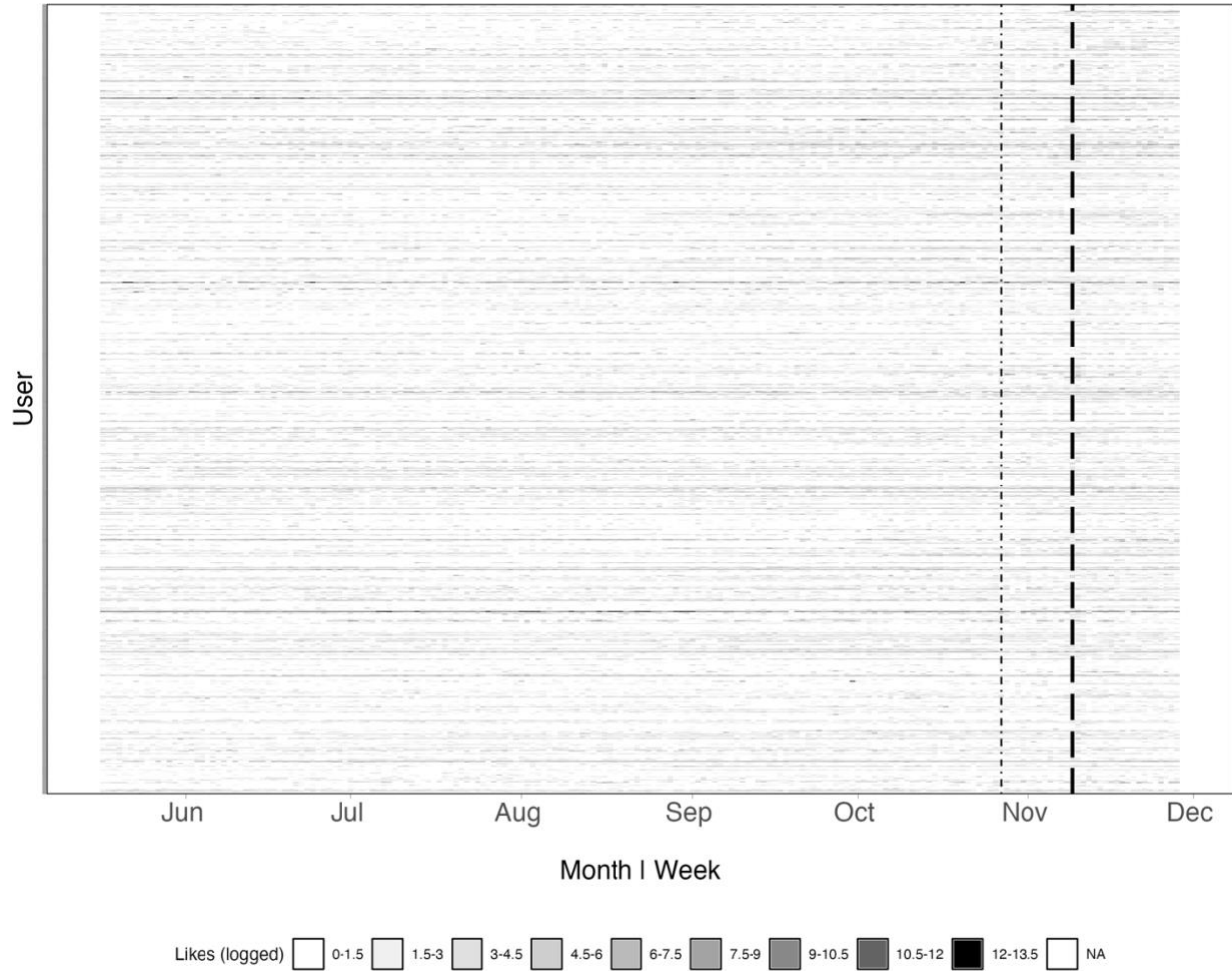


Figure A6. User-day tile plot of likes, May 17–November 29, 2022 for general users. Thin dotted vertical line denotes date of Musk acquisition. Thick vertical dotted line denotes approximate date of blue-tick verification.

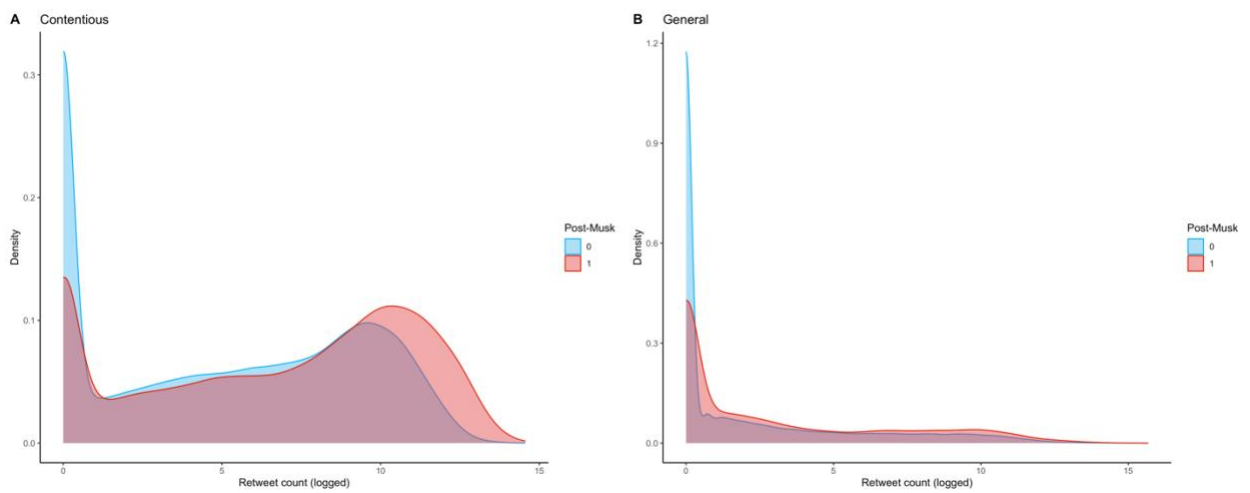


Figure A7. Kernel density plot of (logged) user-level retweet counts before and after the Musk acquisition for contentious and general users. Note: 0 = pre-Musk acquisition; 1 = post-Musk acquisition.

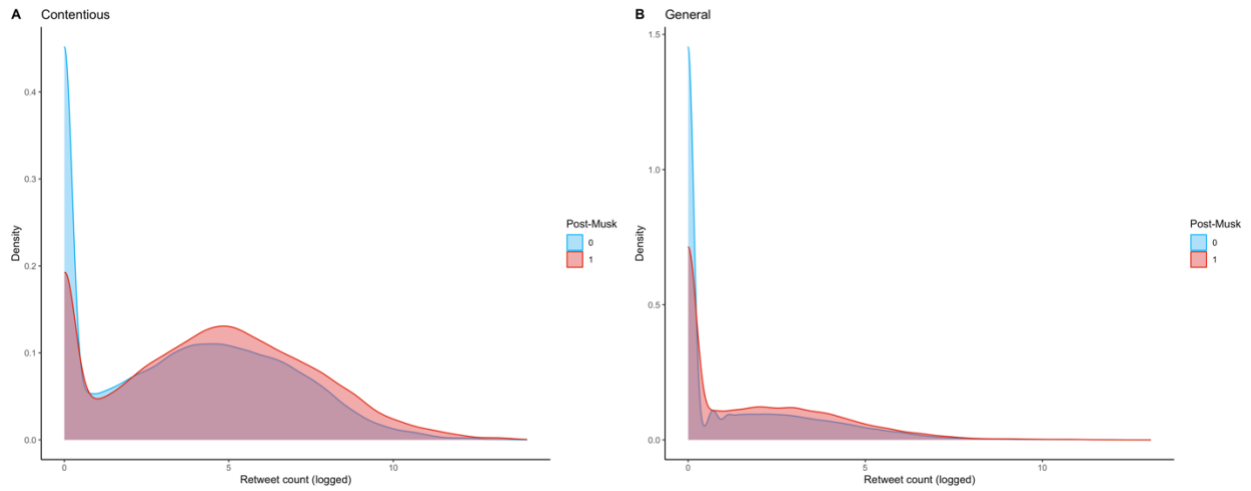


Figure A8. Kernel density plot of (logged) user-level like counts before and after the Musk acquisition for contentious and general users. Note: 0 = pre-Musk acquisition; 1 = post-Musk acquisition.

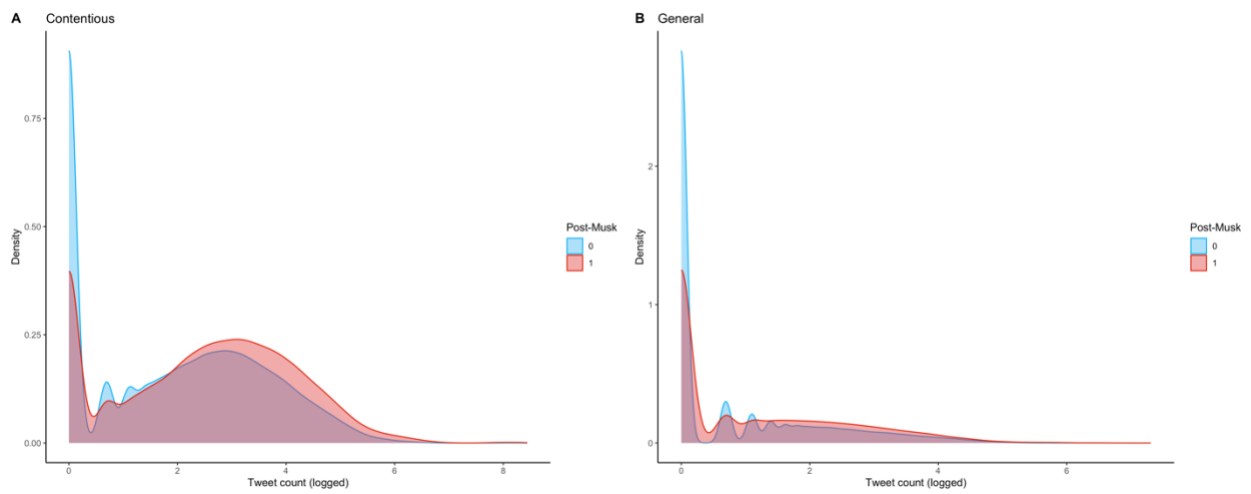


Figure A9. Kernel density plot of (logged) user-level tweet counts before and after the Musk acquisition for contentious and general users. Note: 0 = pre-Musk acquisition; 1 = post-Musk acquisition.

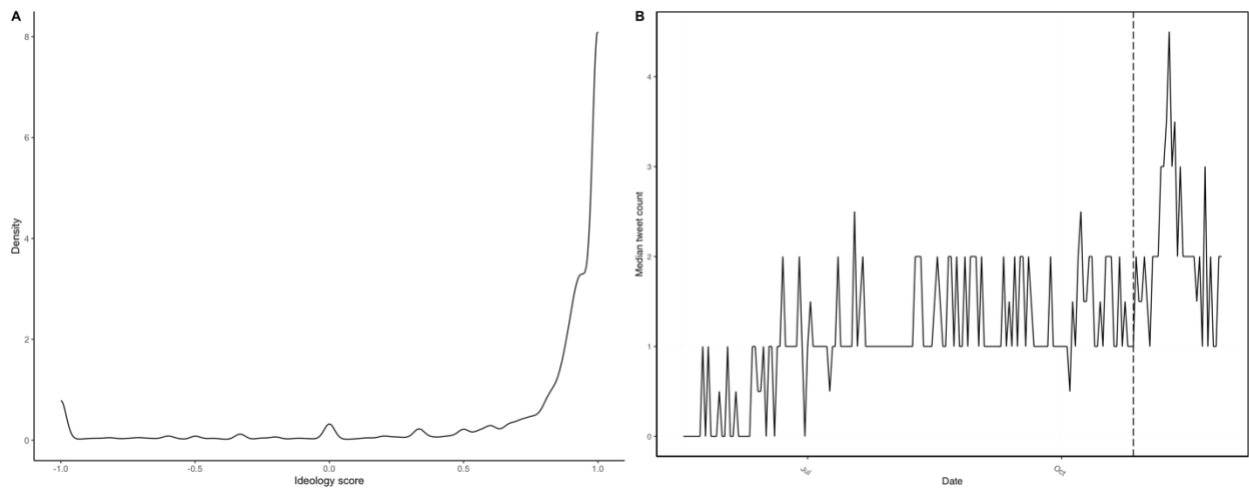


Figure A10. Ideology distribution (A) of retweeters of contentious user tweets and median daily tweet counts of the retweeting accounts (B). Dotted vertical line in panel B denotes the date of the formal Musk acquisition.

Table A1. *Effect of Musk acquisition on contentious user engagement.*

	Retweets	Likes
Post-Musk acquisition	0.536***	0.128***
	(0.027)	(0.020)
Tweets (logged sum)	1.968***	1.416***
	(0.025)	(0.019)
Observations	187,395	187,395
User fixed effect	X	X

*Notes: Standard errors clustered by user. Outcomes are logged retweets and likes. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.*

Table A2. *Effect of Musk acquisition on general blue-tick user engagement.*

	Retweets	Likes
Post-Musk acquisition	0.246***	0.036***
	(0.025)	(0.010)
Tweets (logged sum)	1.913***	1.290***
	(0.033)	(0.015)
Observations	181,935	181,935
User fixed effect	X	X

*Notes: Standard errors clustered by user. Outcomes are logged retweets and likes. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.*

Table A3. Effect of Musk acquisition on user tweet engagement with interaction between post-Musk dummy and user status.

	Retweets	Likes
(Intercept)	1.245***	0.824***
	(0.008)	(0.005)
Post-Musk acquisition	0.507***	0.133***
	(0.015)	(0.010)
General user	-0.820***	-0.588***
	(0.009)	(0.006)
Tweets (logged sum)	2.020***	1.405***
	(0.003)	(0.002)
General user*Post-Musk acquisition	-0.294***	-0.132***
	(0.021)	(0.014)
Observations	369330	369330

*Notes: Standard errors clustered by user. Outcomes are logged retweets and likes. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.*