

# Social Computing Capstone

## Day 5: Engagement

CSE 481p | Winter 2022

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# Schedule for today's class

- Go around and discuss A3 (20 min)
- Lecture on today's topic - Engagement (20 min)
- Instructions for website set-up (5 min)
- Team signups for 1-on-1s with us (5 min)
- Group work time on G1 (20 min)

**A3 - No social media/phone/internet day**

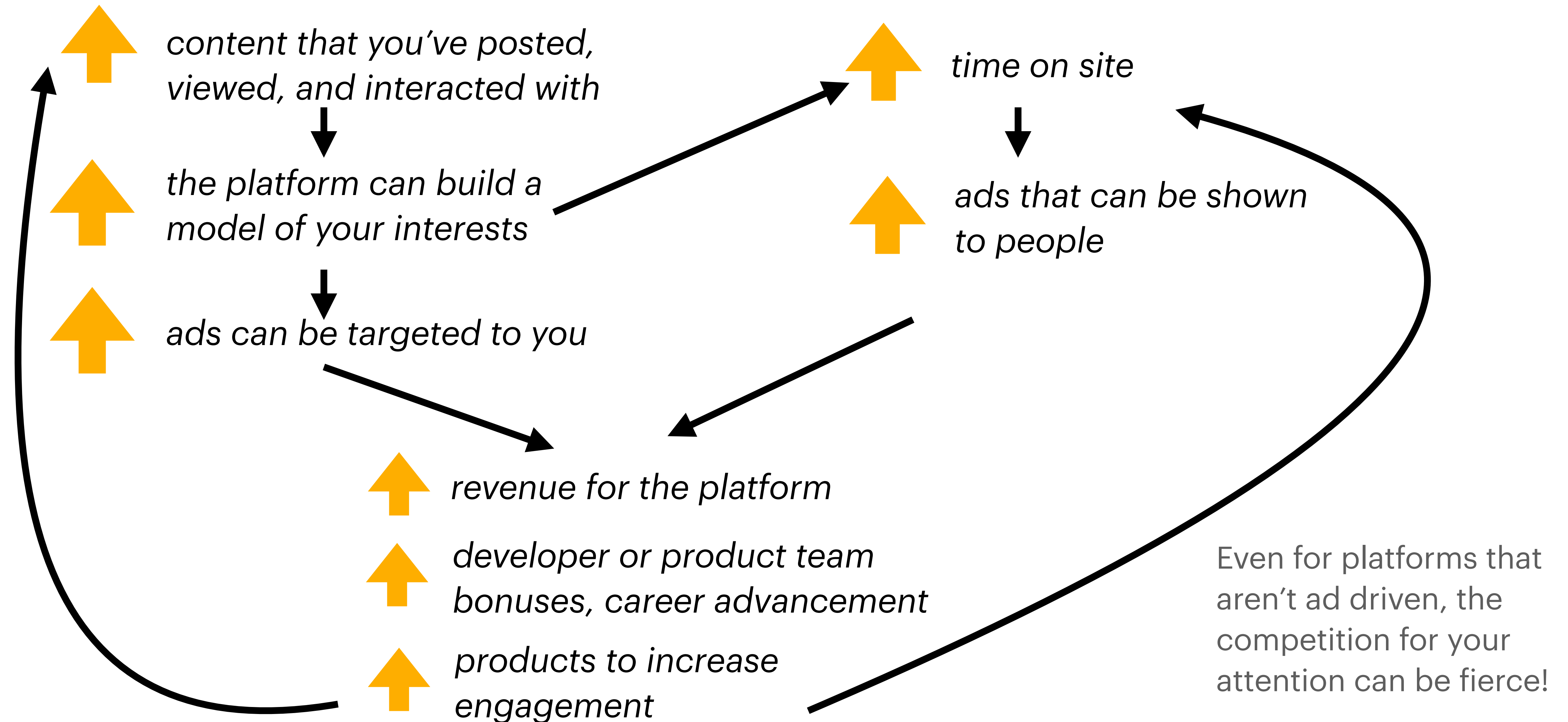
- On a scale of 1 (easy) - 5 (hard), how hard was this challenge? Did you succeed?
- Anything that surprised you about the day, or anything that you noticed about yourself/your tendencies?
- Anything you have done or plan to do differently as a result of this challenge?
- Our reliance on these technologies isn't really an "addiction" per se... so what is it?

# Engagement

# What does “engagement” mean on social platforms?

- Content:
  - Watch time
  - Dwell time
  - Click-through rate
  - Number of comments
  - Number of likes, other emoji reactions
  - Number of shares
- User:
  - Daily active users, monthly active users
  - “Streak” - number of days visited/posted in a row
  - Activity (posting, liking)
  - Time on site on average per visit/day

# Why do platforms care about engagement?



# Ways that platforms increase engagement...sometimes with bad consequences

- **Dark patterns** that limit user autonomy using tricks such as obfuscation or fake-outs
- **Reducing friction** so that it's easier to keep reading, sharing, posting, etc.
- **Hyper-personalization** of your recommendations



**Dark patterns** that limit user autonomy using tricks such as obfuscation or fake-outs

*The Nerdwriter*

# Solutions?

- Stay personally vigilant and learn about these tricks (but that's hard!)
- Shame companies so that it becomes a liability to keep doing it
- Educate designers and developers on their ethical responsibilities so they refuse to do it
- Legislation?
  - Hard to target this exactly but things like anti-trust and GDPR are aiming to reduce the power of platforms to do this

**Reducing friction** so that it's easier to keep reading, sharing, posting, etc.



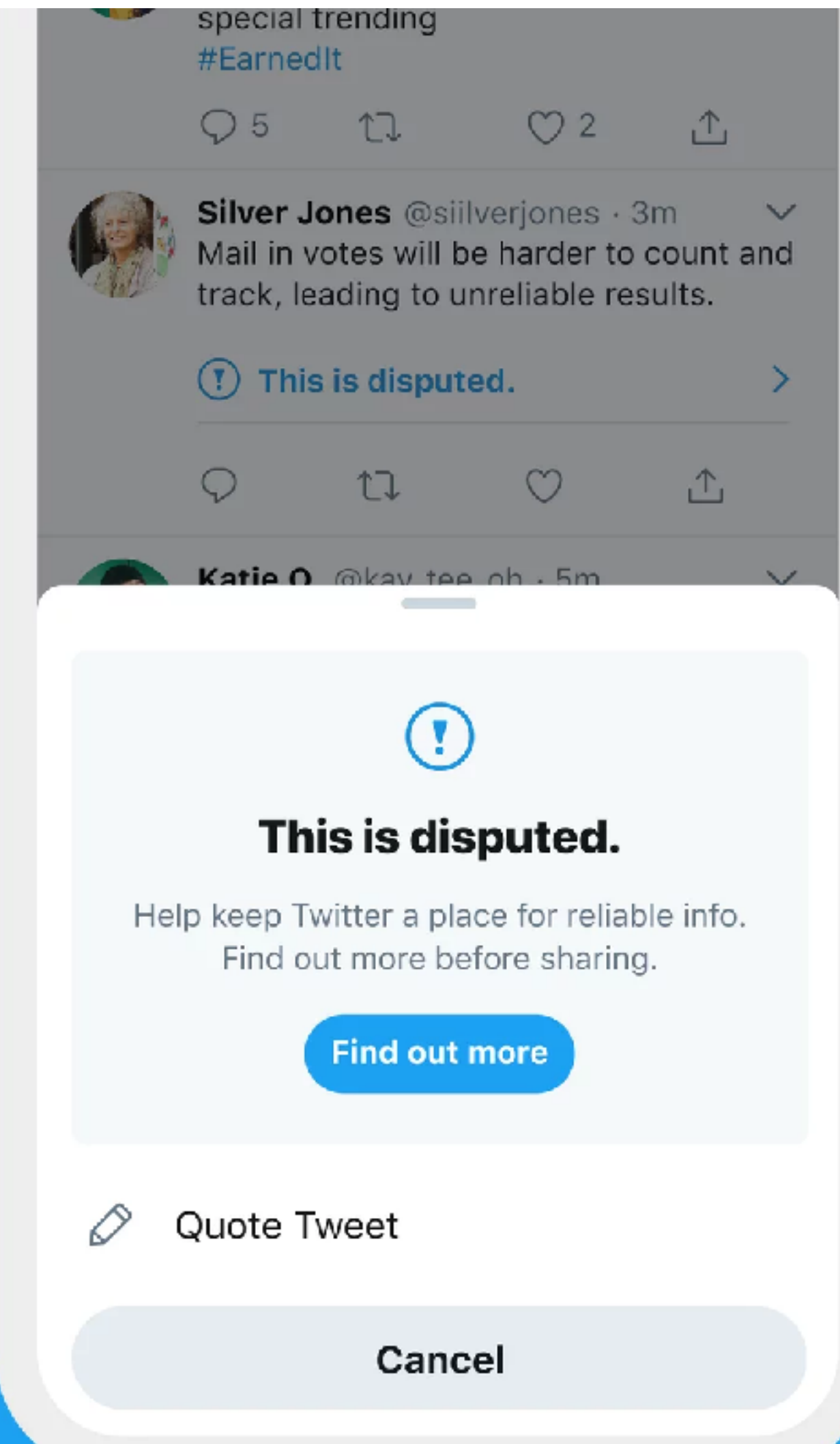
# Example: misinformation

- Studies show that oftentimes people share misinformation because they're **going too fast** (using intuition) and they're not engaging their slower critical reasoning skills. If they slow down, they're less likely to share it.
- They're also not really thinking about **accuracy** when they're sharing, they're thinking about what their friends will like, what will trend, etc. If they're primed to think about accuracy, they're less likely to share it.

Bago, Bence, David G. Rand, and Gordon Pennycook. "Fake news, fast and slow: Deliberation reduces belief in false (but not true) news headlines." *Journal of experimental psychology: general* 149.8 (2020): 1608.

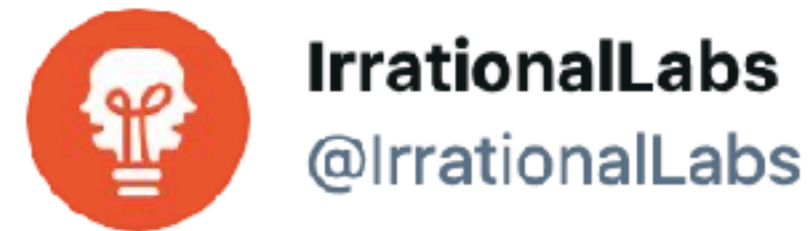
Pennycook, Gordon, and David G. Rand. "Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning." *Cognition* 188 (2019): 39-50.

# Add speed bumps





# Accuracy priming



We designed an intervention that reduced shares of flagged content on TikTok by 24% via a large scale RCT, thread 👉 1/7



**IrrationalLabs** @IrrationalLabs · Feb 3

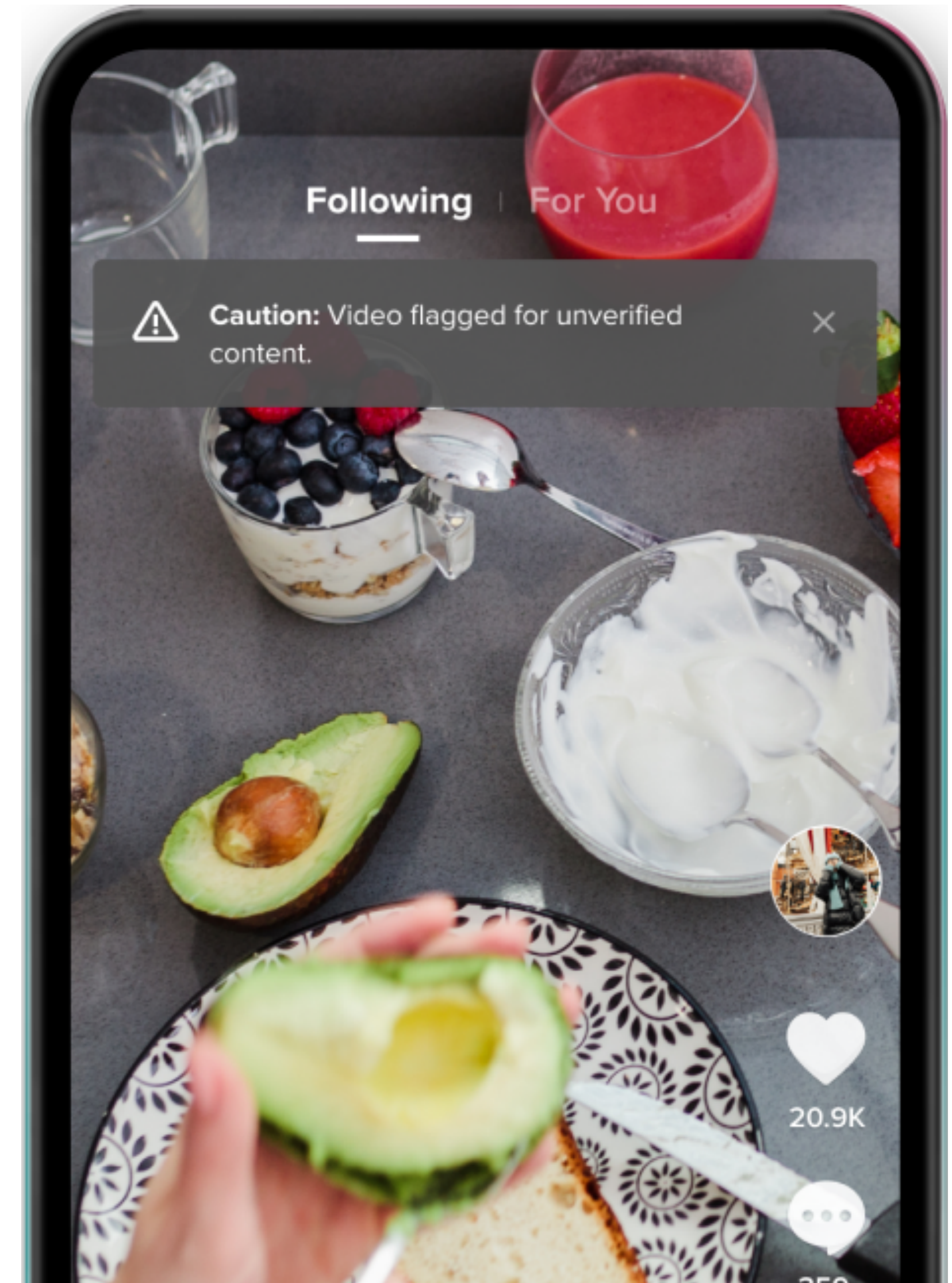
We put a short prompt on videos that reminded people to think about the accuracy of the content they were watching. And then - when people went to share the video - we reminded them again that the video was flagged & asked them if they were sure they wanted to share. 3/7



**IrrationalLabs** @IrrationalLabs · Feb 3

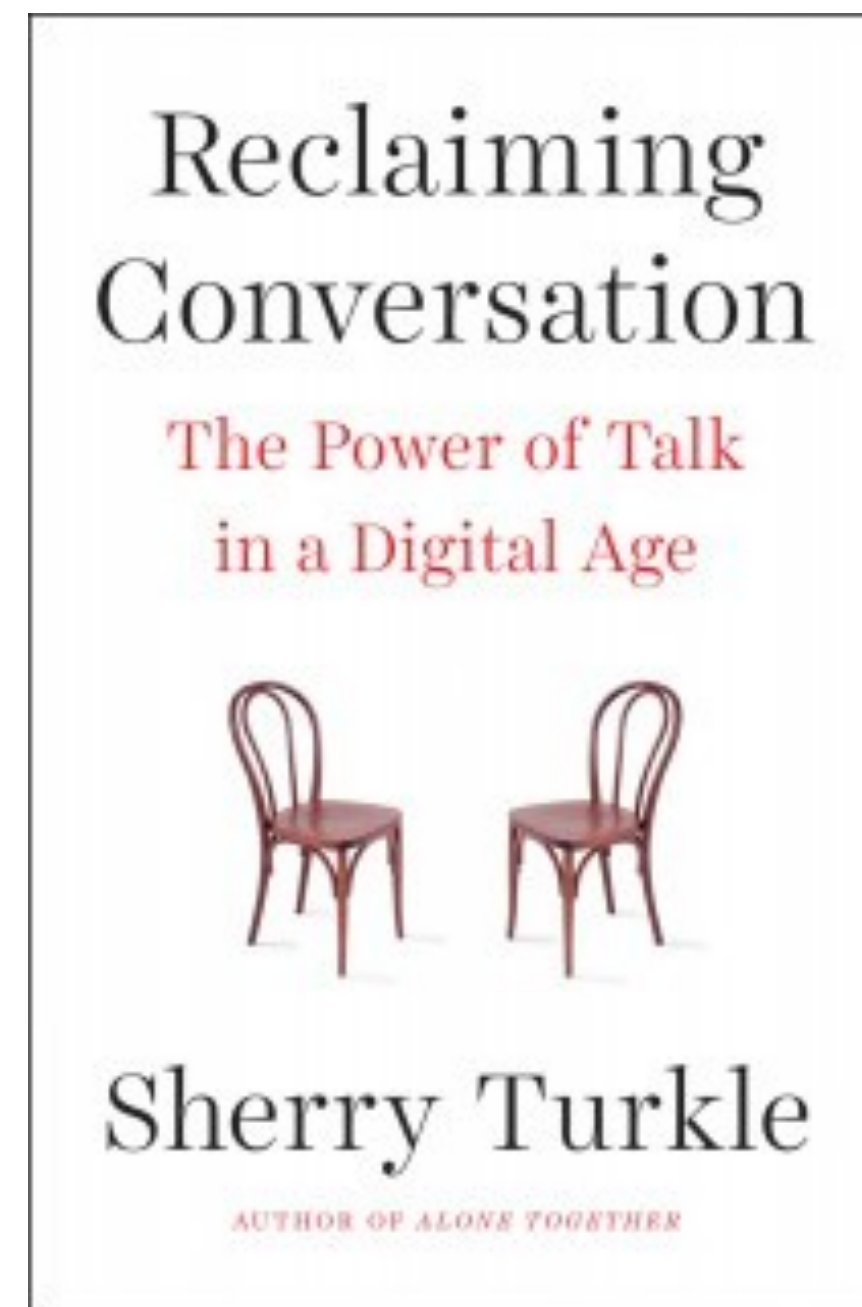
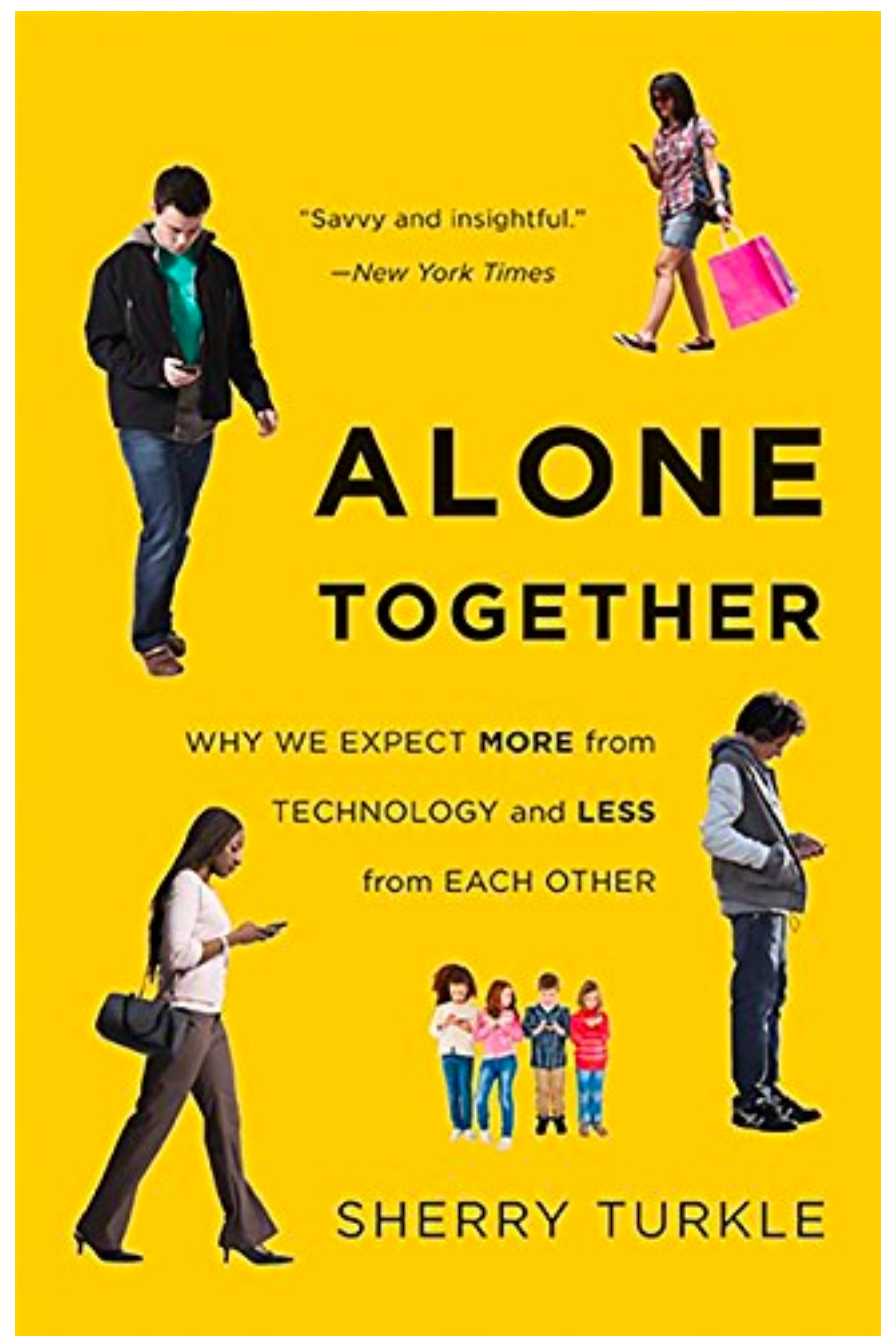
In addition to successfully reducing shares by 24%, our intervention also reduced likes by 7%, and views by 5%. 6/7

<https://twitter.com/IrrationalLabs/status/1357033901311451140>





# Other than redesigning platforms, maybe we also have to rethink our relationship to tech?



Studies of conversation both in the laboratory and in natural settings show that when two people are talking, the mere presence of a phone on a table between them or in the periphery of their vision changes both what they talk about and the degree of connection they feel. People keep the conversation on topics where they won't mind being interrupted. They don't feel as invested in each other. Even a silent phone disconnects us.

The psychologist Yalda T. Uhls was the lead author on a 2014 [study](#) of children at a device-free outdoor camp. After five days without phones or tablets, these campers were able to read facial emotions and correctly identify the emotions of actors in videotaped scenes significantly better than a control group. What fostered these new empathic responses? They talked to one another.

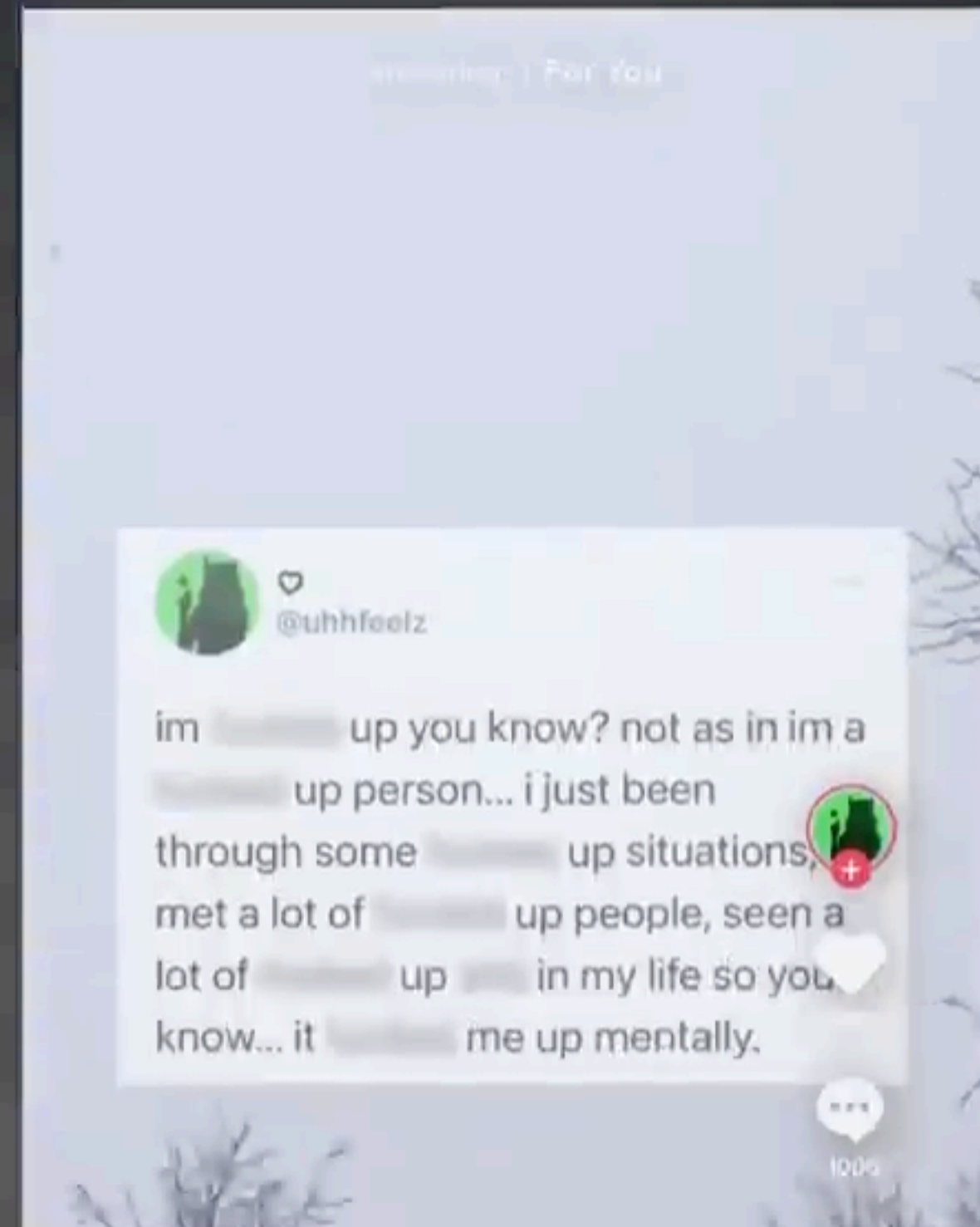
From: <https://www.nytimes.com/2015/09/27/opinion/sunday/stop-googling-lets-talk.html>

# Hyper-personalization => echo chambers

- WSJ did a study where they created 100 TikTok accounts and programmed what videos each account watched vs skipped, then saw what the algorithm recommended.
- They found that accounts quickly went into “rabbit holes”. If the account watched “#depression” content, soon that would be almost all they were seeing.

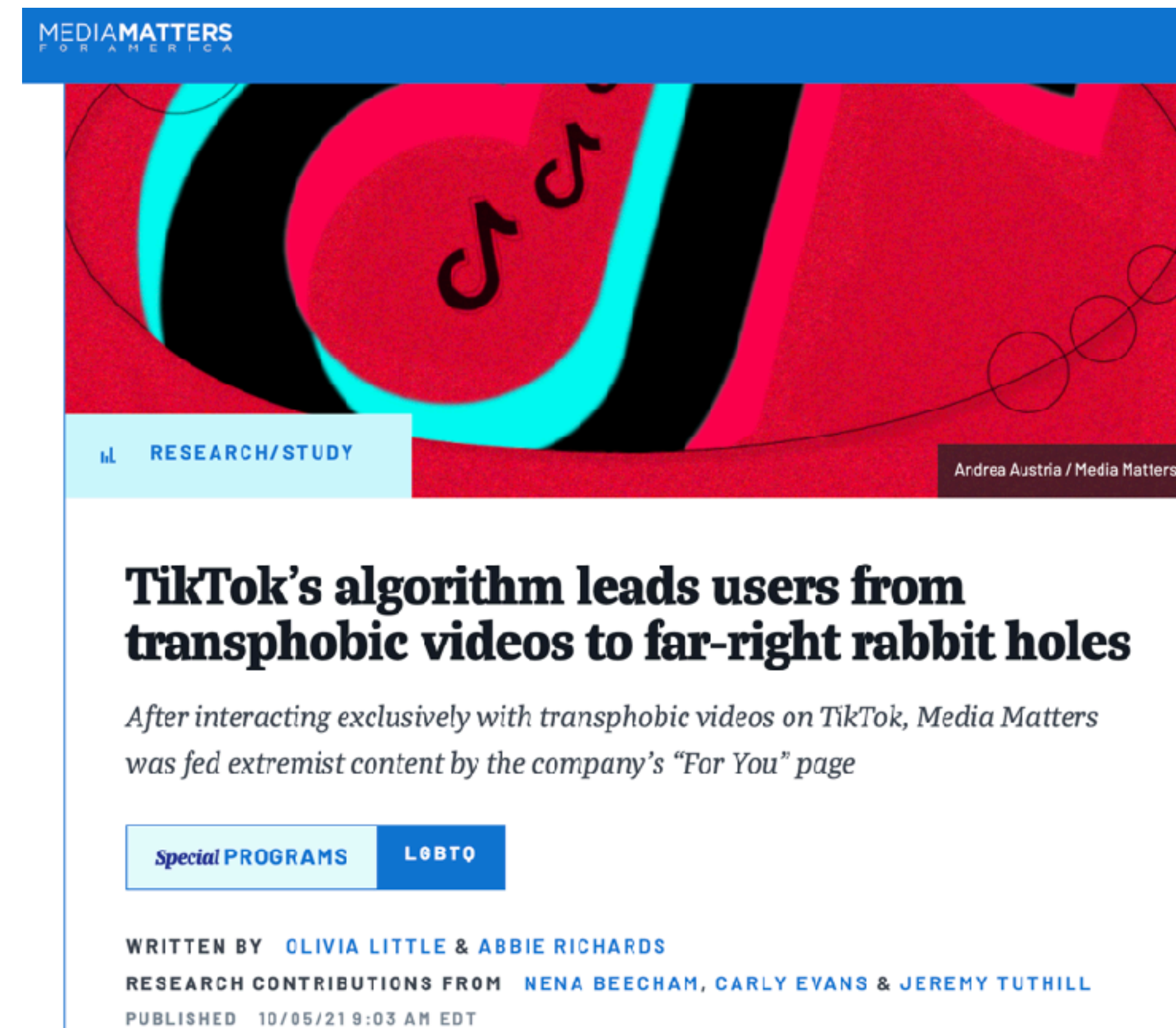


WSJ



<https://www.wsj.com/video/series/inside-tiktoks-highly-secretive-algorithm/investigation-how-tiktok-algorithm-figures-out-your-deepest-desires/>

# Personalized recommendation => Radicalization?



- Fake accounts who start out as anti-trans get exposed to hate speech against additional groups
- This phenomenon has also been documented regarding conspiracy communities

<https://www.mediamatters.org/tiktok/tiktoks-algorithm-leads-users-transphobic-videos-far-right-rabbit-holes>



## **Still fairly open questions!**

How can we design recommender systems optimized to metrics that aren't just engagement?

What are the “right” metrics to optimize when it comes to recommender systems and who gets to decide that?

How can algorithm designers better understand and measure what's happening with their algorithms when they tweak them?

How can people outside the platforms better audit recommender systems so we know what's being personally recommended to people?

**Set up project website + blog**

- Github organization: <https://github.com/UWSocialComputing>
- Every team has their own repo for their website. Ruotong has set up the code for each repo such that there is already a skeleton blog and website!
- Changes you make will automatically update your website (example: <https://uwsocialcomputing.github.io/Left-On-Read/>)
- To add new posts to your blog, follow these instructions (skipping the getting started part): <https://chadbaldwin.net/2021/03/14/how-to-build-a-sql-blog.html>
- We highly encourage you to make changes to the style of the websites (by editing the HTML and CSS), and add info about your team. Eventually you will turn this into a website for your product.
- Once you've finished G1, add it to your website as your first team blog!

# Team signups

- Every week from now on, each group will get 10 minutes with Ruotong or me (we'll swap each week). Come prepped with questions or things to show!
- Tuesday [ 3 slots ]: 10:50, 11:00, 11:10
- Thursday [ 3 slots ]: 10:50, 11:00, 11:10
- If we run out of time in class, I can usually go overtime for the ~30 minutes after class is over.