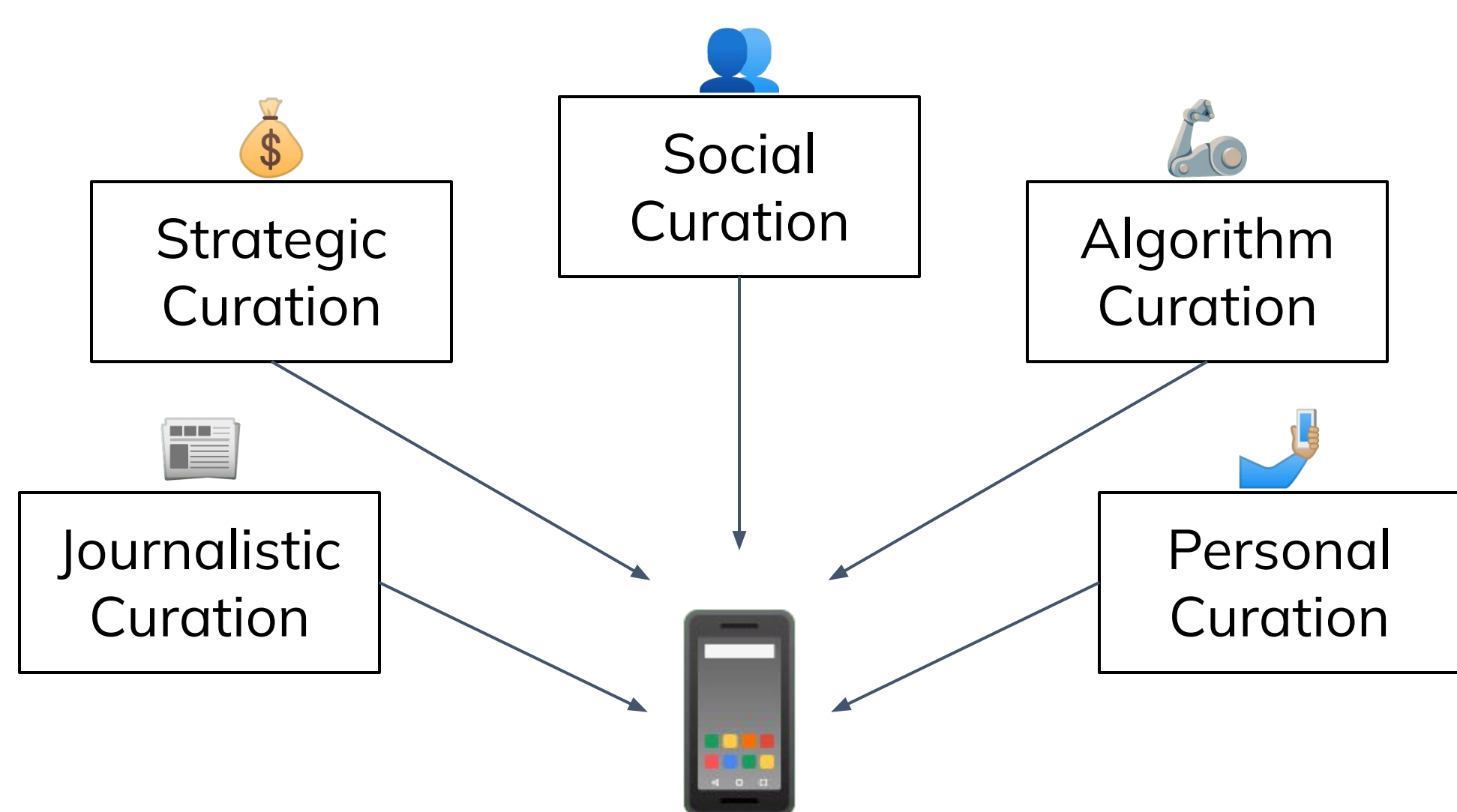


INSPECTING ALGORITHMIC FLOWS

Ethics, Transparency, and Accountability for Digital Mass Communication Platforms

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Curated Flows¹

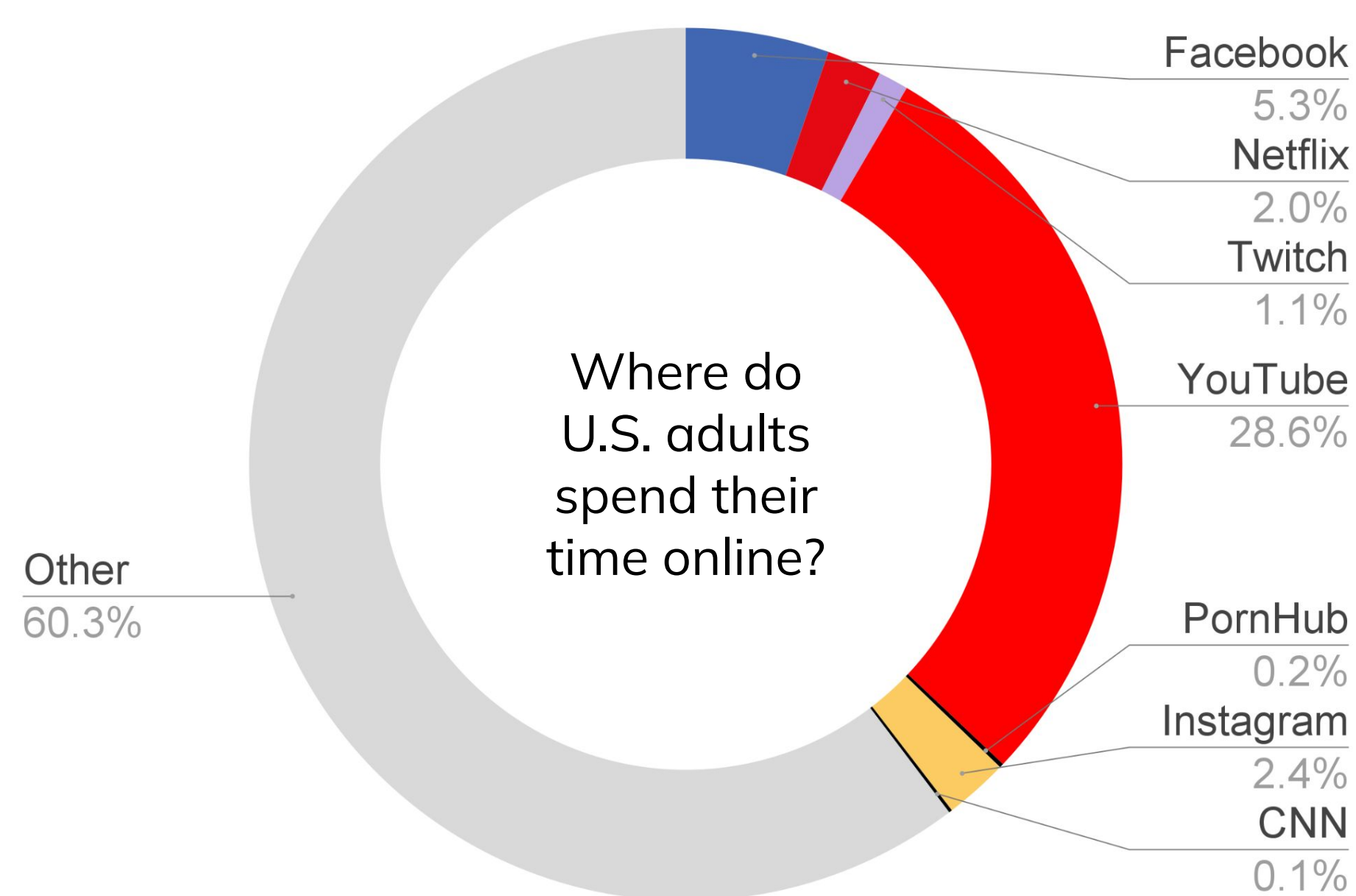


- Popular framework for media research
- “Egocentric” / “individualized” publics
- Five types of influential actors
- Messages from all five types of actors
- Algorithms treated as actors / inputs

Platform Power²

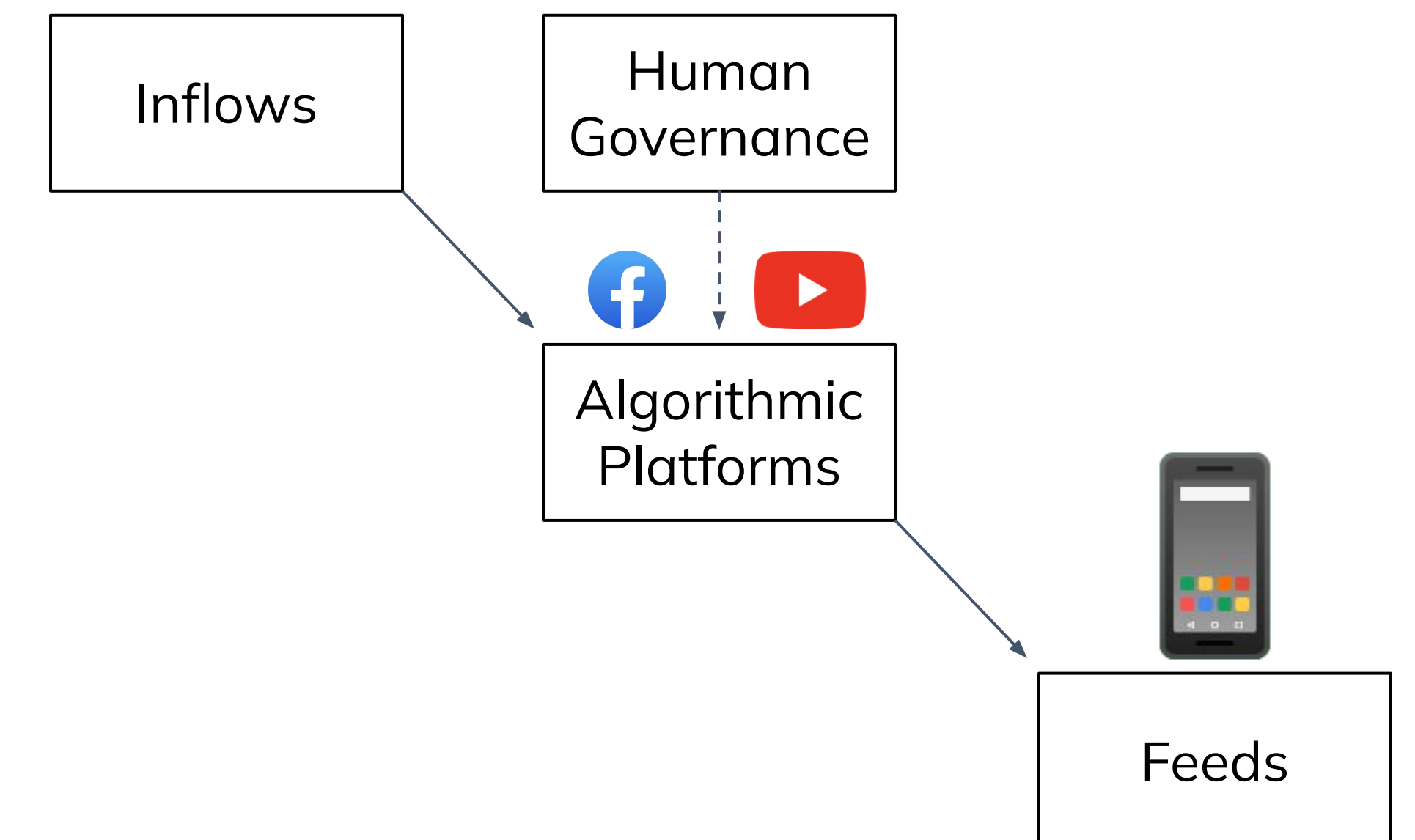
“In a lot of ways, Facebook is more like a government than a traditional company” –Mark Zuckerberg

U.S. Internet users spend plurality of time on platforms:



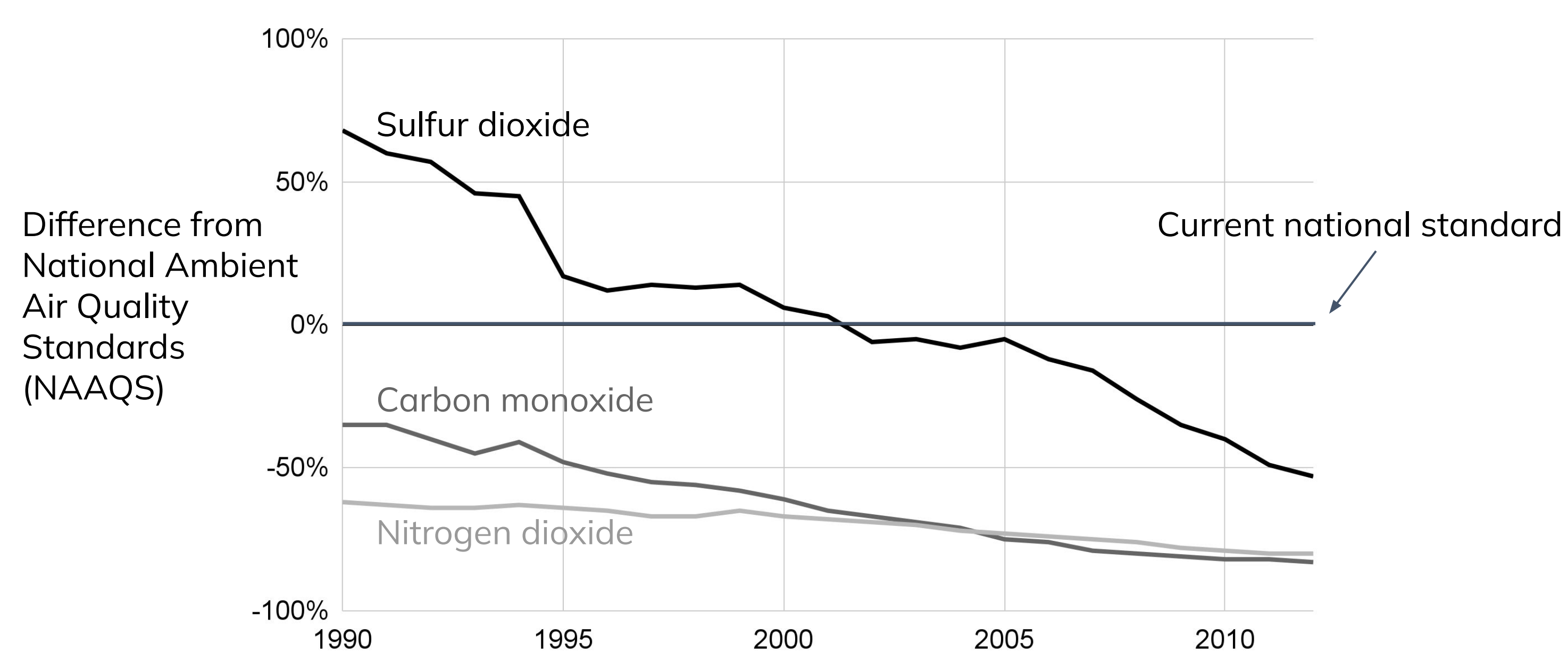
Data from 1.5M+ U.S. Comscore panelists (May 2022, desktop only)

Algorithmic Flows



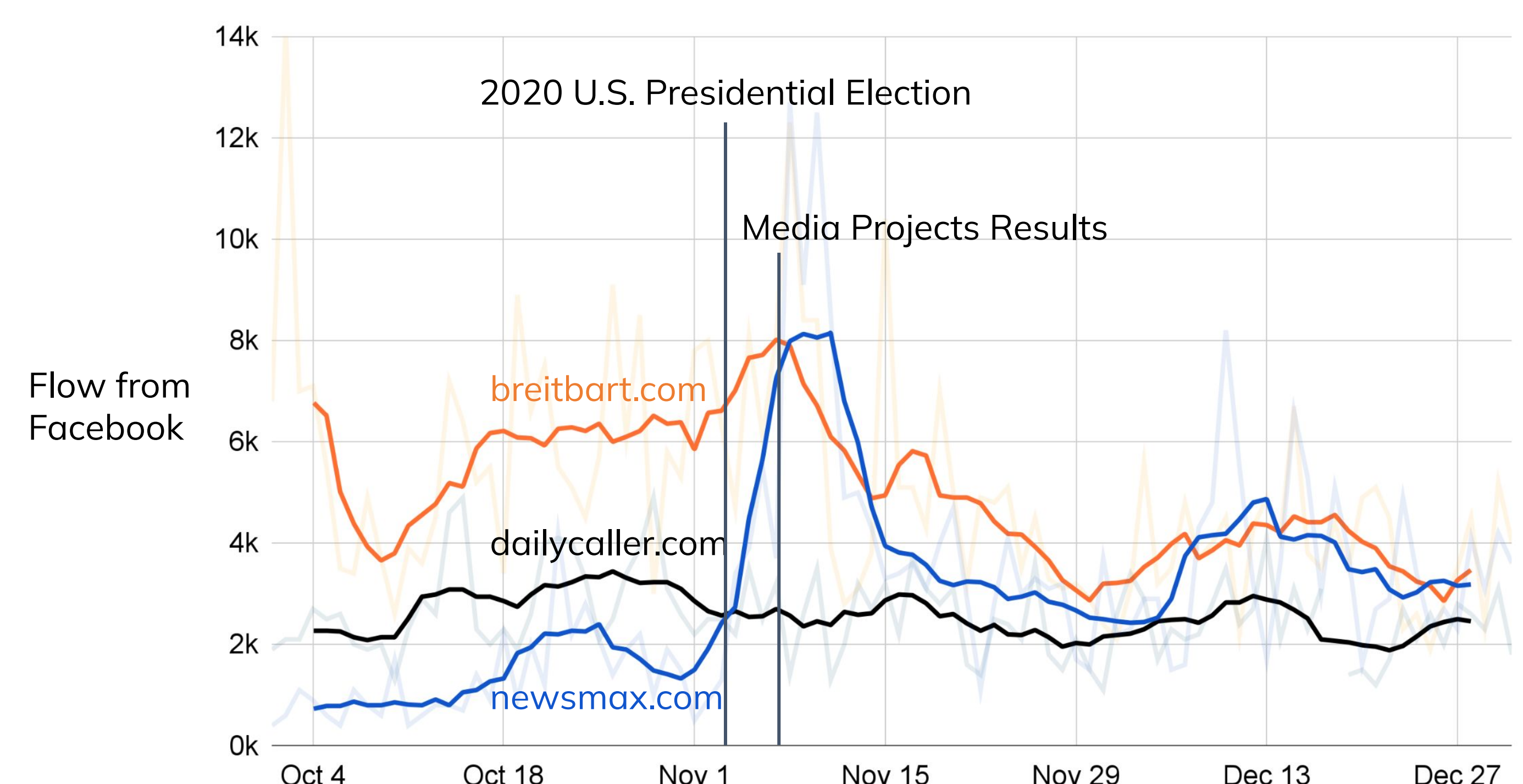
- Proposed framework for platform research
- “Platform-centric” / “algotcentric” publics
- Humans still manage / govern platforms
- Messages from ads, friends, news, etc.
- Platforms mediate messages from inflows

The Power of Transparency³



- Bhopal disaster in 1984 killed and injured thousands
- Prompted U.S. Federal legislation for chemical emissions
- “Emergency Planning and Community Right-to-Know Act” (EPCRA)
 - Required companies to publish toxic release inventory (TRI)
- Rapid reduction in emissions after first results published

Facebook Flows (Work in Progress)



- Facebook’s NewsFeed algorithm sends users to junk news websites
- “Emergency changes” to NewsFeed after U.S. 2020 election results⁴
 - Early analysis suggests these changes reduced junk news traffic
- What if Facebook was required to regularly publish similar metrics?
- Further details in my abstract⁵ and more to come

1 Thorson, Kjerstin, and Chris Wells. “Curated flows: A framework for mapping media exposure in the digital age.” *Communication Theory* 26, no. 3 (2016).

2 Nielsen, Rasmus Kleis, and Sarah Anne Ganter. *The Power of Platforms: Shaping Media and Society*. Oxford University Press (2022).

3 Abelson, Philip H. “Major changes in the chemical industry.” *Science* 255, no. 5051 (1992).

4 Roose, Kevin, Mike Isaac, and Sheera Frenkel. “Facebook struggles to balance civility and growth.” *The New York Times* (2020).

5 Bandy, Jack. “Inspecting Algorithmic Flows: Ethics, Transparency, and Accountability for Digital Mass Communication Platforms.” In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society* (2022).