



# Divided by algorithms: Journalism in the “digital social machine”?

GMF 2023, 19 June 2023 - 14:30-15:30



# Grimme Online Award



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## Qualification/Education

## Research

Sections:



Grimme  
Preis



Grimme  
Online Award



Grimme  
Akademie



Grimme  
Medienbildung



Grimme  
Forschung

Shares in /  
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# Divided by algorithms: journalism in the “digital social machine”?



**Lara Berger**

Position: Research associate and doctoral candidate  
Organization: University of Cologne



**Karin Boczek**

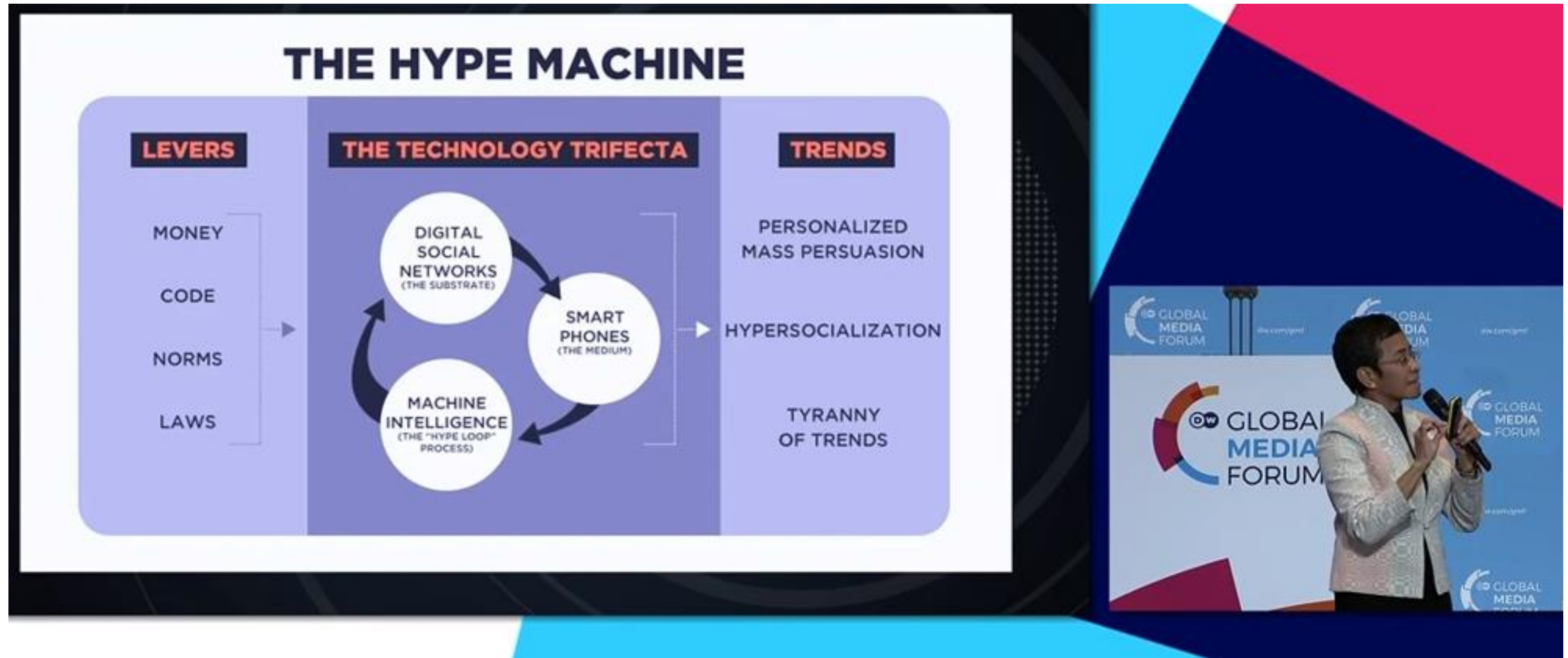
Position: Assistant professor for digital journalism  
Organization: Catholic University Eichstätt-Ingolstadt



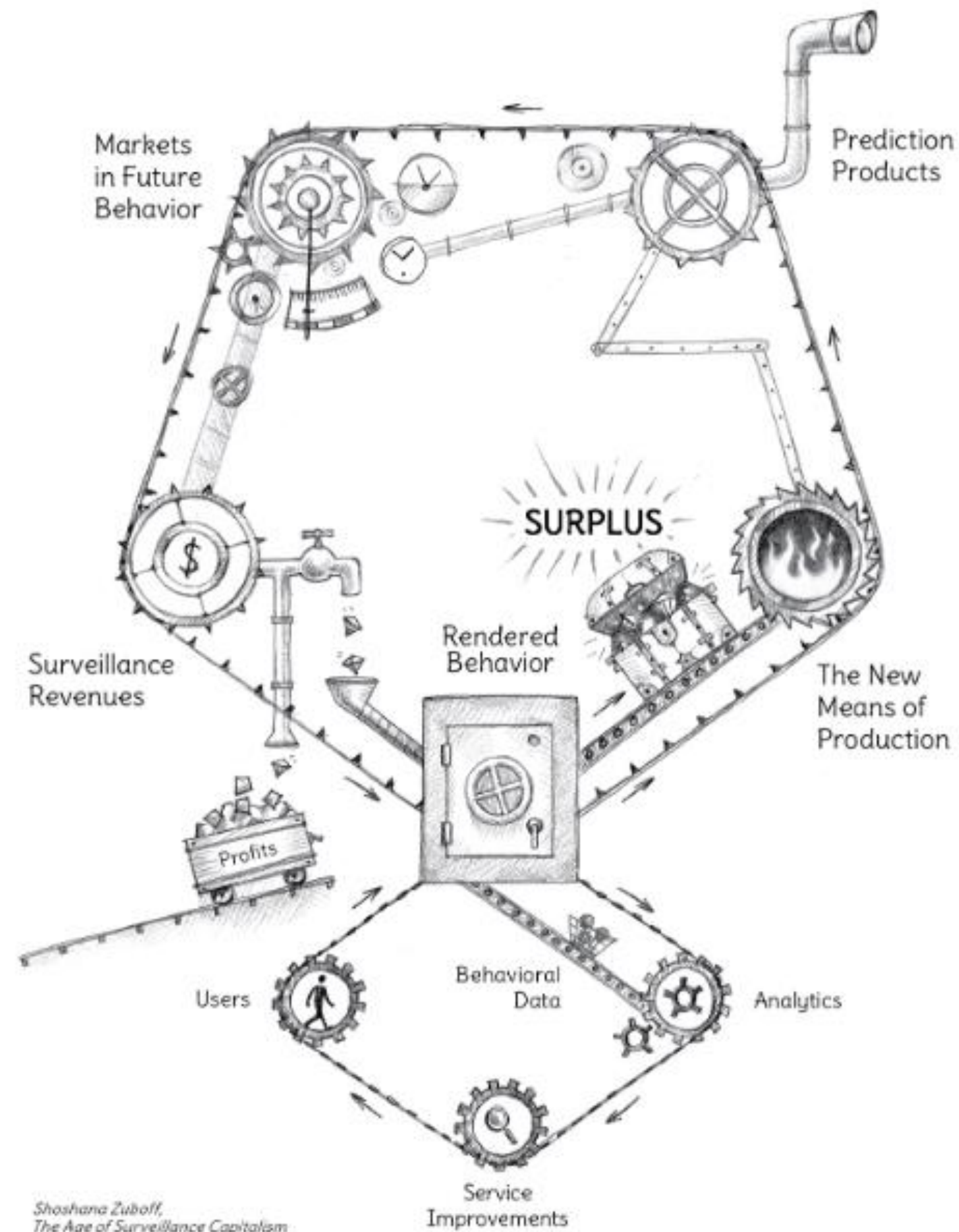
**Harald Gapski**

Position: Head of Research  
Organization: Grimme-Institute

# Maria Ressa at GMF 2022 referring to Sinan Aral (2020)



# Shoshana Zuboff (2018) Machine of Surveillance Capitalism



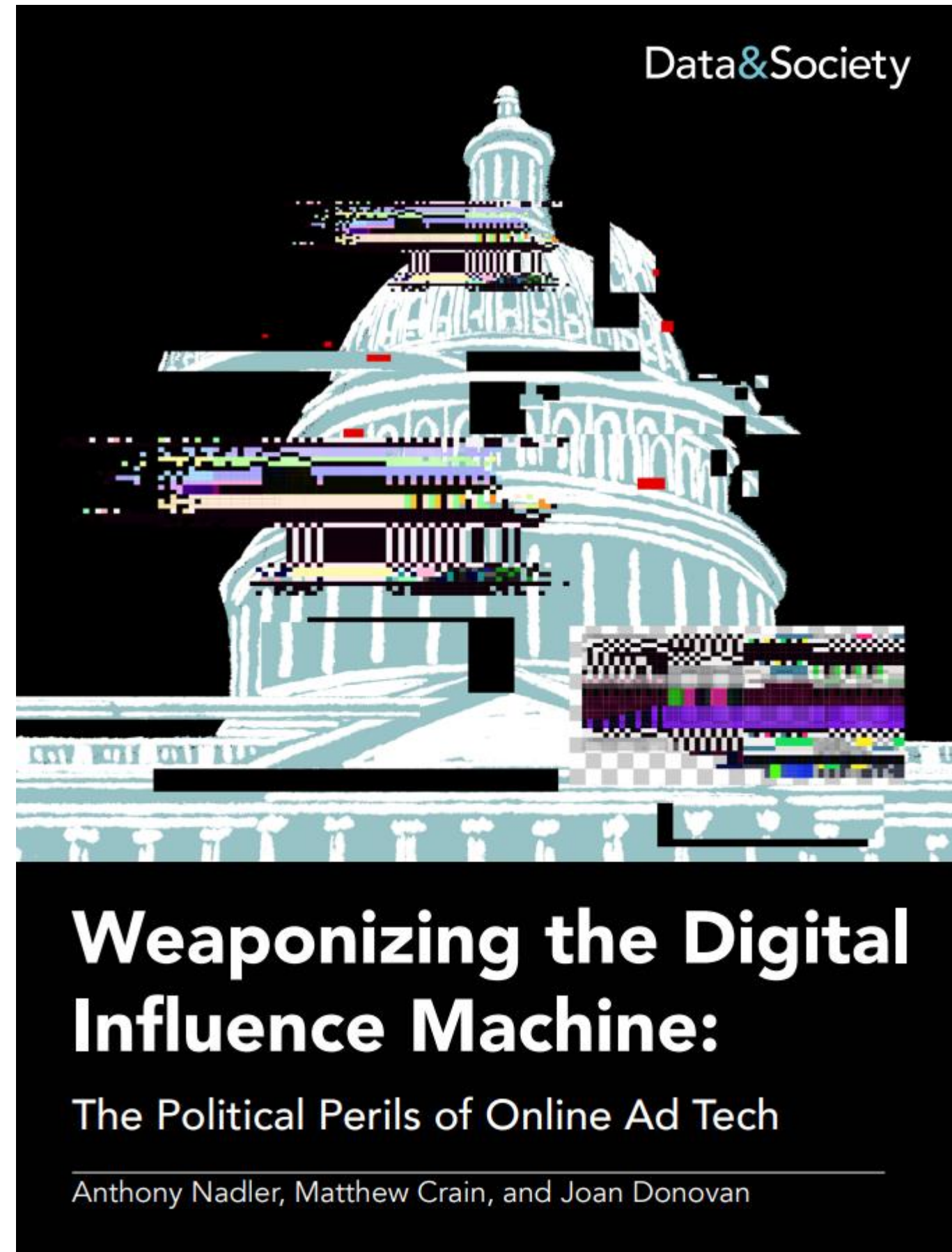
**Figure 2:** The Discovery of Behavioral Surplus

"I define surveillance capitalism as the unilateral claiming of private human experience as free raw material for translation into behavioral data. These data are then computed and packaged as prediction products and sold into behavioral futures markets — business customers with a commercial interest in knowing what we will do now, soon, and later."

Zuboff (2019)

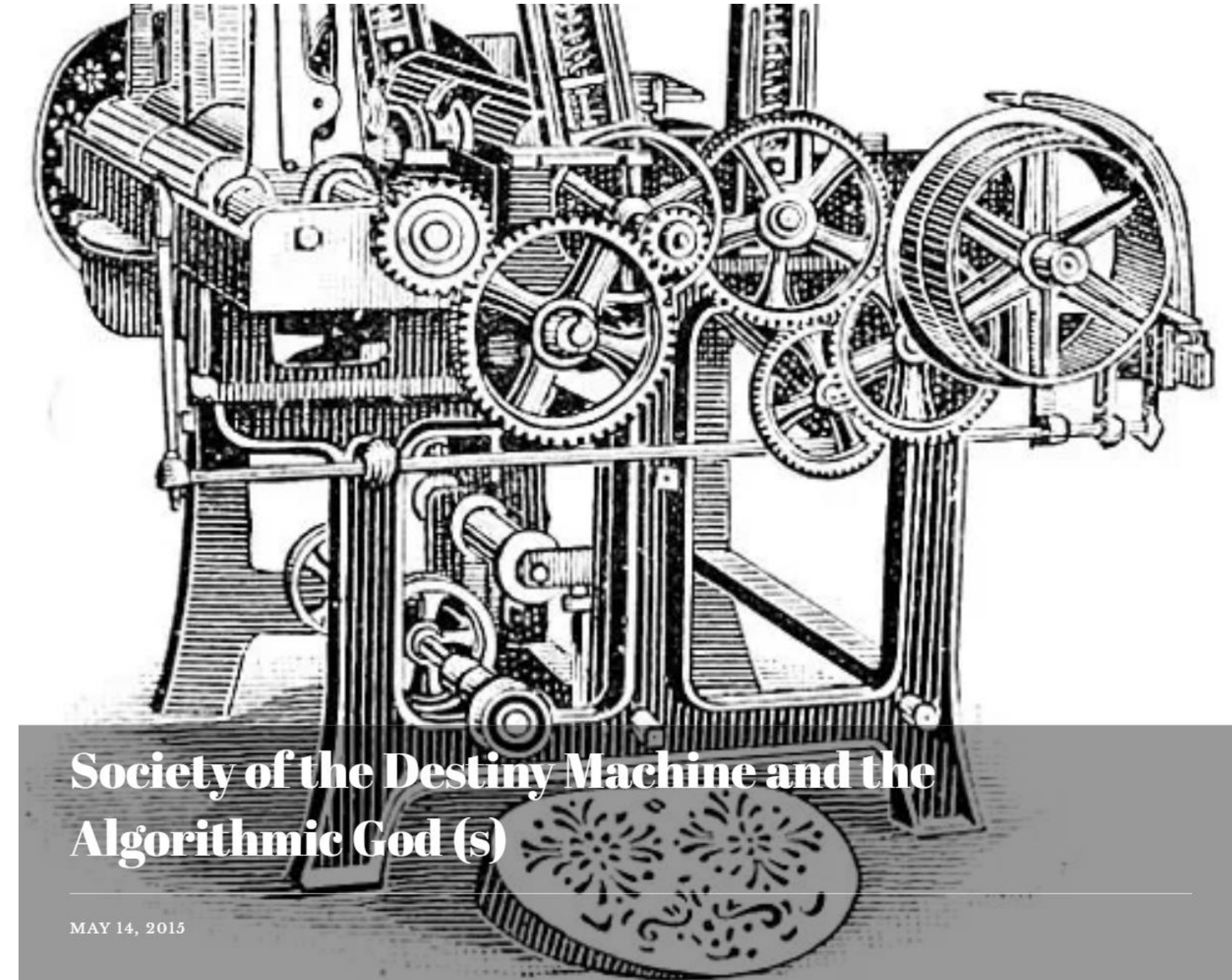
<https://news.harvard.edu/gazette/story/2019/03/harvard-professor-says-surveillance-capitalism-is-undermining-democracy/>

Nadler, Crain, Donovan (2018)  
**Digital Influence Machine**



Source: <https://datasociety.net/library/weaponizing-the-digital-influence-machine/>

Gry Hasselbalch (2015)  
**Society of the Destiny Machine...**

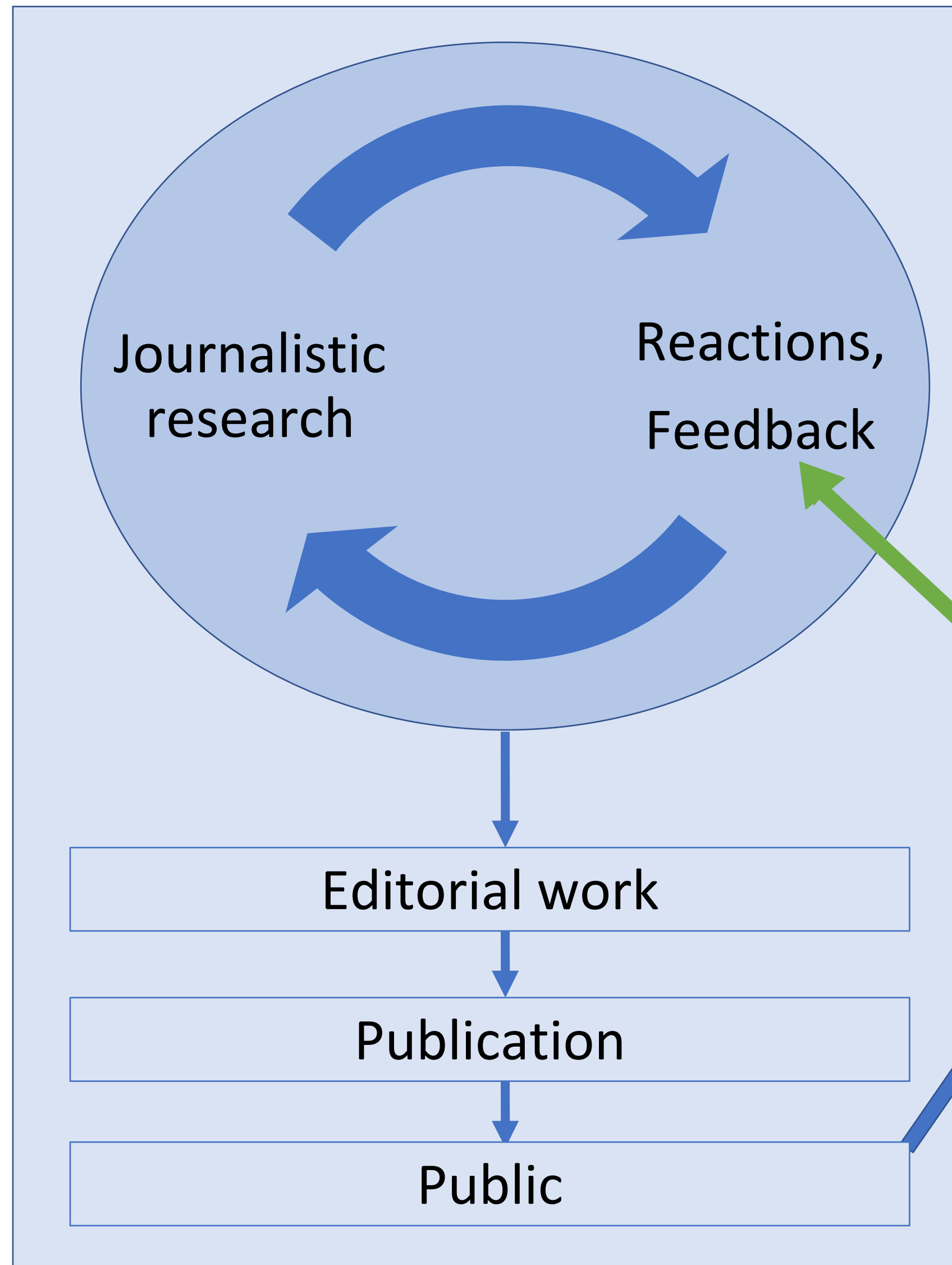


Source: <https://lnkd.in/eqE92bdn>

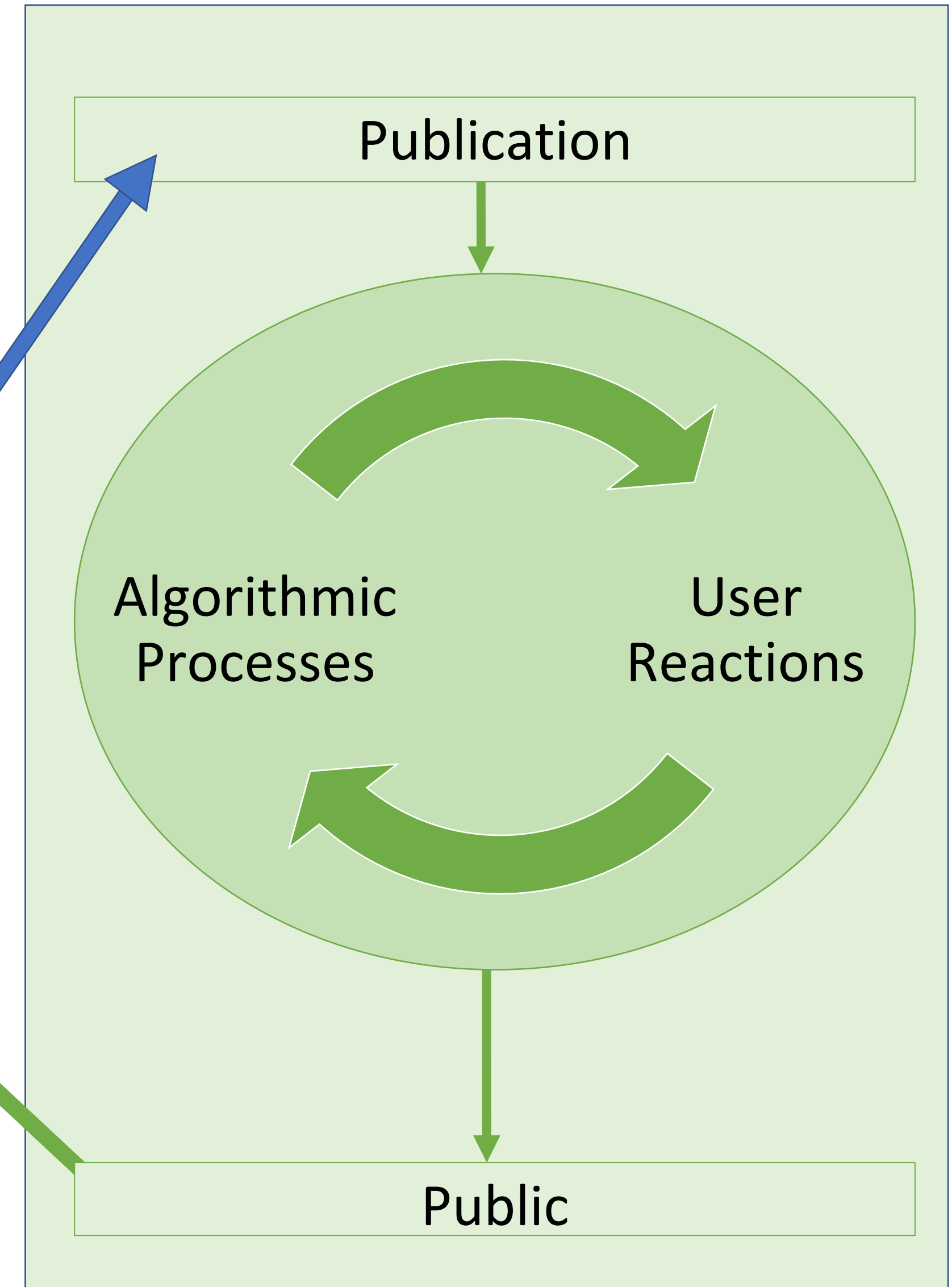
# Organization of algorithmic structured public

(Adapted, translated from Lischka & Stöcker 2017: 19 , based on Dobusch 2017)

## Editorial curated media



## Algorithmically curated intermediaries





Divided by algorithms:  
...?





## Karin Boczek

Position: Assistant professor for digital journalism

Organization: Catholic University Eichstätt-Ingolstadt

# Journalism in algorithmic spaces

 As a researcher comparing quality journalism across distribution channels: newsroom-only curated to intermediary-owned algorithmically curated platforms

 From my experience as a member of the nomination committee of Grimme Institut's "Grimme Online Award" 2023



# Platform Logics dominating journalism?

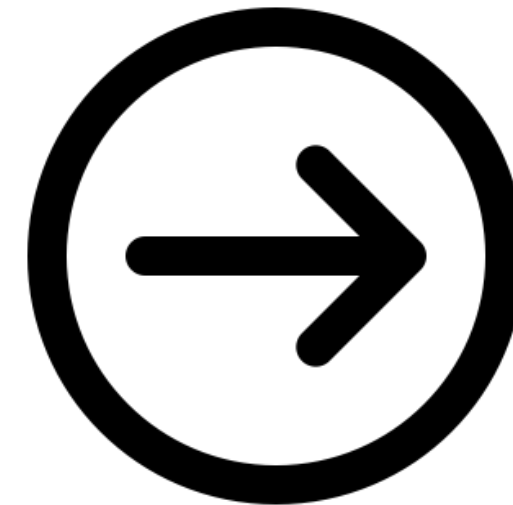
Research on this mostly focusing on Facebook. Results:

- Newsrooms pushing **engaging** news to platform to generate “Likes” and create potentially viral content =
  - Soft news
  - Emotional news
  - Subjective news
- Example: More engaging language on Facebook compared to corresponding news website articles: “What do you think?”

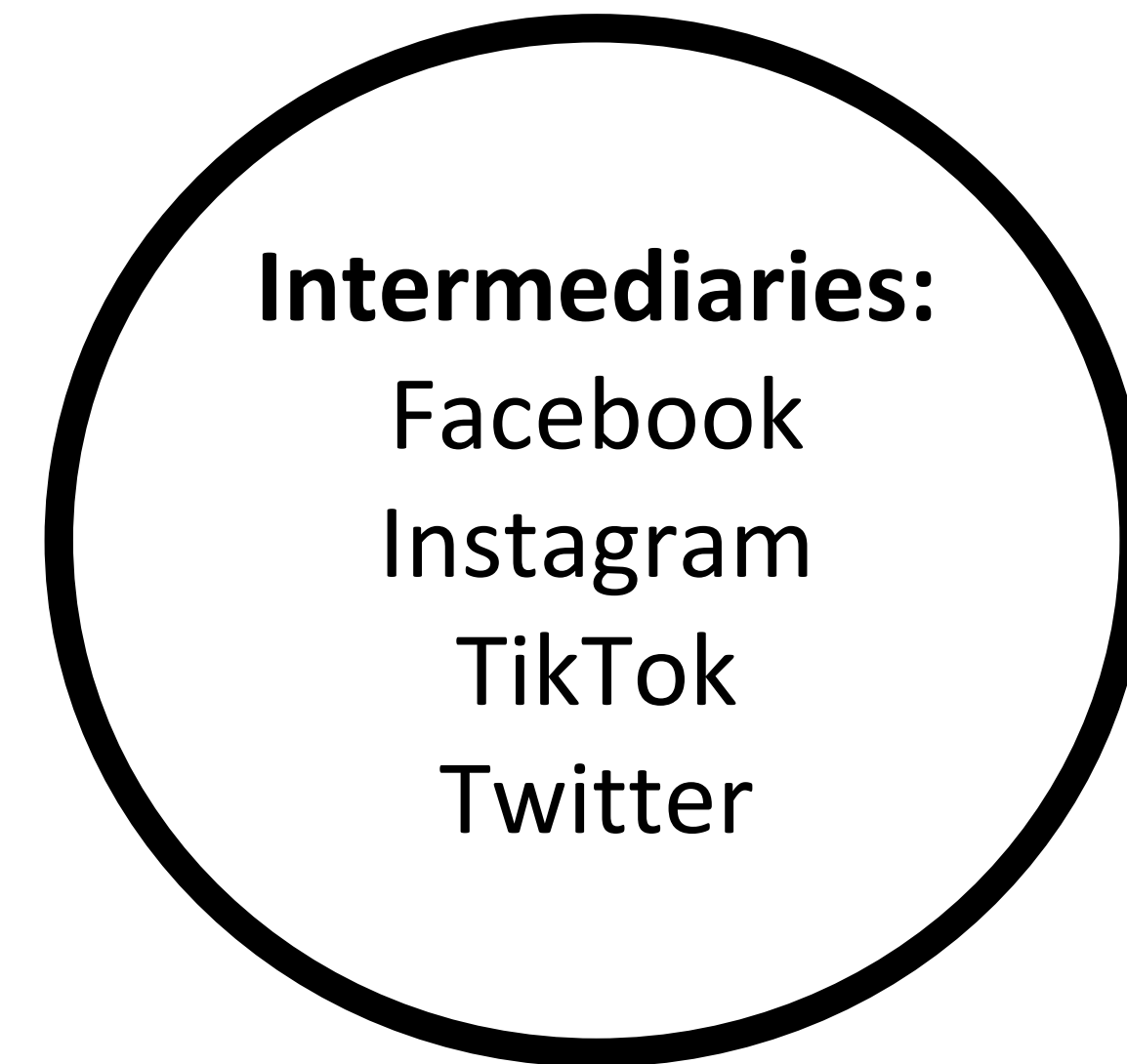
See: Welbers and Opgenhaffen 2019, Haim et al. 2021, Lischka 2021

# Analyzing content across spaces



Editorial curated media  
Website



Algorithmically curated  
intermediaries  
Social Media



# Two key results based on our sample

1.  Only fragment of articles of the websites is distributed via Social Media platforms: 44% - 1% depending on Social Media platform
  - Not only soft news, specific topics! No effect for opinion content!
2.  Content is not adapted to make to more click-able: no interaction features (“What do you think?”) or personalization
  - Full Peer-Reviewed Paper Available Open Access: Hase/Boczek/Scharkow (2022): Adapting to Affordances and Audiences? Digital Journalism
  - Caveats: Only 4 German quality media brands, no native content
  - So: what about other scenarios?



# From the nomination committee

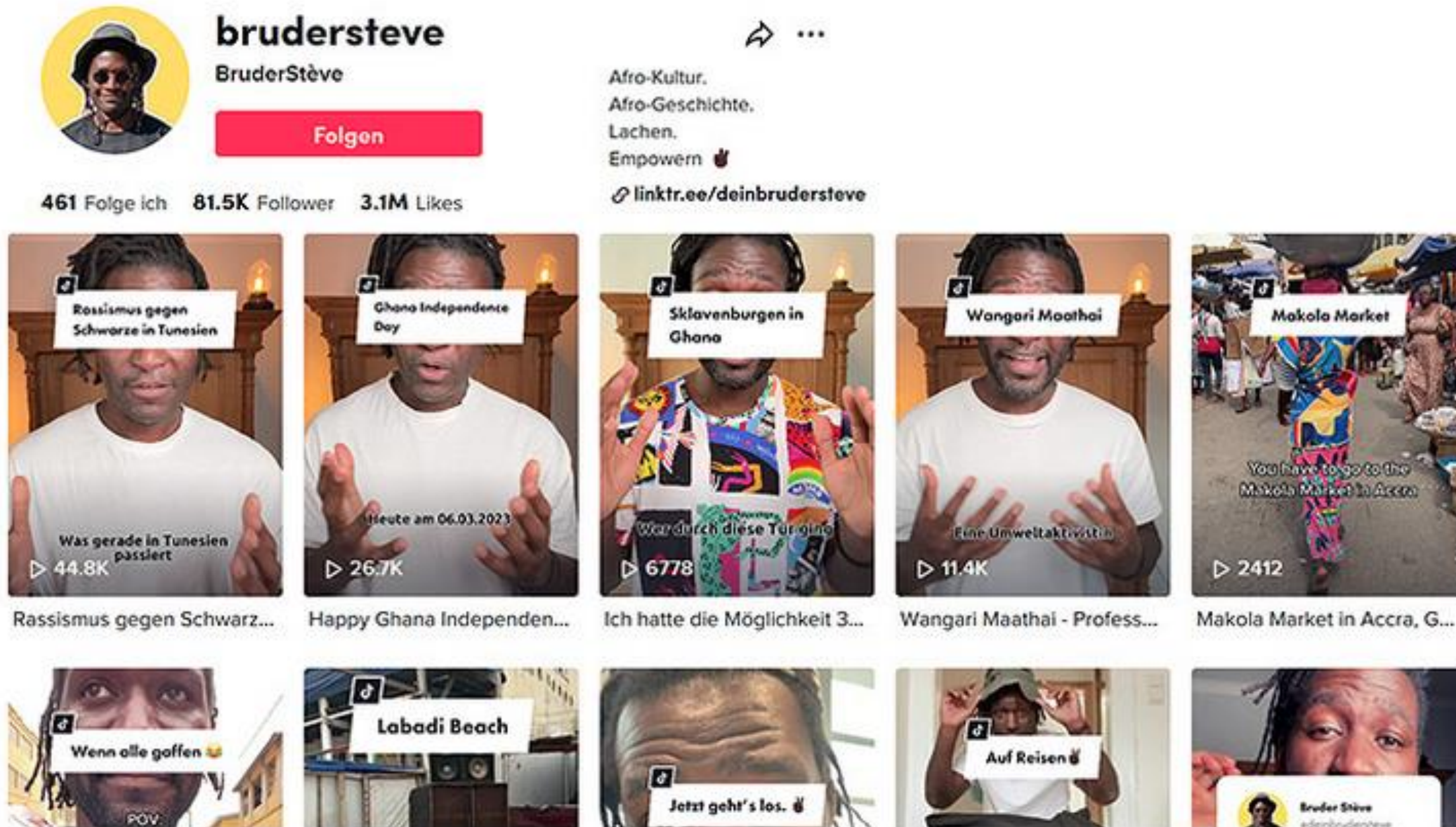
Against all odds: algorithmically curated intermediaries are spaces  
journalists and media creators choose for  
high quality content, including information  
diversifying voices heard and topics discussed in Germany

- Caveat: committee only looks at top content = at least 1 person must find the content prize-worthy

# Two Examples

## Preisträger des Grimme Online Award INFORMATION

### DeinBruderStève



The screenshot shows the TikTok profile for 'brudersteve'. The profile picture is a man wearing a hat. The bio reads: 'Afro-Kultur. Afro-Geschichte. Lachen. Empowern' and includes a link 'linktr.ee/deinbrudersteve'. The profile has 461 followers, 81.5K followers, and 3.1M likes. Below the profile are several video thumbnails with captions: 'Rassismus gegen Schwarze in Tunesien', 'Happy Ghana Independence Day', 'Ich hatte die Möglichkeit 3...', 'Wangari Maathai - Profess...', 'Makola Market in Accra, G...', 'Wenn alle gaffen', 'Labadi Beach', 'Jetzt geht's los.', 'Auf Reisen', and 'Bruder Steve'.

Preis verliehen für Idee und Umsetzung

Internetadresse: [www.tiktok.com/@brudersteve](https://www.tiktok.com/@brudersteve)

## Preisträger des Grimme Online Award KULTUR und UNTERHALTUNG

### Hand drauf



The screenshot shows the Instagram profile for 'hand.drauf'. The profile picture is a yellow circle with a white hand icon. The bio reads: 'Hand drauf DGS PUR Themen aus und für die Deaf Community – mit unseren tauben Hosts Iris, Toma, Björn & Tobias funk von ARD & ZDF go.funk.net/impressum'. The profile has 384 posts, 37.900 followers, and 128 posts followed. Below the profile are several video thumbnails with captions: 'Fernbeziehung', 'Sexarbeit', 'Lernen', 'Tansania', 'Hauptschule', 'Humor', and 'Feminismus'. The bottom row shows three video thumbnails: a grid of people, two women talking, and a woman making a hand gesture.

Preis verliehen für Redaktion und Präsentation

Internetadresse: [www.instagram.com/hand.drauf](https://www.instagram.com/hand.drauf)

# Questions to Karin Boczek?



Divided by algorithms:  
...?



## Lara Berger

Position: Research associate and doctoral candidate

Organization: University of Cologne

# Incentives in the digital sphere

 **Research project:** (How) does digitization shift the emotionality of news headlines?

Idea:

- Journalism has a *natural tendency* to focus on sensationalist content
- *Digitization* comes with incentives that might enhance this:
  - Each headline is in competition with thousands of others
  - Journalists receive immediate feedback
  - Ad-revenues can depend on click-rates

# Incentives in the digital sphere

 **Research project:** (How) does digitization shift the emotionality of news headlines?

## Threefold approach:

1. Comparative analysis of online and offline news from the same outlets
2. Experiment with professional journalists
3. Experiment with readers

# 🔍 Online VS. Offline Headlines

**Data for main analyses: Only economic news, includes article content**

news outlet	time-frame	N online	N offline	N total
<i>BILD</i>	01/01/2017 - 01/06/2022	4,680	3,092	7,772
<i>Der Spiegel</i>	01/02/2003 - 01/06/2022	79,192	14,296	93,488
<i>Die Welt</i>	05/07/2009 - 01/06/2022	65,226	24,535	89,761
<i>Die Zeit</i>	10/01/2009 - 01/06/2022	50,643	64,260	114,903
<i>Rheinische Post</i>	10/09/2020 - 01/06/2022	11,348	22,593	33,941
all from above	all available points in time	211,089	128,776	339,865

Data source: Lexis Nexis

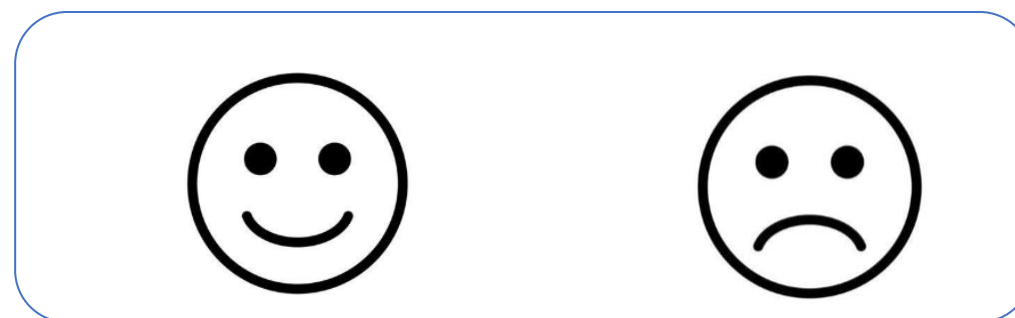
# 🔍 Online VS. Offline Headlines

## Classification of headlines:

Positive / Neutral / Negative



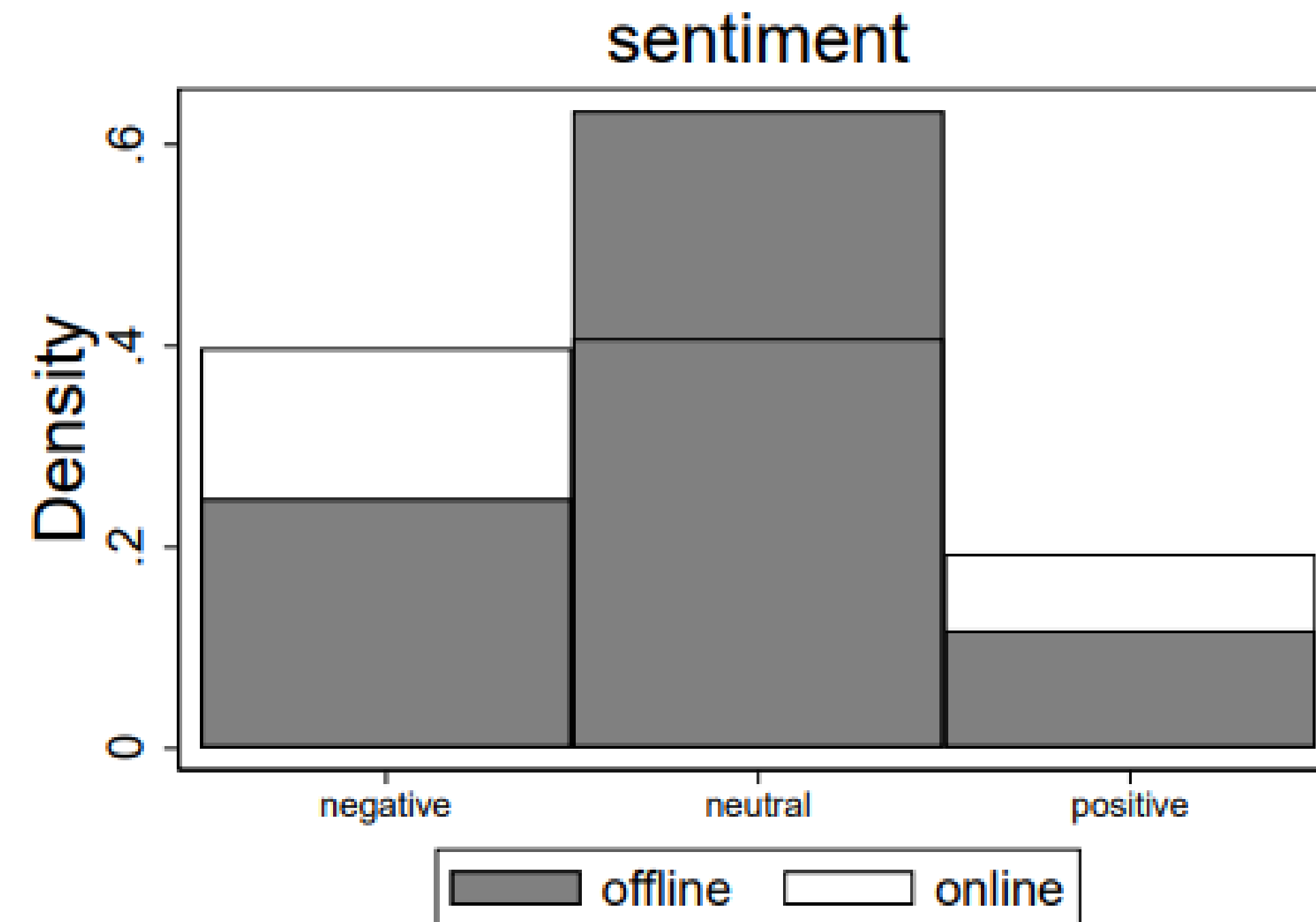
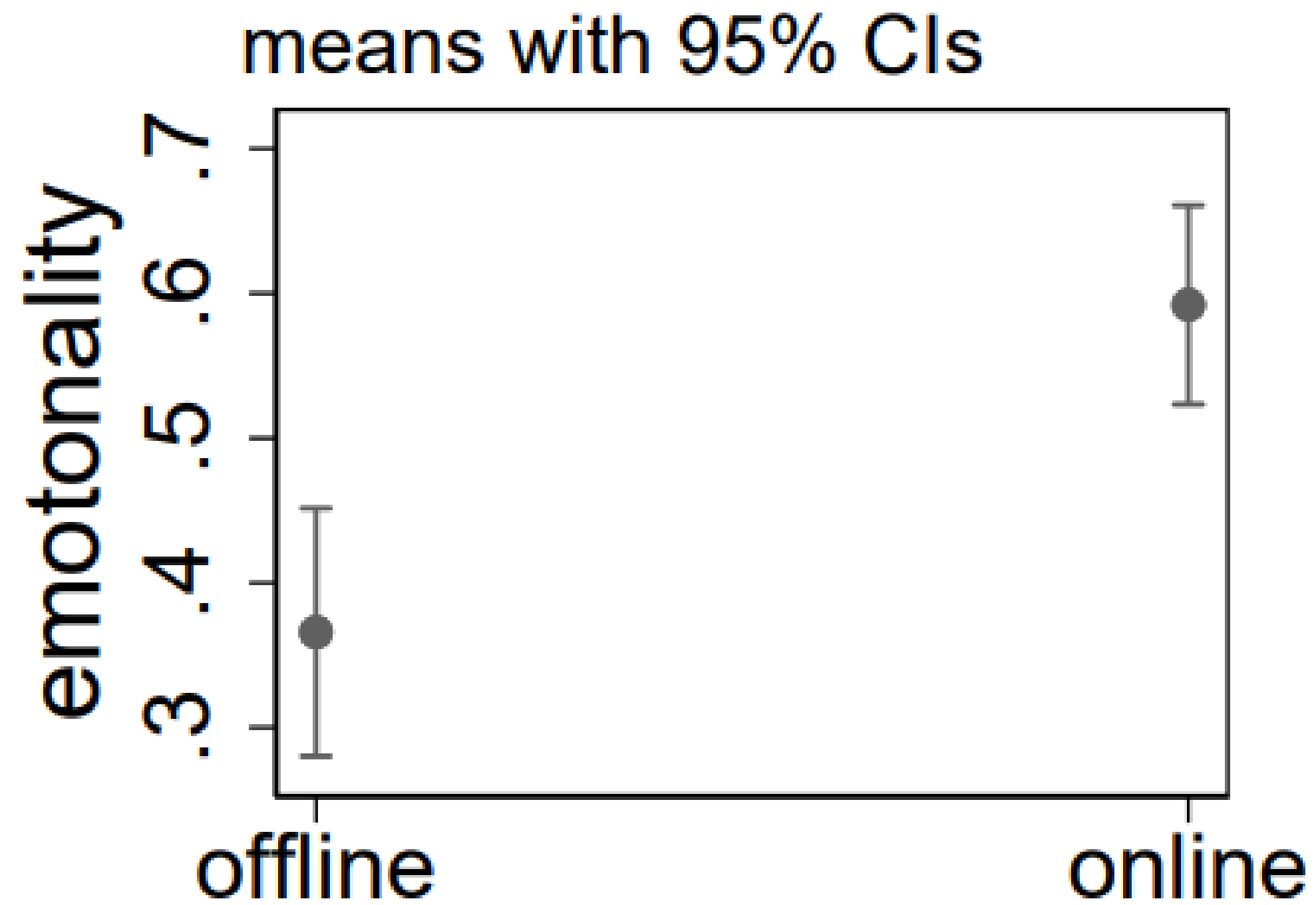
Emotional / Neutral





# Online VS. Offline Headlines

## Results:



# 🔍 Online VS. Offline Headlines

## **Very robust:**

- subset of matched articles
- non-economic headlines
- non-German news outlet
- other classification methodology
- different points in time

# 🔍 Experiment with Journalists

- **Sample:** 201 full-time journalists recruited via email by biggest German journalist association. Age: 18-80, work experience: 2-42 years, work for outlets from the entire political spectrum.
- **Experimental Design:** Journalists *have to choose* an either positive, neutral or negative *headline* for a given article about the German economy. *Randomization* occurs on the journalist's incentives.



control-group  
receives flat  
payment



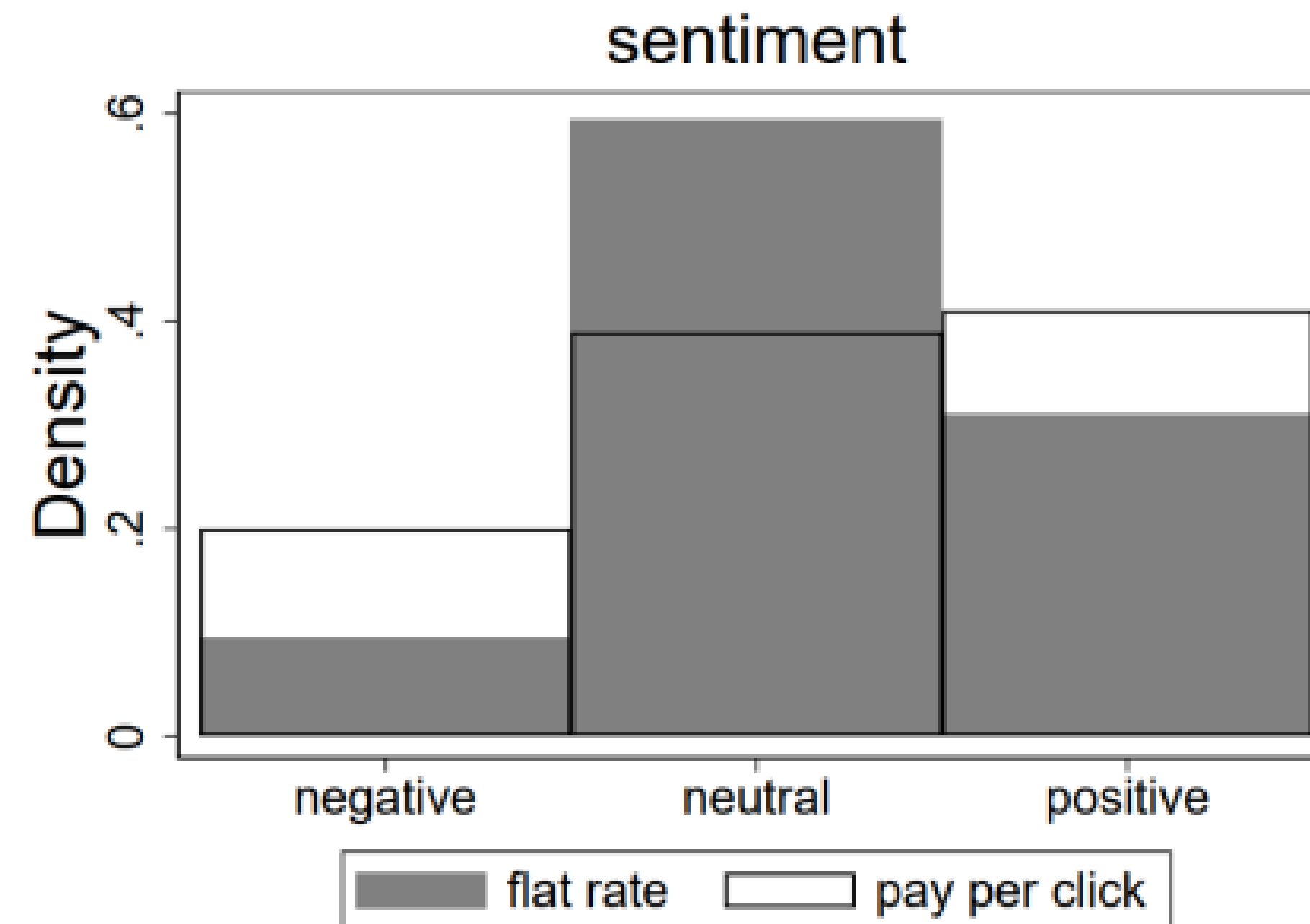
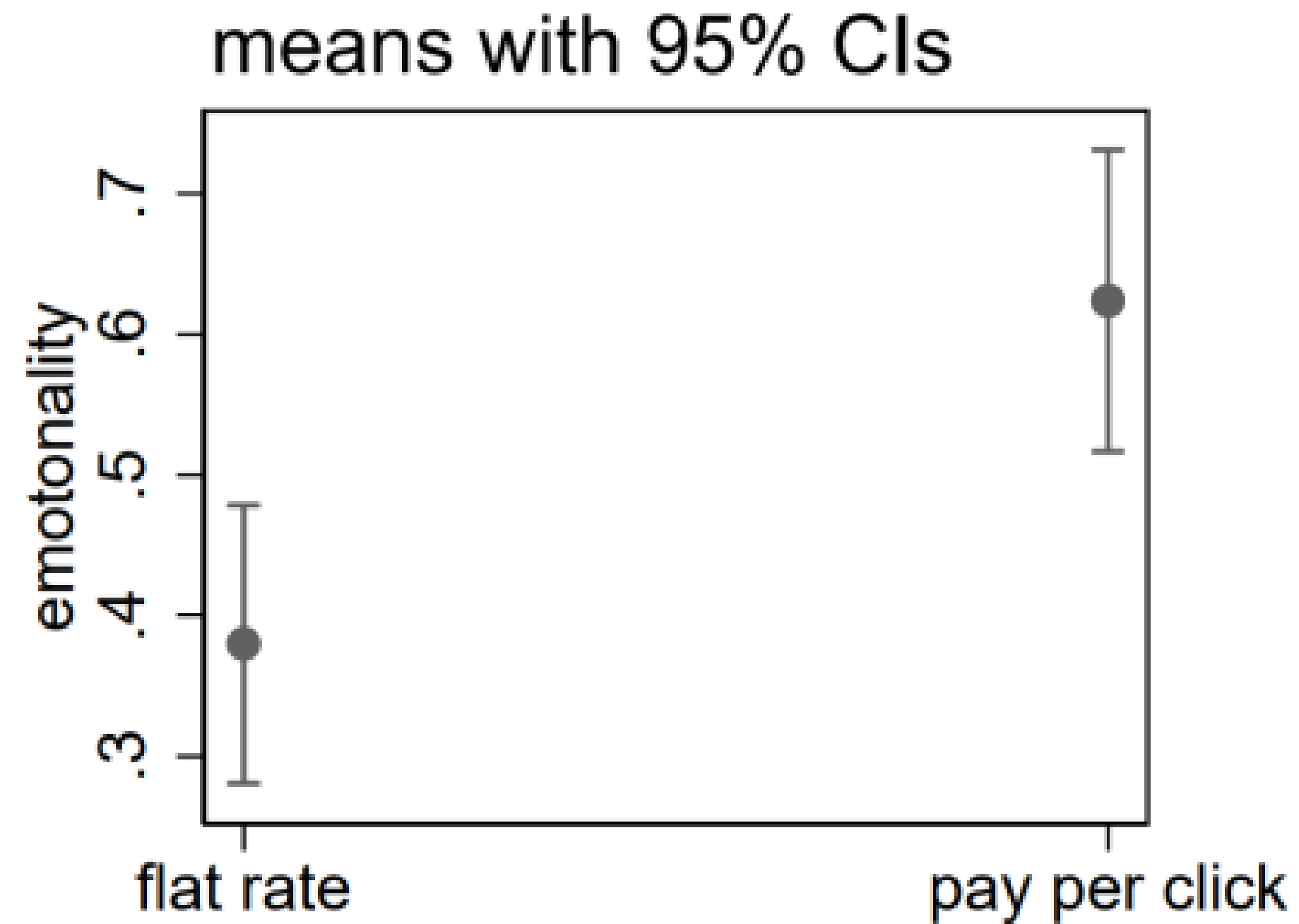
treatment-group  
is paid per click  
on headline





# Experiment with Journalists

## Results:



# 🔍 Experiment with Readers

## Experiment:

- 300 students are *randomly* exposed to one of the three headlines

## Results:

- Those who read an emotional headline have **beliefs** that are more **distorted** from the content in the article.
- Those who read a **positive** headline feel **better**.

# Caveats

## News dataset:

- No causal claims possible
- Only dimension of headline sensationalism analyzed

## Experiments so far:

- Only one topic tested
- Only German journalists
- Non-representative sample of readers

# Questions to Lara Berger?

# Discussion

- Does the empirical findings match with your experiences in your working environment?
- How data-driven / algorithmically influenced are editorial decisions from your experience?

# Discussion

- What are the consequences for media quality?
- How can journalists be supported? Role of guidelines in editorial work?

# Discussion

- What do you think about the relationship between journalism as a social machine and the society as social machine?

# Thank you for your attention!

## Contact:

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Grimme-TV auf YouTube



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