A background image showing a crowd of people, with a focus on several hands holding and using smartphones. The image is slightly blurred, emphasizing the collective use of mobile technology.

**ADD**

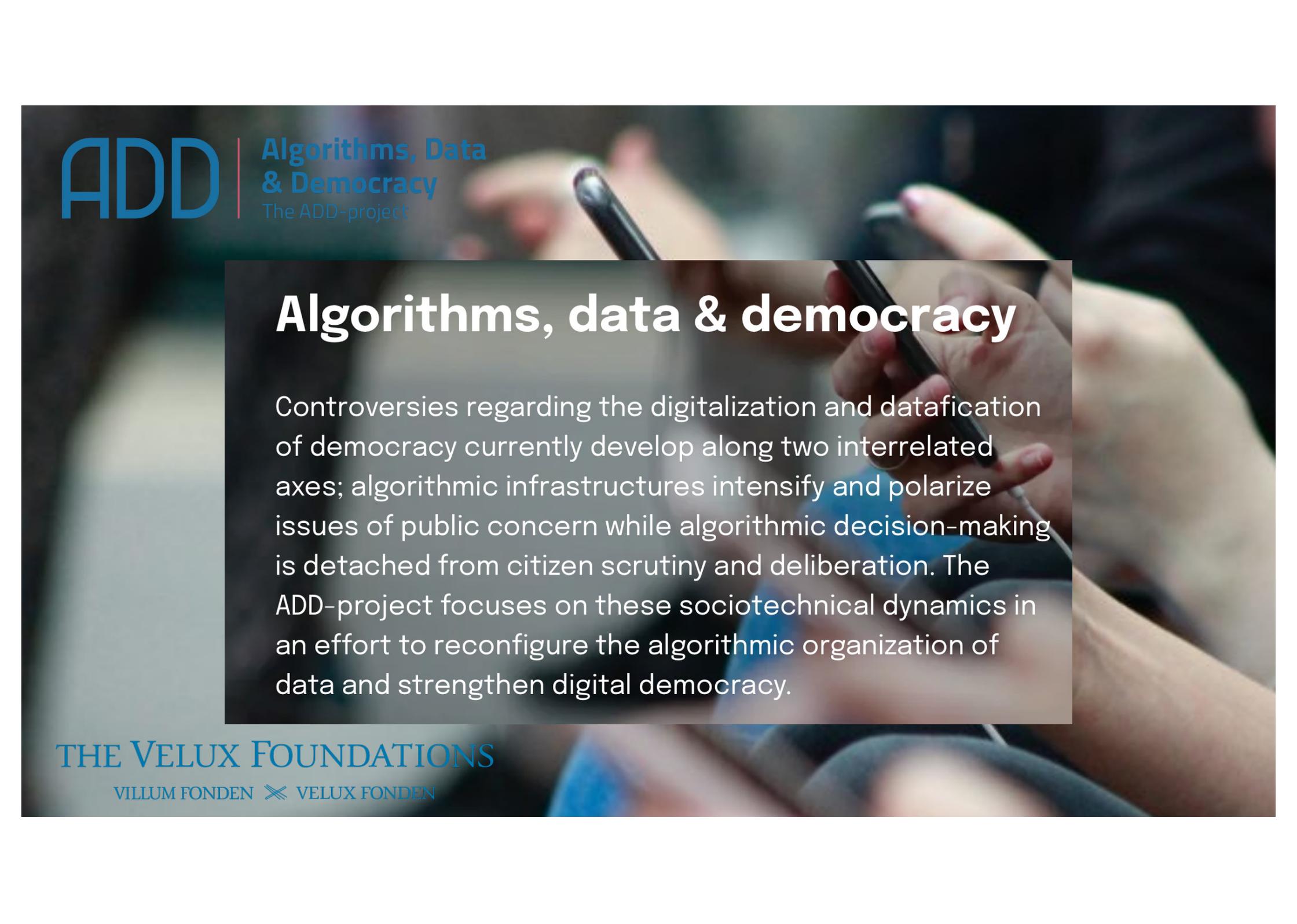
**Algorithms, Data  
& Democracy**  
The ADD-project

## Thinking with and about automated persuasion

*Sine N. Just*  
*Department of Communication and Arts*  
*Roskilde University*

**THE VELUX FOUNDATIONS**

VILLUM FONDEN ✕ VELUX FONDEN

The background of the slide is a blurred photograph of several hands holding smartphones, suggesting a crowd or a public gathering. The image is dark and out of focus, with the primary focus on the text overlaid on it.

# ADD

**Algorithms, Data  
& Democracy**

The ADD-project

## Algorithms, data & democracy

Controversies regarding the digitalization and datafication of democracy currently develop along two interrelated axes; algorithmic infrastructures intensify and polarize issues of public concern while algorithmic decision-making is detached from citizen scrutiny and deliberation. The ADD-project focuses on these sociotechnical dynamics in an effort to reconfigure the algorithmic organization of data and strengthen digital democracy.

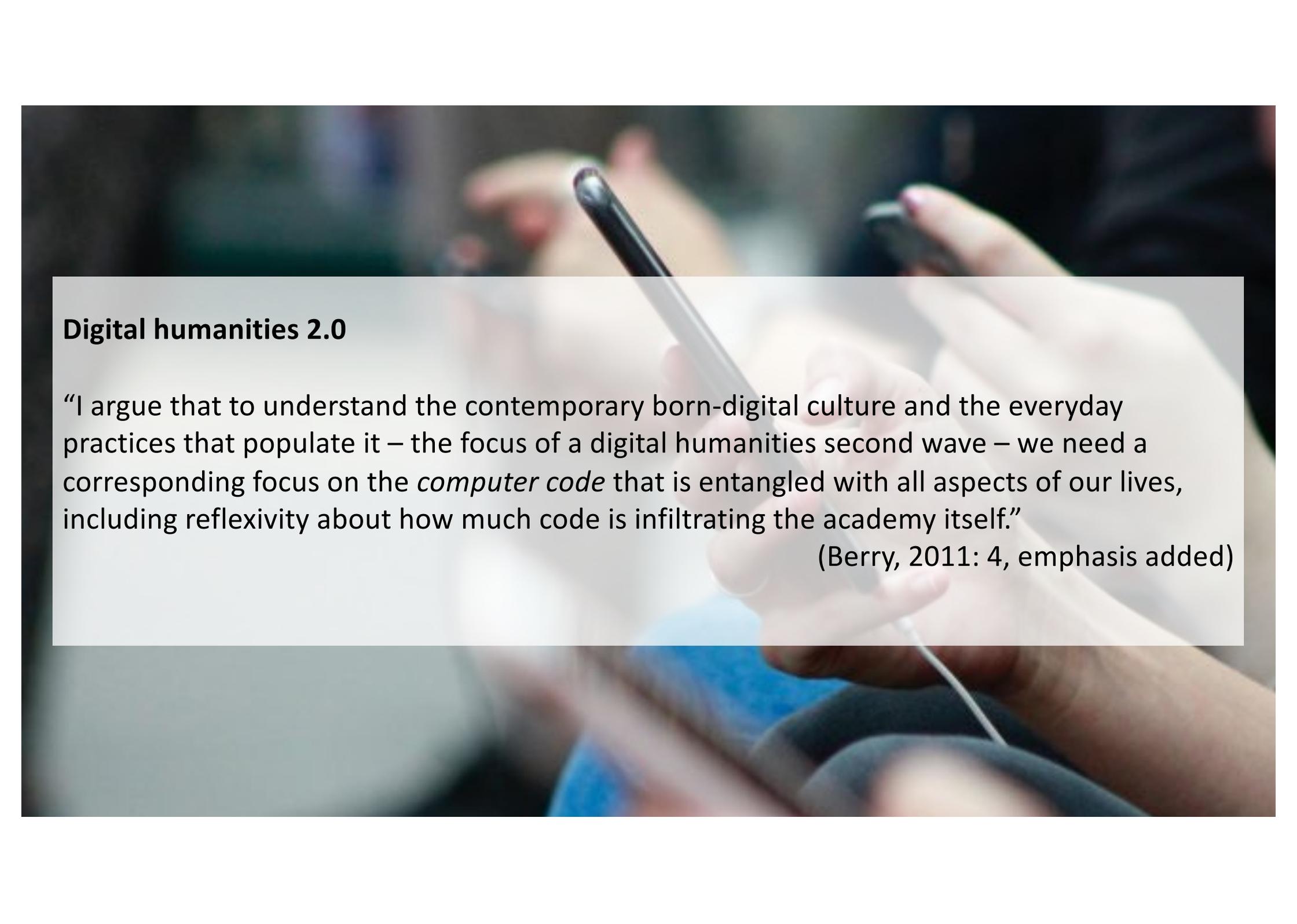
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## Agenda

- Digital humanities 2.0
- Automated persuasion
- Alternative hermeneutic motor schemes
- Alternative practices



## Digital humanities 2.0

“I argue that to understand the contemporary born-digital culture and the everyday practices that populate it – the focus of a digital humanities second wave – we need a corresponding focus on the *computer code* that is entangled with all aspects of our lives, including reflexivity about how much code is infiltrating the academy itself.”

(Berry, 2011: 4, emphasis added)

Thinking with  
automated  
persuasion

# rhetical { code } studies

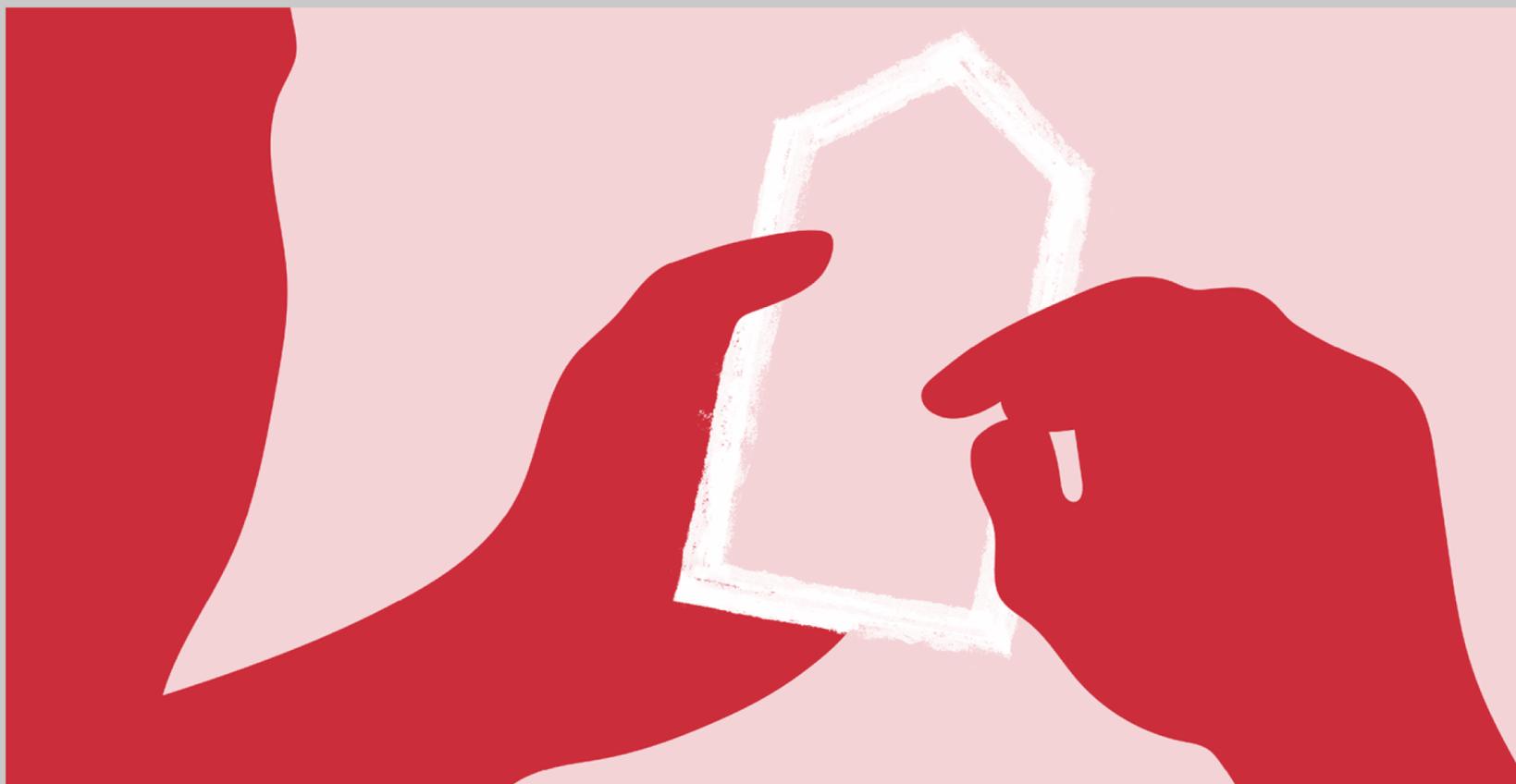
discovering .arguments  
in .and .around .code

```
Cyborg.prototype.randomize = function(list) {  
  randomTerm = list[Math.floor(Math.random() * (list.length))];  
  return randomTerm;  
}  
Cyborg.prototype.enthymemeGenerate = function() {  
  amount = this.randomize(quantity);  
  subject1 = this.randomize(noun);  
  subject2 = this.randomize(noun);  
  action = this.randomize(verb);  
  directObject = this.randomize(noun);  
  this.sentence("major", amount, subject1, subject2, action, directObject);  
  this.sentence("minor", amount, subject1, subject2, action, directObject);  
  return output;  
};
```

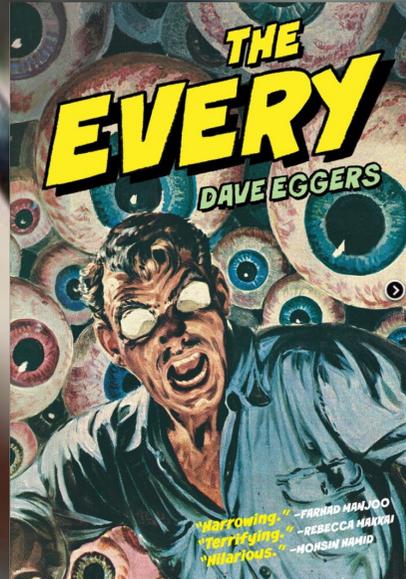
# Angreb i den offentlige debat på Facebook

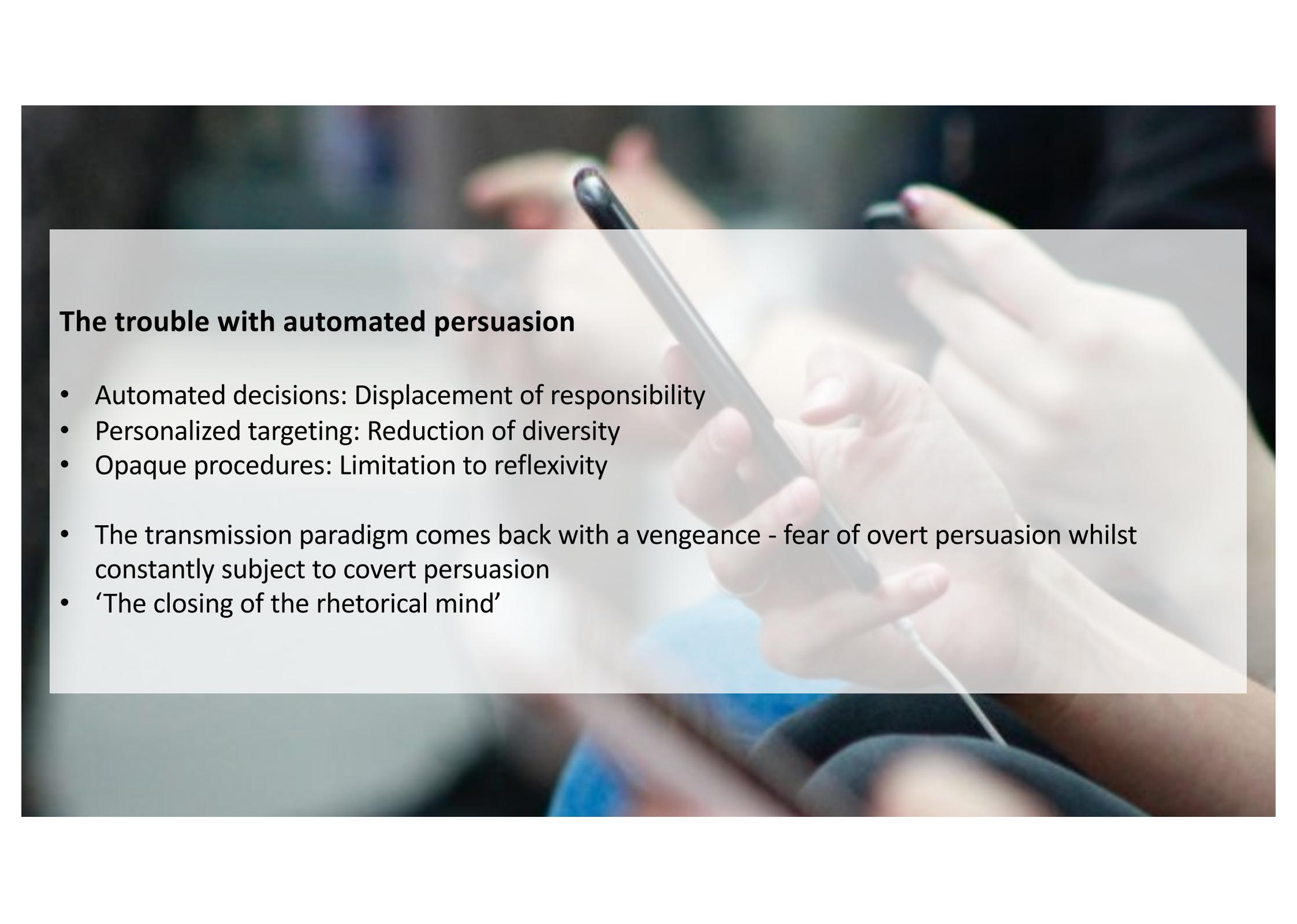
Analyse & Tal F.M.B.A har med støtte fra TrykFonden udviklet den hidtil mest avancerede dansksprogede algoritme til detektion af angreb i den offentlige debat på Facebook. Baseret på assisteret maskinlæring og deep learning-teknologi er det nu muligt at kortlægge andelen af hhv. angreb, anstødeligt og hadefuldt sprog i kommentarsporene på offentlige danske Facebooksider.

&#



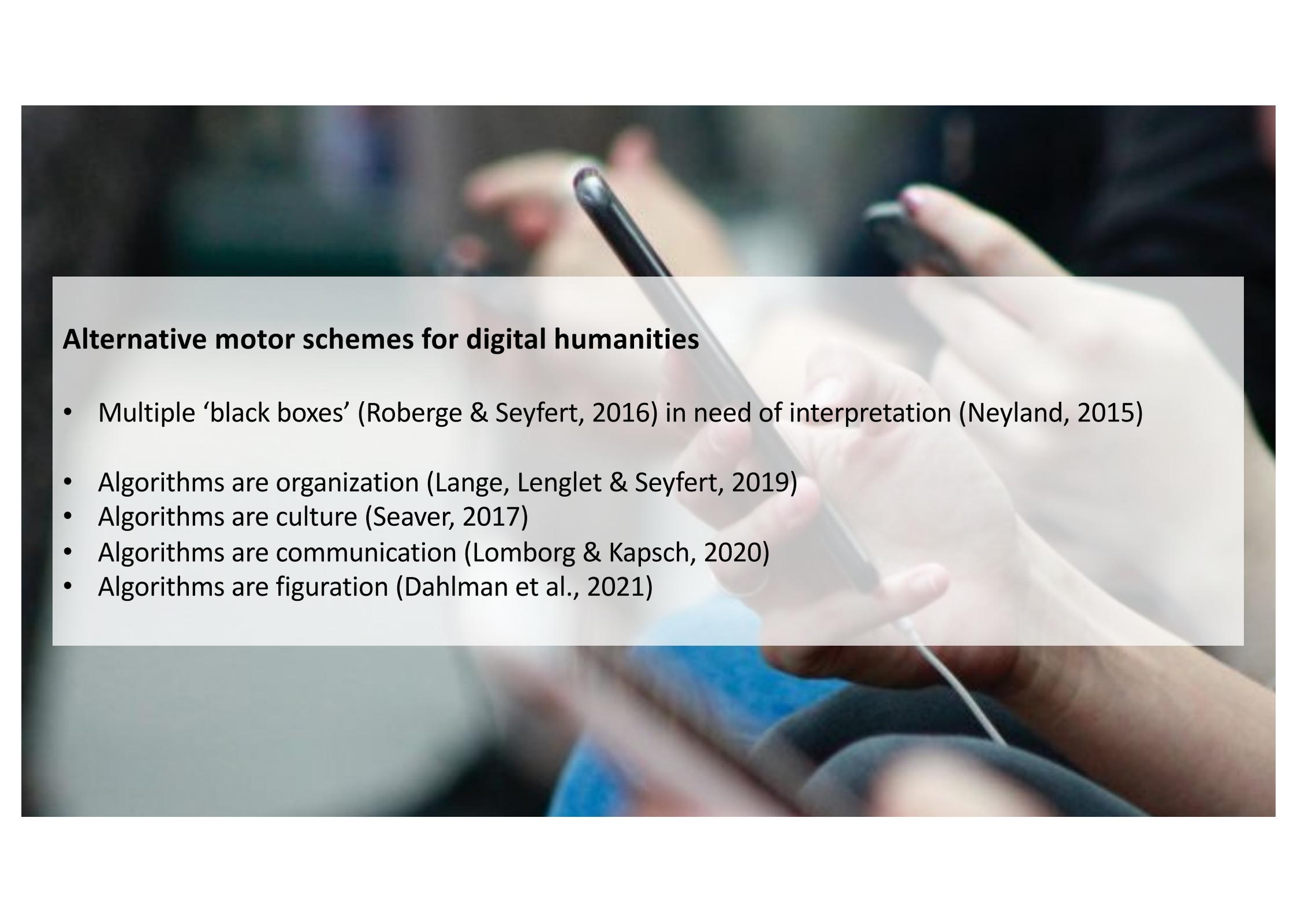
Thinking about  
automated  
persuasion





## The trouble with automated persuasion

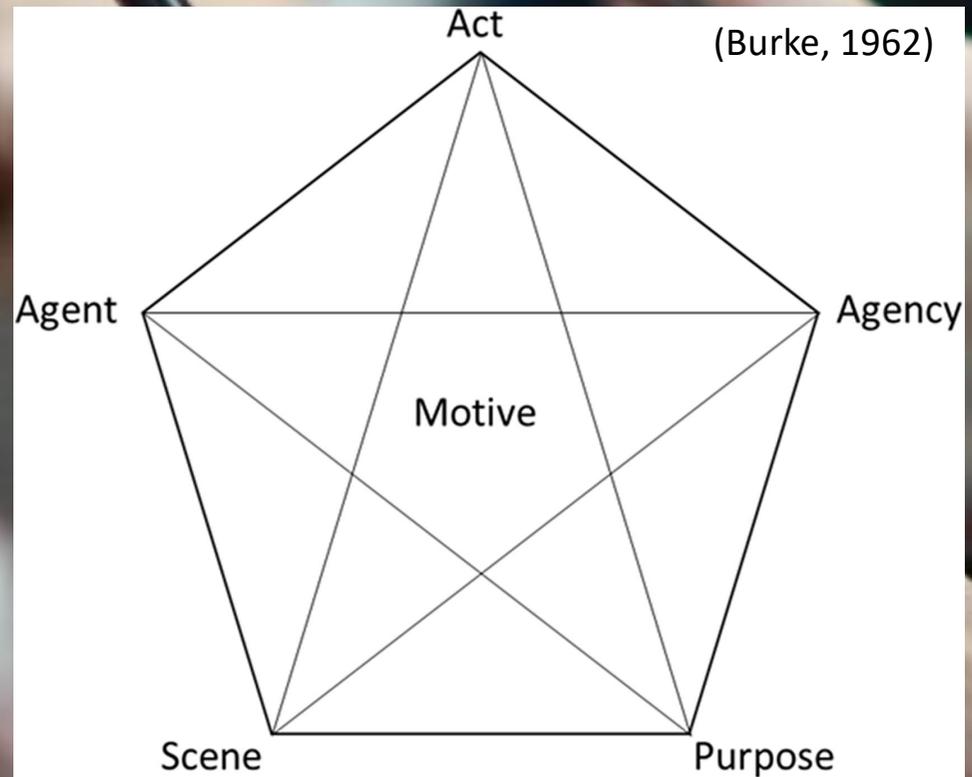
- Automated decisions: Displacement of responsibility
- Personalized targeting: Reduction of diversity
- Opaque procedures: Limitation to reflexivity
- The transmission paradigm comes back with a vengeance - fear of overt persuasion whilst constantly subject to covert persuasion
- 'The closing of the rhetorical mind'

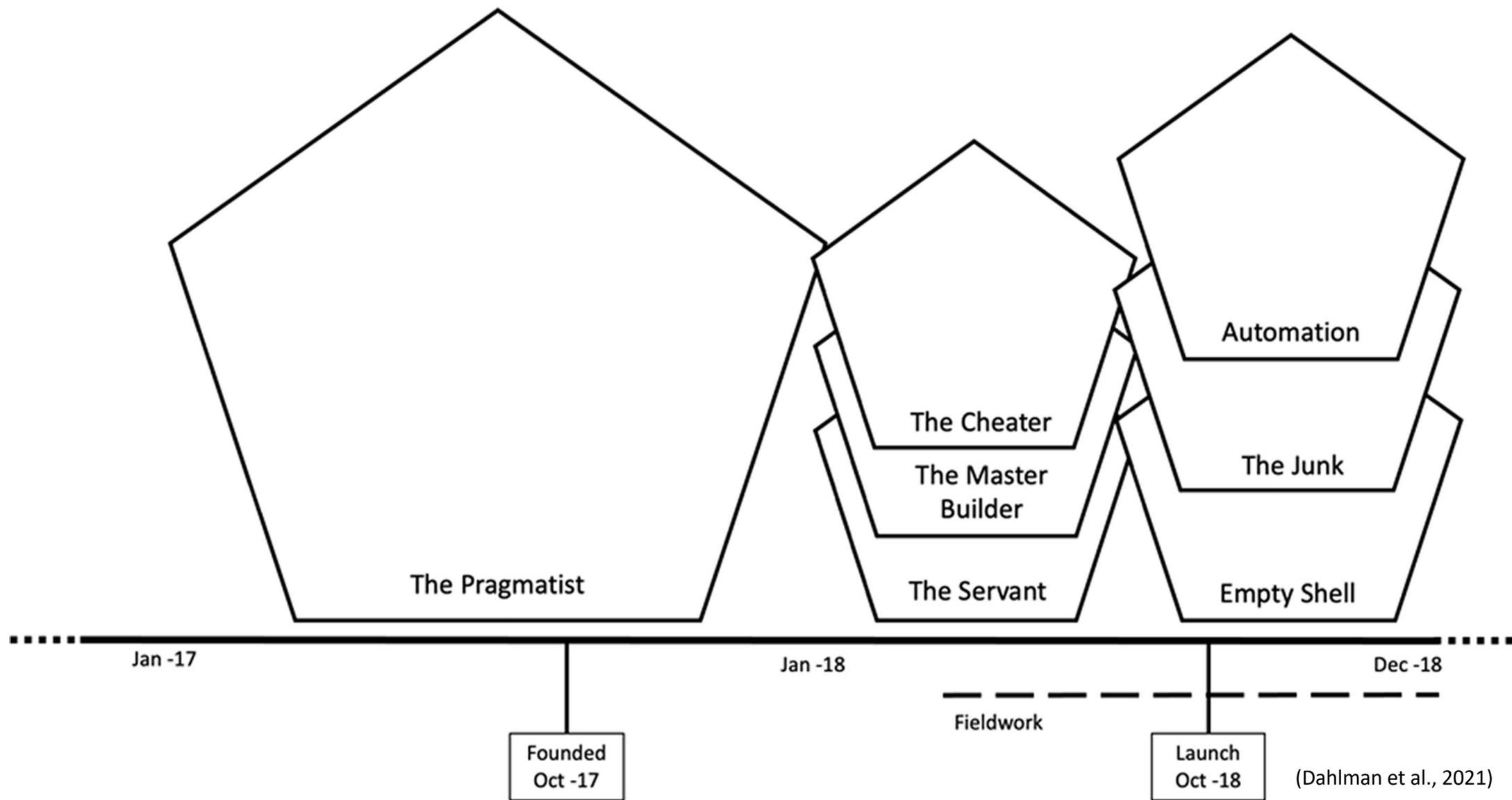


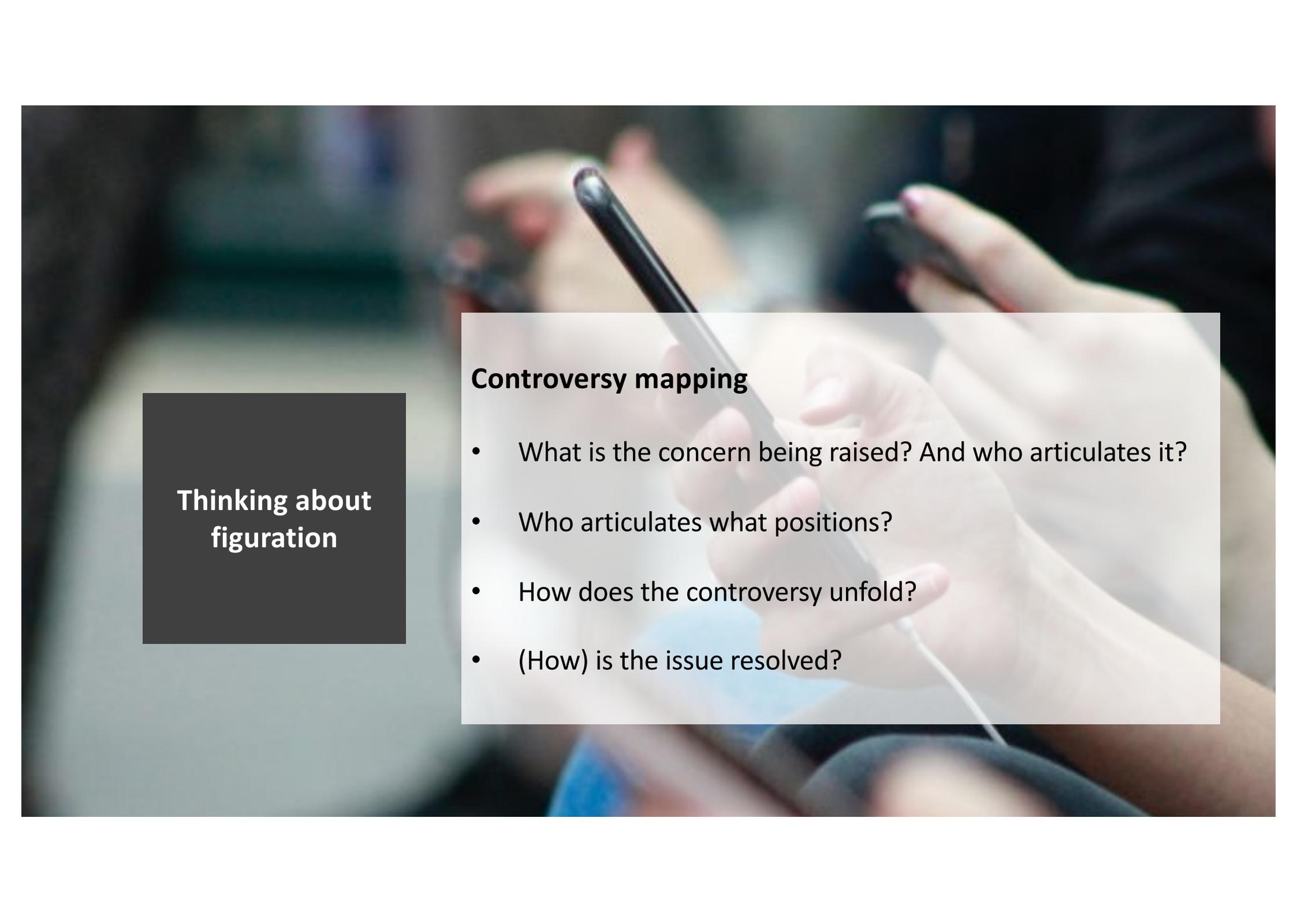
## Alternative motor schemes for digital humanities

- Multiple 'black boxes' (Roberge & Seyfert, 2016) in need of interpretation (Neyland, 2015)
- Algorithms are organization (Lange, Lenglet & Seyfert, 2019)
- Algorithms are culture (Seaver, 2017)
- Algorithms are communication (Lomborg & Kapsch, 2020)
- Algorithms are figuration (Dahlman et al., 2021)

Thinking with  
figuration





A blurred background image showing several people's hands holding and using smartphones. The focus is on the devices and the interaction with them, suggesting a theme of digital communication or technology use.

**Thinking about  
figuration**

### **Controversy mapping**

- What is the concern being raised? And who articulates it?
- Who articulates what positions?
- How does the controversy unfold?
- (How) is the issue resolved?

# HOW DO ALGORITHMS MAKE THE NEWS?

6K named entities extracted from 34K Danish news media articles about algorithms, machine learning, and artificial intelligence.

The entities are mapped as a co-word network where each node is an entity (a word or expression) and an edge signifies co-occurrence in the same articles. Only the 100K edges with highest Pointwise Mutual Information are kept in the visualization.

**RESEARCH & EDUCATION**  
National Danish initiatives in research and education have been focusing on competence development and capacity building in the field of AI and machine learning. Frequently named entities in this space include universities, research groups, and their public and private partners.

**SOCCER**  
AI is increasingly used when, trained on the past performance of players, it replaces the manager and sets the team. Or at least, that is a frequently talked about idea in the world of soccer.

**DANISH BUSINESS**  
As a commercial opportunity and an innovation agenda, AI makes the business news where companies invest in it. Frequently named entities in this space include Danish companies, their R&D initiatives and partners, as well as the public institutions supporting them.

**TECH**  
New inventions make the news, particularly when it involves consumer goods, the smart phones or voice-controlled virtual assistants. This is one of the few areas where named entities include technical jargon like TensorFlow, JavaScript, Python, or Fortran, which seems to stem from articles in specialized trade journals.

**DANISH POLITICS**  
Data, algorithms, digitalization, and big tech have become matters of concern for a range of actors in the domestic political arena. Frequently named entities in this space include names of politicians, political parties, interest organizations, and government agencies. They write opinion pieces or make statements on everything from data leaks and predictive monitoring to online debate culture and Silicon Valley disrupting the labour market.

**THE CHINESE DILEMMA**  
Tech collaboration with China in areas like AI and media networks becomes a problem when Denmark wants to take a clear stance on human rights. Frequently named entities in this space include issues like the Uighurs, Tibet, or Hong Kong, as well as Chinese politicians and tech companies.

**EUROPEAN POLITICS**  
Issues involving data and algorithms in neighbouring countries make the Danish news, from talks about EU's new AI strategy to national regulation against data speech on social media. Frequently named entities in this space include names of European and in particular German and British politicians, media outlets, and political movements.

**INTERNATIONAL CONFLICT**  
The mix of autocratic regimes, geopolitical conflict zones, and AI produces a broad variety of noteworthy stories. These range from intelligence services operating on social media during the Arab Spring or a village of Moroccan traders meddling in the American election, to Mohammed bin Salman allowing a female AI in Saudi Arabia or images of Kim Jong-Un and other controversial figures being banned on TikTok.

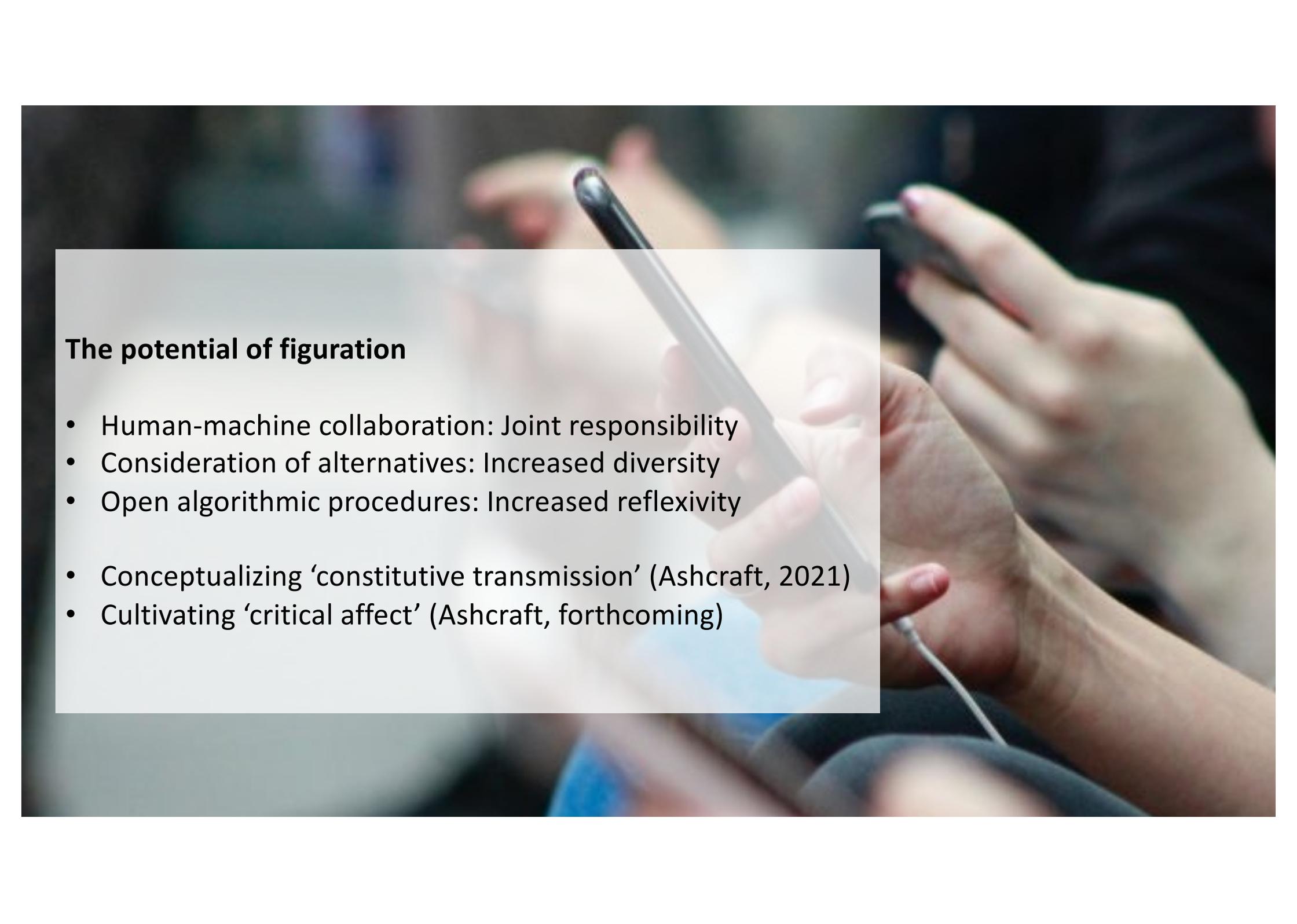
**AMERICAN POLITICS**  
The leak of Hillary Clinton's emails, the Cambridge Analytica scandal, the CreditRisk conspiracy, or the role of Julian Assange. American presidential politics have become mired in data controversies. This also includes the responsibility of tech giants like Google or Meta in the events leading up to the January 6th insurrection and other examples of disinformation.

**CLIMATE & DEVELOPMENT**  
The online blog universe of the trade journal, Ingeniøren (The Engineer) hosts debates about algorithms in climate modeling or the future of augmented reality - often with a focus on, or in the same context as stories from, developing countries.

**MUSIC INDUSTRY**  
How are streaming platforms like Spotify changing business models in the music industry? How do you produce to grab the attention of the TikTok algorithm? Frequently named entities in this space mainly include famous artists.

**ART & ENTERTAINMENT**  
One of the most common ways in which machine learning and AI hit the news is through the world of fiction. Be it cinema, books, exhibitions, or video games, this is where we can speculate about our future lives with algorithms. Frequently named entities in this space include a lot of sci-fi authors, characters, and stories.





## The potential of figuration

- Human-machine collaboration: Joint responsibility
- Consideration of alternatives: Increased diversity
- Open algorithmic procedures: Increased reflexivity
  
- Conceptualizing 'constitutive transmission' (Ashcraft, 2021)
- Cultivating 'critical affect' (Ashcraft, forthcoming)

A background image showing several people's hands holding and using smartphones, suggesting a focus on digital technology and its impact on society.

# ADD

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Thank you!

And stay in touch:

[www.algoritmer.org](http://www.algoritmer.org) / [www.algorithms.dk](http://www.algorithms.dk)  
[sinenjust@ruc.dk](mailto:sinenjust@ruc.dk)

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