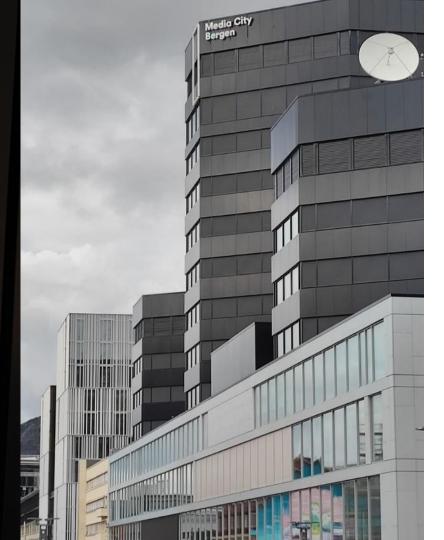
## Al and the disinformation landscape

Al in Research: Possibilities and Challenges The Finnish Society of Sciences and Letters, 13.02.2025

> Carl-Gustav Lindén Professor, University of Bergen carl-gustav.linden@uib.no







#### Tweets & replies Tweets Media



Pinned Tweet



Teemu Roos @teemu\_roos · Oct 29

My advice for illustrating Al related stuff. Avoid:

- circuits
- brains 🥮
- brains made of circuits
- mathematics
- images of space, or the Earth from space
- blue



- humanoid robots 🤐



- above all: the Terminator!

#### Good choices:

- generally: people (like. just. people) 😡 🚲



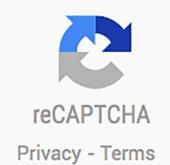
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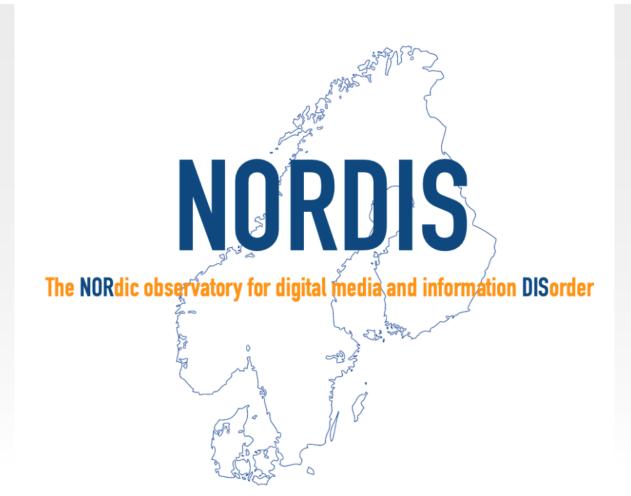




Show this thread







#### Faktisk.no

- Est. 2017
- Owned by the six largest Norwegian media companies
- Listed among the six most important media collaborations in the world

#### University of Bergen

- Most cited university in Norway
- 18.500 students, 4.000 staff members
- Load of WP3: Technology and innovation

#### Factiverse

- Est. 2019
- Research-based AI with focus on explainability and trust
- Partner for fact-checkers in more than 10 countries
- 5.000+ freemium users since launch Q2 23

#### TjekDet

- Est. 2016
- Owned by non-profit organisation
- More than 1.000 fact-checks
- More than 400 editorial articles on topics related to information disorder



#### Källkritikbyrån

- Est. 2019
- Est. by the three founders of its predecessor Viralgranskaren at the free newspaper Metro
- Instituted Källkritikens dag

#### Faktabaari

- Est. 2014
- Registered by non-profit organisation
- Extensive national and internal fact-based information circulation and fact-checks

#### Linnaeus University

- Est. 2010
- Faktajouren
- 2,200 employees
- +40,000 students

#### UNIVERSITETET I BERGEN

What is Generative AI?

Ethical problems

Should we be concerned?

The problem with AI disinformation

The disinformation dilemma

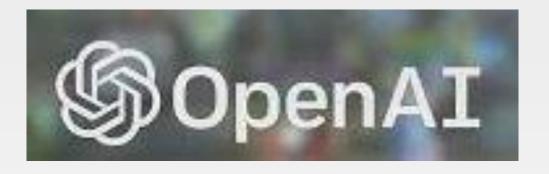
Technology is not enough

Who is responsible?

How big are risks in Finland?

### **What is Generative Al?**

- The Guardian: "a broad label describing any type of artificial intelligence that uses unsupervised learning algorithms to create new digital text, images, video, audio, or code."
- Swedish Radio: "chatbots that can create new content (e.g. text, images, sound, video and code) based on user instructions"



"Our mission is to ensure that artificial general intelligence—Al systems that are generally smarter than humans—benefits all of humanity."

Products: ChatGPT, Dall-e, Whisper, Sora

## **Ethical problems**

- 'Al models can produce entirely false images and articles. They also replicate the existing societal perspectives, including historic biases' (the *Financial Times*)
- 'With computer-generated content, it is complex to guarantee the reliability of facts presented as true' (ANP)
- 'We should be aware that bias/prejudice may be inherent in the models, and editorial/legal considerations may be needed regarding objectivity and impartiality' (SVT)

### Should we be concerned?

- Previously, disinformation was created by humans
- Generative AI can become a new effective tool for "synthetic" propaganda
- Hyper-realistic deepfakes
- Personalised propaganda
- Real-time propaganda bots
- Perfect tools for trolls
- Social media does not carry responsibility for political lies
- Will Open Al monitor ChatGPT and propaganda?

### **Information disorder**

- Disinformation: false information deliberately and often covertly spread
- Misinformation: incorrect or misleading information
- Fake news: news articles that are intentionally and
- verifiably false and could mislead readers
- Malinformation: hate speech, leaks, harassment
- Propaganda: the spreading of ideas, information, or rumor for the purpose of helping or injuring an institution, a cause, or a person

## What experience connected four billion people last year?

- United States
- EU member states
- Russia
- Great Britain
- India
- Indonesia
- Mexico
- Taiwan

#### 2024: The Ultimate Election Year Around the World

National elections are scheduled or expected in at least 64 countries, as well as the European Union, which all together represent almost half the global population.





Election disinformation takes a big leap with Al being used to deceive worldwide



Generative AI is the ultimate disinformation amplifier



Al-generated images have become a new form of propaganda this election season

The Washington Post

The rise of Al fake news is creating a 'misinformation superspreader'



Al-generated disinformation poses threat of misleading voters in 2024 election

The New York Times

Disinformation Researchers Raise Alarms About A.I. Chatbots



Al-Generated Fake News Is Coming to an Election Near You



Disinformation reimagined: how AI could erode democracy in the 2024 US elections

THE CONVERSATION

Algorithms are pushing Al-generated falsehoods at an alarming rate. How do we stop this?

BLOG | OCT. 31, 2024

## "Al-generated" is the new "fake news"

Share this

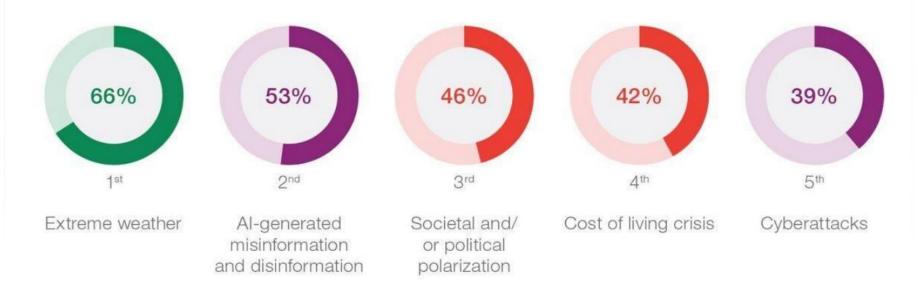


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## Current risk landscape



"Please select up to five risks that you believe are most likely to present a material crisis on a global scale in 2024."



## Slovakia's Election Deepfakes Show Al Is a Danger to Democracy

Fact-checkers scrambled to deal with faked audio recordings released days before a tight election, in a warning for other countries with looming votes.



## Social media algorithms + users + influencers + bots

Europe opens probe into TikTok over election interference following Romanian election

#### Report ties Romanian liberals to TikTok campaign that fueled pro-Russia candidate

A campaign from a governing center-right party may have been hijacked to benefit far-right candidate Călin Georgescu, snoop.ro report shows.

[ SHARE



Calin Georgescu was catapulted from obscurity into the lead in the first round of voting in the Romanian presidential election Nov. 24. | Mihai Barbu/AFP via Getty Images

## Romania's Shady TikTok Election

#### TEITH VITE The Nordic Collaboration Model on **Disinformation** AI-based Machine Language translation translation detection layer Platforms Fact collection layer Parsing and ingestion Algorithmic layer detection Facebook Checkers collector layer Ingestion CLSB Youtube collector Database Parsing system TikTok Bursts collector OSINT Data Storing collector **Specialists Analysts** FACT OSINT specialists checkers Applying Filtering and Generating queries and reporting spreadsheet computing layer reports metrics

**1 Empower** Nordic fact-checking on social media using algorithmic tools and open-source intelligence (OSINT).

2 Investigate if (Russian) disinformation is spread before, during and after the EP elections on social media in Denmark, Sweden and Finland.

## **Findings**

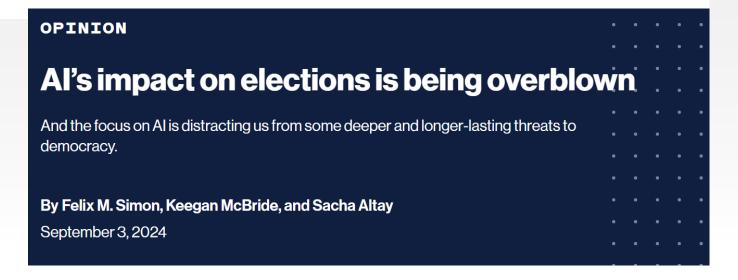
- Various cases of disinformation narratives as well as cases of social media profiles displaying signs of potential inauthentic behaviour were identified.
- No Russian disinformation was identified
- E.g., we identified a case of coordinated behaviour from inauthentic X-accounts (unknown actors).
  - Primo June, the hashtag #vote4charlie was shared to show support to Charlie Weimers, Sweden Democrats top candidate, over the course of 7-days
  - The hashtag were shared more than 2,200 times, primarily by Persian language accounts



#### **DEEP DIVE**

## We Looked at 78 Election Deepfakes. Political Misinformation Is Not an AI Problem.

Technology isn't the problem—or the solution.



### Little trace of Al in Europe

- In the weeks before the vote, the amount of fact-checked disinformation containing Al-generated content detected by EDMO remained constant, at around 4% of the overall amount of fact-checked disinformation
- With limited exceptions, highly-manipulative deepfakes'
  were not prominent during the European elections. Instead,
  Al was used to produce 'shallowfakes', combining out of
  context captions with the image of politicians or events, and
  'cheapfakes', with rather obvious manipulation of video and
  image.

## Reasons for sigh of relief

- Action from policy makers and tech companies
- Campaigning industry norms and ethics
- Swinging an election with AI disinformation might be difficult
- GenAl technology not ripe for elections

(Carr & Köhler, 2024)

### **Western centric view**

- Impact of AI in 2024 elections has been downplayed
- Detection tools have a global equity and effectiveness gap
- Urgent need for public interest AI investment in frontline information actors



Sam Gregory, Witness

## Trump's false or misleading claims total 30,573 over 4 years

Analysis by Glenn Kessler, Salvador Rizzo and Meg Kelly January 24, 2021 at 3:00 a.m. EST



#### MOST READ POL



Biden camp Democration reelection of





#### Video of Hillary Clinton endorsing Ron DeSantis is Al-generated

By Reuters Fact Check

April 17, 2023 7:24 PM GMT+2 · Updated 7 months ago

Clinton ever made such an endorsement.



An Al-generated clip that shows former U.S. Secretary of State Hillary Clinton endorsing Florida Governor Ron DeSantis for the presidency has been shared on social media as if it is authentic. There is no evidence

Clinton can partly be heard saying the following in the clip (here), "You know, people might be surprised to hear me saying this, but I actually like Ron DeSantis a lot. Yeah, I know. I'd say he's just the kind of guy this country needs, and I really mean that. If Ron DeSantis got installed as president, I'd be fine with that."

POLITICS / POLICY / ARTIFICIAL INTELLIGENCE

## Republicans respond to Biden reelection announcement with Al-generated attack ad



Pelosi videos manipulated to make her appear drunk are being shared on social media

















/ The ad depicts a dystopian vision of the US if Biden is reelected. It also raises worrying questions about the place of deepfakes in political campaigning.

By James Vincent, a senior reporter who has covered AI, robotics, and more for eight years at The Verge.

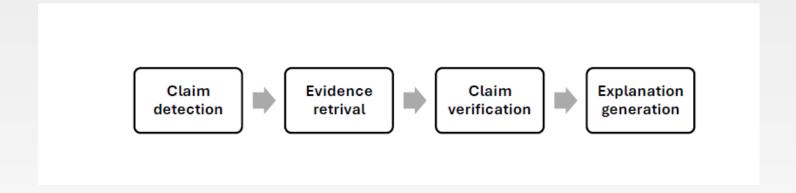
Apr 25, 2023, 3:15 PM GMT+2 | 29 Comments / 29 New







## **Fact-checking process in four steps**



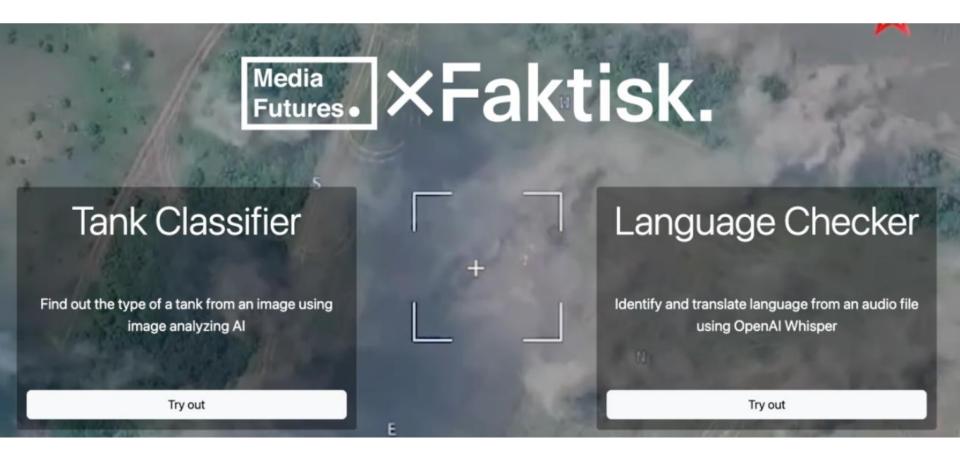
## Fact-Checking Tools Database

10 Show entries

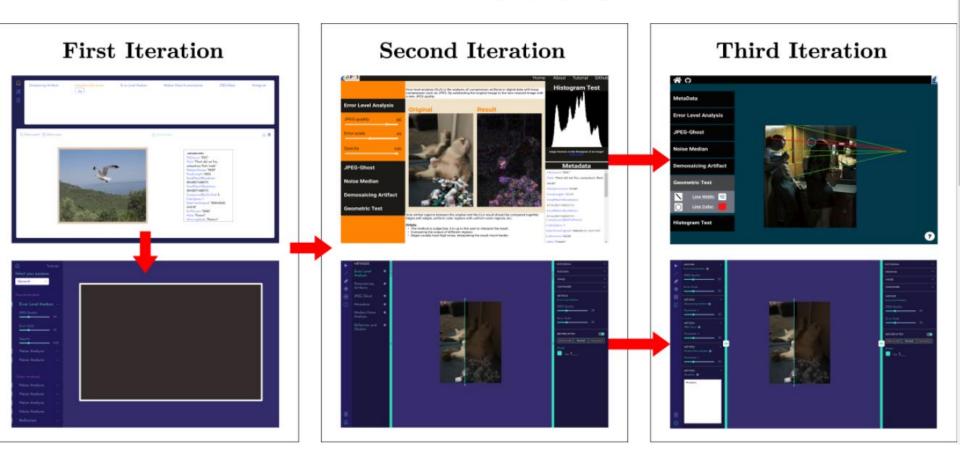
Search:

|   | Tool            | URL                | Description   | Tech     |
|---|-----------------|--------------------|---|----------|
|   | =               | =                  | Ŧ   |          |
| 1 | AccountAnalysis | https://accountan  | Tool for gathering information on Twittter users: when and what type of contect they publish, what accounts they interact with, and what websites they share. (No AI or machine learning.)  | NA       |
| 2 | Adblock Plus    | https://adblockplu | Adblock Plus is a browser extension and app that blocks advertisements and websites through the use of filtering lists. The tool automatically whitelists ads that meet the 'acceptable ads' standards — so ads can avoid being blocked on this platform by adhering to those standards. Users can opt out of even these ads by adjusting the default settings. The tool, while initially an adblocker, has increasingly seen itself as a way for users to protect themselves not only from harmful ads, but also from other harmful sites, including those that spread disinformation. | Filterii |
| 3 | Adobe           | NA                 | Described in interview with IFCN as a 'tool that they deliver to their members', and it's 'for video, for image, and PDF content'.  | NA       |
| 4 | Adverif.ai      | https://www.adve   | AdVerif.ai – Fight Fake News with Al. Fake News is proliferating and creating real losses for publishers and media companies.AdVerif.ai is developing the FakeRank Al to automatically identify   | Al       |

#### AI-based classifier tool presented to NORDIS members



#### UiB Releases FotoVerifier Tool, Accompanying Report



# Is your Al generated copy correct?

Quickly find evidence and fact-check any copy

El Niño is part of a natural climate 64 HJ. DE SPROTTED 20 HEITED 16 DEPUTED phenomenon called the El Niño Southern Search could be interest and one Oscillation (ENSO). El Niño is part of a natural climate. phenomenon called the El Niño Southern Oscillation (ENSO). El Niño means cooler water spreads furthei H. Supporting and stays closer to the surface. El Niño releases a lot of cold into the atmosphere, El Niño releases a lot of cold into the atmosphere, and the air becomes wetter and the air becomes wetter and warmer. The and warmer. regional effects are complicated, and some 1 Supporting places may be both warmer and cooler tha F Okspering expected. The hottest year on record, 200! was an El Niño year.

RGEN

## Factiverse O

## MATTER OF FACT REPORT

Live Fact-Checking The 2024 VP Presidential Debate



### Tools are coming but...

- Gap between emerging technology and fact-checkers
- How to deal with massive flood of automatically generated video, images, text in real-time across platforms?
- Who will get access to these tools?
- Will they be useful in fact-checking workflows?
- Paired with capacity-building in media forensics

## «Disinformation needs a broader approach than technical solutions alone»

## Who is responsible?

Those creating the infrastructure for synthetic media

Large scale/foundation model creators

Those creating tools for synthetic media

User facing tools

Those creating synthetic media

➤ Hobbyists, institutions and organisations

Those publishing and distributing synthetic media

> News media, platforms

(Sam Gregory, Witness)

## News media's response to Gen Al

- (1) Do not to publish texts or images except in specific or exceptional circumstances, for instance, to show how an Al system works (*De Volkskrant*, *The Guardian*, *Wired*);
- (2) Publish synthetic images only for illustrative purpose, with the mention of the prompt used (Heidi.news);
- (3) Only to explore the use of Al-augmented visuals (*Financial Times*);
- (4) Do not publish generated images 'in the style of' to preserve the singularity of human creators (Uzbek & Rica);
- (5) Do not publish Al-generated visual material that can distort or confuse real images (*Aftonbladet*, *Dagbladet*, *Dagens Næringsliv*, *VG*, AP).

## **Lack of moderation on X (Twitter)**

| Primary Language | People |
|------------------|--------|
| Arabic           | 12     |
| Bulgarian        | 2      |
| Croatian         | 1      |
| Dutch            | 1      |
| English          | 2,294  |
| French           | 52     |
| German           | 81     |
| Hebrew           | 2      |
| Italian          | 2      |
| Latvian          | 1      |
| Polish           | 1      |
| Portuguese       | 41     |
| Spanish          | 20     |

#### Is this the Beginning of the End for Al-Summarized News?

Apple has withdrawn a feature which summarized the news after it published multiple inaccuracies. What's next for Algenerated news summaries?



Clare Spencer · Follow
Published in Generative Al in the Newsro...
8 min read · Jan 28, 2025





· More

BBC News sends Breaking News alerts on a single subject



Breaking News
Tue 20:04
CEO shooting suspect Luigi Mangione in
angry outburst outside court as he fights
extradition to New York - follow live

Apple sends an AI-generated summary of BBC News headlines -

#### ввс

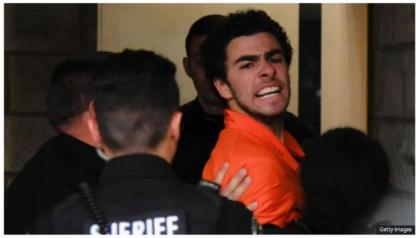
Home News Sport Business Innovation Culture Arts Travel Earth Video Live

## BBC complains to Apple over misleading shooting headline

7 days ago

Share < Save +

Graham Fraser Technology reporter



Luigi Mangione is accused of murdering healthcare insurance CEO Brian Thompson

The BBC has complained to Apple after the tech giant's new iPhone feature generated a false headline about a high-profile murder in the United States.

RGEN

## Avery Lotz, Sara Fischer











# Meta just flipped the switch that prevents misinformation from spreading in the United States

The company built effective systems to reduce the reach of fake news. Last week, it shut them down



Casey Newton

Jan 14, 2025 — 10 min read







### **The Disinformation dilemma**

- Important to acknowledge that we have limited insight into the true extent of disinformation in the Nordic countries.
   Measuring disinformation is an overall problem.
- In Sweden and Finland, funding for fact-checking and independent efforts against disinformation is limited and on a small scale, making systematic assessment challenging.
- Lack of access to data from major online platforms where disinformation spreads, hindering our ability to measure the true extent of the problem.

(Morten L. Dahlback, Faktisk https://nordmedianetwork.org/latest/news/five-questions-and-answers-on-information-disorder-in-the-nordics/)

## Finnish problems

WIRED SECURITY POLITICS GEAR THE BIG STORY BUSINESS SCIENCE CULTURE IDEAS MERCH MY ACCOUNT V

MORGAN MEAKE

BUSINESS NOV 15, 2024 5:33 AM

#### Meta Lobbyist Turned EU Regulator Says Big Tech Rules Have Gone Too Far

Aura Salla was once the tech giant's top lobbyist in Brussels. Now, her presence as a regulator in the European Parliament is proving controversial.





#### Sebastian Tynkkysen uusi taistelu

**Some** | Kesällä europarlamentissa aloittanut Sebastian Tynkkynen löysi itsensä taistelemassa EU:n digisääntelyä vastaan. Tynkkynen uskoo, että yhä useampi kääntyy tulevaisuudessa hänen kannalleen.

Tilaajille



Sebastian Tynkkyselle sosiaalinen media on myös työkalu. Työasioissa hän viestii eniten X:ssä.



The upside Finland

## How Finland starts its fight against fake news in primary schools

Country on frontline of information war teaches everyone from school pupils to politicians how to spot slippery information



SPECIAL REPORT

#### Finland is winning the war on fake news. What it's learned may be crucial to Western democracy

By Eliza Mackintosh, CNN



#### ERSITY C

## US midterm elections: Does Finland have the answer to fake news?

(l) 12 October 2022

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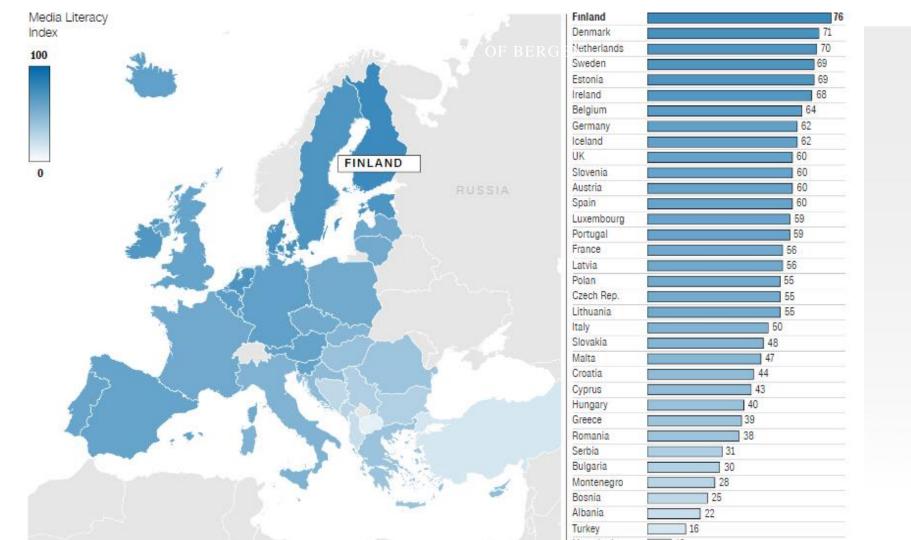
US midterm elections 2022



#### What we can learn from Finland

Mar 1, 2023





## How big are risks in the Finland?

- Media and Al literacy education has a key role
- Few signs that propaganda has an impact on the population majority
- Will a deepfake change your choice of candidate?
- Minorities are more vulnerable

#### But:

 Should synthetic pictures, video, audio and texts in political communication be regulated? Prompts made public?

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The biggest problem is not that we will be fooled by AI

The biggest problem is that we will not believe in anything

