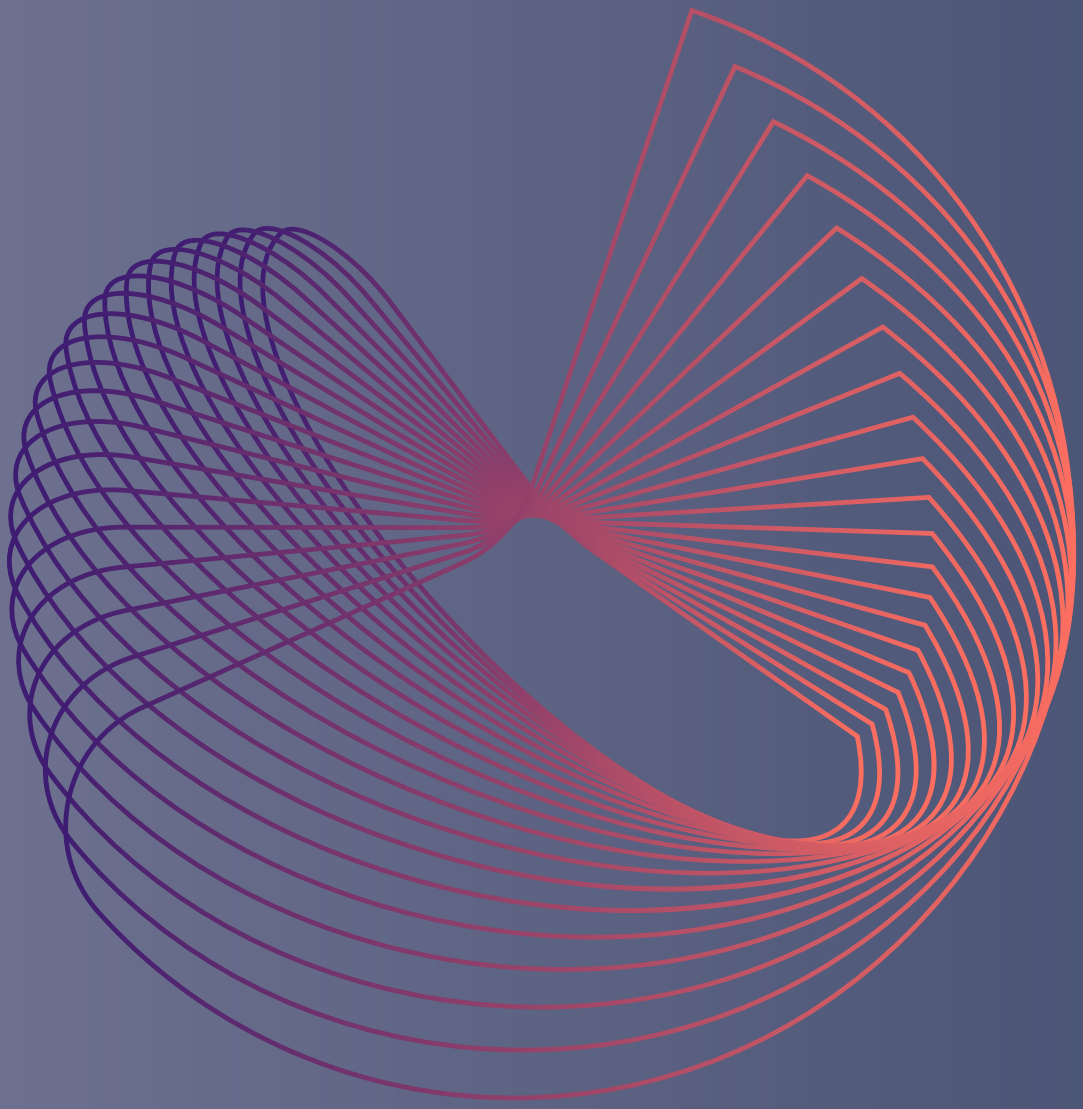
OBSERVATORY ON INFORMATION AND DEMOCRACY

REPORT SUMMARY

INFORMATION ECOSYSTEMS AND TROUBLED DEMOCRACY

A Global Synthesis of the State of Knowledge on News Media, AI and Data Governance



An initiative by: FORUM ON INFORMATION AND DEMOCRACY

Report Summary

Democracy is in trouble: there is no dispute about this. What is controversial is the role of information ecosystems in contributing to the fragility of democracy and to the viral spread of mis- and disinformation. The **International Observatory on Information and Democracy's** report assesses the role of information ecosystems in the Global North and Global Majority World. It focuses on how these ecosystems influence information integrity (the quality of public discourse), the fairness of political processes, the protection of media freedoms and the resilience of public institutions. With a cross-cutting theme of mis- and disinformation, the report addresses three themes: **media, politics and trust; artificial intelligence, information ecosystems and democracy;** and **data governance and democracy.** This critical state-of-the-art analysis is based on academic publications supplemented by reports and other materials from different disciplines and regions (based on a total of 1,664 citations) (see Executive Summary here; Appendix: Methodology here). The report showcases what can be learned from landmark research in these areas. (A summary of Future Research Priorities is here. A Summary of Guidance for Big Tech Companies and Policy Makers is here.)

Information ecosystems have multiple interdependent components involving people, practices, values, institutions and technologies, configured in different social, cultural, political and economic contexts. The possibilities for informed participation in the public sphere are affected by the structures and operations of these ecosystems. Digitized information ecosystems have huge potential to contribute positively to public discourse and to democracy, yet harms are increasingly evident. The analysis in this report treats mis- and disinformation as symptoms of complex changes in society *as well as* important amplifiers of these changes, recognizing that the integrity of information is only one – important – factor that is troubling for democracy.

The analysis highlights research on the impacts of mis- and disinformation on individual attitudes and behaviors. It also highlights other factors that are contributing to the fragility of democracy: the monopolistic big tech companies' data monetization models and data extractive practices, the news media industry's instability, the struggle to deliver 'responsible' AI systems, and failures of governance institutions to uphold international human rights commitments. The report showcases illustrations of what is being done, and what could be done differently, to move towards equitable and inclusive information ecosystems that are compatible with democratic values and justice.

COMMON THEMES

- States have a duty to protect **human rights and fundamental freedoms.** Research consistently emphasizes the need to differentiate between normative goals and principles at a global level, and how these are translated into practice at the regional, country and local level in ways that fail to uphold this duty of States.
- Big tech business models prioritize **data monetization for profit.** These business models create dependencies for private and public organizations as well as individuals, and facilitate the weaponization of information, making social media attractive targets for mis- and disinformation campaigns that are incompatible with a diverse, plural public sphere.
- **Exclusion from and inequitable inclusion** in information ecosystems at the local, national and regional level is persistent and associated with the monopolistic power of big tech companies, which leads to harmful discrimination and exclusions. Measures to modify algorithms do not address the underlying causes of social discord and distrust in society. Population-level data-related injustices need to be investigated to understand how the burdens of datafication are being borne disproportionately by different groups, and the experiences in the Global Majority World need far greater attention.

- **Transparency and accountability** measures are essential to mitigate the harms of mis- and disinformation. Research demonstrates the need to reinforce big tech company governance, to promote AI systems transparency, especially using independent audits, and to ensure that accurate information reaches a wide range of stakeholders. Evidence also emphasizes the need to protect actors who criticize existing governance for failing to uphold human rights commitments.
- **Media and information literacy (MIL) and AI literacy training** is crucial, but it is not a stand-alone answer to mis- and disinformation problems. There is little systematic evidence of the outcomes of these initiatives globally, and over time, and insufficient attention to children's literacy. Evidence indicates that the effectiveness of using AI tools to combat mis- disinformation is highly variable, and providing a meaningful quantitative measure of the scale of mis- and disinformation is not possible due to difficulties in collecting and analyzing data that reflects people's online experiences. In addition, the public's and policy makers' understanding of the threats and impacts of mis- and disinformation varies widely.

STATE-OF-THE-ART IN INFORMATION ECOSYSTEMS RESEARCH

- A strong **Eurocentric/Western bias** is evident in research in all the areas examined in this report. This means decolonizing research is essential if the Global Majority World's experience of information ecosystems is to inform policy and practice.
- A focus on research principally on mis- and disinformation and individual impacts is criticized in the literature for neglecting the history of propaganda, relying on ambiguous metaphors (what is 'good' or 'polluting' information), and neglecting requirements for a vibrant public sphere. Concepts are **defined and operationalized** very differently in research on information ecosystems, and research would benefit from joined-up investigations of changes in information ecosystems, the public sphere and democracy.
- **Research designs and methods** focus on the effects of technology-driven mis- and disinformation and algorithmic personalization systems on individual attitudes and behaviors *or* on the monopolistic power of big tech companies and their business models that sustain mis- and disinformation. This means that multidimensional research is needed that addresses the complex components of information ecosystems, including both the affordances of technology *as well as* the practices of states, companies and other actors.
- **Researcher access to data** held by big tech companies remains a problem. Research reveals the urgent need for data access frameworks and clear data disclosure policies. Researchers who monitor mis- and disinformation and work on strategies to combat it face challenges when efforts are made to suppress results. This means that continuous efforts are needed to secure the independence of researchers and their institutions.

News Media, Politics and Trust

- Research demonstrates that monopolistic **digital platform business strategies** threaten the viability of news production and impact on news consumption. With the news media industry in crisis in many countries, this power asymmetry must be addressed by strengthening the bargaining power of news organizations, and especially smaller news organizations. Both liberal democratic and autocratic countries need to be investigated. It is essential to support research on the effects of different media ownership and market structures on the viability of the news media industry, to foster investment in public service media, and to protect journalists who seek to report accurate news.
- **Trust in news** and in the **trustworthiness of news media organizations** is shown to be influenced by multiple factors including interest in and knowledge about politics. Increasing use of social media to access news means news exposure grows but the impacts on trust are hard to interpret. This is because

there is much focus on individual effects on attitudes and behavior, which are also dependent on complex societal factors. The agency of online participants/audiences and their capacity to engage in critical thinking about the news they engage with needs greater attention.

> Forty percent of respondents self-reported trust in news most of the time: Finland had the highest, at 69%; United States, 32%, France, 31%, Argentina, 30%, Greece, 23%, and Hungary, 23%; there was little evidence that upcoming elections at the time of the survey impacted on indicators of trust (Reuters Institute Digital News Report, 2024).

- Online echo chambers are not solely attributable to algorithmic personalization systems. While some research identifies viral mis- and disinformation as a principal cause of **political polarization,** other research points to complex factors, even when acknowledging that mis- and disinformation can amplify divisions in society. Most of the research in this area relies on evidence in the Global North, uses predominantly experimental methodologies, investigates a limited number of digital platforms, and examines short time periods.
- **Information is wielded as a weapon** by foreign and domestic actors. Research tends to focus more on far-right groups that generate mis- and disinformation on behalf of foreign powers. Greater attention needs to be given to the roles of domestic actors. It is clear from the research evidence that who generates mis- and disinformation and why is just as important as its effects on polarization and political outcomes. Greater attention needs to be given to the actors (individual and institutional) who generate and share mis- and disinformation and to their motivations.

Artificial Intelligence, Information Ecosystems and Democracy

- Different machine learning (ML) technologies are involved in information creation, retrieval, synthesis, presentation and governance. This report emphasizes that there is **not *an* 'AI',** despite the popularity of the term. It is essential to be specific about what AI tools are being investigated in research. In this report, we refer to AI systems and to specific technology tools.
- Research demonstrates that internationally protected human rights and fundamental freedoms (including media freedom and freedom of expression) are fully applicable to the production and use of AI systems, but that not all countries are fulfilling their obligations to protect these rights. The global promotion of 'trustworthy AI' can distract attention from investigation of the biases of AI systems and their discriminatory consequences; this is an area that requires continuing investigation.

> Between 2016 and 2022, 91 laws were enacted or amended to deal with misleading information; from 2011 to 2022, a total of 105 new laws or reinforcement of older laws were put in place to combat mis- or disinformation (Lim & Bradshaw, 2023).

- Those who build and deploy automated content governance systems must be held accountable. Research identifies **a lack of accountability,** and there is weak evidence on the transparency of the training and deployment of automated content governance tools. Research also demonstrates that no single content

moderation technique will be acceptable to all online participants because societal contexts differ. The role of AI systems in information ecosystems, their impact on the public debate in the public sphere and impacts of a growing 'AI divide' all require investigation. This is essential if safeguards are to be effective in preventing big tech companies from using AI systems in ways that intensify societal inequalities.

> Sixty-six percent of people surveyed thought AI would dramatically affect their lives in the next 3–5 years; 67% reported a good understanding of what AI is (AI Index Report, 2024, based on an Ipsos survey in 2023).

- Although the **use of AI systems is only one factor in societal transformation,** decisions about their design and operation impact on societal resilience and cohesion, and large language models (LLMs) demand vast amounts of data and energy-intensive training processes. It is essential that the whole life cycle of AI systems development, including environmentally responsible innovation, in diverse use and country contexts, is investigated to inform choices about the acceptable uses of these systems.

Governing Information Ecosystems: Towards data justice

- Countries are at different stages of **implementing legislation and enforcing regulations** to govern information ecosystems, and the evidence of their effectiveness is uneven regarding the rules and norms that apply to corporate data extraction, data storage and privacy protection. Research demonstrates that laws do not translate automatically into effective enforcement, and this jeopardizes the achievement of justice and equity and efforts to prevent or mitigate the harms of mis- and disinformation.
- Studies of the impacts of datafication and AI systems on individuals must be complemented by research on a wide range of impacts of datafication in people's lives. Evidence of impacts on groups, and especially the disadvantaged, is needed to inform **new data governance frameworks,** which require a collective effort on the part of governments, big tech companies and civil society actors.
- Many approaches to **countering mis- and disinformation** rely on AI systems and methodologies, but these are not adequate for addressing the scale and variety of online platforms and user experiences. Real-world testing of these approaches is urgently needed, since most are not tested beyond laboratory experiments.
- **Public acceptance** of strategies to combat mis- and disinformation is shown to vary by country, socio-political context, culture and history, including experience with autocratic governments and colonialization. It is essential that these strategies, including fact-checking, are anchored in human rights principles and the rule of law.
- Big tech companies are creating de facto data governance frameworks enabled by their **monopolization of user data.** Research demonstrates how this is resulting in the monopolization of knowledge. There is an urgent need for robust and robustly enforced rules to control what can be done with the data generated through online interaction, and when it is not in people's interests for data resources to be converted into private assets.
- **It is essential to reimagine what data justice could be.** This means empowering individuals and communities to devise proportionate, sustainable uses of data that avoid known biases of business models and AI systems. There is relatively little systematic research, especially on initiatives around the world, undertaken by data justice movements that contest the dominant designs of digital systems and means for controlling data. Their resource requirements, scalability and capacity to contribute to individuals' and communities' sovereignty over their data needs investigation.

A FINAL WORD ON WHAT SHOULD BE DONE

Achieving the United Nations *Global Digital Compact's* goal to address technology-facilitated violence, hate speech and mis- and disinformation requires research on the impacts of harmful information on adults and children. It also requires investigation of the implications of monopolistic market structures and data monetization strategies, governance institutions and changes in AI systems and other digital technologies. These are essential if the causes, consequences and potential responses to evolving information ecosystems and democratic fragility are to be addressed. Section 6 of Chapter 9 and the Executive Summary provide guidance for actions by policy makers and big tech companies (although it should be noted that this report was not intended to provide specific recommendations).

GUIDE TO CHAPTERS OF THE REPORT

Chapter 1: *Information Ecosystems and Democracy.* Core themes and definitions of key concepts.
Chapter 2: *News Media, Information Integrity and the Public Sphere.* What research tells us about changes in legacy and online news media, and what can be done to promote information integrity and a democratic public sphere.
Chapter 3: *Artificial Intelligence, Information Ecosystems and Democracy.* Properties of AI systems (machine learning algorithms), their role in content governance and internationally protected human rights.
Chapter 4: *Big Tech Power and Governing Uses of Data.* The power of big tech companies and approaches to governing data extraction and use, and influences on political deliberation.
Chapter 5: *Awareness of Mis- and Disinformation and the Literacy Challenge.* Awareness of harms and approaches to media and information literacy (MIL) and AI literacy
Chapter 6: *Governing Information Ecosystems: Legislation and Regulation.* Legislative and regulatory tools to mitigate the harms of mis- and disinformation and govern big tech companies.
Chapter 7: *Combating Mis- and Disinformation in Practice.* Specific measures to combat mis- and disinformation by civil society organizations and governments.
Chapter 8: *Towards Data Justice in Information Ecosystems.* Corporate strategies and practices that lead to injustice and strategies of individuals and communities to resist extractive features of the data economy.
Chapter 9: *Information Ecosystems and Troubled Democracy.* Cross-cutting themes including human rights, data monetization, exclusion and inequitable inclusion, transparency and accountability and characteristics of research.

About the Observatory on Information and Democracy

The International Observatory on Information and Democracy is a core project of the Forum on Information and Democracy, the implementing civil society-led body of the Intergovernmental Partnership of the same name, gathering representatives from 53 democratic States. The Observatory aims to provide a common and shared understanding of information ecosystems and their impact on democracy by aggregating and synthesizing existing research and available data through a robust, inclusive, critical review process. In the form of biennial reports, it provides civil society leaders, researchers, academics and, importantly, policy makers, with a periodic global assessment of the information and communication space and its impact on democracy. By acting as a global research-to-policy interface in the field of Information and Democracy, the Observatory strives to become the equivalent of the IPCC for the communication space, and to foster a more evidence-based roadmap towards both governmental and corporate accountability, ultimately to emulate appropriate civic action in the field of safeguarding democracy.