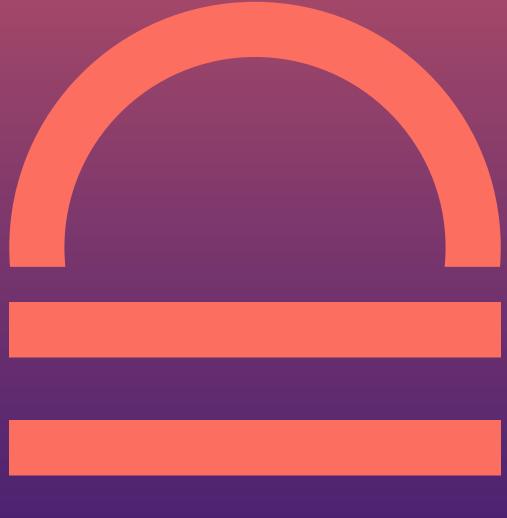


INFORMATION ECOSYSTEMS AND TROUBLED DEMOCRACY

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



An initiative by: FID FORUM ON INFORMATION AND DEMOCRACY

Future Research Priorities

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. This report examines information ecosystems in social, cultural, political and economic settings in the Global North and Global Majority World. We present here future research priorities based on the **International Observatory on Information and Democracy**'s critical state-of-the art analysis of research across multiple disciplines (based on 1,664 citations). The analysis focused on **media**, **politics and trust**; **artificial intelligence**, **information ecosystems and democracy**; and **data governance and democracy** – with a cross-cutting theme of mis- and disinformation (see Executive Summary <u>here</u>, full report <u>here</u>; Appendix: Methodology <u>here</u>; Guidance for Policy Makers and Big Tech Companies <u>here</u>).

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. Today's information ecosystems have huge potential to contribute positively to public discourse and to democracy. Yet democracy is increasingly fragile. 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 in this report highlights research on the harmful or divisive impacts of mis- and disinformation on individual attitudes and behaviors. It also points to the importance of other factors that contribute 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.

Research Strengths, Weaknesses and Gaps

Our analysis confirms that the study of the effects of mis- and disinformation on individuals' attitudes and beliefs is a thriving research tradition. Studies in this tradition begin with an interest in information and its impact on individuals. Another tradition starts with an interest in inequalities in society, and focuses on how monopolistic market structures, undemocratic institutions and political processes and failures to implement internationally agreed human rights commitments contribute to the production and viral circulation of mis- and disinformation. Both may be concerned with harms to safety, discrimination and marginalization and damage to the public sphere and democracy. However, our review of the research indicates that the latter tradition is more likely to identify a wider range of factors contributing to the evolution of information ecosystems and whether or not this brings benefits or harms to societies as a whole.

A key weakness in much research on information ecosystems is an assumption that the beneficial and harmful uses of digital technologies are dictated by technological change, most recently by AI systems. Research on the reciprocal and interdependent relationships between the components of information ecosystems is urgently needed to understand the complex factors that influence how mis- and disinformation is experienced by individuals and groups, and how it shapes the capacity for informed debate in the public sphere.

This research must engage with both the experiences of individuals and groups and with the way power asymmetries operate through market structures and political institutions.

The following research questions would guide researchers towards a deeper understanding of how to 'promote diverse and resilient information ecosystems' (United Nations *Global Digital Compact*, 2024).

DATAFICATION FOR PROFIT

- What specific features of big tech business models make them attractive targets for mis- and disinformation campaigns?
- What mix of competencies and enforcement mechanisms is needed to counter harmful exercises of corporate power?
- What measures are needed to preserve and promote the capacities of diverse communities to question digital dependencies outside formal policy-making spaces?

HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS

- How is international human rights law interpreted and applied at regional and country levels in relation to news media, AI systems and data collection and use in both the Global North and Global Majority World?
- What structural inequalities, political alignments and social transformations prevent news media independence and stand in the way of treating news media as a 'public good'?
- In what contexts is AI systems production and use inconsistent with protecting international human rights commitments?
- How should AI systems biases be identified and mitigated?
- Are measures for combating mis- and disinformation, including fact-checking, anchored in human rights principles and the rule of law?

INFORMATION ECOSYSTEMS: EXCLUSIONS AND INEQUITABLE INCLUSIONS

- What features of big tech business models and datafication strategies lead to disproportionate burdens and exclusions that marginalize populations, and what population-level injustices are being perpetuated?
- How are policies applied on the infrastructure layer of information ecosystems being used to limit access to information? (This report did not focus on the range of digital divide issues, but it is clear that research on progress towards meaningful internet connectivity in the Global Majority World – and elsewhere – is crucial.)
- What can be done to counter a growing 'Al divide' and to enable representatives of the Global Majority World to participate in policy debates about the development and use of Al systems on the global level?
- How are news media ownership and regulatory regimes impacting on the quality of information in the public sphere? How is the use of AI systems transforming news production and circulation? And what is the role of individual and institutional actors in promoting harmful mis- and disinformation?
- How is AI systems governance and the use of AI-enabled content governance impacting on disadvantaged and marginalized communities?
- What data justice initiatives are underway in countries around the world, and how effective are they in
 contesting the design of digital systems and in devising means of controlling data in the interests of
 individuals and groups in society? What are their resource requirements, scalability and capacities to
 enhance individual and community sovereignty over data?

GOVERNING FOR TRANSPARENCY AND ACCOUNTABILITY

- What *combinations* of governance interventions are effective in mitigating the harms of mis- and disinformation and achieving greater AI systems transparency and accountability?
- What should be done to ensure sustainable financing for the news industry and to help smaller news organizations achieve greater bargaining power?
- Are existing or new rules and norms for corporate data extraction, data storage and privacy protection effectively enforced? What steps are needed to achieve 'meaningful transparency' and 'interoperable transparency' in a way that would mitigate mis- and disinformation harms?
- How can data governance be reimagined and practiced through meaningful deliberation about how fundamental rights can be protected, and how could collective efforts of governments, big tech companies and civil society actors be mobilized?
- How does the public view interventions to moderate online mis- and disinformation? What are the differences in preferences for state, co-regulatory or individual interventions to mitigate harms across countries, and why do these preferences differ?

MEDIA AND INFORMATION LITERACY (MIL) AND AI LITERACY

- What MIL and AI literacy initiatives are being introduced globally? What training is appropriate for children, for adults generally, and for policy makers?
- What factors, in addition to individual characteristics, explain variations in news media trust? How do social, political, cultural and economic factors influence the agency of online participants/audiences and their capacity to engage in critical thinking about online information (and how is this mediated by offline social networks)?
- What are the outcomes of MIL and AI literacy training, especially over time, and what are the funding arrangements? Are adults and children with critical literacy skills better able to differentiate between legitimate and other sources of information, and how does this vary?
- Do Al literacy training initiatives include knowledge about the fundamental principles of Al systems at all stages of Al systems development and deployment?
- What would be needed to achieve standardized MIL and AI literacy conceptual frameworks and methodologies to advance comparative evaluation of literacy initiatives?

Overall Assessment of Information Ecosystems & Democracy Research

DOMINANCE OF RESEARCH FROM THE GLOBAL NORTH

OBSERVATORY ON INFORMATION AND

DEMOCRACY

- Research from the Global North is dominant across the disciplines. Working towards the decolonization of research is essential if Global Majority World experience is to inform policy and practice.
- In-depth and comparative studies of experience of information ecosystems within the Global Majority World are needed, which requires resource commitments.
- Research on news media mistrust, news avoidance and resilience to mis- and disinformation targeted using online personalization systems and political polarization is strongly biased towards the Global North (although there are exceptions). A wider range of platforms and actors (state/private and foreign/domestic) and their motivations need investigation.
- Research is urgently needed on the whole life cycle of AI systems development and on diverse use and country contexts this must include the Global Majority World.

CONCEPTS, RESEARCH DESIGNS AND METHODS

- Concepts of mis- and disinformation, information integrity and information ecosystems are operationalized differently in research without explicitly acknowledging this. Greater care is needed in clarifying definitions of concepts and operationalizing them.
- Bridges are needed between research on information ecosystems and the public sphere, and research in both these areas would benefit from stronger engagement with work on securitization and the socio-economics of online labor markets.
- Mixed quantitative and qualitative methods or qualitative methods can yield an insight into affordances
 of technology *and* the practices of states, companies and other actors and the experiences of mis- and
 disinformation that complement results from quantitative studies. Research across the themes in this
 report would benefit from a greater use of a range of methods.
- Al systems evaluations are mainly based on experiments, and would benefit from the use of real-word data and field research using a range of quantitative and qualitative methods. Technical solutions to detect misand disinformation are not widely tested beyond the laboratory. Real-world testing of these solutions is needed.
- Researcher access to data is limiting research. Safe harbors for researchers, clear data disclosure policies, public data infrastructure frameworks and resources are urgently needed, especially in the Global Majority World. It is also essential to monitor whether researchers are able to work independently on politically sensitive topics involving mis- and disinformation or structural asymmetries between the actors involved in information ecosystems.

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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 researchto-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.