THE HEXAGON OF DISINFORMATION: A FRAMEWORK FOR EMPIRICAL RESEARCHES

Maurílio Luiz Hoffmann da Silva
Universidade Federal do Rio Grande do Sul

Introduction and theoretical background

Disinformation has consolidated as one of the most complex phenomena of contemporary society. Its impact is no longer marginal; events such as the COVID-19 pandemic and continuous attacks on democratic structures demonstrate that the circulation of fabricated, manipulated, or decontextualized narratives has become a central element in disputes for power and hegemony. The ability of disinformation to couple with social dynamics and be amplified by technological infrastructures gives it unprecedented scale and speed, challenging society's capacity to respond.

However, the academic study of this phenomenon, while expanding, often operates in a fragmented manner. Research tends to focus on isolated aspects, such as qualitative analyses of content or network analyses of circulation, but rarely integrates these with the political and economic incentives that sustain the system. This methodological fragmentation highlights a significant gap: the lack of analytical models that allow for an integrated investigation of the phenomenon.

To address this gap, this paper introduces the "Hexagon of Disinformation": a theoretical-methodological framework designed to guide empirical research in a systemic and integrated way. The model is structured into six interconnected and interdependent dimensions: material, social, technological, economical, political, and institutional.

The framework is theoretically grounded in the articulation of Fairclough's (1992, 2015) theory of discourse as social practice and Recuero's (2024) systemic perspective on disinformation. From Fairclough, the framework understands disinformation not as simple "false content" but as a discursive action embedded in social relations and power

struggles. Recuero provides the key to integration, proposing that disinformation must be understood as a complex system, analyzable as an object (content), a process (circulation dynamics), and an effect (social consequences).

The framework's primary contribution resides precisely in its systemic nature. It invites the researcher to investigate the relationships of interdependence and retrofitting between the dimensions, offering a robust guide for an integrated analysis of disinformation's mechanisms and impacts.

Table 1 - The Hexagon of disinformation and its six dimensions

Dimension	What does it analyze?
Material	Linguistic & narrative materiality. Legitimation strategies. Manipulation mechanisms. Specific grammars. Credibility. Persuasion.
Social	Group dynamics. Social interactions. Propagation. Identity formation. Community belonging. Echo chambers.
Technological	Digital infrastructure. Platform design. Algorithms (recommendation, amplification). Ecosystem. Affordances. Bots.
Economical	Incentives. Business models. Profit. Monetization (advertising). Financial fraud. Artificial engagement industry.
Political	Strategic tool. Power disputes. Polarization (affective, ideological). Populist rhetoric. Destabilization.
Institutional	Impact on public trust. Institutions (press, science, government, judiciary). Attacks. Institutional responses.

The six dimensions of the Hexagon of Disinformation

The material dimension of the Hexagon examines the micro-level elements, focusing on the linguistic materiality of the phenomenon. This dimension investigates how disinformation is constructed to circulate effectively. It analyzes the discursive strategies used, such as legitimation (e.g., appeal to authority, moral authorization) (Van Leeuwen, 2007), manipulation (e.g., emotional appeals, framing) (van Dijk, 2006), and the specific "grammars" of disinformation (e.g., sensationalism, conspiratorial tone, discrediting institutions) that build credibility and persuade (Recuero, 2024).

The social dimension addresses the relational dynamics within society, emphasizing the role of group identity and shared beliefs in the dissemination of disinformation (Bastos & Tuters, 2023). It examines the meaning and intent behind content, efforts at persuasion,

and calls to action embedded in disinformation narratives. This dimension also explores the ways in which disinformation fosters a sense of belonging by appealing to group identity and creating echo chambers—closed networks where individuals predominantly interact with like-minded others (Sunstein, 2001). Furthermore, it analyzes the role of conspiracy theories as simplified explanations of complex issues that resonate within specific social groups (Forgas & Baumeister, 2019).

The technological dimension of the Hexagon examines the relationship between disinformation and digital technologies, focusing on how platform infrastructures, algorithms, and technological affordances enable and shape the spread of false narratives. It investigates phenomena such as filter bubbles (Pariser, 2012), which isolate users in personalized content ecosystems, and the influence of algorithms in amplifying disinformation. The role of bots, cross-platform dissemination, and the use of artificial intelligence for manipulation are also central to this dimension.

The economical dimension of the Hexagon of Disinformation examines the financial incentives and mechanisms underpinning the creation and dissemination of disinformation. It investigates the monetisation of false content through advertising systems, such as programmatic media and sponsored content, and explores the role of click farms in generating artificial engagement (Alves & D'Andrea, 2023; Coromina et al., 2020). This dimension also considers how disinformation redirects users to pages with advertising, promotes social media channels, and links to crowdfunding platforms, creating pathways for financial gain (Alves, 2024).

The political dimension examines the interplay between disinformation and politics, focusing on themes of political polarisation (Arbatli & Rosenberg, 2020; Borah & Singh, 2022) and populism (Engesser et al., 2017; Waisbord, 2018b, 2018a). Political polarisation manifests through ideological divisions and affective antagonisms, fostering an "us versus them" dynamic that amplifies societal rifts. Populism frames "the people" as a unified, virtuous entity opposed to corrupt elites, constructing partisan narratives where truth is ideologically contingent. This dimension analyses discursive elements such as appeals to group sovereignty, critiques of elites, and the mobilisation of polarising rhetoric.

Lastly, the institutional dimension of the Hexagon of Disinformation examines how disinformation interacts with and undermines key institutions, particularly those tied to knowledge production and democratic governance. This includes an analysis of the epistemic crisis, characterised by declining trust in universities, the press, and other truth-establishing bodies. It also investigates attacks on democratic institutions, such as courts and electoral systems, alongside the erosion of confidence in electoral processes (Bennett & Livingston, 2018). Furthermore, this dimension explores the dual role of journalism, both as a vector for and a counter to disinformation, through the emergence of fact-checking agencies.

Final remarks

The Hexagon of Disinformation framework provides a structured and comprehensive tool for advancing systemic research in the field. By adopting a socio-discursive and systemic perspective, the framework moves beyond fragmented analyses to explore the multifaceted nature of disinformation.

The framework's main strength lies in its systemic view, treating the six dimensions as interconnected. The boundaries between them are porous; a single event is often analyzed through multiple dimensions simultaneously. The value of the Hexagon is in analyzing the connections and interactions between the dimensions. For example, a political objective may mobilize economic resources to create a material (discursive) piece of content, which is then amplified by the technological infrastructure, finds resonance in a social dynamic (echo chamber), and ultimately aims to erode an institutional target.

While robust, the framework's application highlights challenges inherent to the object of study, such as the opaqueness of data in the economical (hidden funding) and technological (algorithmic black boxes) dimensions.

The Hexagon of Disinformation represents a versatile analytical tool, offering researchers a systematic means of investigating the complex ecosystem of disinformation. By emphasizing the interconnectedness of its parts, it contributes to a more holistic understanding of the phenomenon and the development of more effective, multi-faceted strategies to counter it.

References

Alves, M. (2024). Estudo exploratório do financiamento da desinformação na web: Fraudes, apostas, trading e clickbaits. *Contracampo*, *43*(1), Article 1. https://doi.org/10.22409/contracampo.v43i1.56987

Alves, M., & D'Andrea, C. (2023). THE INFRASTRUCTURAL POWER OF PROGRAMMATIC ADVERTISING NETWORKS: ANALYZING

DISINFORMATION INDUSTRIES IN BRAZIL. *AoIR Selected Papers of Internet Research*. https://doi.org/10.5210/spir.v2023i0.13413

Arbatli, E., & Rosenberg, D. (2020). United we stand, divided we rule: How political polarization erodes democracy. *Democratization*, *28*(2), Article 2. https://doi.org/10.1080/13510347.2020.1818068

Bastos, M., & Tuters, M. (2023). Meaningful disinformation: Narrative rituals and affective folktales. *Big Data & Society*, *10*(2), 20539517231215361.

https://doi.org/10.1177/20539517231215361

Bennett, W. L., & Livingston, S. (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication*, *33*(2), Article 2. https://doi.org/10.1177/0267323118760317

Borah, A., & Singh, S. R. (2022). Investigating political polarization in India through the lens of Twitter. *Social Network Analysis and Mining*, *12*(1), 97. https://doi.org/10.1007/s13278-022-00939-z

Coromina, O., Matamoros-Fernández, A., & Rieder, B. (2020). FOLLOW THE MONEY: A LARGE-SCALE INVESTIGATION OF MONETIZATION AND OPTIMIZATION ON YOUTUBE. *AoIR Selected Papers of Internet Research*. https://doi.org/10.5210/spir.v2020i0.11194

Engesser, S., Ernst, N., Esser, F., & Büchel, F. (2017). Populism and social media: How politicians spread a fragmented ideology. *Information, Communication & Society*. https://www.tandfonline.com/doi/abs/10.1080/1369118X.2016.1207697

Fairclough, N. (1992). *Discourse and Social Change*. Polity Press. Fairclough, N. (2015). *Language and Power* (3rd ed.). Routledge. Forgas, J. P., & Baumeister, R. (Eds.). (2019). *The Social Psychology of Gullibility: Conspiracy Theories, Fake News and Irrational Beliefs* (1st edition). Routledge.

Pariser, E. (2012). *The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think* (Reprint edição). Penguin Books. Recuero, R. (2024). *A rede da desinformação: Sistemas, estruturas e dinâmicas nas plataformas de mídias sociais*. Editora Sulina.

Sunstein, C. R. (2001). *Echo Chambers: Bush V. Gore, Impeachment, and Beyond*. Princeton University Press.

van Dijk, T. A. (2006). Discourse and manipulation. *Discourse & Society*, *17*(3), 359–383. https://doi.org/10.1177/0957926506060250

Van Leeuwen, T. (2007). Legitimation in discourse and communication. *Discourse & Communication*, *1*(1), 91–112. https://doi.org/10.1177/1750481307071986 Waisbord, S. (2018a). The elective affinity between post-truth communication and populist politics. *Communication Research and Practice*, *4*(1), 17–34. https://doi.org/10.1080/22041451.2018.1428928

Waisbord, S. (2018b). Why Populism is Troubling for Democratic Communication. *Communication, Culture and Critique*, *11*(1), 21–34.

https://doi.org/10.1093/ccc/tcx005