

Navigating the cognitive challenges of distinguishing fact from fiction in today's information landscape

Legroux, Femke

Publication date:
2025

License:
Unspecified

[Link to publication](#)

Citation for published version (APA):

Legroux, F. (2025, Jan 5). Navigating the cognitive challenges of distinguishing fact from fiction in today's information landscape. Unpublished.

Copyright

No part of this publication may be reproduced or transmitted in any form, without the prior written permission of the author(s) or other rights holders to whom publication rights have been transferred, unless permitted by a license attached to the publication (a Creative Commons license or other), or unless exceptions to copyright law apply.

Take down policy

If you believe that this document infringes your copyright or other rights, please contact openaccess@vub.be, with details of the nature of the infringement. We will investigate the claim and if justified, we will take the appropriate steps.

**Navigating the cognitive challenges of distinguishing fact from fiction in today's
information landscape**

Femke Legroux¹

*¹Vrije Universiteit Brussel (VUB), Faculty of Psychology and Educational Sciences,
Department of Psychology , Pleinlaan 2, 1050 Brussels, Belgium*

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

Preface

This compilation of essays reflects my experience with the argumentative writing component of Academic English 3. I have studied a variety of subjects in this course, improved my critical thinking abilities, and sharpened my ability to make well-reasoned, fact-based arguments. The integration of research, analysis, and writing strategies necessary for successful academic communication is evident in every work. Beyond academic borders, argumentative writing is an essential ability that gives people the means to engage in meaningful discourse and effectively express their opinions. I have gained a deeper knowledge of the complexities present in both academic and real-world disputes thanks to this course, which has taught me how to critically assess opposing ideas in addition to crafting strong arguments.

I want to express my appreciation to my teacher, Dr. Douglas Atkinson, and fellow students for their advice and criticism during this course. Their assistance has greatly influenced the way I write and improved my capacity to communicate concepts with conviction and clarity.

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

Abstract

Cognitive flaws like confirmation bias and cognitive inertia have made it harder to tell fact from fiction in an era of digitalization and information multiplication. Emotional reasoning and the design of digital platforms, which create echo chambers and hasten the dissemination of false information, amplify these psychological inclinations, rooted in evolutionary survival processes (Lewandowsky et al., 2017; Törnberg & Andersson, 2021). Misinformation impacts polarization, trust, and political and economic stability, as it exploits these cognitive biases and thrives within the architecture of modern digital ecosystems (McDougall et al., 2018; Aral, 2021). This essay examines these effects from cognitive, technological, and social standpoints, assessing current approaches such as educational initiatives, legal frameworks, and technological advancements. However, significant gaps remain, including the need for cross-cultural and longitudinal studies to better understand the persistence and variation of misinformation across diverse contexts (Rasi et al., 2021; Frau-Meigs & Corbu, 2024). By addressing these issues from a multidisciplinary perspective, this work offers strategies to mitigate the negative effects of disinformation and promote an informed populace.

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

Introduction

In a time characterized by unparalleled access to information, the ability to discern fact from fiction has become increasingly essential (Acciarni et al., 2021). However, psychological tendencies like *confirmation bias*, where individuals favor information and interpretations that align with their existing beliefs (Charness & Dave, 2017; Mercier, 2022; Peters, 2022), and *cognitive inertia*, the resistance to altering one's thoughts or attitudes even when faced with credible contradictory evidence (Samadi et al., 2024; Turner et al., 2021), make this task significantly more challenging. Coupled with the digital amplification of fake news (Figueira & Oliveira, 2017; George et al., 2023; Peck, 2020), individuals often struggle to navigate the overwhelming flood of competing narratives (Boin et al., 2021). This paper aims to explore these challenges, drawing on key studies and proposing strategies to reduce their societal impact.

How cognitive biases evolved as survival mechanisms

The psychological tendency to maintain beliefs despite contradictory evidence is a well-documented phenomenon. Two key concepts, confirmation bias and cognitive inertia, provide valuable insights into this persistence

Confirmation bias. Confirmation bias refers to the tendency to seek, interpret, and remember information in ways that confirm pre-existing beliefs (Charness & Dave, 2017; Mercier, 2022; Peters, 2022). Hugo Mercier and Dan Sperber (Mercier & Sperber, 2011), in their theory of reasoning, argue that this bias evolved as a social adaptation, enabling individuals to defend their viewpoints and foster group cohesion rather than evaluate objective truths (Mercier & Sperber, 2011). This is evident in studies where participants demonstrate a

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

proclivity to critique opposing arguments more rigorously than their own. For instance, experiments have shown that individuals presented with mixed evidence about a contentious topic tend to highlight information supporting their stance while dismissing or undervaluing contrary data (Ceci et al., 2024; Efstratiou & Cristofaro, 2022; McKenna & Dunning, 2024).

Cognitive inertia. Cognitive inertia, closely related to belief perseverance, is the resistance to altering one's attitudes or thoughts, even when faced with credible and disconfirming evidence (Samadi et al., 2024; Turner et al., 2021). Stanford's studies on decision-making, such as the assessment of suicide notes (Ross et al., 1975; Schoene et al., 2021), illustrate this phenomenon. Participants often clung to initial judgments about the authenticity of notes, even after being told their assessments were fabricated. Similarly, experiments on firefighter decision-making (Okoli et al., 2022) revealed a reluctance to revise strategies, even when presented with data showing inefficiencies in their approach. This resistance underscores the powerful influence of initial beliefs and the difficulty in overcoming them.

Cognitive inertia is further amplified by emotional reasoning, where beliefs are deeply intertwined with personal identity, values, or moral convictions (Déli, 2024; Giorgi, 2017). Emotions such as fear, anger, pride, or even guilt act as powerful reinforcers, making individuals more resistant to evidence that challenges their worldview (Halperin, 2015). For instance, emotionally charged topics like politics, religion, or public health policies often evoke defensive reactions (Fassin, 2023; Nussbaum, 2013). People are more likely to dismiss facts or rational arguments when they perceive these as threats to their sense of self or belonging (Fassin, 2023; Nussbaum, 2013). Neurological studies support this interplay between emotion and cognition. The amygdala, a brain region associated with processing emotions, becomes highly active when individuals encounter information that contradicts deeply held beliefs (Halperin & Pliskin, 2015; Panksepp et al. 2017; Van Overwalle, 2009). This heightened

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

emotional response can override the prefrontal cortex—responsible for rational decision-making—leading to a reliance on gut reactions rather than logical analysis. This dynamic creates a formidable barrier to belief change. When individuals feel their core values or social identity are under threat, they are more likely to double down on their existing beliefs rather than engage with opposing evidence (Halperin & Pliskin, 2015; Panksepp et al. 2017; Van Overwalle, 2009). This explains why efforts to correct misinformation often fail or even backfire, reinforcing the very myths they aim to debunk.

The enduring nature of cognitive biases, as described above, can be attributed to their evolutionary origins (Haselton et al., 2009; Korteling et al., 2018). These biases likely developed as adaptive mechanisms to enhance survival and reproduction in ancestral environments. Quick decision-making, often based on limited information, was crucial in scenarios where delaying action could mean life or death. For example, perceiving patterns—even false ones—might have helped early humans avoid predators or identify resources more effectively. Additionally, aligning with group consensus fostered social cohesion, reducing the likelihood of exclusion from the group, which could be fatal in resource-scarce settings. In modern contexts, however, these once-beneficial traits can lead to cognitive distortions (Randle et al., 2015). The simplicity and immediacy favored by evolutionary pressures are ill-suited to navigating today's complex and often contradictory information landscape. Instead of aiding survival, these biases now exacerbate challenges like misinformation and polarization (Haselton et al., 2009; Korteling et al., 2018; Randle et al., 2015).

Understanding the evolutionary and emotional underpinnings of these cognitive tendencies is essential for addressing the challenges of belief persistence. By recognizing how these factors shape human thought, we can design interventions that account for both the psychological and emotional dimensions of misinformation. These insights pave the way for

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

more effective strategies, such as fostering empathy and reducing perceived threats, to encourage openness to new information (Wilson et al., 2014; Panksepp, 2010).

The role of technology in misinformation amplification

Digital platforms have significantly exacerbated the challenges of discerning truth from misinformation, amplifying cognitive biases and accelerating the spread of false narratives (Kozyreva et al., 2020; Langraw & Zaman, 2023). Two major factors contribute to this phenomenon: the creation of echo chambers and filter bubbles (Roos Arguedas et al., 2022; Zimmer et al., 2019), and the unparalleled speed and reach of misinformation on social media (Hillary & Dumebi, 2021 ; Lu et al., 2023).

Echo chambers and filter bubbles. Reinforcing preconceived notions is largely accomplished by algorithms intended to customize user experiences. These algorithms produce "filter bubbles," where people are mainly exposed to material that supports their opinions, by selecting content according to past preferences and actions. This restricted exposure eventually creates "echo chambers," where people who share similar views reinforce one another's opinions, frequently at the price of intellectual diversity. This tendency increases polarization and increases the likelihood that people would take false information at face value (Roos Arguedas et al., 2022; Zimmer et al., 2019),.

The speed and reach of misinformation. Social media platforms are made with user interaction in mind, giving preference to attention-grabbing, sensational, or emotionally charged material. Because of this, false information frequently spreads more quickly than accurate information. False articles are shared much more frequently and reach a wider audience, according to studies that compare the spread of fake and true news on Twitter. The

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

ease of material sharing and the absence of strict fact-checking procedures on many platforms are the main causes of this quick dissemination (Hillary & Dumebi, 2021 ; Lu et al., 2023).

Several studies highlight the distinct susceptibilities of digital spaces to false information. For instance, a 2018 MIT study found that false information is 70% more likely to be retweeted than genuine information, and that it spreads much more quickly (Vosoughi et al., 2018). This tendency is explained by the emotional appeal and freshness of false information, which draws attention more readily than complicated or everyday facts (Marwick, 2018; Schackmuth, 2018). A clear example of the harmful real-world effects of unrestrained digital disinformation is the "Pizzagate" conspiracy. This unfounded allegation that a pizzeria in Washington, D.C., was the center of a child trafficking network connected to political elites started on internet forums and swiftly expanded across sites like Twitter and Reddit (Metaxas & Finn, 2019). An armed man stormed the restaurant, thinking he was saving children, despite the conspiracy's viral nature and total lack of evidence (Marwick & Lewis, 2017). This episode serves as an example of how false information can spread beyond fictional narratives and provoke real, occasionally violent, acts when it is spread via digital media (Lewandowsky, 2022). Such examples highlight the urgent need for strategies to counter the amplification of misinformation. By understanding the mechanics of digital ecosystems and their vulnerabilities, policymakers and technology developers can work toward creating more robust safeguards against the spread of false information (Mihailidis & Viotty, 2017; Zannettou et al., 2019; Cosentino, 2020).

It is impossible to overestimate how much technology contributes to the spread of false information. Digital platforms greatly increase the difficulty of determining the truth by creating echo chambers, speeding up the dissemination of sensational content, and emphasizing engagement above accuracy. To lessen the impact of false information in the digital age,

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

addressing these problems calls for a multipronged strategy that includes algorithmic transparency, content control, and user education.

Societal implications of fake news

The societal implications of fake news extend far beyond individual belief systems, influencing the broader fabric of communities, institutions, and nations. This section examines three critical impacts: polarization, the erosion of trust, and the economic and political consequences of misinformation.

Polarization. One of the main causes of societal division is fake news. It widens the gap between ideological groupings by fostering echo chambers and reiterating preexisting biases (Kitchens et al., 2020; Spohr, 2017). Research indicates that exposure to politically biased or inaccurate information makes individuals more hostile toward opposing ideas and promotes a "us versus them" mentality (Törnberg & Andersson, 2021; Tucker et al., 2018). This divide further entrenches individuals in their ideological silos and reduces the possibility of constructive discussion (Munroe, 2024). For example, the Pew Research Center (2020) highlights that partisan divisions in the United States have significantly increased over the past decade, with fake news playing a critical role in amplifying these divides. Polarized information ecosystems on social media, driven by algorithmic filters and information cascades, reorganize social networks in ways that amplify divisions and propagate misinformation (Tokita & Guess, 2021). Studies have also shown how digital disinformation manipulates emotional and cognitive biases, reinforcing ideological alignment and social identity (Jost et al., 2022; Ruffo et al., 2023). These findings underscore the need for strategies to mitigate the spread of false information and its polarizing effects. By understanding the dynamics of digital misinformation and addressing echo chambers, policymakers and

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

technologists can work toward fostering healthier information ecosystems and promoting dialogue across ideological divides.

Erosion of trust. Public confidence in important institutions, such as the media, scientific communities, and governmental organizations, is weakened by the spread of fake news. Because it undermines the authority of sources, this breakdown of confidence is especially worrisome. Research has shown that repeated exposure to false information, even after it has been refuted, can lead to persistent skepticism about the accuracy of reliable information (Lewandowsky et al., 2017). Such skepticism can have far-reaching effects, impeding collective efforts to address critical issues like climate change and public health (Hornsey & Lewandowsky, 2022). For example, during the COVID-19 pandemic, misinformation significantly eroded trust in public health leadership, further complicating efforts to manage the crisis (Dhanani & Franz, 2020). These trends highlight the urgent need to combat fake news and rebuild trust in credible institutions..

Economical and political consequences of misinformation. There are real political and economic consequences to disinformation. As seen by the proliferation of false narratives during significant campaigns like the 2016 U.S. presidential election, fake news has been demonstrated to affect voter behavior during elections (López et al., 2024; Donovan, 2021). By making dramatic or polarizing assertions, these lies frequently target important demographics and aim to sway public opinion (Pennycook & Rand, 2019). Economically speaking, erroneous reports can cause stock price swings or erode customer trust, leading to market instability (Sunstein, 2020). The lethal effects of disinformation are further illustrated by public health emergencies like the COVID-19 pandemic, where false claims about treatments or vaccines hampered efforts to curb the virus's spread (Chou et al., 2021). For example, concerns regarding vaccine safety, fueled by misinformation, have directly led to

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

decreased vaccination rates, prolonging the pandemic's effects (Lewandowsky et al., 2017; Chou et al., 2021).

Creating all-encompassing measures to combat the spread of fake news requires an understanding of its societal ramifications. Stakeholders may more effectively target efforts to lessen these pervasive consequences by examining how disinformation contributes to division, trust erosion, and political and economic upheaval (Cosentino, 2020; Bennett & Livingston, 2020). For example, the proliferation of fake news has disrupted trust in democratic institutions and created vulnerabilities in addressing critical challenges, such as public health crises and election integrity (Aral, 2021; Mondini, 2023). Additionally, misinformation has amplified the “post-truth” era, where skepticism toward credible sources further complicates societal cohesion and effective governance (Lewandowsky et al., 2017; Flew, 2021). Building resilience against the widespread influence of disinformation requires concerted efforts from governments, digital corporations, and education to counter its impact through systemic reforms and awareness campaigns.

Existing solutions and critiques

Efforts to address cognitive biases and combat misinformation have largely focused on three key approaches: educational interventions, regulatory measures, and technological solutions. Each strategy offers distinct advantages and faces unique challenges.

Educational interventions. A key component of initiatives to promote critical thinking and lessen vulnerability to false information is media literacy training. The goal of these programs is to equip individuals with the tools to assess information sources, identify biases, and distinguish fact from fiction (McDougall et al., 2018). A successful example of such a program is Finland, where the inclusion of media literacy in school curricula has significantly

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

enhanced citizens' ability to identify and reject misleading information (Melstveit Roseme et al., 2024). However, the effectiveness of these programs often depends on audience participation and implementation strategies. For instance, while younger, tech-savvy audiences benefit from these initiatives, older populations may face challenges in accessing and adopting media literacy practices (Rasi et al., 2021). Critics also argue that implementing these programs can be resource-intensive, requiring substantial investment and long-term commitment (Edwards et al., 2021; Frau-Meigs & Corbu, 2024).

Regulatory measures. Legislation has been introduced by certain governments to stop the spread of false information. For example, Singapore's *Protection from Online Falsehoods and Manipulation Act (POFMA)* penalizes individuals and websites that disseminate misleading information (Han, 2020). While such measures can deter bad actors, they have also raised concerns about potential overreach and suppression of free expression (Helm & Nasu, 2021). Critics caution that poorly designed regulations could be exploited for political purposes, undermining democratic values and silencing dissent (Carson & Gibbons, 2023).

Technological solutions. These technologies assess the veracity of content and provide users with context to evaluate its accuracy (Kavanagh & Samantha, 2023). For instance, NewsGuard uses human reviewers and algorithmic methods to rate news sources, aiming to combat misinformation on a large scale (Rao, 2023). However, the use of algorithms raises ethical concerns, particularly regarding biases in training data and the opacity of decision-making processes (Horne et al., 2023). Additionally, effective implementation relies on user engagement, as these tools are only impactful when individuals actively use them to verify information (Mazzoli, 2023; Allen, 2024). This underscores the importance of increasing public awareness and fostering trust in such technologies to maximize their potential.

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

Although each of these strategies has shown promise, their drawbacks highlight how difficult it is to combat false information. To build a society that is more knowledgeable and resilient, a complete approach that incorporates technology, regulation, and education is necessary. In order to do this, cooperation between educators, legislators, and tech developers will be essential.

Gaps in the literature

Despite the increasing focus on misinformation and cognitive biases, several significant gaps in the research remain. While short-term studies often demonstrate improvements in media literacy and critical thinking, the long-term effectiveness of these programs remains unclear. Research is needed to determine whether these skills are retained over time and if they translate into sustained resilience against misinformation (McDougall et al., 2018; Frau-Meigs & Corbu, 2024). This is critical for assessing the true impact of educational interventions and identifying areas for enhancement. Further, the influence of cultural norms, values, and media ecosystems on susceptibility to misinformation is underexplored. For instance, some societies may emphasize collective beliefs or hierarchical authority, influencing how individuals process conflicting information (Rasi et al., 2021). Comparative studies across diverse cultural contexts could uncover unique vulnerabilities and inform mitigation strategies tailored to specific regions or populations. Lastly, technological solutions such as fact-checking algorithms and misinformation detection tools have shown promise, but their effectiveness remains difficult to quantify. Metrics for assessing their real-world impact—such as user engagement, behavior change, and reductions in misinformation spread—are still evolving (Horne et al., 2023; Allen, 2024). Additionally, concerns over algorithmic biases and transparency complicate efforts to evaluate these tools comprehensively (Horne et al., 2023).

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

Conclusion

Addressing the intricacies of belief persistence and the propagation of false narratives is crucial in a time when disinformation is pervasive and cognitive biases seriously impair the capacity to distinguish fact from fiction. This essay has explored the psychological foundations of cognitive inertia and confirmation bias, emphasizing the emotional processes that reinforce these inclinations as well as their evolutionary origins. Although these prejudices were formerly survival strategies, they today fuel social problems like distrust and divisiveness. The need for technical accountability is highlighted by the way that digital platforms use echo chambers and filter bubbles to spread false information. Fake news has an impact on institutions, economies, and democratic processes in addition to individual belief systems, as evidenced by the real-world repercussions of unchecked lies, such the "Pizzagate" conspiracy.

Although they confront many obstacles, efforts to counteract misinformation, whether through technical interventions, regulatory actions, or educational initiatives, show potential. Programs for media literacy may be successful in the short term, but their long-term effects need to be assessed. Regulations must strike a balance between protecting democratic freedoms and reducing disinformation. Despite their innovation, technological solutions struggle with user engagement, transparency, and algorithmic bias mitigation. The gaps in the literature highlight areas that need more investigation, especially in regards to comprehending the cross-cultural aspects of misinformation susceptibility and the long-term effectiveness of interventions. To close these gaps and create a culture that is resistant to false information, researchers, legislators, educators, and tech developers must work together.

In the end, reducing the negative effects of fake news on society requires encouraging critical thinking, increasing algorithmic transparency, and giving people the tools they need to

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM FICTION IN TODAY'S INFORMATION LANDSCAPE

successfully traverse the complicated digital environment. Stakeholders can collaborate to build a more knowledgeable and united world by combining these tactics.

References

- Acciarini, C., Brunetta, F., & Boccardelli, P. (2021). Cognitive biases and decision-making strategies in times of change: a systematic literature review. *Management Decision*, 59(3), 638-652. <https://doi.org/10.1108/MD-07-2019-1006>
- Allen, J. (2024). Essays on understanding and combating misinformation at scale. *MIT*. <https://doi.org/10.1016/mit.2024.misinfo>
- Aral, S. (2021). *The hype machine: How social media disrupts our elections, our economy, and our health—and how we must adapt*. Penguin Random House.
- Bennett, W. L., & Livingston, S. (2020). *The disinformation age*. Cambridge University Press.
- Boin, A., McConnell, A., & Hart, P. (2021). *Governing the pandemic: The politics of navigating a mega-crisis* (p. 130). Springer Nature.
- Carson, A., & Gibbons, A. (2023). The big chill? How journalists and sources perceive and respond to fake news laws in Indonesia and Singapore. *Journalism Studies*, 24(1), 45–63. <https://doi.org/10.1080/1461670X.2023.2192299>
- Ceci, S. J., Clark, C. J., Jussim, L., & Williams, W. M. (2024). Adversarial collaboration: An undervalued approach in behavioral science. *American Psychologist*.
- Charness, G., & Dave, C. (2017). Confirmation bias with motivated beliefs. *Games and Economic Behavior*, 104, 1-23. <https://doi.org/10.1016/j.geb.2017.02.015>
- Chou, W. Y. S., Gaysynsky, A., & Vanderpool, R. C. (2021). The COVID-19 misinformation challenge in public health. *Health Promotion Practice*, 22(3), 299–302. <https://doi.org/10.1177/15248399211031947>

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- Cosentino, G. (2020). *Social media and the post-truth world order: The global dynamics of disinformation*. Springer.
<https://doi.org/10.1007/978-3-030-43005-4>
- Déli, E. (2024). *Emotional Reasoning: Insight into the Conscious Experience*. CRC Press.
- Dhanani, L. Y., & Franz, B. (2020). The role of news consumption and trust in public health leadership in shaping COVID-19 knowledge and prejudice. *Frontiers in Psychology, 11*, 560828. <https://doi.org/10.3389/fpsyg.2020.560828>
- Donovan, J. (2021). Misinformation and disinformation in the 2020 elections. *Harvard Kennedy School Misinformation Review*.
<https://doi.org/10.37016/mr-2020-49>
- Edwards, L., Stoilova, M., & Anstead, N. (2021). Rapid evidence assessment on online misinformation and media literacy: Final report. *London School of Economics and Political Science*.
<https://doi.org/10.21953/lse.03xst9n9o4h4>
- Efstratiou, A., & De Cristofaro, E. (2022). Adherence to Misinformation on Social Media Through Socio-Cognitive and Group-Based Processes. *Proceedings of the ACM on Human-Computer Interaction, 6*(CSCW2), 1-35. <https://doi.org/10.1145/3555589>
- Fassin, D. (2013). On resentment and ressentiment: the politics and ethics of moral emotions. *Current Anthropology, 54*(3), 249-267. <https://doi.org/10.1086/670390>
- Figueira, Á., & Oliveira, L. (2017). The current state of fake news: challenges and opportunities. *Procedia computer science, 121*, 817-825.
<https://doi.org/10.1016/j.procs.2017.11.106>
- Flew, T. (2021). The global trust deficit disorder: A communications perspective on trust in the time of global pandemics. *Journal of Communication, 71*(2), 163–188.
<https://doi.org/10.1093/ccc/tcz041>

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- Frau-Meigs, D., & Corbu, N. (2024). *Disinformation debunked: Building resilience through media and information literacy*. Springer.
<https://doi.org/10.1007/978-3-030-77433-2>
- George, J., Gerhart, N., & Torres, R. (2023). Uncovering the truth about fake news: A research model grounded in multi-disciplinary literature. *Fake News on the Internet*, 175-202.
- Giorgi, S. (2017). The mind and heart of resonance: The role of cognition and emotions in frame effectiveness. *Journal of Management Studies*, 54(5), 711-738.
<https://doi.org/10.1111/joms.12278>
- Halperin, E. (2015). *Emotions in conflict: Inhibitors and facilitators of peace making*. Routledge.
- Halperin, E., & Pliskin, R. (2015). Emotions and emotion regulation in intractable conflict: Studying emotional processes within a unique context. *Political Psychology*, 36, 119-150. <https://doi.org/10.1111/pops.12236>
- Han, T. Z. (2020). *Protection from Online Falsehoods and Manipulation Act (POFMA): Regulating fake news to maintain public trust in Singapore*. National University of Singapore.
- Haselton, M. G., Bryant, G. A., Wilke, A., Frederick, D. A., Galperin, A., Frankenhuys, W. E., & Moore, T. (2009). Adaptive rationality: An evolutionary perspective on cognitive bias. *Social Cognition*, 27(5), 733-763. <https://doi.org/10.1521/soco.2009.27.5.733>
- Helm, R. K., & Nasu, H. (2021). Regulatory responses to 'fake news' and freedom of expression: Normative and empirical evaluation. *Human Rights Law Review*, 21(2), 302–330. <https://doi.org/10.1093/hrlr/ngaa053>
- Hilary, I. O., & Dumebi, O. O. (2021). Social media as a tool for misinformation and disinformation management. *Linguistics and Culture Review*, 5(S1), 496-505.
<https://doi.org/10.21744/lingcure.v5nS1.1435>

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- Horne, B. D., Nevo, D., & Smith, S. L. (2023). Ethical and safety considerations in automated fake news detection. *Behaviour & Information Technology*, 42(1), 15–32. <https://doi.org/10.1080/0144929X.2023.2285949>
- Hornsey, M. J., & Lewandowsky, S. (2022). A toolkit for understanding and addressing climate skepticism. *Nature Human Behaviour*, 6, 1380–1393. <https://doi.org/10.1038/s41562-022-01463-y>
- Jost, J. T., Baldassarri, D. S., & Druckman, J. N. (2022). Cognitive–motivational mechanisms of political polarization in social-communicative contexts. *Nature Reviews Psychology*, 1, 24–37. <https://doi.org/10.1038/s44159-022-00093-5>
- Kavanagh, J., & Samantha, I. (2023). Fighting misinformation: Exploring automated and fact-checking tools. *RAND Corporation*. <https://doi.org/10.7249/RR3000>
- Kitchens, B., Johnson, S. L., & Gray, P. (2020). Understanding echo chambers and filter bubbles: The impact of social media on diversification and partisan shifts in news consumption. *MIS Quarterly*, 44(4), 1671–1694. <https://doi.org/10.25300/MISQ/2020/16371>
- Korteling, J. E., Brouwer, A. M., & Toet, A. (2018). A neural network framework for cognitive bias. *Frontiers in psychology*, 9, 1561. <https://doi.org/10.3389/fpsyg.2018.01561>
- Kozyreva, A., Lewandowsky, S., & Hertwig, R. (2020). Citizens versus the internet: Confronting digital challenges with cognitive tools. *Psychological Science in the Public Interest*, 21(3), 103-156. <https://doi.org/10.1177/1529100620946707>
- Langraw, K. S., & Zaman, A. (2023). A Study on Evaluating the Impact of Social Media's Fake News on The Attitudes and Beliefs of a Society. *International Journal of Social Science & Entrepreneurship*, 3(4), 254-270.

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- Lewandowsky, S. (2022). Fake news and participatory propaganda. In J. A. Forgas & K. Fiedler (Eds.), *Cognitive illusions: Intriguing phenomena in thinking, judgment, and memory* (pp. 341–364). Routledge.
<https://doi.org/10.4324/9781003006310-12>
- Lewandowsky, S., Ecker, U. K. H., & Cook, J. (2017). Beyond misinformation: Understanding and coping with the “post-truth” era. *Journal of Applied Research in Memory and Cognition*, 6(4), 353–369. <https://doi.org/10.1016/j.jarmac.2017.08.005>
- López, L., Conigliaro, J., & Elnicki, D. M. (2024). Our values and a hope for a better future — JGIM and the US elections of 2024. *Journal of General Internal Medicine*.
- Lu, Y., Yao, F., & Liu, Q. (2023). Unraveling the Web of Misinformation: Investigating Fake News Propagation and Its Societal Impact. *Insights in Social Science*, 1(1), 7-20.
- Marwick, A. E. (2018). Why do people share fake news? A sociotechnical model of media effects. *Georgetown Law Technology Review*, 2(2), 474–512.
<https://doi.org/10.2139/ssrn.3214773>
- Marwick, A. E., & Lewis, R. (2017). Media manipulation and disinformation online. *Data & Society*. <https://doi.org/10.2139/ssrn.3059007>
- Mazzoli, E. M. (2023). Digital trust initiatives: Seeking to reward journalistic ethics online. *Center for International Media Assistance*.
<https://doi.org/10.1093/cima/1123>
- McDougall, J., Zezulkova, M., Van Driel, B., & Sternadel, D. (2018). Teaching media literacy in Europe: Evidence of effective school practices in primary and secondary education. *NESET II Report*.
<https://doi.org/10.2766/613204>
- McKenna, C., & Dunning, D. (2024). Psychological mechanisms underlying the biased

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- interpretation of numerical scientific evidence. *Journal of Experimental Psychology: General*. Advance online publication. <https://doi.org/10.1037/xge0001704>
- Melstveit Roseme, M., Day, L., & Ecorys. (2024). Putting media literacy on the map – A snapshot of policies and practices in Europe. *European Commission*. <https://doi.org/10.2759/421132>
- Mercier, H. (2022). Confirmation bias–myside bias. In *Cognitive illusions* (pp. 78-91). Routledge.
- Mercier, H., & Sperber, D. (2011). Why do humans reason? Arguments for an argumentative theory. *Behavioral and brain sciences*, 34(2), 57-74. <https://doi.org/10.1017/S0140525X10000968>
- Metaxas, P., & Finn, S. (2019). Investigating the infamous #Pizzagate conspiracy theory. *Technology Science*.
- Mihailidis, P., & Viotty, S. (2017). Spreadable spectacle in digital culture: Civic expression, fake news, and the role of media literacies in the “post-fact” society. *American Behavioral Scientist*, 61(4), 441–454. <https://doi.org/10.1177/0002764217701217>
- Mondini, F. (2023). *Unveiling the threat: The cognitive mechanisms behind disinformation's influence on democratic systems*.
- Munroe, W. (2024). Echo chambers, polarization, and "Post-truth": In search of a connection. *Philosophical Psychology*, 37(1), 45–67. <https://doi.org/10.1080/09515089.2023.2174426>
- Nussbaum, M. C. (2013). *Political emotions*. Harvard University Press.
- Okoli, J. O., Watt, J., & Weller, G. (2022). A naturalistic decision-making approach to managing non-routine fire incidents: evidence from expert firefighters. *Journal of Risk Research*, 25(2), 198-217. <https://doi.org/10.1080/13669877.2021.1936609>

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- Panksepp, J. (2010). Affective neuroscience of the emotional BrainMind: evolutionary perspectives and implications for understanding depression. *Dialogues in clinical neuroscience, 12*(4), 533-545. <https://doi.org/10.31887/DCNS.2010.12.4/jpanksepp>
- Panksepp, J., Lane, R. D., Solms, M., & Smith, R. (2017). Reconciling cognitive and affective neuroscience perspectives on the brain basis of emotional experience. *Neuroscience & Biobehavioral Reviews, 76*, 187-215. <https://doi.org/10.1016/j.neubiorev.2016.09.010>
- Peck, A. (2020). A problem of amplification: Folklore and fake news in the age of social media. *Journal of American Folklore, 133*(529), 329-351. <https://doi.org/10.5406/jamerfolk.133.529.0329>
- Pennycook, G., & Rand, D. G. (2019). Fighting misinformation on social media using “prebunking” strategies. *Psychological Science, 30*(11), 1931–1943. <https://doi.org/10.1177/0956797619888215>
- Peters, U. (2022). What is the function of confirmation bias?. *Erkenntnis, 87*(3), 1351-1376. <https://doi.org/10.1007/s10670-020-00252-1>
- Pew Research Center. (2020). Partisan antipathy: A deeper look.
Retrieved from <https://www.pewresearch.org>
- Randle, J. M., Stroink, M. L., & Nelson, C. H. (2015). Addiction and the adaptive cycle: A new focus. *Addiction Research & Theory, 23*(1), 81-88. <https://doi.org/10.3109/16066359.2014.942295>
- Rao, S. (2023). Countering disinformation in the United States. *Bertelsmann Stiftung*. <https://doi.org/10.1108/BS123>
- Rasi, P., Vuojärvi, H., & Rivinen, S. (2021). Promoting media literacy among older people: A systematic review. *Adult Education Quarterly, 71*(2), 163–188. <https://doi.org/10.1177/0741713620923755>
- Ross, L., Lepper, M. R., & Hubbard, M. (1975). Perseverance in self-perception and social

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- perception: Biased attributional processes in the debriefing paradigm. *Journal of Personality and Social Psychology*, 32(5), 880–892. <https://doi.org/10.1037/0022-3514.32.5.880>
- Ross Arguedas, A., Robertson, C., Fletcher, R., & Nielsen, R. (2022). Echo chambers, filter bubbles, and polarisation: A literature review. <http://dx.doi.org/10.60625/risj-ctxj-7k60>
- Ruffo, G., Semeraro, A., Giachanou, A., & Rosso, P. (2023). Studying fake news spreading, polarization dynamics, and manipulation by bots: A tale of networks and language. *Computer Science Review*, 47, 100497. <https://doi.org/10.1016/j.cosrev.2022.100497>
- Samadi, A. H., Panahi, M., & Raanaei, A. (2024). The roots of cognitive inertia: an introduction to institutional changes. In *Institutional Inertia: Theory and Evidence* (pp. 133-153). Cham: Springer Nature Switzerland.
- Schackmuth, A. (2018). Extremism, fake news, and hate: Effects of social media in the post-truth era. *CORE*. <https://doi.org/10.13140/RG.2.2.21073.07520>
- Schoene, A. M., Turner, A., De Mel, G. R., & Dethlefs, N. (2021). Hierarchical multiscale recurrent neural networks for detecting suicide notes. *IEEE Transactions on Affective Computing*, 14(1), 153 – 164. <https://doi.org/10.1109/TAFFC.2021.3057105>
- Spohr, D. (2017). Fake news and ideological polarization: Filter bubbles and selective exposure on social media. *Business Information Review*, 34(3), 150–160. <https://doi.org/10.1177/0266382117722446>
- Sunstein, C. R. (2020). *False rumors and the spread of misinformation*. Harvard University Press.
- Tokita, C. K., & Guess, A. M. (2021). Polarized information ecosystems can reorganize social

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

- networks via information cascades. *Proceedings of the National Academy of Sciences*, 118(48), e2102147118.
<https://doi.org/10.1073/pnas.2102147118>
- Törnberg, P., & Andersson, C. (2021). Modeling the emergence of affective polarization in the social media society. *PLOS ONE*, 16(9), e0258259.
<https://doi.org/10.1371/journal.pone.0258259>
- Tucker, J. A., Guess, A., Barberá, P., & Vaccari, C. (2018). Social media, political polarization, and political disinformation: A review of the scientific literature. *SSRN*.
<https://doi.org/10.2139/ssrn.3144139>
- Turner, B. M., Kvam, P. D., Unger, L., Sloutsky, V., Ralston, R., & Blanco, N. J. (2021). Cognitive inertia: How loops among attention, representation, and decision making distort reality.
- Van Overwalle, F. (2009). Social cognition and the brain: a meta-analysis. *Human brain mapping*, 30(3), 829-858. <https://doi.org/10.1002/hbm.20547>
- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *science*, 359(6380), 1146-1151. <https://doi.org/10.1126/science.aap9559>
- Wilson, D. S., Hayes, S. C., Biglan, A., & Embry, D. D. (2014). Evolving the future: Toward a science of intentional change. *Behavioral and Brain Sciences*, 37(4), 395-416.
<https://doi.org/10.1017/S0140525X13001593>
- Zannettou, S., Sirivianos, M., Blackburn, J., & Kourtellis, N. (2019). The web of false information: Rumors, fake news, hoaxes, clickbait, and various other shenanigans. *Proceedings of the ACM on Data and Information Quality*, 1(1), 1–37.
<https://doi.org/10.1145/3309699>
- Zimmer, F., Scheibe, K., Stock, M., & Stock, W. G. (2019, January). Echo chambers

NAVIGATING THE COGNITIVE CHALLENGES OF DISTINGUISHING FACT FROM
FICTION IN TODAY'S INFORMATION LANDSCAPE

and filter bubbles of fake news in social media. Man-made or produced by algorithms.

In *8th annual arts, humanities, social sciences & education conference* (pp. 1-22).