Unraveling the Dynamics of Climate Disinformation. Understanding the Role of Vested Interests, Political Actors, and Technological Amplification

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Abstract

This special issue aims to investigate the dynamics of climate disinformation, focusing on the roles of vested interests, political actors, and technological amplification. It seeks to provide theoretical and empirical insights into how various actors shape climate disinformation across Europe and Latin America, addressing a significant gap in the existing literature. The articles in this issue explore various dimensions of climate disinformation, underscoring the complexity of climate discourse. The authors explore how climate disinformation manifests itself in political and social media debates, the role of far-right parties in defying and coopting environmental narratives, and whether algorithms contribute to the spread of disinformation. This special issue emphasises the need for improved communication strategies and public engagement to counteract disinformation and foster informed and transformative climate action.

Keywords: climate disinformation, vested interests, far-right, algorithms, social media, delayism, obstructionism.

Introduction

The Global Risks Report has ranked misinformation and disinformation as the greatest immediate risk to human society while extreme weather conditions ranked as the greatest long-term risk (World Economic Forum, 2024). Recent research has shown that climate disinformation is being fuelled by well-funded transnational interest groups, as well as conservative politicians and social media algorithms (Brulle et al., 2024; Sethi, 2024; Vicente Torrico and Díez-Garrido; Vowles et al., 2024). These groups are changing the contours of political communication and blocking effective action. A recent report from the Intergovernmental Panel on Climate Change (IPCC, 2022) sees disinformation as a tactic "to maintain the status quo by actors in positions of power". However, further research is needed to understand how various vested interests contribute to the spread of climate misinformation and what measures can be taken to mitigate its impact. In this context, we need novel perspectives that explore the changing nature of climate disinformation and its political and social dimensions, relevant to understanding climate denial, delayism and obstructionism (CAN, 2021; Hornsey, Harris and Fielding, 2018). This special issue on 'Climate

Disinformation. Understanding the Role of Vested Interests, Political Actors, and Technological Amplification' highlights the need to shed light on how powerful actors circulate disinformation about climate change.

Climate disinformation has traditionally focused on denying climate change, its causes and consequences. Outright climate change denial is still pervasive on social media and among far-right actors and parties. However, it goes well beyond denying climate change (Cook, 2020). Donald Trump, for instance, has made contradictory statements (Allen and McAleer, 2018; Cheung, 2020) while withdrawing from the Paris Climate Agreement and taking over a hundred steps to scale back measures that tackle climate change (Columbia, 2022). Similarly, EU far-right coalitions have issued confusing statements while voting environmental policies down in Parliament (Gottenhuber and Mulholland, 2019). While pledging climate neutrality in 2050, Bolsonaro's policies have also ravaged an Amazon damaged by out-of-control wildfires and deforestation.

Nowadays, outright denial has become less popular in the mainstream media and among big corporations (CAAD, 2024; Lamb et al., 2024; Sethi, 2024). In this context, vested interests are experimenting with more subtle tactics to distract citizens and delay action. The literature has identified a rise of more nuanced strategies, highlighting a change from outright denial to delayism. In fact, CAAD (2024) sees delayism as 'the new climate denial'. Lamb et al. (2020) have found four main delayist discourses often spread through misleading or deceptive strategies. These discourses have been graphically summarised by Keller (2021) as (1) redirecting responsibility, (2) supporting non-transformative options, (3) discrediting climate policies and (4) blunt climate surrender.

The first type of delay focuses on redirecting responsibility towards others, whether individual consumers or those with greater fossil fuel consumption. For example, Brazilian far-right leader Jair Bolsonaro recommended "to poop every other day" as a measure to protect the environment (BBC, 2019). These claims strategically stress citizens' responsibility, offering misleading solutions that background the role of governments, big corporations and vested interests. The second set of discourses supports non-transformative solutions, stating that a slow-paced change based on technological, managerial or fossil fuel 'solutionism' will work best. Such strategies exaggerate the effectiveness of techno-managerial planning and offer misleading interpretations of people's freedom of choice. For instance, citizens' demonstrations against environmentally friendly urban planning projects, such as superblocks, often emphasise better management rather than transformative action (Klause, 2018).

The third discourse highlights the downsides of climate policies, which are falsely framed as disruptive and damaging to national traditions, the national economy and people's economic well-being (García Santamaría, 2020). Such discourses often appeal to biased accounts of social justice by stating that developing countries and vulnerable people will have an economic disadvantage if they comply with restrictive guidelines. For instance, conservative parties have framed the European Union's low-emission zones as punishing citizens who lack the means to purchase a new car, distorting the perceived costs of the green transition (Niranjan, 2024). Finally, delayism also manifests itself through pessimistic discourses of surrender, arguing that climate change is already underway and that human efforts are unable to mitigate it. In light of the overwhelming scientific evidence about the climate crisis, overt disinformation and denialist rhetoric are increasingly being combined with these forms of "inactivism" (Mann, 2021). Taken together, these four discourses use sophisticated techniques that are harder to grasp and identify, yet still send deterring and misleading messages (Forchtner and Lubarda, 2022) that foster public confusion and mistrust in institutions and science.

Climate disinformation is part of a contemporary post-factual paradigm in which discussions regarding the nature of factuality and authenticity occur amidst a disintegration of previously established categories of knowledge and truth (Lindholm, 2008; Thurnell-Read, Skey and Heřmanová, 2023). The post-factual paradigm often appeals to ordinary people's experiences and common sense while dismissing scientific facticity (Bergmann, 2020; Hameleers, 2020; Prasad, 2019). This phenomenon is exacerbated by rapid sociocultural and technological transformations, which contribute to reconfiguring the mechanisms through which truth and fakery are constructed and disseminated. In that context, false or misleading information may be regarded as credible if it is felt as authentic and propagated through trustworthy social networks (Gehl and Lawson, 2022).

Climate misinformation and disinformation have become a pressing global issue. For instance, the United Nations Intergovernmental Panel on Climate Change has analysed the impact of disinformation on climate action (IPCC, 2022), and the European Union has called for a universal definition (EU, 2022). The 'universal' definition understands climate disinformation and misinformation as the dissemination of "deceptive or misleading content" that (1) understates climate change in terms of its existence, urgency, impact and human involvement, (2) misrepresents scientific data by strategically silencing, cherry-picking, highlighting and backgrounding information (non)aligned with the obstructionists' interests and (3) distorts the nature of initiatives that allegedly support climate mitigation policies while defying scientific consensus (CAAD, 2024).

While the term 'disinformation' indicates deliberate and intentional dissemination (EU, 2024), misinformation implies an accidental circulation of falsehoods (Sethi, 2024).[1] Social actors and organisations can foster disinformation by misinterpreting, decontextualising or drawing partial conclusions from data. In practice, disinformation and misinformation are highly intertwined since it might be hard to identify the nature of the source's intention but also because people can unknowingly circulate disinformation.

Disinformation has been shown to lead to misconceptions (Ranney and Clark, 2016), to decrease people's support of mitigation policies (van der Linden et al., 2017), and to foster social polarisation (Cook, Lewandowsky and Ecker, 2017). Climate disinformation goes hand in hand with policy obstructionism since they are both aimed at influencing policymaking, hindering policy implementation, and undermining public support for science and climate action. The following lines explore the range of vested interests focused on obstructing climate action, often by producing and circulating climate disinformation in the form of deceptive and misleading data and discourses.

Vested Interests and Climate Obstructionism

Climate obstructionism refers to "intentional actions and efforts to slow or block policies on climate change that are commensurate with the current scientific consensus of what is necessary to avoid dangerous anthropogenic interference with the climate system" (Brulle et al., 2024: 4). Taken together, these mechanisms are focused on spreading strategically misleading and deceitful stories that violate people's right to accurate information. Therefore, disinformation and obstructionism are problematic for their anti-climate-action focus but also their anti-democratic nature (EU, 2024).

[1] Talking about disinformation and misinformation assumes that there are scientific truths which serve as starting points against which all information can be measured.

Vowles, Ekberg and Hultman (2024) have identified three levels of climate obstruction. The first level relates to the clear denial of climate change or humans' involvement in it, the second level seems to recognise scientific evidence yet aims to delay action for economic, political or ideological reasons. Finally, the third level refers to the cultures, hierarchies and systems of values that interfere with climate action at the personal (lifestyle), collective (identities) and structural level (infrastructures, decision-making…).

Brulle et al. (2024) have traced the structure of climate obstruction, identifying the range of vested interests pushing for obstructing climate action. In their schema, individuals, foundations and corporations fund and/or compensate advocacy organisations, advertising agencies, trade associations, think tanks and universities that provide obstructionist news and information. Through the conservative media, lobbying and PACs, they manage to impact the public, media and political agendas, ultimately influencing policy outcomes that benefit the obstructionists and their interests. Many obstructionist and misleading discourses are based on neoliberal discourses of techno-managerial mechanisms and technological solutionism, ignoring the systemic problems that lay at the roots of the problem – as the slogan 'system change not climate change' suggests (Swyngedouw, 2022).

Across Europe, obstructionist messages mobilise a range of deceptive and misleading arguments about the damages of climate action (Brulle et al., 2024). Fossil fuels companies and the agri-food sector are key obstructionist actors, portraying climate action as damaging the national economy, framing gas as a necessary transition and renewable sources as costly and inefficient (Moreno and Almirón, 2024). These discourses are common among far-right parties, such as the Sweden Democrats, the Spanish party Vox or Fratelli d'Italia.

Global far-right political leaders have aligned themselves with vested interests, strategically integrating climate discourse into their broader culture wars. Furthermore, previous research has found that people with populist attitudes are more sceptical about climate change, human involvement and mitigation strategies (Huber, 2020). The tactics employed in climate denialism range from logical fallacies and pseudoscientific expertise to the propagation of conspiracy theories (Cook, Ellerton, & Kinkead, 2018). Additionally, there is a notable trend toward the construction of artificial controversies surrounding climate issues (Hansson, 2017).

Far-right and authoritarian leaders portray climate action as elitist and foreign, putting the burden on local industries and people with fewer resources. In this context, politicians, celebrities and the 'climatism' cartel (Bohr, 2016) are often accused of being hypocrites who defend elitist policies that damage citizens' interests (King, Janulewicz and Arcostanzo, 2022; Marquardt, Oliveira and Lederer, 2022). Populists' alleged anti-elitism connects with climate disinformation through the rhetoric of far-right culture wars. The far-right pleads for inaction or delay through melancholic appeals to preserve national identity and tradition (Moreno and Almirón, 2024). In this context, arguments against climate action are often presented as part of the rural and urban divide (McCarthy, 2020), or a fight between local particularities and global homogenising forces (Forchtner, 2019).

The recent wave of farmers' protests across Europe situate food and agriculture as key elements of far-right climate debates, such as green patriotism, ecobordering and racism, epistemic populism, climate change denialism and delayism, or class-based debates about the urban-rural divide. Some studies suggest that far-right parties support green populism (Stone Jr., 2022) and green patriotism (Schaller and Carius, 2019), co-opting discourses of regional and national environmental conservation while rejecting green energy policies

and international treaties. For instance, the far right has been active in defending 'blood and soil' agricultural policies. The term 'ecofascism' refers to a trend of neo-Nazi groups going green. Inspired by Hitler's vegetarianism and the nazi '*blut und boden*' slogan, these groups appeal to anti-globalisation, xenophobic and gastronativist discourses anchored around the terroir and organic farming (Forchtner, 2018; Dumitrescu, 2018). This has been combined with ecoborderig discourses, blaming migrants and other socially minoritised majorities for threatening the conservation of the national territory and pointing to the Global South (rather than wealthy industrialised nations) as responsible for major environmental destruction (Turner and Bailey, 2021). Finally, the far-right also supports neoliberal vested interests. In the Global South, authoritarian populism has supported neo-extractivist policies while appealing to national development, indigenous livelihoods and anti-imperialism (Tilzey, 2021).

Climate disinformation and obstructionism can be state-sponsored (Echeverría and García Santamaría, 2024; Vicente Torrico and Díez-Garrido, 2024). A chief sponsor of climate disinformation has been the State and its institutions, be it governments, parties, or security agencies, which often count on sophisticated techniques and vast resources. This might be more apparent in autocratic countries such as Russia but also appears in electoral democracies such as Czechia, Poland or the Netherlands (Brulle et al., 2024). For instance, the Dutch Ministry of Economic Affairs and Climate Policy as well as the Polish Ministry of Climate and the Environment and the Ministry of State Assets have systematically opposed effective climate regulation (Duineveld et al., 2024; Szulecki, Maltby and Szulecka, 2024). And in Spain, far-right political parties, industries and think tanks have attempted to use lawfare to threaten climate activists (Moreno and Almirón, 2024).

A body of scholarly literature has examined the emergence of far-right movements and their strategic use of social media platforms to disseminate climate-related disinformation (Fraune and Knodt, 2018; Gottenhuber and Mulholland, 2019; Hameleers, 2020). However, there is also a heated debate about the role of big tech, algorithms and amplification in the context of climate disinformation. Big-tech firms play a role in this cycle, functioning without proper climate misinformation policies and amplifying climate misinformation and disinformation on social media. This is because algorithms, homophily and echo chambers provide a promising environment for mis/disinformation to spread (Treen, Williams and O'Neill, 2020). According to the Center for Countering Digital Hate, algorithms can amplify the most extreme forms of climate disinformation. For instance, delayism appears in almost three-fourths of all deceiving or misleading accounts of climate change on YouTube (CCDH, 2024). For these reasons, civil society organisations have urged the COP26 Presidency and the CEOs of large social media companies to act against climate change disinformation. After an open letter led by the Conscious Advertising Network (CAN, 2021), Google, Pinterest, Twitter, and Facebook issued new commitments to fight climate change disinformation. However, Facebook's algorithms continue to recommend pages fuelling disinformation (Global Witness, 2022).

Special Issue

This special issue aims to move beyond the current state of the art by exploring theoretical and empirical ways in which vested interests shape climate change across Europe and Latin America. The proposal conveys an interdisciplinary approach at the intersections of Media and Communication studies, Political Science and

Sociology. Our purpose is to explain the growing relevance of climate change in social and political discourse as well as the impact of political forces that deny this compelling societal challenge. Drawing on different epistemological perspectives, the articles in this special issue address climate communication offering an up-to-date analysis of a variety of case studies. In doing so, this special issue addresses a gap in the existing literature and seeks to remedy a disciplinary fragmentation, building upon communication science and sociological research. Overall, the proposal emphasises the need for accurate information and effective communication strategies to address the challenges posed by climate change.

All in all, this special issue aims to contribute to the current understanding of climate mis/disinformation by providing new insights into the strategies employed by a variety of political, economic and technological vested interests. We expect this special issue to have both theoretical and practical implications. Theoretical implications include advancing our understanding of the changing nature of truth and fakery in a post-factual era and the dynamics of climate mis/disinformation. Practical implications aim to contribute to the development of targeted interventions, policies, and communication strategies to counter the spread of misinformation, foster public understanding, and facilitate informed action on climate change.

The articles included in this special issue explore the changing nature of climate disinformation and the vested interests underpinning it, such as the state, tech companies and far-right organisations from various geographical contexts. Examples include the role of far-right political parties in spreading misinformation about climate change and the influence of social networks and algorithms in shaping public opinion.

The first article is Théo Aiolfi's "Le Pen, Zemmour and the 'patriotic ecology' of the French far-right: The Case of the 2022 presidential elections". The article explores the strategic divide within the far right in France during the 2022 presidential elections, distinguishing between a 'modernist' approach, which seeks to soften the party's image and appeal to a broad public, and a 'traditionalist' approach, which emphasises radical ideas and distinctiveness. Although ecological issues have historically been associated with the political left, the growing urgency of the climate crisis has forced far-right politicians to address them through a framework called "patriotic ecology". In this research, the author posits how this concept intertwines nationalism and conservatism and describes a romantic connection between the earth and its inhabitants. The results show that the interplay between modernist and traditionalist strategies within the French far right, exemplified by Le Pen and Zemmour, underscores the complexity and adaptability of far-right discourse in contemporary politics, being also able to address issues traditionally dominated by the left.

In a more technical vein, Dmitry Erokhin and Nadejda Komendantova wrote "Unveiling the dynamics of climate change narratives: A Google Trends analysis", exploring public engagement with climate change by analysing Google Trends data from 2023. Using Google Trends, the authors analysed search behaviours related to keywords such as "climate", "climate change", "climate hoax", and "HAARP". The results highlight the critical role of public interest dynamics in climate discussions and underscore the need for further research and proactive engagement strategies to promote informed dialogue and action on climate change.

The third article moves the focus to Italy. In "Italians and Global Warming Scepticism: Opinions and Ways of Information", Giuseppe Pellegrini and Enzo Loner use quantitative and qualitative analysis methods to investigate the elements associated with global warming scepticism and to inquire how citizens inform themselves about this issue. The study employs a rigorous mixed-method methodology: quantitative analysis reveals that trust in science and age significantly influences scepticism, while qualitative data highlight the role of the media and the importance of interpersonal communication in opinion formation. The study

highlights the multifaceted nature of individual beliefs and the critical role of trust in science. Pointing to the interplay between individual perceptions, media influence, and emotional engagement, this research stresses the critical role of the well-informed and engaged public in combating climate change scepticism and promoting collective action.

The fourth article focuses on the Greek context. Ioanna Archontaki, Iliana Giannouli, Achilleas Karadimitriou and Stylianos Papathanassopoulos have jointly written the article "Talking Green on Social Media: An exploratory study of online environmental communication in Greece". In it, the authors examine the main environmental issues, and their aspects prioritised in the Greek online public sphere. The article investigates whether social media users contribute to constructing and disseminating different narratives on environmental issues. To this end, based on a coding protocol, the authors monitor the content of three digital platforms (Facebook, Twitter and YouTube) over three months (from September 2021 to November 2021), and compare social media users' posts with professional content produced by traditional media. The results highlight the complex role played by social networks in shaping the public discourse on climate change in Greece.

In "Anti- and pro-environmental disinformation. Fact-checking Spanish political parties' discourse", Vicente Fenoll, Estrella Alonso-del-Barrio and José Gamir-Ríos investigate the dissemination of climate disinformation by Spanish political parties, analysing the scope, types and ideological biases of their strategies. It is assumed that political issues are fundamental in electoral contexts and that citizens' opinions about them determine voting decisions. However, misinformation can distort public discourse and influence political debates. The analysis is based on fact-checks from two accredited Spanish fact-checkers, Newtral and Maldita, covering statements made by politicians from October 2018 to March 2023. The results highlight the need for greater vigilance against misinformation in political discourse, especially as environmental challenges become increasingly urgent.

The sixth article, "Ask Google: The Role of the Search Machinery in the Construction of Knowledge about Climate Change", is written by Dafne Calvo, María Iranzo-Cabrera and Raquel Tarullo. The authors analyse the role of Google in shaping the discourse around climate change through its search algorithms and the implications for public understanding and misinformation. Specifically, the article uses a mixed methods approach to analyse Google search data from Spanish-speaking countries, exploring how climate change is represented in search results and which actors are prioritised. The results highlight Google's pivotal role as a mediator in the climate change discourse and reveal how its algorithms shape public perceptions and contribute to polarisation and misinformation. Moreover, the article argues that, in recognising the challenges of algorithmic control and misinformation, stakeholders can develop more effective strategies to promote climate engagement.

David Vicente Torrico and María Díez Garrido signed the last article, "A Functional Analysis of VOX's Climate Discourse on Social Media". Their work analyses the discourse of the Spanish far-right Vox party on the social media platform X (formerly Twitter) concerning environmental policies. The study employed Functional Discourse Theory and analysed 91 posts from the official account of Vox and its leader, Santiago Abascal, from September 2022 to February 2023. The analysis reveals that Vox's environmental discourse on X presents a strategic approach characterised by simplicity, controversy and a balance between praise and attacks. This populist strategy not only serves to reinforce the party's narrative but also contributes to the erosion of meaningful public discourse on climate change. The implications of these findings underscore the

need for improved media literacy and fact-checking to combat misinformation and promote informed engagement with environmental policies.

In summary, this special issue invites readers to explore the ways in which vested interests shape climate change communication and disseminate climate disinformation globally. Drawing from different epistemological perspectives, the articles address climate communication by offering up-to-date analyses of relevant case studies.

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Bibliographical references

Aiolfi, T. (2024). Le Pen, Zemmour and the 'patriotic ecology' of the French far right: The case of the 2022 presidential elections. *Observatorio*, (18)5, 1-21 https://doi.org/10.15847/obsOBS18520242593

Allen, D. E. & McAleer, M. (2018). Fake news and indifference to scientific fact: PresidentTrump's confused tweets on global warming, climate change and weather. *Scientometrics*, 117(1), 625–629.

Archontaki, I., Giannouli, I., Karadimitriou, A. & Papathanassopoulos, S. (2024). Talking Green on social media: An exploratory study of online environmental communication in Greece. *Observatorio*,(18)5, 64-84 https://doi.org/10.15847/obsOBS18520242583

BBC. (2019, August 10). Jair Bolsonaro: 'Poop every other day' to protect the environment. *BBC*. https://www.bbc.com/news/world-latin-america-49304358

Bergmann, E. (2020). Populism and the politics of misinformation. *Safundi*, 21(3), 251–265.

Bohr, J. (2016). The 'climatism' cartel: why climate change deniers oppose market-basedmitigation policy. *Environmental Politics*, 25(5), 812–830.

Brulle, R. J., Roberts J., Timmons & Spencer, M. C. (Eds). (2024). *Climate Obstruction Across Europe*. New York: Oxford University Press.

CAAD (2024). What is misinformation & disinformation. *Climate Action Against Disinformation*. https://caad.info/what-is-misinformation-disinformation/#universal-definition

Calvo, D., Iranzo-Cabrera, M. & Tarullo, R. (2024). "Ask Google": The role of the search machinery in the construction of knowledge about climate change. *Observatorio*, (18)5, 104-203 https://doi.org/10.15847/obsOBS18520242579

CAN (2021, November 9). Open letter: Global action required now to tackle the threat of climate misinformation and disinformation. *Conscious Advertising Network*. https://consciousadnetwork.medium.com/open-letter-global-action-required- now-to-tackle-the-threat-of-climate-misinformation-and-7064278b5b77

CCDH (2024). The New Climate Denial. How social media platforms and content producers profit by spreading new forms of climate denial. *Center for Countering Digital Hate*. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://counterhate.com/wp-content/uploads/2024/01/CCDH-The-New-Climate-Denial_FINAL.pdf

Cheung, H. (2020, January 23). What does Trump actually believe on climate change? *BBC*. https://www.bbc.com/news/world-us-canada-51213003

Columbia (2023). *Climate Deregulation Tracker*. *Columbia University*. https://climate.law.columbia.edu/climate-deregulation-tracker

Cook, J. (2020). Deconstructing Climate Science Denial. In D. Holmes & L. M. Richardson. M. (Eds.), *Edward Elgar Research Handbook in Communicating Climate Change* (pp. 62–78). Cheltenham: Edward Elgar.

Cook, J., Ellerton, P. & Kinkead, D. (2018). Deconstructing climate misinformation to identify reasoning errors. *Environmental Research Letters*, 11(2), 024018.

Cook, J., Lewandowsky, S., & Ecker, U. (2017). Neutralizing misinformation through inoculation: Exposing misleading argumentation techniques reduces their influence. *PLOS ONE*, 12(5), e0175799.

Duineveld, M., Dix, G., Plets, G. & Hüzeir, V. (2024). Climate Obstruction in the Netherlands: Strategic and Systemic Obstruction of Dutch Climate Policies (1980– Present). In R. J. Brulle, J. T. Roberts & M. C. Spencer (Eds), *Climate Obstruction Across Europe* (pp. 162–185). New York: Oxford University Press.

Dumitrescu, I. (2018, June 13). 'Bio-Nazis' Go Green in Germany. *Político*. https://www.politico.eu/article/germany-bio-nazis-go-green-natural-farming-right-wing-extremism/

Echeverría, M. & García Santamaría, S. (2024). Introduction: Deceiving from the top. State-sponsored disinformation as a contemporary global phenomenon. In M. Echeverría, S. García Santamaría & D. C. Hallin (Eds.), *State-Sponsored Disinformation around the Globe. How Politicians Deceive their Citizens* (pp.1–18). New York and London: Routledge.

Erokhin, D. & Komendantova, N. (2024). Unveiling the dynamics of climate change narratives: A Google Trends analysis. *Observatorio*, (18)5,22-42 https://doi.org/10.15847/obsOBS18520242567

EU (2022). REPORT on foreign interference in all democratic processes in the European Union, including disinformation. *European Union*. https://www.europarl.europa.eu/doceo/document/A-9-2022-0022_EN.html#_section1

EU (2024). Climate Disinformation. *European Union*. https://climate.ec.europa.eu/eu-action/climate-disinformation_en

Fenoll, V., Alonso-del-Barrio, E. & Gamir-Ríos, J. (2024). Anti- and pro-environmental disinformation. Fact-checking Spanish political parties' discourse. *Observatorio*, (18)5,85-103 https://doi.org/10.15847/obsOBS18520242582

Forchtner, B. & Lubarda, B. (2022). Scepticisms and beyond? A comprehensive portrait of climate change communication by the far right in the European Parliament. *Environmental Politics*, 32(1), 43-68.

Forchtner, B. (2018, June 11). The Radical Right and the Meat-Free Diet. *Fair Observer*. https://www.fairobserver.com/region/europe/radical-right-neo-nazis-meat-free-diet-vegan-vegetarian-news-51422/.

Forchtner, B. (2019). Climate Change and the Far-Right. *WIREs Clim Change. 2019;10:e604. https://doi.org/10.1002/wcc.604*

Fraune, C. & Knodt, M. (2018). Sustainable energy transformations in an age of populism, post-truth politics, and local resistance. *Energy Research & Social Science*, 43(1), 1–7.

García Santamaría, S. (2020). The Italian Taste: The Far-Right and the Performance of Exclusionary Populism during the 2019 European Elections. *Trípodos*, 49(1), 129–149.

Gehl, R. W. & Lawson, S. T. (2022). *Social Engineering: How Crowdmasters, Phreaks, Hackers, and Trolls Created a New Form of Manipulative Information*. Cambridge: The MIT Press.

Global Witness (2022). The climate divide: How Facebook's algorithm amplifies climate disinformation. *Global Witness*. https://www.globalwitness.org/en/campaigns/digital-threats/climate-divide-how-facebooks- algorithm-amplifies-climate-disinformation/

Gottenhuber, S. & Mulholland, E. (2019). Addressing European Populism from a Sustainability Policy Perspective. *European Sustainable Development Network*. https://www.esdn.eu/fileadmin/ESDN_Reports/ESDN_Quarterly_Report_53_final.pdf

Hameleers, M. (2020). Populist Disinformation: Exploring Intersections between Online Populism and Disinformation in the US and the Netherlands. *Politics and Governance*, 8(1), 146–157.

Hansson, S. O. (2017). Science denial as a form of pseudoscience. *Studies in History and Philosophy of Science*, Part A(63), 39–47.

Hornsey, M. J., Harris, E. A. & Fielding, K. S. (2018). Relationships among conspiratorial beliefs, conservatism and climate scepticism across nations. *Nature Climate Change*, 8(1), 614-620.

IPCC (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability. *Intergovernmental Panel on Climate Change*. https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

Keller, C. (2021). Discourses of Climate Delay. https://www.celinekeller.com/discourses-of-climate-delay

King, J., Janulewicz, L. & Arostanzo, F. (2022). Deny, Deceive, Delay: Documenting and Responding to Climate Disinformation at COP26 and Beyond. *Institute for Strategic Dialogue*. https://www.isdglobal.org/wp- content/uploads/2022/06/Summative-Report-COP26.pdf

Klause, K. (2018, April 6). Barcelona superblocks: how power and politics shape transformational adaptation. *Barcelona Laboratory for Urban Environmental Justice and Sustainability*. https://www.bcnuej.org/2018/04/06/barcelona-superblocks-how-socio-political-power-struggles-shape-transformational-adaption/

Lamb, W. F., Mattioli, G., Levi, S., Roberts, J. T., Capstick, S., Creutzig, F., Minx, J. C., Müller-Hansen, F., Culhane, T. & Steinberger, J. K. (2020). Discourses of climate delay. *Global Sustainability*, 3: e17. doi: 10.1017/sus.2020.13.

Lindholm, C. (2008). *Culture and authenticity*. Oxford: Blackwell.

Mann, M. E. (2021). *The New Climate War: The Fight to Take Back Our Planet*. New York:Public Affairs.

Marquardt, J., Oliveira, M. C. & Lederer, M. (2022). Same, same but different? Howdemocratically elected right-wing populists shape climate change policymaking, *Environmental Politics*, 31(5): 777–800.

McCarthy, J. 2020. Authoritarianism, Populism, and the Environment: Comparative Experiences, Insights, and Perspectives. *Annals of the American Association of Geographers*, 109(2), 301–313. doi:10.1080/24694452.2018.1554393.

Moreno, J. A. & Almirón, N. (2024). Climate Obstruction in Spain. From Boycotting the Expansion of Renewable Energy to Blocking Compassion Toward Animals. In R. J. Brulle, J. T. Roberts & M. C. Spencer (Eds), *Climate Obstruction Across Europe* (pp. 294–319). New York: Oxford University Press.

Niranjan, A. (2024, April 30). How climate policies are becoming focus for far-right attacks in Germany. *The Guardian*. https://www.theguardian.com/world/2024/apr/30/how-climate-policies-are-becoming-focus-for-far-right-attacks-in-germany

Pellegrini, G. & Loner, E. (2024). Italians and Global Warming Skepticism: opinions and Ways of information. *Observatorio*, (18)5,43-63 https://doi.org/10.15847/obsOBS18520242574

Prasad, A. (2019). Denying Anthropogenic Climate Change: Or, How Our Rejection of Objective Reality Gave Intellectual Legitimacy to Fake News. *Sociol. Forum*, 34(1), 1217–1234.

Ranney, M.A. & Clark, D. (2016). Climate Change Conceptual Change: ScientificInformation Can Transform Attitudes. *Topics in Cognitive Science*, 8(1), 49–75.

Schaller, S. & Carius, A. (2019). *Convenient Truths. Mapping Climate Agendas of Right-Wing Populist Parties in Europe*. Berlin: Adelphi Consult GmbH.

Sethi, P. (2024). (24 April). What are climate misinformation and disinformation and what is their impact. *Grantham Research Institute on Climate Change and the Environment*, London School of Economics. https://www.lse.ac.uk/granthaminstitute/explainers/what-are-climate-misinformation-and-disinformation/

Stone Jr, J. R. (2022). *Populism, Eco-populism, and the Future of Environmentalism*.Routledge.

Swyngedouw, E. (2022). The unbearable lightness of climate populism. *Environmental Politics*, 31(5), 904–925.

Szulecki, K., Maltby, T. & Szulecka, J. (2024). Climate obstruction in Poland: A Governmental-Industrial Complex. In R. J. Brulle, J. T. Roberts & M. C. Spencer (eds). *Climate Obstruction Across Europe* (pp. 186–213). New York: Oxford University Press.

Thurnell-Read, T., Skey, M. & Heřmanová, M. (2023). Introduction: Cultures of Authenticity. In T. Thurnell-Read, M-. Skey, M. & M. Heřmanová (Eds). *Cultures of Authenticity*. Emerald Publishing.

Tilzey, M. (2021). Authoritarian populism and neo-extractivism in Bolivia and Ecuador: the unresolved agrarian question and the prospects for food sovereignty as counter-hegemony. In I. Scoones, M. Edelman, S. M. Borras Jr., L. Fernanda Forero, R. Hall, W. Wolford and B. White. *Authoritarian Populism and the Rural World* (pp. 266-292). London, New York: Routledge.

Treen, M., d'I., Williams, H. T. P., O'Neill, S. J. (2020). Online misinformation aboutclimate change. *WIREs Clim. Change*. 11, e665. https://doi.org/10.1002/wcc.665

Turner, J. & Bailey, D. (2022). 'Ecobordering': casting immigration control asenvironmental protection. *Environmental Politics*, 31(1), 110–131.

van der Linden, S., Leiserowitz, A., Rosenthal, S. & Maibach, E. (2017). Inoculating thepublic against misinformation about climate change. *Global Challenges*, 1(2), 1–7.

Vicente Torrico, D. & Díez Garrido, M. (2024). A Functional Analysis of VOX's Climate Discourse on Social Media. Observatorio, (18)5, 124-145 https://doi.org/10.15847/obsOBS18520242581

Vicente Torrico, D. & Díez-Garrido. (2024). Spanish far-right and environmental disinformation: VOX's obstructionist discourse on the climate crisis on Twitter. In M. Echeverría, S. García Santamaría & D. C. Hallin (eds.). *State-Sponsored Disinformation around the Globe. How Politicians Deceive their Citizens* (pp. 105–120). New York and London: Routledge.

Vowles, Kjell; Ekberg, Kristoffer & Hultman, Martin. (2024). Climate Obstruction in Sweden: The Green Welfare State – Both Progressive and Obstructionist. In Robert J. Brulle, J. Timmons Roberts & Miranda C. Spencer (eds). *Climate Obstruction Across Europe* (pp. 109–135). New York: Oxford University Press.

World Economic Forum (2024, January 10). Global Risks Report. *World Economic Forum*. https://www.weforum.org/publications/global-risks-report-2024/