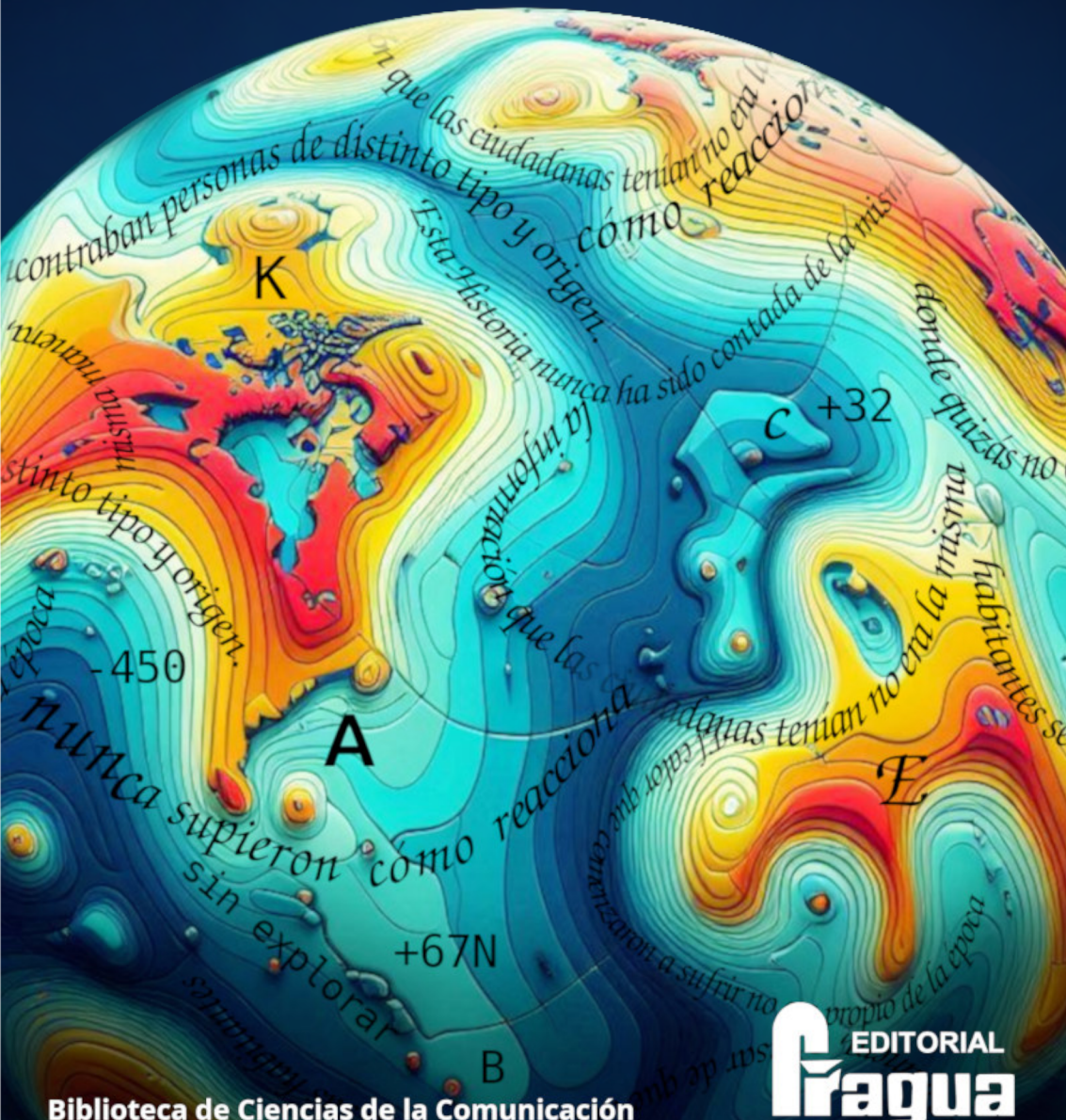
Nuevas narrativas y discursos ante la emergencia climática

Isidro Jiménez Gómez
David Álvarez Rivas
(editores)



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EDITORIAL Fragua

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EDITORIAL Fragua
MADRID MMXXIV

Director de la Colección: IGNACIO MUÑOZ MAESTRE

Imagen de la cubierta: Isidro Jiménez Gómez

Título: Nuevas narrativas y discursos ante la emergencia climática

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ISBN 979-13-991218-3-4 (pdf)

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Youth perceptions of disinformation in international climate negotiations

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1. Introduction

In the current context, climate diplomacy unfolds within a dense atmosphere of rumour, selective disclosure, and strategic distortion. Deceptive narratives, whether inadvertent misinformation or deliberate disinformation, shape agendas long before legal texts reach plenary. Misinformation refers to false or inaccurate information that is spread without intent to deceive, while by contrast, disinformation is the intentional creation and dissemination of false information with the aim of deceiving or manipulating public opinion (Wardle & Derakhshan, 2017). Such practice is deeply embedded in political competition (Mearsheimer 2013; Humprecht 2019; Correia *et al.*, 2022).), but its disruptive force is intensifying, affecting many areas surrounding the political context, such as the climate domain. The relevance and severe risks caused by disinformation are highlighted by the Intergovernmental Panel on Climate Change (IPCC), which identifies disinformation as a continuing

barrier to decisive action (2022), while the World Economic Forum (2024) lists it among the most immediate global risks. During the last Conference of Parties (COP29), organised by the United Nations Framework Convention on Climate Change (UNFCCC) in November 2024, Brazil, United Nations (UN) and United Nations Educational, Scientific and Cultural Organization (UNESCO) launched the Global Initiative for Information Integrity on Climate Change which recognizes climate disinformation as a major threat to climate action and sustainable development progress, and therefore aims to bring together countries, international organizations and networks of researchers to support joint effort in tackling disinformation in preparation for COP30 (United Nations, 2024). Disinformation represents a complex and vast communication challenge that permeates climate governance, directly impacts public perception, and affects the legitimacy of negotiation processes. Therefore, it is important to consider it from a broader communication perspective, and not solely as a political phenomenon. Despite this, in research disinformation has been outlined as political communication (Freelon & Wells, 2020) and started being a topic of primary analysis only in 2017. Previously its origin can be rooted back to the history of propaganda in communication research through the Institute for Propaganda Analysis (IPA) in the 1930s (Fondren, 2021), and lately through studies on misinformation in political and communication research among the 1970s and 1980s (Freelon & Wells, 2020). Therefore, literature surrounding this topic is still at its early age and requires further studies that go beyond political analysis, considering broader strategic communication perspectives and more differentiated affected publics.

Among different stakeholders, youth are the group risking a major exposure to climate disinformation due to insufficient connections between climate action and education (McGimpsey *et al.*, 2023). In the context of climate governance and negotiations, they have gained high visibility in the past few years as a result of their advocacy actions that had an enormous impact worldwide, influencing climate action and putting pressure within the political sphere (Neas *et al.*, 2022). Although youth are labelled digital natives, empirical studies reveal uneven critical media skills and sustained exposure to algorithmically amplified falsehoods (Guess *et al.* 2020; Cook 2023; Treen *et al.* 2020; Sutirman *et al.* 2022). Being youth increasingly

involved in decision making processes by being included in parties' delegations during climate negotiations like COPs (YOUNGO, 2023), despite the still relevant barriers (Monticelli & Corsaro, 2023), the impact that climate disinformation can have on their contribution and effectiveness can be relevant. Therefore, the need to assess how youth involved in climate negotiations processes perceive and are affected by climate disinformation becomes urgent. This chapter examines how these youths perceive, interpret and contest climate related disinformation at COP29.

1.1. Disinformation as a strategic communication tool in international climate discourses

In human communication systems, all information passes through a process of interpretation from the sender to the receiver, which can inevitably be subjected to misinterpretation (Lakoff, 1995). Indeed, communication and information are often embedded with possible noise, misunderstanding, inaccuracy, and deception (Marshall, 2017). Accurate communication requires effort and preparation as it can be easily compromised, both on purpose and with strategic objectives, or unintentionally (Marshall, 2007). Disinformation can affect communication by generating information distortion through multiple elements, among which complexity, categorization, framing, and power relations (Peckham, 1979; Marshall, 2017). These are often used to reach denialism, especially in political settings and contexts of distributed governance where there are a large number of players and responsibilities are avoided (Hood, 2011; Marshall et al., 2015), such as in the climate change negotiations environment. Therefore, to better understand how disinformation impacts climate negotiations communication, it is useful to first analyse these communication dynamics from the perspective of international relations and politics as applied to climate issues. Indeed, strategic communication aimed at manipulating information has become increasingly powerful in international politics (Gerrits, 2018), with misinformation and disinformation playing a significant role in shaping public perception and policy outcomes. Disinformation related to international information can create general distrust by making the statements of public and political actors questionable (Tandoc et al., 2018). These processes involve different

stakeholders shaping the information system, among which state actors, media and the general public. In the climate domain, these narratives directly shape negotiation communication and make deferral of near term decisions more likely.

States and influential actors use deception tactics such as concealment (hiding critical information) and spinning (amplifying selected details), to create asymmetrical information advantages, distort international narratives, and achieve strategic objectives. Deception can be distinguished in different forms: lies between states, alarmism, strategic cover-ups, nationalist myths and liberal lies (Mearsheimer, 2013). States through social and discursive events can indeed influence the perception of their counterparts, using strategic narratives to have an impact on the system, on the parties identity building, and on the issues discussed within the international negotiations (Miskimmon *et al.*, 2013). By applying soft power to influence others' preferences, states can achieve their objectives in international politics by making other countries admire and emulate them. In this way politicians shape the priorities of the discussions, influencing the agenda setting by redefining framings (Nye, 2004). In negotiation settings, such narratives shape briefings and media lines, reframe priorities, and normalise procedural caution that postpones near term commitments (Lamb *et al.*, 2020). Therefore, disinformation has become a security matter due to its capacity to manipulate international conflict knowledge (Massa & Anzera, 2022).

Media and information technologies also play a significant role in this context, amplifying disinformation and consequently degrading robust pluralism and civil political engagement (Bennett & Livingston, 2021). Based on the main target, the media play a more relevant or marginal position. When deliberate deception campaigns are targeted to the states-elite engaged in global strategic issues, media usually play a minor role. Differently, when the recipient of these strategies is the public opinion, media are at the centre of the spreading process, sharing information politically influenced and manipulated by the elite in a downward hierarchical way, as described by Entman's cascading activation model (2003). In these communication processes, disinformation is strategically used as a regulatory tool. The reason why media often amplify this, is due to the fact that they are unable to distance themselves from government sources

(Correia *et al.*, 2022). Indeed, seeking alternative sources would complicate their verification routine (Humprecht, 2020). Additionally, states gain advantage by making their communication more credible by leveraging the newspapers' international recognition and trust (Anzera & Massa, 2021). News media and platform dynamics can also legitimise these frames through misinterpretation or selective coverage, shaping public perceptions and institutional trust.

From the side of the receiver, studies show that people feeling socially rejected are more likely to believe in political disinformation, even when proof of misleading communication is shown (Garrett *et al.*, 2020), while more in general fact-checking has been proved to reduce belief in false narratives, even though it is less effective with people already believing in the idea behind the false claim (Hameleers *et al.*, 2020). This aligns with studies showing how confirmation bias works in these contexts (Piksa *et al.*, 2024). In practice, these narratives affect climate communication through three mechanisms: agenda setting, issue framing, and credibility erosion (Lamb *et al.*, 2020; Treen *et al.*, 2020).

The dynamics behind the information flows among different stakeholders highlight how disinformation is strategically and intentionally used as a form of political communication, aiming to shape international narratives and influence both decision-makers and public opinion to achieve single states' objectives, thereby raising threats to transparency and accountability in global negotiations. This is the channel through which disinformation driven frames reorient climate communication during COPs and legitimize slower or weaker outcomes.

1.2. The multiple dimensions of climate disinformation and its strategic mechanisms

Climate disinformation has emerged as a persistent and multifaceted barrier to effective climate governance. It encompasses the deliberate creation and dissemination of misleading information intended to deceive the public, erode trust in science, and delay or obstruct climate action.

A growing body of interdisciplinary research has sought to conceptualise climate disinformation by examining its cognitive, communicative, and sociopolitical dimensions, as well as its impacts on

public understanding and policy processes. Scholars have stressed that climate disinformation is often entangled with broader political, economic, and ideological agendas (Climate Obstruction across Europe, 2024; Ekberg *et al.*, 2023; Lamb *et al.*, 2020; van der Linden *et al.*, 2017; Gertrudix *et al.*, 2024). In this context, climate disinformation must be understood not just as a cognitive and political phenomenon, but as a strategic communication process. Indeed, in negotiation settings climate disinformation functions as a communicative infrastructure that redirects attention away from near term mitigation commitments (Lamb *et al.*, 2020), while the linked discourses of delay represent authentic communicative frameworks strategically designed to influence public opinion and legitimize inaction. Their communication strategies are in general usually built on temporal engagement and persuasive storytelling (Parker & Dobson, 2025; Throgmorton, 2003), including an element of explanation or coherence within the narrative, the potential for generalizability and some moral tension (Sandercock, 2003).

Historically, climate disinformation can be traced back to the late twentieth century, when major fossil fuel corporations such as ExxonMobil and Shell were already aware of the environmental consequences of greenhouse gas emissions. Internal documents from these companies confirmed an early scientific consensus on the anthropogenic causes of climate change, yet both invested in strategic communication campaigns designed to cast doubt on the evidence and to delay regulatory intervention (Ekberg *et al.*, 2023; Climate Obstruction across Europe, 2024; van der Linden *et al.*, 2017). The Global Climate Coalition played a key role in shaping public perception during this period by portraying climate science as speculative and regulatory responses as threats to economic stability (Ekberg *et al.*, 2023). These efforts, rooted in what scholars have described as denialist strategies, deliberately misrepresented scientific findings to safeguard industrial interests and obstruct the adoption of international climate agreements such as the Kyoto Protocol (Shue, 2021; Gertrudix *et al.*, 2024). As the scientific consensus on climate chaan have an even greater impact when it influences youth. Young people are not merely passive receivers of disinformation; they are also active communicators who may inadvertently spread disinformation and misinformation, given their vulnerability and difficulties in navigating a highly complex communicative ecosystem. Therefore, developing eco-media literacy becomes an even more

important tool for communicative resilience and to strengthen their agency. Rapp and Salovich (2018) emphasize how prior knowledge of digital, media, and information literacy is a useful resource for helping people critically evaluate the information they encounter, filter out misinformation, and identify disinformation. Also other studies (Pennycook *et al.*, 2020; Dame Asjin-Tettey, 2022) show how people taught to think about the accuracy of the news they read and trained through media and information literacy are less likely to share inaccurate information, decreasing the sharing of fake news. This is relevant since youth as active users of social media often also share satirical content for fun, which has been found as one of the motivations behind fake news and misinformation sharing (Madrid-Morales *et al.*, 2021). Through ecomedia literacy, youth become aware of the risks of increasing the virality of contents that might longe gained widespread acceptance, the strategic focus of obstruction shifted. Rather than rejecting the existence of climate change outright, actors began to promote delay by questioning the feasibility and timing of policy responses. Lamb *et al.* (2020) have described this transition in terms of distinct discourses of delay, including economic fatalism, individualism, and technological optimism.

According to the work Climate Obstruction across Europe (2024), such narratives have been deployed in European political debates, including Brexit, where climate regulations were framed as burdens on national sovereignty and competitiveness. Corporations and trade associations have reinforced these narratives by promoting speculative technologies such as carbon capture and storage as sufficient solutions, thus legitimising continued fossil fuel production (Lamb *et al.*, 2020; Gertrudix *et al.*, 2024). These evolving communication strategies have been amplified by digital platforms. Social media algorithms, which prioritise emotive and polarising content, have facilitated the rapid spread of misleading narratives. Paid campaigns by fossil fuel interests often coincide with key legislative debates, taking advantage of psychological heuristics and existing biases to shape public understanding (Treen *et al.*, 2020; Gertrudix *et al.*, 2024). These dynamics are further reinforced by coordinated networks of think tanks, industry lobby groups, and sympathetic media outlets, which work in tandem to normalise partial responses or inaction in the face of the climate emergency (Christner *et al.*, 2024; Climate Obstruction across Europe, 2024).

In addition to their structural coherence, these narratives exploit psychological and social predispositions. Populist radical right movements, in particular, have provided fertile ground for the diffusion of disinformation. The resonance of climate disinformation within these groups is linked to ideological affinities, including anti-elitism, distrust of scientific institutions, and nativist worldviews. Empirical research has confirmed that while right-wing populist attitudes are associated with climate scepticism, the effectiveness of correction strategies appears to be consistent across ideological lines, suggesting that even politicised misinformation can be countered with appropriate interventions (Christner *et al.*, 2024). Nevertheless, the persistence of ideological polarisation and identity-protective cognition continues to undermine corrective efforts (Lewandowsky *et al.*, 2021; Hameleers & van der Meer, 2020). Correction strategies have developed along two primary axes: prebunking and debunking. Prebunking, grounded in inoculation theory, aims to build cognitive resilience by exposing individuals to weakened rhetorical forms of disinformation before actual exposure, helping them recognise manipulative intent. Debunking, by contrast, seeks to neutralise the influence of falsehoods after exposure through direct factual refutation. Both methods have shown efficacy in controlled experiments, although their real-world applicability remains a matter of ongoing research. In a recent study conducted in Germany, all debunking strategies and logic-based prebunking significantly reduced climate-related misperceptions. However, combined interventions did not produce additive effects, and no differential response was observed across ideological subgroups, suggesting broad generalisability (Christner *et al.*, 2024). Despite such findings, disinformation often resists correction due to its exploitation of affective mechanisms. Emotional appeals rooted in fear, anger, or identity reinforce motivated reasoning and reduce receptiveness to counter-arguments (Treen *et al.*, 2020; Lewandowsky *et al.*, 2021). Moreover, disinformation frequently relies on ambiguous language, selective use of factual elements, and pseudo-scientific framings that increase its plausibility and confuse epistemic boundaries (van der Linden *et al.*, 2017; Petersen, 2023). These characteristics complicate the task of correction, especially in dynamic online environments where exposure is continuous and selective.

The geographical and political dynamics of climate disinformation demand close attention. While strategies of obstruction differ across national contexts, they consistently reflect local political cultures and institutional arrangements. In Europe, Germany has seen far-right actors such as the AfD and think tanks like EIKE actively promote climate disinformation under the banner of climate realism. These organisations host conferences in collaboration with US-based denialist networks, reinforcing transatlantic alliances in obstructionist messaging. In the United Kingdom, platforms such as The Daily Sceptic and The Conservative Woman frequently publish misleading content on renewable energy and decarbonisation targets, framing climate policy as economically irrational and threatening to national sovereignty. In Italy, greenwashing practices are widespread among fossil fuel companies, which use visual environmental cues and sustainability rhetoric to frame themselves as climate allies, even while expanding carbon-intensive activities. These messages are often amplified by political actors citing energy insecurity to legitimize continued investment in fossil fuels, particularly in periods of geopolitical uncertainty (Climate Obstruction across Europe, 2024).

Beyond Europe, climate disinformation similarly adapts to local socio-political conditions. In the United States, fossil fuel companies have historically funded disinformation campaigns that cast doubt on scientific consensus while promoting free-market narratives hostile to regulation. These efforts, coordinated through organisations such as the Heartland Institute, helped shape public and political discourse for decades (Ekberg *et al.*, 2023; van der Linden *et al.*, 2017). In Nigeria, recent cross-national studies have highlighted how low institutional trust and ideological alignment with political leaders increase susceptibility to false climate beliefs (Ejaz *et al.*, 2024). In India, climate disinformation often spreads through decentralised networks via mobile platforms like WhatsApp, where emotionally charged content targeting environmental activists or state policies circulates with limited moderation (Climate Obstruction across Europe, 2024). In Australia, science denial has been reinforced through media channels aligned with fossil fuel interests, contributing to persistent public scepticism toward climate science (van der Linden *et al.*, 2017).

Climate disinformation is not merely a by-product of fragmented information flows; it functions as a deliberate and strategic instrument of

climate obstruction. It operates across cognitive, communicative, political, and economic domains and is sustained by adaptive networks capable of adjusting their discursive tactics to new contexts. These include shifting from outright denial to policy delay, from falsifiable claims to ambiguous framings, and from centralised elite messaging to participatory digital mobilisation (Treen *et al.*, 2020; Petersen, 2023; Gertrudix *et al.*, 2024). Such flexibility enhances disinformation's resilience and complicates its correction. As researchers note, countering it requires more than fact-checking or exposure to corrections; it necessitates structural interventions aimed at rebuilding epistemic trust, increasing transparency in lobbying and political communication, regulating platform governance, and promoting critical digital literacies (Lewandowsky *et al.*, 2021; Gertrudix *et al.*, 2024; Petersen, 2023). Further research should assess how these interventions function across different cultural and political contexts, examine the affective drivers of disinformation uptake, and explore the long-term effectiveness of inoculation and correction strategies at scale (Christner *et al.*, 2024; Basol *et al.*, 2021). These dynamics inform briefings, press lines, and social content produced around the COP venue, and they also shape what youth delegates hear, share, and contest.

1.3. Youth climate activism and the threat of disinformation

Youth are among the most impacted part of the population by climate change, alongside other vulnerable groups (United Nations, 2015; Bahrami *et al.*, 2020). Their role in climate activism and negotiations has increasingly been recognized by institutions (UN, 2018) thanks to their strong leadership in advocating and communicating the climate crisis powerfully (Eide & Kunelius, 2021). Studies have demonstrated how their participation in official delegations has proved to have brought new perspectives, strengthening party's communication, and improving the negotiations' outcomes (YOUNGO, 2023; United Nations Joint Framework Initiative, 2010; Campisi *et al.*, 2023).

Among various stakeholders, youth, often labeled as digital natives, yet with limited digital literacy (Sutirman *et al.*, 2022), are particularly vulnerable to disinformation due to their heavy reliance on peers and online platforms (Cook, 2023). Indeed, social media features such as homophily,

polarization and echo chambers facilitate the rapid spread of disinformation (Treen *et al.*, 2019). Consequently, online misleading information can negatively influence youth's decision-making, behaviors, attitudes and civic engagement (Dihman, 2023), making them susceptible to false narratives that distort science and weaken negotiation positions (Ojala, 2015; Grapsas *et al.*, 2023; Lee *et al.* 2020). Their negotiation processes performance can also be affected by the emotional toll of encountering persistent disinformation, which can reduce confidence and hinder communication effectiveness (Hameleers *et al.*, 2020).

In this context, the media, despite impacting negatively in terms of amplifying disinformation, can also act as facilitators for citizen participation. Online platforms can indeed become mediating tools to increase connections among youth and influence politics (Massa & Anzera, 2022). Youth recognize these opportunities and take advantage of social media as a tool for advocacy (Boulianne *et al.*, 2020). There are numerous studies analysing how youth strategically leverage online platforms to mobilise and facilitate campaigns, initiatives and marches related to climate justice in order to create more participation and inclusion (Sainz & Hanna, 2023; Cortés-Ramos *et al.*, 2021; Chia, 2021). A recent study (Arnot *et al.*, 2024) has analysed Australian youth perspectives regarding the role of social media in climate action. Results show how youth consider social media as a powerful tool for raising awareness, to build a sense of urgency and accountability, and to engage diverse youth audiences. This highlights how climate disinformation can have an even greater impact when it influences youth. Young people are not merely passive receivers of disinformation; they are also active communicators who may inadvertently spread disinformation and misinformation, given their vulnerability and difficulties in navigating a highly complex communicative ecosystem. Therefore, developing eco-media literacy becomes an even more important tool for communicative resilience and to strengthen their agency. Rapp and Salovich (2018) emphasize how prior knowledge of digital, media, and information literacy is a useful resource for helping people critically evaluate the information they encounter, filter out misinformation, and identify disinformation. Also other studies (Pennycook *et al.*, 2020; Dame Asjin-Tettey, 2022) show how people taught to think about the accuracy of the news they read and trained through media and information literacy are less

likely to share inaccurate information, decreasing the sharing of fake news. This is relevant since youth as active users of social media often also share satirical content for fun, which has been found as one of the motivations behind fake news and misinformation sharing (Madrid-Morales *et al.*, 2021). Through ecomedia literacy, youth become aware of the risks of increasing the virality of contents that might look just funny and innocent, but misleading.

At the same time, youth have recognised limitations in reaching and impacting decision makers, highlighting the need for educational social media campaigns, and the request for using trusted voices to counter misinformation and disinformation. More into details, youth seem concerned for the possible spread of disinformation, while they were requiring more inclusion of influential public figures to add credibility to real fact-based information, putting attention on the need to make youth communicate more climate related content. This underlines even more the importance for youth to be well prepared from an educational perspective, since they are among the major communicators in the international context. Their consumption of information should therefore be reliable, especially when reshared.

Consequently, scholars have emphasised the need for more sophisticated educational interventions, including eco-media literacy, which encourages critical engagement with environmental narratives in media systems and aims to enhance individual resilience to manipulative content (Gertrudix *et al.*, 2024). Looking at climate education, 70% of youth are still not able to explain climate change, or can only explain its broader principles (UNESCO, 2024), while 65% of students would like to learn more about it (Holm-Olsen, 2024). On the other side, media literacy has been described as a facilitator for balancing opportunities and risks related to the use of the internet among youth (Livingstone & Helsper, 2020), as well as for positively impacting their ability to navigate social media and to assess the information. Research shows how youth with media literacy skills can recognize fake news without being easily impacted by sensational news (Salleh Abdul Latif *et al.*, 2024).

Understanding whether and how climate disinformation reaches young activists at international climate negotiations becomes crucial for supporting their effectiveness and inclusion in decision making processes, as they represent a key proactive force driving a just transition. Current studies

focusing on this issue are still very limited, therefore this research aims to fill this gap by investigating youth's perceptions of disinformation at climate negotiations.

2. Objectives

The research aims to examine how youth involved in climate negotiations perceive, experience, and respond to climate-related disinformation within the context of international climate negotiations, with a specific empirical focus on COP29. It addresses a gap in the existing literature concerning the exposure of youth to disinformation and their communicative vulnerability within multilateral processes. The overarching objective is to understand how disinformation affects youth participation, credibility, and communicative agency during negotiations.

This investigation is guided by two central research questions. The first (RQ1) concerns the extent to which youth engaged in climate negotiations recognise the presence of disinformation in climate negotiations such as COPs, and how they describe, interpret, and categorise it across different communicative environments. It is hypothesised (H1) that youth will demonstrate a significant level of awareness of these phenomena, with particular emphasis on digital platforms such as social media and private messaging channels, which have been widely identified as key channels of exposure in the context of public discourse and climate politics (Guess *et al.*, 2020; Cook, 2023; Treen *et al.*, 2020).

The second question (RQ2) explores what measures youth in climate negotiations consider appropriate or effective in mitigating the influence of disinformation during COPs. It seeks to identify the forms of individual and collective agency that youth apply when confronted with ambiguous or misleading information, including both informal strategies and systemic proposals. In this respect, the study builds on the hypothesis (H2) that youth responses are likely to rely primarily on basic adaptive strategies, such as selective source verification, triangulation of inputs, and peer confirmation. At the same time, some participants may articulate more structured and collective responses, including the call for institutional tools, integrated dashboards, or collaborative verification systems supported by formal mechanisms (Jeong, Cho and Hwang, 2012).

3. Methodology

This study employs a qualitative methodology to examine how youth involved in climate negotiation processes perceive and respond to climate disinformation in international negotiation contexts. Data was collected during COP29, held in Baku, through a combination of semi-structured in-depth interviews, ethnographic observation, and web listening analysis.

24 participants were interviewed, of which 50% females and the other 50% males, including 21 youth involved in the negotiation processes aged 25 to 34, and 3 senior professionals aged 35 to 42 who work closely with youth and reported youth perspectives. Participants came from 13 countries: Austria, Cyprus, Czech Republic, Finland, Germany, India, Italy, the Netherlands, North Macedonia, Poland, the United Kingdom, the United States, and Ukraine. Participants were selected to reflect geographic, gender, background and institutional diversity, including representation from both EU and non-EU countries, as well as varying roles within youth delegations and observer organisations.

Interviews focused on how disinformation is experienced within both online and offline negotiation settings, how it is recognised, and what strategies are used to address it. In parallel, seven consecutive days of ethnographic observation were carried out during negotiation sessions, side events, constituency meetings, and informal interactions. These observations captured how information was exchanged among youth delegates, how unverified content circulated, and how participants engaged with potentially misleading narratives. Notes were recorded systematically and later reviewed to identify recurring patterns and contradictions. The third element of the methodology involved a web listening analysis conducted using The Signal 2, a digital monitoring platform developed by Buzztech. The tool was used to analyse public online conversations on News platforms, X, Facebook, Instagram and LinkedIn, gathering 34,687 posts in different languages related to climate disinformation over three COP cycles: COP27 (November 2022), COP28 (December 2023), and COP29 (November 2024). The monitoring focused on youth-related discussions and aims to assess the frequency, framing, and evolution of disinformation narratives over time. Keyword tracking (such as “climate negotiations”, “disinformation”, “fake news”, and “COP”) was applied to identify moments of increased activity or

concern among youth stakeholders in digital spaces. Data from interviews, observations, and web listening were analysed in parallel to identify common themes, divergences, and emerging trends. While the study is exploratory in nature, the combination of methods provides a multi-layered perspective on how disinformation is perceived and handled by young participants in high-level climate negotiation processes. All participants provided informed consent. Anonymity was guaranteed and ethical standards were respected throughout the research process.

4. Results

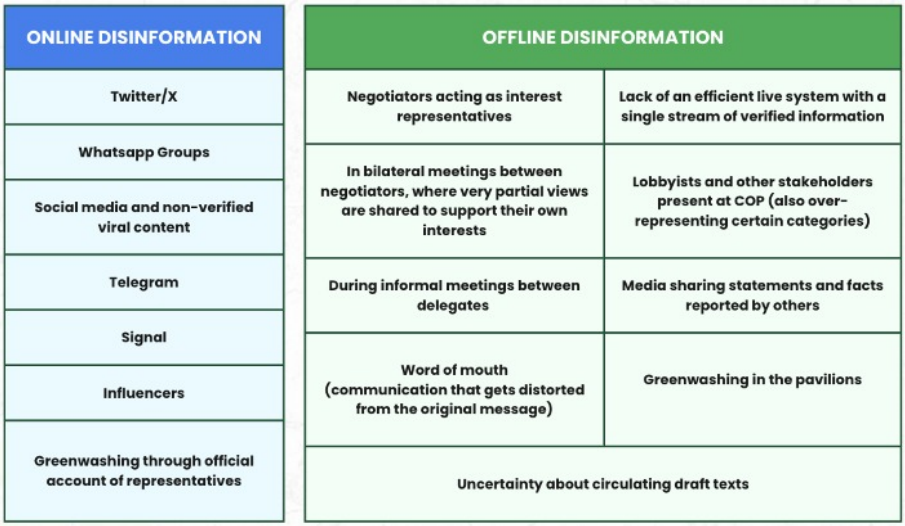
The results of this research show that youth involved in negotiation processes at COP29 perceive the presence of climate-related disinformation within negotiation environments, both online and offline. Among the 24 interview participants, 85.2% stated that they had encountered some form of disinformation during the conference, while 14.8% reported no direct exposure.

Online disinformation was identified as the most prominent, with 92.6% of interviewees indicating its presence in digital spaces. Offline disinformation was also recognised, although to a lesser extent, with 55.6% acknowledging its occurrence in face-to-face or informal settings. While youth identified online disinformation more easily, they demonstrated greater critical thinking and precision in describing offline cases, suggesting heightened attentiveness in in-person contexts. As shown in Figure 1, participants described online disinformation as including content disseminated via platforms such as Twitter/X, Telegram, and Signal, as well as WhatsApp groups and other social media environments. Particular emphasis was placed on unverified viral content, greenwashing by official representatives' accounts, and misleading narratives shared by influencers.

Offline disinformation was reported in several forms. These included negotiators acting as interest representatives, bilateral meetings where partial views were selectively shared, and informal conversations in which original messages became distorted. Other examples included the lack of a unified system for verified real-time information, the influence of lobbyists and overrepresented stakeholders in negotiation spaces, greenwashing in national or organisational pavilions, and uncertainty around

circulating draft texts. Some respondents also reported that traditional media outlets contributed to offline disinformation by amplifying statements that had not been formally confirmed.

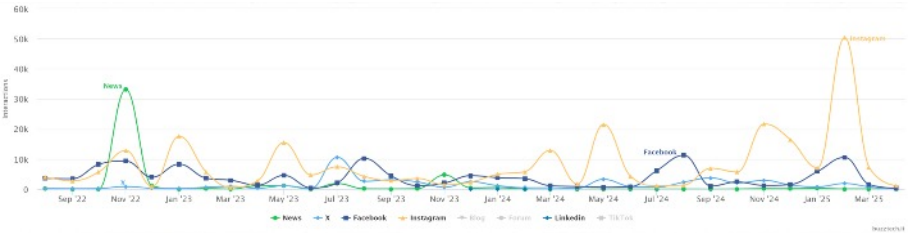
Figure 1. Representations of climate disinformation online and offline as perceived by youth in climate negotiations



Source: *The authors*

The web listening analysis conducted using The Signal 2 revealed an increasing trend in online engagement around disinformation and climate negotiations over three COP cycles. Public digital conversations referencing climate disinformation rose from COP27 to COP29, with COP29 showing the highest volume of youth-related engagement on the topic. Figure 2 shows how during the time Instagram has become the major online platform in regard to online engagement in discussions explicitly mentioning key words such as “disinformation” and “climate negotiations”. The peaks of Instagram after COP29 (November 2024) show how youth conversations surrounding these topics are gaining more relevance and attention.

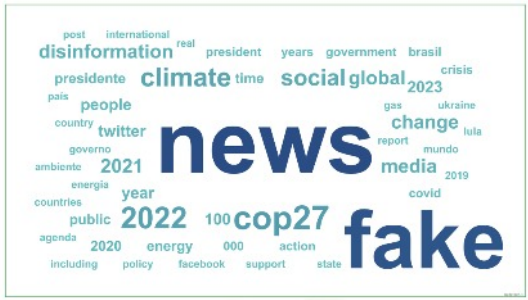
Figure 2. Online engagement trend regarding disinformation and climate negotiations (COP27-COP29)



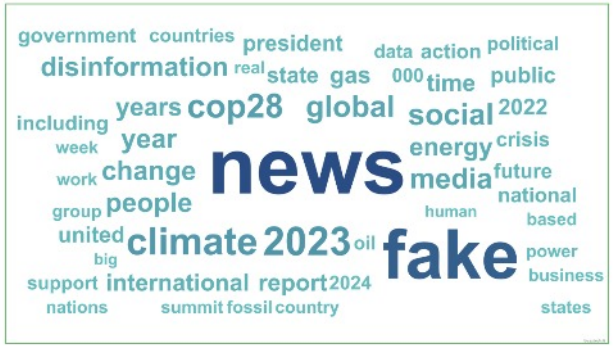
Source: *The Signal 2, Buzztech*

Word clouds generated for each negotiation cycle (Figure 3) reflect this growing concern, with an increase in both quantity and quality of the words used in these online discussions. Terms such as "fake news," "greenwashing," "draft leak," and "information integrity" are present with increasing frequency and prominence. Additionally, it is possible to notice how words referring to countries, such as “China” and “American”, have been highlighted during COP29, including political references such as “Trump”, “Donald”, “Biden”, “political united”, of some of which are also quantitatively more presented and associated with disinformation than “COP29” itself. This is a prominent example of how disinformation conversations are highly associated and linked to the political realm.

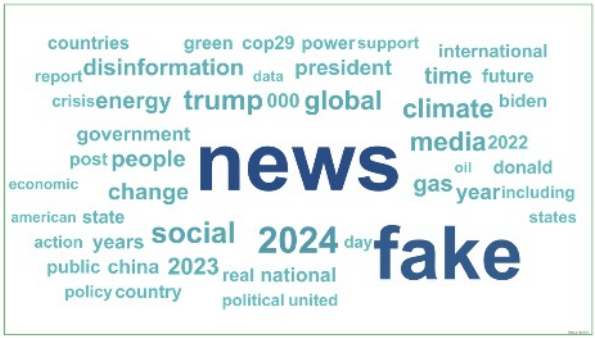
Figure 3. Word clouds regarding disinformation and climate negotiations (COP27-COP29). Source: *The Signal 2, Buzztech*



COP27 (01.02.2022-01.02.2023)



COP28 (01.02.2023-01.02.2024)

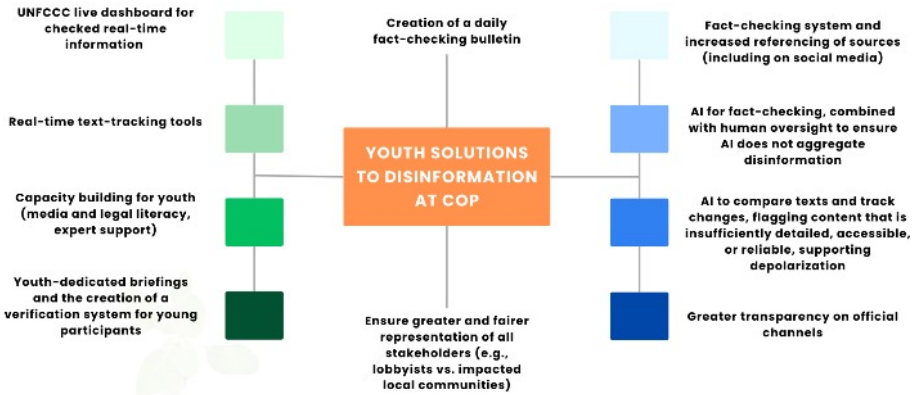


COP29 (01.02.2024-01.02.2025)

Another insight raised by youth delegates is a range of solutions to address disinformation within the negotiation context (Figure 4). These include the creation of an official UNFCCC live dashboard providing verified real-time updates, the implementation of a daily fact-checking bulletin, and the development of fact-checking systems that include transparent referencing of sources. Several respondents suggested the use of AI to support fact-checking and document analysis, while emphasising the importance of human oversight to avoid the automated spread of errors. Additional proposals included real-time text tracking tools to monitor changes in negotiation documents, training programmes on media and legal literacy for youth delegates, and the establishment of youth-dedicated briefings with

internal verification mechanisms. Several interviewees suggested improved representation of underrepresented groups, greater transparency on official communication channels, and the reduction of asymmetries between lobby groups and affected communities.

Figure 4. Youth solutions to disinformation in climate negotiations



Source: *The authors*

Finally, trusted sources of information during negotiations have been asked to be identified. Participants mentioned the UNFCCC, UNDP, and COP websites; universities, research centres, and think tanks; the Earth Negotiations Bulletin; official COP documents; internal channels and legal teams; YOUNGO communication channels; position papers; expert observers; and selected journalists and platforms. Other sources mentioned included IISD, ECHO, Climate Network, Grand Reserva, and Carbon Brief.

5. Discussion and conclusion

The findings of this study confirm the widespread perception of disinformation among youth in negotiation processes at COP29. As hypothesised, 85.2% of interview participants reported encountering disinformation during the conference. This confirms the research first hypothesis (H1) that youth demonstrate significant awareness of false or

misleading information, especially on digital platforms, aligning with precedent research (Guess *et al.*, 2020; Cook, 2023; Treen *et al.*, 2020). The fact that 92.6% of respondents identified online disinformation as present reinforces the centrality of digital environments in shaping youth experiences of climate negotiation processes. However, the study also reveals that offline disinformation, although less immediately visible, is perceived by over half of participants (55.6%), and described with a higher level of critical awareness. This outcome is very positive in terms of youth disinformation awareness, since climate offline disinformation at COP was expected to be more difficult to be detected by youth, and therefore less perceived.

These results reflect a dual dynamic. On one hand, youth demonstrate sensitivity to the rapid spread and emotional tone of online climate disinformation, particularly through social media, messaging platforms, and the amplification of unverified narratives. On the other, they express heightened analytical attention to offline distortions, especially in informal meetings, bilateral exchanges, or situations where interest groups dominate communication. This suggests that youth involved in climate negotiation processes are capable of distinguishing between types of disinformation and adjusting their interpretive strategies accordingly.

The hypothesis regarding counter-strategies (H2) is only partially confirmed. While several participants refer to basic practices such as cross-checking sources and consulting official documents, others propose more structured approaches. These include the development of a UNFCCC dashboard for real-time verified information, daily fact-checking bulletins, and the integration of artificial intelligence for document tracking and verification. Youth delegates also expressed the need for dedicated briefings, verification systems, and training programmes to enhance their capacity to respond to disinformation. This aligns with recent literature advocating multi-level interventions, from individual media-literacy education (Rau & Premo, 2025; Heuer, 2025) and youth-focused fact-checking initiatives (Mesquita et al., 2024), to school and platform-based verification systems (Selnes, 2024), endorsing holistic frameworks that prepare, curb, and respond to misinformation threats (Johansson et al., 2022).

The web listening analysis confirms that public online engagement with the issue of disinformation in climate negotiation processes has

increased across recent COP cycles. The rise in frequency and prominence of terms related to disinformation in youth-driven digital conversations between COP27 and COP29 suggests that the topic is becoming more visible and politically relevant. Word clouds generated from the analysis highlight a consistent pattern of concern around fake news, manipulation of draft texts, and the credibility of official statements.

Participants also highlighted the unequal distribution of reliable information during negotiation processes. They noted that certain groups, such as lobbyists or high-level stakeholders, have privileged access to updates and informal channels, while youth and affected communities often rely on fragmented or delayed information. This asymmetry contributes to confusion, emotional volatility, and strategic disadvantage. As such, several participants identified transparency and equal access to verified information as prerequisites for meaningful participation. In terms of trusted sources, youth mentioned institutional platforms such as the UNFCCC, UNDP, and COP websites, as well as research institutions, expert observers, and curated media outlets such as the Earth Negotiations Bulletin and Carbon Brief. This reflects an awareness of the importance of triangulating information and consulting sources that are both technically accurate and contextually relevant.

Overall, the results of this research confirm that climate disinformation is a recognised and multifaceted challenge within the COP context. While youth are not always equipped with formal tools to address it, they demonstrate a growing capacity to identify disinformation, reflect critically on its impacts, and propose context-specific solutions.

This study makes three key contributions to the field of climate communication. First, it shows how disinformation affects youth credibility and communicative agency by creating strategic disadvantages and emotional volatility that undermine their effectiveness in negotiation processes. Second, it documents proposed communication solutions including real-time information boards, fact-checking bulletins, and eco-media literacy programmes that address the specific challenges faced by youth delegates. Third, it demonstrates how young people interpret and confront false narratives in international negotiation spaces through both individual verification strategies and collective institutional proposals.

This research has been undertaken with the objective of creating a first general analysis of how youth perceive disinformation at international climate negotiation processes. Its relevance is entailed in the enrichment of the literature that it brings, since studies in this context taking into consideration young negotiators are still lacking and underdeveloped. Limitations are present in terms of limited sample size being a more qualitative study, and due to the contextual and temporal constraints that create difficulties in interviewing people involved in the negotiations during the fast-paced COP environment. Furthermore, it is important to underline that this study relies also on perception-based data, therefore findings may be influenced by personal or contextual biases. Future research on these topics are highly needed and recommended. Further studies can use a quantitative approach, including surveys, helping to scale up findings and test the generalizability of the identified trends. Additionally, comparisons among different cultures and background influences might be added to the study, with also a comparative focus on offline and online disinformation dynamics.

Finally, this work is particularly relevant also for its contribution to the Sustainable Development Goals (SDGs) and Agenda 2030, specifically with reference to SDG 13 to support and empower youth in climate action, as well as to SDG 4 with the aim to push for more quality education as a fundamental tool to fight climate disinformation and build resilience.

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