Analysis of climate denialism on YouTube: refuting instead of debating

Abstract

The scientific consensus on the existence, the human origin, the seriousness of the consequences and the urgency of adopting immediate solutions to climate change is growing, as successive reports by the Intergovernmental Panel on Climate Change have shown. The alteration of global climate patterns experienced in recent years confirms the worst prediction models, and yet there are still voices that question these facts.

This study proposes to examine the interpretative frameworks underpinning public discussion of climate denialism on the online video platform YouTube. To this end, it presents an analysis of the 50 most popular videos under the label of climate denialism in Spanish, paying attention to the key issues and figures on which the denialist ideology is articulated and the attitude of support, neutrality or rejection on the part of those responsible for the content.

The results obtained show the generalised rejection of the denialist discourse among Spanish-speaking content creators, who resort to experienced sources and contrasted resources to refute these arguments, as well as the politicisation of scientific knowledge in terms of debate, uncertainty, mistrust and lack of commitment to deal with the consequences.

Keywords: climate change; denialism; YouTube; framing; ideology

1. Introduction

The Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2022) shows an intensification in the rate and intensity of the effects of global warming. In this sense, anthropogenic climate change has been the most important environmental threat of our time and future generations for decades. However, despite the efforts made by scientific, educational and environmental groups, there are still groups in society that question or, at least, relativise the scope of the problem (CIS, 2022).

This position could be justified from the perspective of the nature of the phenomenon, which is characterised by its slow evolution and by the fact that it is more evident in places far from the most advanced societies (Vicente Torrico & López Vidales, 2022; Zehr, 2015). Therefore, given the physical and psychological distance from the problem, media coverage is key to defining a threat that is considered invisible (Carvalho, 2010). However, the media's treatment of the climate crisis has been criticised as sensationalist, decontextualised and Eurocentric (Boykoff, 2010; León & Erviti, 2013; Lampis, 2013), thereby fuelling a debate based on political arguments (Anderson et al., 2012; Howell et al., 2020) around scientific evidence: climate change exists, it is caused by humans and its impacts on the planet require immediate action (IPCC, 2001).

The counterpart of the scientific collective in the public arena are the so-called climate deniers, a group that resorts to the use of rhetorical arguments to create the appearance of a legitimate debate where there is none, with the ultimate aim of rejecting a proposal or assertion on which there is a general consensus (Diethelm and McKee, 2009,2).

The narrative construction of their discourse pivots between the fallacies of authority held by false experts, the accusation of pressures and conspiracies, inaccurate representations and analogies, the projection of their own behaviour or the generation of impossible promises (Vicente Torrico, 2020; Heras, 2018). Through these postulates, climate deniers seek to undermine the credibility of scientific professionals and institutions, question the degree of consensus and the reliability of their research, relativise the existence of the problem, human involvement and the seriousness of the facts and, ultimately, discourage the adoption of measures that involve a change in the current economic and social order.

Therefore, the accumulation of empirical evidence on the climate crisis has forced the traditional denialist discourse, based on absolute rejection (Heras, 2013, 156), to shift towards low-intensity approaches, where the existence of the problem is no longer questioned but the social and economic policies to be developed are (Martín Sánchez, 2020). This reconfiguration of the message leads us to question the appropriateness of its name, since we would be dealing with a case of obstructionism and promotion of inaction, rather than a case of denial (Abellán López, 2021; Ekberg et al, 2022). In our case, and in order to facilitate understanding among the public, we will keep the classic label of denialists to refer to the group.

It could also be asked whether, after the loss of presence in the conventional media (Martín Sosa, 2021), climate deniers have shifted their focus of action to an environment with fewer barriers to access, such as social networks like Facebook (Frances Bloomfield & Tillery, 2019). Web 2.0 is the best showcase for the creation and dissemination of collective knowledge, in a horizontal, democratic and collaborative construction process that allows a different approach to the world around us, free from the formal and ideological limitations that dominate the routines of information professionals (Vicente Mariño and Vicente Torrico, 2014).

In this digital environment, the user becomes the protagonist of the communicative scheme, thanks to their ability to search, consume, value and share different content, thus creating their own information diet, outside the filters and guarantees of conventional media.

Social networks are home to professional profiles, such as journalists, producers, agencies and the media, who use these platforms to extend the useful life of their products and reach a wider audience, but also to anonymous users, who emerge from popular culture, and whose credibility is not protected by any company or organisation.

Our research focuses on the dissemination of denialist content through the video platform YouTube, as it is the second most visited website after its parent, the Google search engine (Alexa, 2022). Therefore, we should consider this portal as a major media actor when it comes to shaping public opinion, even more so given the process of audience migration from conventional media to digital portals (Vicente Torrico & González Puente, 2022).

In this sense, authors such as Allgaier (2019) highlight the ease of consumption compared to written information as one of the main factors for which the video platform is positioning itself as an informative reference among users, also in the case of realities as complex as science or the environment (León and Bourk, 2018). In fact, as Lovell (2015) remarks, some video creators receive hundreds of millions of views, reaching higher levels of popularity among young people than the great science communicators, such as Karl Sagan or Neil deGrasse.

On the negative side, Soukup (2014) and Michael (2017) point out that YouTube is a social platform where there is no quality control or editorial line, so any user can create their own personal account and share content that is unverified, unverified or outright false. To combat misinformation, the video platform has incorporated a series of filters and warnings for users in 2021, especially on topics susceptible to public debate such as climate change (Mohan, 2021), as shown in *Figure 1*:

Figure 1. Content warning. YouTube
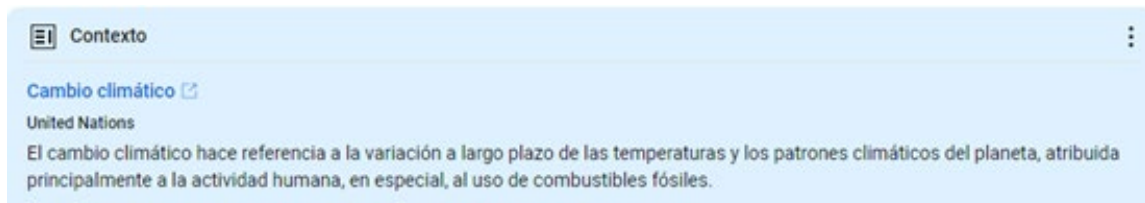
It is therefore relevant from a sociological point of view to know the extent and acceptance of the denialist, obstructionist and anti-solutionist discourse in one of the main public showcases for such a pressing problem as the global climate crisis.

2. Objectives and hypotheses

The literature that has been reviewed, as previously mentioned in the introductory chapter of this research, reveals a shift in the denialist discourse propagated through mainstream media. Rather than outright questioning the reality of the climate crisis, the strategy has now shifted towards discouraging the implementation of drastic measures that would necessitate a change in the current state of affairs. For this reason, the main objective of our proposal is to analyse the most relevant content related to climate change denialism in the digital environment, taking as a reference the platform with the largest social following in recent years: YouTube.

Based on this general goal, our specific objectives are to study the visibility and interactions obtained by this type of content, to analyse the sources and ideas that support or refute them and, finally, to examine the position adopted by the creators of the videos with respect to denialism.

The starting hypothesis underpinning this research (H1) assumes that the community of digital creators rejects climate denialism, in line with the results gathered in sociological studies, so we expect to find a large majority of content against denialist postulates.

On a second level, we consider that, despite the creative freedom offered by the Internet, the key discursive elements of the denialist argumentation will coincide with the key elements of the discourse disseminated through the traditional media (H2).

Finally, we can expect a greater use of scientific resources and contrasted sources by those content creators who refute the denialist approaches as opposed to those who support their ideas (H3).

3. Methodology

Our research opts for a methodological combination based on content analysis (Krippendorff, 1990) and frame analysis (Entman, 1993), in a design that reachs great popularity in the academic field of social sciences (Neuendorf, 2002). Through these techniques we can infer the intentions of the creators of the messages and pose scenarios about their influence on the audience, which is why, according to Igartua Perosanz, it is a basic tool for the description, control and explanation of the content of a message (2006, 193-196).

The analysis tool consists of a pre-coding template in which all the elements considered relevant to achieve the objectives of our research are included. For its elaboration, we integrated, on the one hand, the specific analysis criteria for the study of YouTube reception proposed by Arévalo Salinas (2014, 158), Costa Sánchez (2014, 35) and González Puente (2020), and, on the other, the rhetorical and semantic elements that characterise denialist discourse, inspired by the work of Almirón et al. (2020, 2010) and Abellán López (2021, 291), and which are included in *table 1*:

Table 1. Analysis tool

Rank	Title / URL		

DISEEMINATION	Creator
	Date of upload
	Number of views
	Number of likes / (% views)
	Number of comments / (% views)
	Sources, resources and links
		TOPICS	1. Scientific denial
			  - 1.1 Existence and reliability
			  - 1.2 Human responsibility
			  - 1.3 Extent of consequences
			2. Economic denial
			  - 2.1 Costly solutions
			  - 2.2 Minimal benefits
			3. Political denial
			  - 3.1 Individualism is useless
			  - 3.2 Those in charge must act

Source: created by the autor/s

The first block of analysis is aimed at characterising the document, based on its title, the author, the date it was uploaded to the platform and the length of the video. Next, the engagement generated among the community is analysed, according to the number of views, positive ratings and comments received, including the absolute number and the ratio with the aim of assessing the engagement generated by the video. Finally, we address the presence of external resources or links that facilitate or allow us to contrast the veracity of what is presented in the story.

In the second block of analysis, we present a study of the elements that characterise the narrative construction of the denialist discourse, focusing on three main divisions: scientific, economic and political. Thus, scientific denial consists of questioning the existence of climate change and the reliability of the studies that support it, relativising human influence on the planet's climate and the predicted impacts. Economic denial associates the fight against climate change with costly investments and irreparable damage to the market, and points out the minimal benefits to society. Finally, political

denial alludes to the inability of the individual to influence the future of the planet, and instead redirects responsibility towards those who cause the problem.

The analysis tool described above is applied to a sample of the 50 Spanish-language videos with the highest number of views on the YouTube platform using the search terms "negacionismo climático" (climate denialism in Spanish). The language used was chosen in operational terms, as several videos in Portuguese and one in English were retrieved under this tag due to the characteristics of the portal's search engine.

The choice of search terms is based on the reading of Weart (2011) and Dunlap (2013), who establish a clear differentiation between scepticism and denialism. In this sense, at the beginning of the research, different lexical variations were explored, such as climate lie, climate business, climate scam or climate fraud, common terms in the language of denialists but with a lower incidence on YouTube, so they were finally discarded.

The final sample, therefore, is made up of a total of 50 selected videos dated 20th December 2022, the titles and URLs of which can be consulted at the end of this research, in the annexes chapter.

4. Results

The chapter on results, in line with what was indicated in the methodological section, presents a clear division between the findings linked to the dissemination and reception of the content and the analysis of the variables, sources and resources used in the construction of the story.

Our analysis begins with a description of the videos with the highest number of views on YouTube video platform. Thus, as can be seen in table 2 below, we can highlight that the public goes to this website to consume audiovisual content by non-professional creators but with a certain background or experience in dealing with these issues.

Table 2. Top 10 videos about climate denialism in Spanish

Rank	Title	User	Category	Views	Date
1	Cómo evitar el Cambio Climático MUY RÁPIDO	Acciona	Company	2.311.048	2018.05.08
2	Respondo Comentarios de Negacionistas del Cambio Climático	QuantumFracture	UGC	1.317.576	2018.12.10
3	¿Se ha Demostrado que el Cambio Climático No es Culpa de la Humanidad? Nope	QuantumFracture	UGC	761.850	2019.08.01
4	Clima no es tiempo: la verdad del CAMBIO CLIMÁTICO	Date Un Vlog	UGC	325.140	2019.03.20
5	"La humanidad se extinguirá en 2030": del negacionismo al alarmismo por el cambio climático	El Confidencial	Media	266.001	2019.12.05
6	3 MENTIRAS DEL CAMBIO CLIMÁTICO	La Banana Rancia	UGC	148.788	2019.08.23
7	Un día en la CUMBRE del CLIMA #COP25 | Políticos, Negacionistas y Ciudadanos	La gata de Schrödinger	UGC	100.623	2019.12.11
8	¿Negacionismo Cambio Climático? J.A. Kast conversa con El Villegas	El Villegas	UGC	73.833	2019.09.30
9	DONALD TRUMP y los NEGACIONISTAS del CAMBIO CLIMÁTICO	OLD Hardcore	UGC	34.543	2020.10.23
10	Un catedrático explota contra los argumentos negacionistas de Ayuso y Esperanza Aguirre en directo.	Pandemia Digital	Media	22.605	2022.11.14

Source: created by the autor/s

Among the 10 most viewed videos, seven of them belong to the user-generated content (UGC) category, while the media and corporate communications departments only managed to place two and one video respectively among the most popular ones. The content generated by Acciona, a Spanish operator dedicated to the production of clean

energy, is the most viewed and generated the most engagement, while El Confidencial and Pandemia Digital managed to include two pieces with an eye-catching title among the most relevant content on climate denialism. The only popular video defending the denialist argument is by the charismatic Chilean writer and talk-show host El Villegas, and occupies the eighth position among the most outstanding content in the sample.

The results shown in this introduction reflect a characteristic common to all the videos, which is that the age of the content is directly proportional to the number of views and interactions accumulated.

In order to explore these findings in more depth, we now offer a detailed analysis of the production variables of the selected videos.

The first of the variables that we have observed in our detailed analysis corresponds to the date of uploading of the videos. As can be seen in *graph 1*, public discussion of climate denialism is a relevant issue on the YouTube video platform, as more than half of the content analysed has been created in the last two years, in a clear upward trend.

Graph 1. Date of upload
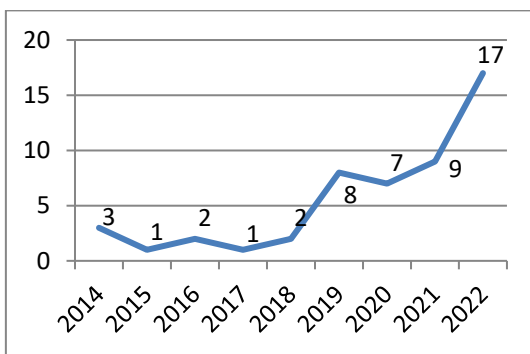
Source: created by the autor/s

One of the reasons that could justify this growing interest in climate denialism could be the recent incorporation of climate change denialist politicians as talk show hosts on the television programme Todo Es Mentira, whose interventions have been harshly criticised by users of this network on 7 occasions. Another possible interpretation could be linked to the increase in political and social tension in the country, as the extreme right-wing party Vox, ideologically aligned with the climate denialism of Donald Trump and Jair Bolsonaro, appears, either directly or indirectly, in a total of 10 of the videos analysed.

If we look at the typology of the creators of videos on climate denialism, we can see that the majority of production falls into two of the segments analysed, as shown in *graph 2*: on the one hand, user-generated content makes up 46% of the sample; on the other hand, the media, mainly digital natives, provides 42% of the creations analysed in our research.

Graph 2. Category of content creators
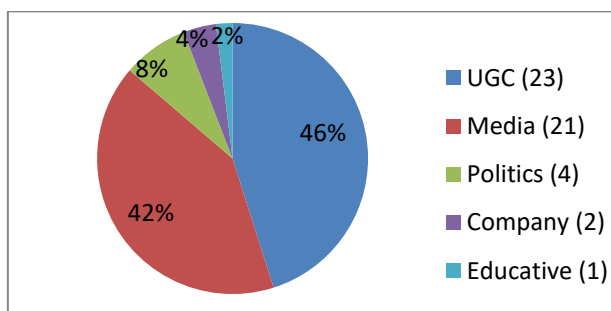
Source: created by the autor/s

Within the first group, Quantum Fracture clearly stands out, contributing 2 videos to the analysis sample and placing them among the 10 most visited, while in the second group, Spanish Revolution (4), Pandemia Digital (3) and La Sexta (3) stand out, as they are the most active in the creation of content on climate denialism on YouTube. In the case of accounts linked to political formations, the results indicated correspond to two ideologically antagonistic parties (EH-Bildu and Vox) that have had major disagreements in the Spanish parliamentary seat.

If we look at the engagement generated by the creations analysed, the best ratio of likes per number of views corresponds to the intervention of Inés Cañizares, representative of the political party Vox, on the drought in the Congress of Deputies. This political party also managed to place in seventh place its other video, in which three of its deputies intervene in a plenary committee on clean energies.

In general terms, as shown in table 3, the pieces that obtain a better engagement ratio are characterised by introducing a controversial approach, not exempt from personal disqualifications, even in the title of the video.

Table 3. Top 10 videos with the best likes rate

Rank	Title	User	Category	Views	Likes	Rate
1	VOX rechaza 'el negacionismo y el fanatismo climático' del Gobierno que ignora la sequía de España	VOX Congreso	Politics	955	198	0,207
2	Analizamos el COP27 y el negacionismo de Ayuso y Esperanza Aguirre junto a Ecodiuku	Pandemia Digital	Media	1.681	241	0,143
3	¡VERGONZOSO! el PROGRAMA 'TODO ES MENTIRA' colabora con NEGACIONISTAS del CAMBIO CLIMÁTICO	Rubén Hood	UGC	12.441	1.783	0,143
4	IMPRESCINDIBLE. Los 3 tipos de negacionismo climático, por Fernando Valladares	Spanish Revolution	Media	2.468	322	0,130
5	Respuesta a Jano García: "el cambio climático es un negocio".	EcoDiuku	UGC	814	105	0,129
6	¿Despreciables negacionistas?. Así desmonta VOX el discurso climático del Ejecutivo	VOX Congreso	Politics	9.845	1.224	0,124
7	🤦‍♀️ ¡DEMENCIAL! La burla de CuatroTV ante el Cambio Climático.	Pandemia Digital	Media	5.482	666	0,121
8	Negacionistas en Todo es mentira: NO TIENEN NI IDEA	Spanish Revolution	Media	5.539	630	0,114
9	DONALD TRUMP y los NEGACIONISTAS del CAMBIO CLIMÁTICO	OLD Hardcore	UGC	34.543	3.808	0,110
10	DESMONTANDO a los NEGACIONISTAS del CAMBIO CLIMÁTICO	Spanish Revolution	Media	3.128	318	0,102

Source: created by the autor/s

These characteristics are repeated in the case of the number of comments obtained by the selected videos. As in the previous section, the more controversial approaches get a higher resonance in terms of discussion with their users. The only exception to this pattern of behaviour, as can be seen in *table 4*, is provided by user *jlpintado*, who reports on an issue of particular relevance to the community such as the end of monetisation, i.e. the end of earning revenue, for videos with denialist content.

Table 4. Top 10 videos with the best comments rate

Rank	Title	User	Category	Views	Comments	Rate
1	Noticia: Youtube desmonetizara vídeos negacionistas al cambio climático (símbolo amarillo Youtube)	jlpintado	UGC	737	45	0,061
2	Respuesta a Jano García: "el cambio climático es un negocio".	EcoDiuku	UGC	814	39	0,048
3	DESMONTANDO a los NEGACIONISTAS del CAMBIO CLIMÁTICO	Spanish Revolution	Media	3.128	118	0,038
4	El ridículo de un diputado de Vox al pedirle datos científicos sobre su negacionismo climático	Spanish Revolution	Media	10.467	344	0,033
5	IMPRESCINDIBLE. Los 3 tipos de negacionismo climático, por Fernando Valladares	Spanish Revolution	Media	2.468	81	0,033
6	⬛TOMA ZASCA ⬛EXPERTA DESTROZA a ESPERANZA AGUIRRE ⬛NEGACIONISMO y CAMBIO CLIMATICO ⬛⬛⬛	La Voz Noticias	Media	4.592	136	0,030
7	¿Las personas que NIEGAN el Cambio Climático son Estúpidas?	Bienvenido al Holoceno	UGC	1.502	42	0,028
8	VIRUS DEL ODIO Y NEGACIONISMO CLIMATICO - REPORTAJE A ALDO DUZDEVICH - CARTA AMBIENTAL	HISTORIA Y POLÍTICA	UGC	1.364	37	0,027
9	5 FALACIAS negacionistas del cambio climático DESMONTADAS	IvanbaOficial	UGC	2.107	54	0,026
10	⬛ MOMENTO GEEK | Javier Milei y el negacionismo climático	La Izquierda Diario	Media	14.871	368	0,025

Source: created by the autor/s

However, as a possible limitation to the above interpretation, it should be noted that the absolute number of likes is directly proportional to the number of views, and that it is the most visited videos that also get the most support.

As an introduction to the analysis of the discursive variables used in the videos on climate denialism, we must observe the classification of the content in general terms. Thus, we can see that of the 50 videos analysed, only three (6%) are in favour of the denialist approach, while there are two (4%) that maintain a neutral attitude, showing both sides of the debate, as shown in the following table.

Table 5. Videos that support/discuss climate denialism

| Rank	Title	User	Category	Views	Position
9	¿Negacionismo Cambio Climático? J.A. Kast conversa con El Villegas	El Villegas	UGC	73.833	Support
11	Un catedrático explota contra los argumentos negacionistas de Ayuso y Esperanza Aguirre en directo.	Pandemia Digital	Media	22.605	Neutral
17	¿Despreciables negacionistas?. Así desmonta VOX el discurso climático del Ejecutivo	VOX Congreso	Politics	9.845	Support
20	Los negacionistas del cambio climático: escépticos, incrédulos de las causas y de las consecuencias	laSexta Noticias	Media	5.872	Neutral
47	VOX rechaza 'el negacionismo y el fanatismo climático' del Gobierno que ignora la sequía de España	VOX Congreso	Politics	955	Support

Source: created by the autor/s

In this regard, it should be noted that the vast majority (90%) of the creations listed on YouTube when searching for "climate denialism" adopt a critical stance towards denialist approaches, dominating the public discussion of this issue in the digital sphere as well.

In order to adequately study this reality, we will first analyse the articulation of the denialist ideology and then study the resources used by the authors to refute it.

According to what was pointed out in the methodological section, the denialist discourse is structured around three main frames of interpretation, scientific denial, economic denial and political denial, with their corresponding subdivisions, as can be seen in *graph 3*:

Graph 3. Main ideas used in the denialist discourse
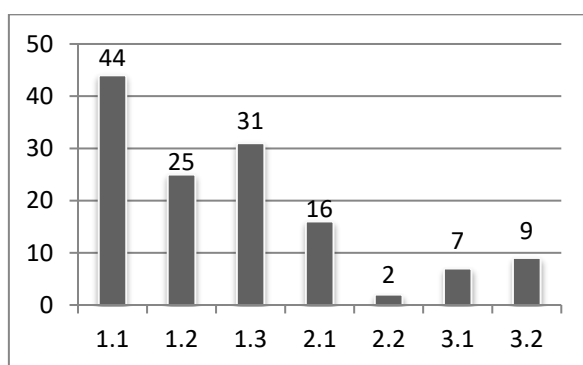
Source: created by the autor/s

The denialist argumentation on YouTube places particular emphasis on the scientific interpretation framework, present in three out of four interventions, and well ahead of issues related to economics and political management.

Within this dominant frame, the first variable stands out, focusing on denying the existence of climate change (22) and questioning the reliability of researchers (22). The second idea of the scientific framework totals 31 impacts, and relativises the extent of the consequences of climate change. Finally, voices rejecting human responsibility appear 25 times.

The economic interpretation is dominated by the idea of the high cost of investing in renewable energies (16) compared to other much cheaper alternatives, which represents a great effort for the ailing national economy. With a practically residual specific weight (2), the minimal advantages of combating climate change currently go practically unnoticed.

In the framework of political interpretation, which is aimed at discouraging social action, the approach is that the most polluting countries should act (9), with the focus on the developing countries of the Asian continent. The variable questioning the effectiveness of individual measures, on the other hand, appears on 7 occasions.

In order to correctly interpret and understand the breakdown of denialist variables, it is necessary to take into account the predominance of political figures in the sample analysed. In this way, their participation in parliament and in the media amplifies frameworks of interpretation that are already outdated in Spanish public life.

If we delve deeper into the typology of the sources of the denialist discourse, we find that the creators allude to them using three types of formulas: through indirect mention, with generic denialism or by inserting their statements, as can be seen in *graph 4*:

Graph 4. Main sources of climate denialism
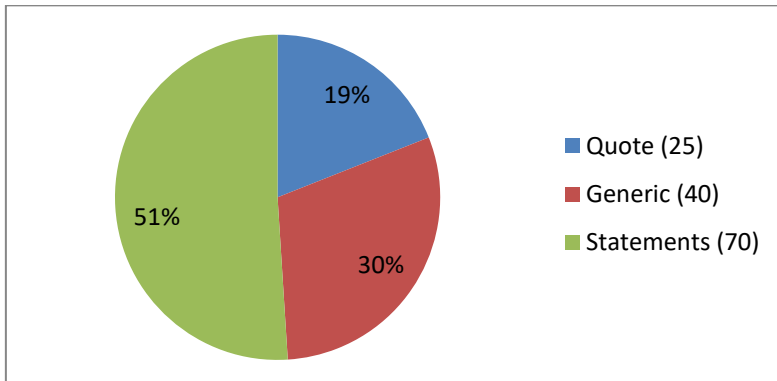
Source: created by the autor/s

As noted at the end of the previous page, political figures play a prominent role in the dissemination of the denialist argument in Spanish on YouTube, both directly and indirectly. The parties that appear in this section correspond to the Partido Popular, either through former leaders such as José María Aznar, Mariano Rajoy and Esperanza Aguirre, or current representatives, such as Isabel Díaz Ayuso, and also Vox, a party that is indirectly questioned in parliament and in the media.

In contrast to the denialist argument, which was refuted in 90% of the videos in the sample, scientific sources and resources emerge that attempt to combat the spread of denialist ideology. Of the 135 variables analysed, 114 have been disproved, showing a clear predominance of the majority position on climate change. However, only 16 were supported by external references in the description of the video.

Graph 5 shows the sources most frequently used by the creators of the videos analysed to refute the climate change denialist arguments:

Graph 5. Main sources rebating climate denialism
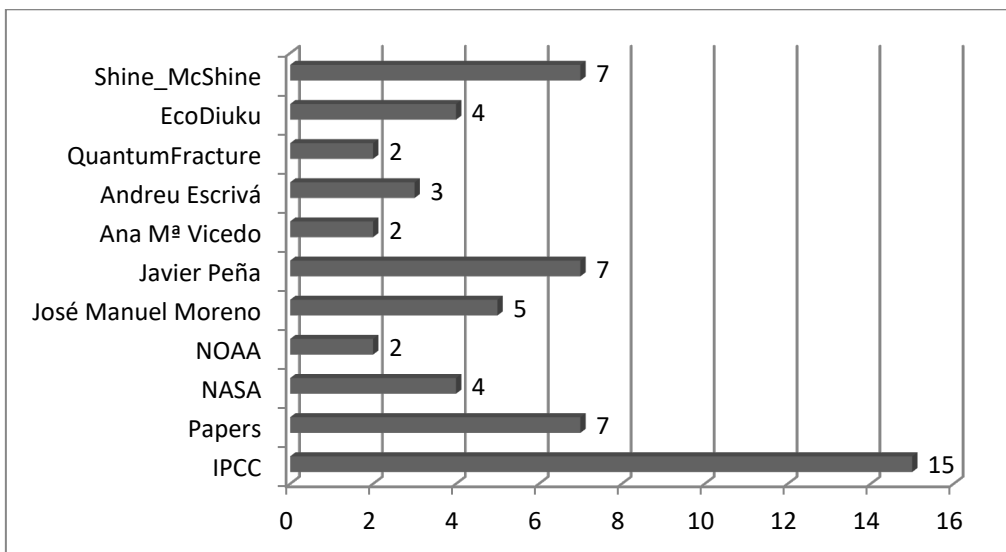
Source: created by the autor/s

As can be seen in *graph 5*, the Intergovernmental Panel on Climate Change acts as the leading source to counteract the disinformation propagated by climate change deniers, as it is used against 11% of their arguments.

On a second level are academic papers, among which The Lancet is mentioned twice. Climatologist Javier Peña and science populariser Shine_McShine, both regular users of the networks, are also equally represented.

Organisations are relegated to a third level, with NASA (4) and NOAA (2) barely receiving any attention from content creators. However, despite their small number, their contributions are very valuable, as they allow the information to be contrasted by embedding the access link.

Finally, it should be noted that the creators of the content analysed act as legitimate voices to refute the denialist argument in 12 of the videos analysed and refute a total of 36 denialist arguments (27%), which would place them as the most relevant source. However, this practice should be taken as negative, since, in addition to not mentioning any external source, they do not share the references on which they base their ideas in the description of the video and could therefore generate mistrust about the accuracy of their discourse.

5. Discussion and conclusions

The analysis of climate change denialist contents on the YouTube video platform has allowed us to achieve the objectives set out at the beginning of the research, as well as to test the initial hypotheses that motivated this study.

The results have revealed a generalised rejection of climate denialism by the community of digital creators, in line with the retreat of those voices in the public and media spheres (Martín Sánchez, 2020), as well as the social consensus on the seriousness of the climate emergency.

However, we must point out that the key elements of the denialist discourse present in our study do not correspond to the trend detected in the mainstream media (Fernández Reyes, 2010; Dunlap & McCright, 2011), rejecting our second hypothesis. The repercussions of the statements made by certain political figures (Gunster, 2011; Corner et al., 2015), both in Congress and in the television show "Todo Es Mentira", have overstated a framework of scientific interpretation that has already been superseded in other spheres, but which persists on the web (Erviti, Azevedo & Codina, 2018). In this sense, one could ask the real impact of this type of content on the users who consume it, but this answer exceeds the limits of our work.

Finally, the third hypothesis has been partially confirmed through the list of sources and resources used by the content creators to justify their rejection of the denialist ideology, since, although the IPCC, journals and scientific disseminators appear among the most cited sources (Cooper, 2011), a quarter of the videos do not have scientific backing that would allow them to refute the denialist discourse without fissures and rely all their credibility on the knowledge attributed to their creator. Nevertheless, and taking as a reference the studies by Anderson (2009) and Dolsak and Houston (2014), the sources that appear on screen, which directly state their message, have an advantage in the competition of opposing discourses.

It is necessary to consider these findings in order to monitor a highly topical issue in which rhetorical, ideological and argumentative confrontation is decisive for raising social awareness.

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
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7. Annexes

Rank	Title	URL
1	Cómo evitar el Cambio Climático MUY RÁPIDO	https://www.youtube.com/watch?v=3X-Z0kMfh4M
2	Respondo Comentarios de Negacionistas del Cambio Climático	https://www.youtube.com/watch?v=ayKM68aaljI
3	¿Se ha Demostrado que el Cambio Climático No es Culpa de la Humanidad? Nope	https://www.youtube.com/watch?v=Dzncwn-H6L0
4	Clima no es tiempo: la verdad del CAMBIO CLIMÁTICO	https://www.youtube.com/watch?v=bQTTphy2c-M
5	"La humanidad se extinguirá en 2030": del negacionismo al alarmismo por el cambio climático	https://www.youtube.com/watch?v=cgBvbB4krdE
6	3 MENTIRAS DEL CAMBIO CLIMÁTICO	https://www.youtube.com/watch?v=jgD_HD7shuw
7	Un día en la CUMBRE del CLIMA #COP25 | Políticos, Negacionistas y Ciudadanos	https://www.youtube.com/watch?v=kqSXF30RfCY
8	¿Negacionismo Cambio Climático? J.A. Kast conversa con El Villegas	https://www.youtube.com/watch?v=9QCek0yDtLk
9	DONALD TRUMP y los NEGACIONISTAS del CAMBIO CLIMÁTICO	https://www.youtube.com/watch?v=CMCKg2Fos4k
10	Un catedrático explota contra los argumentos negacionistas de Ayuso y Esperanza Aguirre en directo.	https://www.youtube.com/watch?v=yA05o3KWjW8
11	👑 MOMENTO GEEK | Javier Milei y el negacionismo climático	https://www.youtube.com/watch?v=F-11-QbV1Ks
12	Negacionistas climáticos debatiendo con un científico en la TV española	https://www.youtube.com/shorts/OWYhZ-zcLd0
13	¡VERGONZOSO! el PROGRAMA 'TODO ES MENTIRA' colabora con NEGACIONISTAS del CAMBIO CLIMÁTICO	https://www.youtube.com/watch?v=5cSkgrD49dA
14	El ridículo de un diputado de Vox al pedirle datos científicos sobre su negacionismo climático	https://www.youtube.com/watch?v=laeTCSD7bwU
15	Isabel Díaz Ayuso: negacionista del cambio climático (y por qué está equivocada)	https://www.youtube.com/shorts/Tq1q-ZGYKVA
16	¿Despreciables negacionistas?. Así desmonta VOX el discurso climático del Ejecutivo	https://www.youtube.com/watch?v=tFtMpN5EjCw
17	Stephen Hawking y grupo de científicos advierten del negacionismo climático de Donald Trump	https://www.youtube.com/watch?v=0UETVUcFUWM
18	Oskar Matute desmonta el negacionismo climático de la ultraderecha y su falsa retórica	https://www.youtube.com/watch?v=niFIPqAx4YM
19	Los negacionistas del cambio climático: escépticos, incrédulos de las causas y de las consecuencias	https://www.youtube.com/watch?v=YXltxPLrBjo
20	La estupidez del negacionismo climático	https://www.youtube.com/watch?v=x_gp_8yKWAo
21	Negacionistas en Todo es mentira: NO TIENEN NI IDEA	https://www.youtube.com/watch?v=sRVmjjr1vUA
22	🙈 ¡DEMENCIAL! La burla de CuatroTV ante el Cambio Climático.	https://www.youtube.com/watch?v=ln2tq7bUnjM
23	A todos los negacionistas del cambio climático ... 🤭 #lol #humor	https://www.youtube.com/shorts/pshLbfoGWJ4
24	El negacionismo es cosa del pasado, afirma experto sobre el cambio climático	https://www.youtube.com/watch?v=6j4EbqNRKqM
25	💥TOMA ZASCA 💥 EXPERTA DESTROZA a ESPERANZA AGUIRRE ☞NEGACIONISMO y CAMBIO CLIMATICO 👏👏👏	https://www.youtube.com/watch?v=QE1S_U3Qa58
26	¿Quién financia a los negacionistas del cambio climático? - laSexta columna	https://www.youtube.com/watch?v=dvce_3ul1fY
27	5 ARGUMENTOS frente al NEGACIONISMO del Cambio Climático 💬	https://www.youtube.com/watch?v=BBKZ3tO5ns4
28	DESMONTANDO a los NEGACIONISTAS del CAMBIO CLIMÁTICO	https://www.youtube.com/watch?v=5m47HSxY71s
29	HECD 123 - La Manada y los bulos + negacionismo climático en prime time + Ayuso y el macarrismo	https://www.youtube.com/watch?v=La3ny7W9SVo
30	MOOC Cambio Climático. 1.3 Los negacionistas	https://www.youtube.com/watch?v=ZZaxFYdNTPg
31	💥¡BOOM! 💥EXPERTO contesta al NIÑO PIJO de VOX ☞ LA CIENCIA vs NEGACIONISMO del CAMBIO CLIMATICO	https://www.youtube.com/watch?v=9aS7EXum-04
32	Los negacionistas o cómo relativizar el impacto del cambio climático - laSexta columna	https://www.youtube.com/watch?v=fe1vSxDRcOc
33	IMPRESCINDIBLE. Los 3 tipos de negacionismo climático, por Fernando Valladares	https://www.youtube.com/watch?v=0pM6Pys_gDM
34	El negacionismo climático de Trump sobre los incendios forestales hace arder la carrera electoral	https://www.youtube.com/watch?v=1DUDTBIXLAc
35	Negacionismo climático: las más absurdas conspiraciones sobre el calentamiento global	https://www.youtube.com/watch?v=yo10HOYaPLQ
36	5 FALACIAS negacionistas del cambio climático DESMONTADAS	https://www.youtube.com/watch?v=vpz0Vdd8f44
37	EH Bildu desenmascara a los negacionistas del cambio climático: «Lo suyo es hipocresía climática».	https://www.youtube.com/watch?v=bgriXl6znkY
38	Analizamos el COP27 y el negacionismo de Ayuso y Esperanza Aguirre junto a Ecodiuku	https://www.youtube.com/watch?v=XqagUcml-tA
39	¿Las personas que NIEGAN el Cambio Climático son Estúpidas?	https://www.youtube.com/watch?v=BJZsyakh_K8

40	CAMBIO CLIMÁTICO, NEGACIONISMO Y EXTREMA DERECHA - SHINE MCSHINE	https://www.youtube.com/watch?v=Ks7oDnmj5Ew
41	VIRUS DEL ODIO Y NEGACIONISMO CLIMATICO - REPORTAJE A ALDO DUZDEVICH - CARTA AMBIENTAL	https://www.youtube.com/watch?v=x7odS6IabF4
42	Ignite Valencia #7 - Andreu Escrivá: Los negacionistas del cambio climático	https://www.youtube.com/watch?v=3RprJVqeDVs
43	14-6-2022 LA CAFETERA: "NEGACIONISMO CLIMÁTICO, CALENTAMIENTO ANDALUZ"	https://www.youtube.com/watch?v=Ar_2oXFRYbQ
44	🥊 GAKIAN vs QUANTUMFRACTUM y los NEGACIONISTAS del CAMBIO CLIMÁTICO | #DeKéVa #2	https://www.youtube.com/watch?v=FWCNHmxMWTg
45	Los negacionistas del cambio climático	https://www.youtube.com/watch?v=kQvbl4Xgfp4
46	VOX rechaza 'el negacionismo y el fanatismo climático' del Gobierno que ignora la sequía de España	https://www.youtube.com/watch?v=K-EZepRYnjo
47	Elon Musk refuta a Negacionista Climático en 1 Minuto	https://www.youtube.com/watch?v=xL9Fbt3iatY
48	Respuesta a Jano García: "el cambio climático es un negocio".	https://www.youtube.com/watch?v=hVohDuztX1s
49	Los Argumentos en contra del cambio climático (Parte 1)	https://www.youtube.com/watch?v=kNA9-ZNPZz4
50	Noticia: Youtube desmonetizara vídeos negacionistas al cambio climático (símbolo amarillo Youtube)	https://www.youtube.com/watch?v=zSLcjOvDcns