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Emotionalization of the 2021–2022 Global Energy Crisis Coverage: Analyzing the Rhetorical Appeals as Manipulation Means in the Mainstream Media

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Abstract: As the issues of the world's overreliance on fossil fuels still remain unresolved, mainstream media play a central role in influencing public attitudes towards energy sources. This article aimed to consider Aristotle's rhetorical appeals as manipulation means in the news coverage of the 2021–2022 global energy crisis. Using computer-aided text analysis, media framing, discourse, and rhetorical analyses, this paper analyzes 600 news articles published on the websites of the four mainstream media sources from the key countries that were affected by the crisis. The results confirmed emotionalization of the news coverage that occurred through the use of similar rhetorical appeals and emotive language means aimed at inducing positive or negative feelings and shaping public opinion. The UK and US mainstream media appeared to rely more on the opinions of political, business, and energy authorities, highlighting a high level of politicization of their coverage. The findings also indicated polarization of the attitudes in the coverage, with mainly negative narratives about fossil fuels and more positive narratives about renewable energies, which contributed to public opinion manipulation and energy decision-making. This study opens up perspectives for future research on media emotions and rhetorical appeals as powerful manipulation means in applied linguistics, rhetoric, and journalism.



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Copyright: © 2025 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/ licenses/by/4.0/). **Keywords:** global energy crisis; energy dependence; energy transition; rhetorical appeals; manipulation means; emotionalization of news discourse; media framing; Lippmann's public opinion; agenda setting; mainstream media

1. Introduction

The oil and gas industry is historically seen as a driving force of the global economy since mineral resources are 'natural capital' that ensures stable economic growth (Litvinenko et al., 2023, p. 95) and provides sustainable development worldwide (Zhou, 2023, p. 1). However, the depletion of the existing oil and gas fields and the problems in finding new fields have made it difficult to maintain stable growth in the production of hydrocarbon resources (HCRs) in the recent years (Arias & Colmenarez, 2024; Ganzulenko & Petkova, 2023). Thus, the global oil and gas industry is currently facing both opportunities for developing new fields and technologies (Kryltcov et al., 2021), shifting to renewable energy sources (RESs), and improving energy efficiency and introducing digital technologies (Belsky et al., 2024; Samylovskaya et al., 2022) and challenges that are related to the environmental risks (Ashish et al., 2024), overreliance on artificial intelligence (Haouel & Nemeslaki, 2024), and the exhaustion of readily available resources (Babyr, 2024).

The shortage of energy sources fueled the global energy crisis which began in 2021 and spiked in 2022 due to many factors, including global green movements to reduce

carbon emissions, the Ukraine–Russia conflict, and post-COVID-19 economic rebound. Some energy researchers pointed out that the global demand for crude oil would continue to decrease (Ponomarenko et al., 2024), while other scholars revealed challenges in implementing energy transition policies (Sikirica, 2024) and the high level of polarization in public debates on energy sources, with extremely negative narratives about fossil fuels and positive narratives about renewable energy sources (Dagiliūtė, 2024; Pierce et al., 2024). As a result, the issues of energy transition and energy efficiency (Gajdzik et al., 2024; Shklyarskiy et al., 2023), energy justice (Van Uffelen et al., 2024), and the impact of the energy crisis on the global economy (Ozili & Ozen, 2023) became the main topics of public and media debates (Sefa-Nyarko, 2024; Yun et al., 2022).

The majority of media studies on the global energy crisis coverage highlight the key role of the media in the process of public acceptance or non-acceptance of energy sources (Sovacool et al., 2022). Most studies pinpoint the politicization of the energy crisis coverage and climate change news content, which refers to the prominence of political actors in the coverage (Chinn et al., 2020) and indicates political bias in media. For instance, the study of Yun et al. (2022) confirmed the politicization of the energy crisis in the South Korean media and detected the role of fake news in fueling renewable energy conflicts and stimulating oppositions to locating renewable energy facilities or justifying such oppositions. Huan (2023) found that the coverage of the energy crisis was not predominantly energy-related but rather focused on political issues. The findings of Panchendrarajan et al. (2024) also proved that the energy crisis brought into the debate the issues of fair distribution of economic burdens and cost of living, social justice, and equity in the UK newspapers as well as local problems rather than energy issues. The study of Loschke et al. (2024) revealed that both positive and negative news discourse contributed to the polarization of attitudes towards energy policies, which allowed us to assume the significant role of positive and negative emotionality in shaping public opinion and sustaining certain ideology in the news discourse.

It is also worth noting that during the COVID-19 pandemic, mass media became more reliant on digital and social media, on the one hand, and susceptible to emotional manipulation and misinformation, on the other hand (Li et al., 2022). The overreliance on social media (Bi, 2023), the 'totalizing visualization' of new media (Dorofeev & Tomaščíková, 2021), and rapid digitalization of the modern world (Bylieva et al., 2022; Shestakova & Morgunov, 2023) led to the process of 'deep mediatization' (Hepp, 2020, 2022), which refers to the entanglement of the social world with media technologies. It concerns how we create our society through digital media and their infrastructures, and how they are reconfigured as a result. The proliferation of fake news and conspiracy theories in social and digital media gave birth to the phenomenon of the 'post-truth era' characterized by the prevalence of emotional arguments over rational arguments in both print and electronic media (Aïmeur et al., 2023; Teneva, 2023). Thus, appeals to emotions became one of the characteristics of modern media discourse (Alba-Juez & Larina, 2018).

On the one hand, the process of intentional embedding of emotions into news stories or 'emotionalization' of the media discourse (Alba-Juez & Larina, 2018) resulted in a large amount of 'sensational' news seeking to engage a wider audience and increase the circulation and revenue of commercial media outlets. As Samoilenko et al. (2017, p. 34) noted, emotions contribute to the commercial success of media outlets by "featuring sensations and scandals in which political actors become targets of public praise or condemnation". On the other hand, it resulted in challenges related to fact-checking of news information even in mainstream media, which are adjudged more credible despite heavier dependency on digital media for information (Salaudeen & Onyechi, 2020).

Most media studies paid little attention to the way media coverage affected how disputes around energy issues evolved (Van Neste & Couture-Guillet, 2022). Some media studies on the global energy crisis focused on sentiment analysis of the energy crisis discourse. For instance, Kim et al. (2024) found that intense negative emotions dominated Korean news comments about energy transition. Weber (2024) noted the deeply rooted criticism of nuclear power and the necessity of the expansion of renewable energies in European newspapers. Pierce et al. (2024) argued that emotions, such as anger and fear, are central to how coalitions advocate for policy change in the regulation of oil and gas drilling in Colorado. The study of Matthews (2024) found that reporting to UK TV audiences focused on political and economic issues such as elite inaction and profiteering from the energy crisis, though the coverage omitted any explanation and assistance for those audiences affected by the soaring energy costs. The study of Molek-Kozakowska (2024) revealed that the overall discourse on energy policy was used to stir anxiety among the public and thus manipulate it for political gain, which allowed us to assume the manipulative role of emotions in shaping public opinion on the energy-related issues in the online news discourse, since online news in general has a direct impact on democracy and political knowledge (Al-Rawi, 2019).

Although the majority of media studies focus on political bias in social and digital media coverage of the global energy crisis, little attention is paid to the issues of tackling language manipulation means and their hidden ideological meanings in the mainstream media that contribute to influencing public perceptions of the energy crisis and energy sources. Therefore, based on Aristotle's theory of rhetoric, Lippmann's (1929/2021) theory of public opinion, and agenda-setting and framing theories, the present study aims to identify and consider the most common rhetorical appeals and emotive language means that are used as means of public opinion manipulation in the online publications of the four mainstream media from the key countries that either benefitted or suffered from the 2021–2022 global energy crisis, including The New York Times (the USA), The Guardian (the UK), The Times of India (India), and China Daily (China) (Bolton, 2024; Ozili & Ozen, 2023; Rankin et al., 2021). This paper intends to contribute to the studies on the agenda-setting role of the news media and the manipulative use of Aristotle's appeals from rhetorical, linguistic, and journalistic perspectives. It should also be noted that the results of the present study can be applicable to the news coverage of the 2021–2022 global energy crisis only in the selected four mainstream newspapers.

2. Theoretical Context

2.1. The Study of Rhetorical Appeals, Emotions, and Manipulation in Mass Communication: *An Overview*

The study of rhetorical appeals has its roots in Aristotle's rhetorical triangle, according to which persuasion occurs through the use of the character ('ethos') of the speaker, the emotional state ('pathos') of the hearer, and the argument ('logos') itself (Aristotle cited in Rapp, 2023). The rhetorical triangle has a profound significance in the realm of public and political speeches (Samboang et al., 2024). In particular, appeals to 'ethos' (authority) are aimed at convincing the audience by using a speaker's credibility and authority or by emphasizing one's expertise and experience in a certain field to establish a speaker's rapport with his or her audience. 'Pathos' is about evoking feelings with the aim of establishing emotional connection with the audience, making the latter feel personally involved in the issue. Appeals to 'logos' involve supporting the argument with facts, statistics, and logical reasoning.

In Aristotle's triangle, 'logos', 'ethos', and 'pathos' should be balanced within a text (Aristotle cited in Rapp, 2023). Therefore, emotions are regarded as one of the basic

components of public persuasion. The study of Rocklage et al. (2018) confirmed a strong link between emotionality ('pathos') and persuasion, proving that the intent to persuade other people spontaneously increases the emotionality of individuals' appeals. Moreover, emotions can also be viewed as 'cognitively relevant' since they reflect not only feelings, but also "inaccurate beliefs and, therefore, their value is variable" (Aristotle cited in Coelho & Huppes-Cluysenaer, 2018, p. 16). As Nikunen (2019) noted, they can be influenced by cultural norms, practices, and social structures.

Nevertheless, it should be noted that Aristotle's fundamental appeals can be used as means to manipulate the audience (Gagich & Zickel, 2018; Teneva, 2023). In this sense, such appeals are regarded as 'fallacies' or false arguments that can weaken a speaker's arguments and mislead the audience. Thus, emotional fallacies can be used to play on the recipients' emotions rather than provide evidence (Kuchel & Rowland, 2023). According to Koszowy et al. (2022), ethotic techniques can be used to either emphasize or weaken and undermine a speaker's own or others' credibility and trustworthiness, whereas logical fallacies can rely on those facts and evidence which are favorable to the speaker's arguments (Teneva, 2023). Copi et al. (2018) developed a classification of fallacies, including 'argumentum ad hominem' (an appeal to authority in which the opinion of an authority figure (or figures) is used as evidence to support an argument); 'argumentum ad populum' (an appeal to the public, often emotionally laden, that claims a conclusion is true because most or all people irrelevantly think, believe, or feel that it is); 'argumentum ad numerum' (an appeal to numbers based on the number of people who hold a particular belief); and 'argumentum ad passiones' (an appeal to strong feelings, emotions, or enthusiasm rather than judgment in order to establish a conclusion) (Hansen, 2020). These four fallacies identified by Copi et al. (2018) serve as a basis for our further classification of rhetorical appeals in the news coverage of the global energy crisis.

It should be noted that theories about emotions and their role in media are abundant throughout the entire history of media and differ in their approaches (Eder et al., 2019). For instance, affect theory considers emotions as subjectively experienced feelings (Gibbs, 2011) and uses the term 'affect' as an umbrella term comprising any felt bodily state such as moods, reflexes, and felt bodily responses. According to this theory, social 'contagion,' which is a seemingly spontaneous process by which information, such as attitudes, emotions, or behaviors, is spread throughout a group from one member to others (Riggio & Riggio, 2023), is considered to be the original basis for all human communication and a central feature of the audience's emotional engagement (Plantinga, 2009), which is relevant to the present study of emotionalization of online news discourse.

Evolutionary media scholars consider innate affect programs, whereas cognitive appraisal theories of emotion view emotions that are produced from our interpretation of what we experience (Eder et al., 2019). According to the appraisal theory, emotions are elicited and differentiated on the basis of a person's subjective evaluation (Scherer, 1999). Thus, this theory can be applied to capture the judgment process in terms of emotions experienced by the reader or viewer and how the wider context such as the full news article, or even just the headline, forms a part of this process (AlZahrani & Alhuthali, 2024), which is also relevant to the present study on the role of emotive language in evoking the audience's emotional responses in the energy crisis discourse.

Habermas (1989) sidelined emotions and viewed the public sphere as an ideal arena of rational discussion. Nevertheless, he claimed that "emotion is to practical reason as sense perception is to scientific reason" (Habermas cited in Rehg, 2011, n. pag.). Thus, citizens who participate in public debates are individuals who bring to public discussion not only their beliefs but also their socially relevant affective concerns (Rosas & Serrano-Puche, 2018). This neglected aspect of the public sphere was highlighted by researchers who considered

emotions as an integral part of the public debates and motivators for political mobilization (Nussbaum, 2013) as well as social means of communication and information (Glück, 2018; Orts, 2022).

During recent decades, the interest in studying mediated emotions increased with what Patricia Clough and Halley (2007) identified as an 'affective turn'. As a result, the concept of the emotional public sphere emerged, highlighting the significant role of emotions in the media (Rosas & Serrano-Puche, 2018). As opposed to an old and rather simplistic view that journalists' own emotions have to be excluded in news reporting that adheres to the principles of truth, objectivity, freedom of expression, and the right of citizens to information, Stenvall (2014, p. 461) claimed that "emotionality does not necessarily run counter to objectivity but may operate alongside" with it. Furthermore, she argued that emotions perform a strategic function for journalists to structure news material, establish a link to news audiences, or emphasize emotive information in news coverage. Stenvall (2014) classified representations of emotions in news agency reports, including attributed and non-attributed affects. Wirth and Schramm (2005) also distinguished 'everyday' emotions from 'media-specific' emotions, considering particular emotions as effects of media usage under media-specific or genre-specific conditions.

From the viewpoint of Nabi (2003, p. 226), who focused on the relationship between emotion and cognition in understanding the influence of mediated messages, emotions are "internal, mental states representing evaluative reactions to external events, agents, or objects that vary in its intensity". In her opinion, they serve as frames for issues, highlighting certain information in terms of accessibility and thus guiding subsequent decision-making. This finding is relevant to the present study of the manipulative use of emotive language means that contribute to energy decision-making. Thus, according to Nabi (2003), actions triggered by mediated emotions vary depending on the nature of the emotion itself, with different emotions leading to different behaviors. For instance, fear and anger can differentially affect information accessibility, desired information seeking, and policy preference. These findings highlight the importance of studying the discrete emotions in persuasive contexts, which is relevant in the present study.

The study of De Los Santos and Nabi (2019) also revealed that the emotionality of news stories plays a significant role in determining how consumers respond to and selectively engage with online news content. According to their research, emotional stories that contained appeals to hope and anger encouraged readers to spend more time on the story page, whereas stories that appealed to fear and anxiety resulted in avoidance behavior. Likewise, considering the correlation between emotions and virality, Berger and Milkman (2013) also found that positive content is more viral than negative content. However, they concluded that "the role of emotion in transmission is more complex than mere valence alone" (Berger & Milkman, 2013, p. 21). For instance, users are more likely to take actions if they are exposed to such emotions can be used as an effective manipulative strategy to evoke strong emotional responses in the audience, enhance decision-making, and maximize the reader engagement.

Modern studies of emotions note that emotions are pervasive in digital and social media, contribute to the commercial success of media outlets (Nikunen, 2019), enhance social media engagement (Bil-Jaruzelska & Monzer, 2022), and have a direct impact on political processes (Neyazi & Kuru, 2024). According to Eder et al. (2019), the impact of mass media on society is to a great extent based on human emotion. Thus, emotions are one of the key factors in determining news value.

As a result, on the one hand, the new forms of 'emotion-driven' journalism aim to create intimate and trustful relationships with audiences, thus highlighting the persuasive role of emotions in constructing media objectivity and contributing to public trust (Lecheler, 2020). On the other hand, digital media technologies provide tools that allow modern media outlets to manipulate public opinion on a wide scale, revealing the manipulative role of emotions in hindering objectivity and disseminating mis- and disinformation (Teneva & Bykov, 2023). Therefore, studying emotions from both rhetorical and journalistic perspectives is critical to mainstream media, which are also vulnerable to fake news and online misinformation (Al-Rawi, 2019). As Glück (2018) noted, one of the efficient ways to study mediated emotions is to consider them as evoked by a variety of textual devices in news discourse, including metaphors and rhetorical devices.

Prior studies uncovered challenges in defining manipulation and distinguishing it from persuasion, deception, coercion, and propaganda. The majority of the studies viewed manipulation as deceptive and hidden from the recipient who is not aware of being manipulated and, therefore, cannot control its consequences. For instance, Wood (2014) considered deception as a form of manipulation. Barnhill (2014) claimed that recipients may be aware of being manipulated so that manipulation is not always covert. Recent studies have shown that the distinction between manipulation and other forms of influence is more controversial and problematic. Klenk (2021) notes that although the manipulator wishes to conceal his intentions, the manipulatory act is sometimes overt. Noggle (2021) sees manipulation as a form of non-coercive pressure and a more general form of deception. In his viewpoint, the aim of 'global' manipulation is to deprive its victim of free will. Fischer (2022) places manipulation between two poles: persuasion aimed to convince others via arguments founded in good reason, on the one hand, and coercion aimed to force others to act in a certain way, on the other hand. Spencer (2020) defines manipulation as an intentional attempt to influence a subject's behavior by exploiting a bias or vulnerability. Durgeç (2024) distinguishes manipulation from propaganda, defining the former as a means of changing the behavior or opinions of the audience in line with the wishes of those who perform manipulation and the latter as the influence aimed at changing people's political preferences and mindset.

Van Dijk (2015) perceived discourse analysis as a sort of ideology analysis, claiming that discourse plays a major role in the expression and reproduction of ideologies. Van Dijk (2006) linked discourse, cognition, and society, arguing that most manipulation can be tackled through social, cognitive, and discursive perspectives since it takes place by text and form. He defined manipulation as a form of social power abuse, cognitive mind control, and discursive practice of "a manipulator, which exercises control over other people, usually against their will or against their best interests" (Van Dijk, 2006, p. 360). Thus, following the definition of manipulation by Durgeç (2024) and Van Dijk's (2015) view on discourse analysis, the present study aims to uncover manipulative language means and their hidden ideological meanings that contribute to changes in public opinion about the global energy crisis and energy sources in four English-language mainstream media.

2.2. The Role of Media in Public Opinion Manipulation Through Lippmann's and Agenda-Setting Theories

In times of international crisis, the rise of digital and social media contributed to the phenomenon known as 'infodemics' that is characterized by an overabundance of unverified and often contradictory information which is transmitted rapidly in digital and physical environments (Dutta et al., 2022). Therefore, the issues of public opinion manipulation in mass media became of vital importance to many scientists. Happer and Philo (2013) found that by focusing public interest on particular subjects, mass media may severely limit the information available to the audience and intentionally remove alternative facts and solutions from the public debate, which is necessary to make informed decisions about the subjects and is a reminder of Lippmann's (1929/2021) theory of public opinion and its relevance in the modern media.

Walter Lippmann was the first to reveal the critical role of media in influencing public opinion through choosing facts and filtering information that favors those in power. In his famous book Public Opinion, Lippmann (1929/2021) considered public opinion formation and manipulation through constructing the subjective representations of the world or 'pseudo-environments' which represent an accumulation of distorted pictures that arise in people's minds and shape their perception of the world. According to Lippmann (1929/2021), people's behavior is based not on their knowledge or experience but on these pictures which are indeed their public opinions. These distorted images or 'stereotypes', as Lippmann (1929/2021) defined them, are powerful tools in public opinion formation since they serve as 'time-saving' and efficient devices for transmitting particular symbols and cultural patterns through mass communication and simplifying the complexities of the world. Nevertheless, they also pose a serious threat to the objectivity of information and knowledge since they are inherently subjective and prejudiced, which may lead to implicit bias and conspiracy theories (Arnold-Forster, 2023). Therefore, information in mass communication does not represent the objective reality but is a result of restructuring the news and filtering information based on personal values, emotions, and opinions. By harnessing stereotypes and emotional weaknesses of the audience, the media is able to control and direct public attitudes towards particular subjects in a way that is favorable to them. These Lippmann's (1929/2021) ideas are especially relevant in the modern digital media where both journalists and online users share their personal views and emotions, which contributes to the appearance of an information pseudo-environment (Liu, 2022) and the dissemination of online mis- and disinformation (Teneva, 2023).

Based on the theory of public opinion, the agenda-setting theory (McCombs & Shaw, 1972) also puts emphasis on shaping public opinion and emphasizes the power of news organizations to 'consciously' select and decide which facts to reveal to the public. It focuses on a cognitive process known as 'accessibility', which implies that if a news item is covered more frequently and prominently, the issue becomes more important and accessible to the audience. By increasing the intensity and highlighting the importance of particular subjects in the news coverage, the media have a powerful impact on public opinion and decision-making (Valenzuela & McCombs, 2019).

The original paradigm of this theory was developed into 'second-level agenda setting', which emphasizes how the media describes issues or objects rather than what they emphasize and considers affective (emotional) and substantive (ideological) aspects of media discourse (Buyanza-Mwidima, 2024). In essence, framing theory is similar to 'second-level agenda setting' (Arowolo, 2017) since it deals with how something that is presented to the audience (called "the frame") influences the choices people make about how to process that information (De Vreese, 2005). The rhetorical power of a frame comes from its function to heighten the saliency of some aspects of reality over others. Frames provide interpretive cues for facts and are composed of key concepts, metaphors, images, and symbols to structure transmission of meaning (Feste, 2011). While agenda-setting theory deals with the salience issues, framing is concerned with the presentation of issues.

Thus, Lippmann's (1929/2021) public opinion, agenda setting, and framing theories seem to be relevant to this study, which aims to consider rhetorical appeals and emotive language as means of public opinion manipulation in the online news coverage of the 2021–2022 global energy crisis.

2.3. The Concepts of Energy Dependence, Energy Efficiency, Energy Transition, Energy Nationalism, and Energy Democracy in the Energy Crisis Coverage

During the global energy crisis, the issues of 'energy dependence', 'energy efficiency', 'energy transition', 'energy nationalism', and 'energy democracy' became a topic of geopolitical, environmental, and economic debates in mainstream media worldwide (Panchendrarajan et al., 2024). Since these concepts are intertwined and directly related to media debates on the energy crisis and energy sources in the analyzed material of the present study, it is necessary to define them.

According to the study of Donchev (2014), energy dependence refers to humanity's reliance on primary or secondary energy sources. In his viewpoint, dependence on energy sources can be reduced by 'energy efficiency', which is a way of managing and restraining the growth in energy consumption (Ozturk, 2013). Lantz et al. (2021) defined energy efficiency as the key factor of 'energy transition', which refers to the shift from one dominant energy resource—or set of resources—to another, switching from low-efficiency energy sources towards high-efficiency ones. Notably, Yang et al. (2024) distinguished the explicit transition, which is usually captured by statistic data and information, from the implicit transition, which involves shifts in energy security, geopolitical structure, energy power, energy justice, and energy governance and receives relatively less attention in the current literature.

Scholarly and media debates on citizen participation in energy transitions also included calls for 'energy democracy' (Van Veelen & Van Der Horst, 2018). It is an emergent social movement advancing renewable energy transition by resisting the fossil-fuel-dominant energy agenda (Szulecki & Overland, 2020). Energy democracy is seen as a possibility to democratize society (Sasaki, 2022) and as incorporating more comprehensive and practical issues, including its relation to technologies, economic activities, and ecology (Yun et al., 2022). Szulecki (2018) emphasized the idea of a public component influencing energy democracy, claiming that citizens' participation is key to energy decision-making. Nevertheless, the rise of the concept of 'energy democracy', which still lacks agreed definition, also reflects the growing politicization of energy governance and climate policy (Szulecki & Overland, 2020), which allowed us to assume politicization of the energy crisis debates in mainstream media.

Żuk et al. (2024) claim that there are challenges in implementing energy transition that are due to 'energy nationalism' or 'resource nationalism' used to subordinate energy policy to national interests. They may have harmful implications for both climate policy and the costs of the energy transition with a risk of delaying it. In particular, resource nationalism may lead to state intervention, which may take different forms—from higher taxes to creating state-owned enterprises with equity participation in various projects, export controls, and even nationalization (Nakhle, 2023).

As Wagner (2018) claims, media framings highlighting or omitting certain economic, social, or environmental details can considerably affect both the knowledge base and motivation of the audience in their decision-making and acceptance of energy policies. Therefore, the news coverage of the global energy crisis plays an important role in shaping public attitudes towards energy dependence, energy efficiency, energy transition, energy democracy, and energy nationalism.

3. Research Aims, Hypothesis, and Methodology

3.1. Research Aims

The research objective was twofold: first, to identify the most common rhetorical appeals and emotive language means in the online publications of the four English-language mainstream media taken from the key countries that were most affected by the crisis, and, second, to analyze their role in shaping public opinion on the energy crisis and energy sources and influencing energy decision-making. The following tasks were set to accomplish the research objective:

- To analyze the content of the news articles about the 2021–2022 global energy crisis from the four English-language mainstream media sources within the framework of Lippmann's (1929/2021) theory of public opinion, agenda setting, and framing theories;
- 2. To study the sources of news information in the energy crisis coverage and tackle their role in setting public agenda and shaping public opinion about the energy-related issues in the selected mainstream media;
- 3. To identify the most common types of rhetorical appeals in the news coverage of the 2021–2022 global energy crisis, measure their frequency during the examined period (from 1 August 2021 to 31 December 2022), and analyze their role in shaping public opinion about the energy-related issues;
- 4. To detect and examine specific rhetorical strategies, devices, and emotive language means in accordance with Van Dijk's (2015) approach to discourse analysis, uncover their hidden ideological meanings, and analyze their role in inducing positive or negative feelings and attitudes towards the effects of the fossil fuel crisis and energy sources.

3.2. Research Hypothesis

The study hypothesizes that (a) the news coverage of the global energy crisis is emotionalized in the selected mainstream media; (b) emotionalization of the coverage occurs through the frequent use of similar rhetorical appeals and emotive language means, which contribute to shaping public opinion on energy-related issues, including energy dependence, energy efficiency, energy democracy, energy transition, and energy nationalism; (c) emotionalization of the news coverage can also contribute to polarizing public attitudes towards the crisis by inducing either positive or negative feelings towards the effects of the energy crisis and energy sources; and (d) the use of major news agencies as information sources can also contribute to setting public agenda and shaping public perceptions of the energy crisis and energy sources in the selected mainstream media.

3.3. Materials and Methods

This paper aims to tackle the manipulative use of rhetorical appeals and emotive language in the news articles about the 2021–2022 global energy crisis taken from the websites of the four mainstream media from the viewpoint of rhetoric, applied linguistics, and journalism. As this study is multidisciplinary, it utilizes a mixture of research methods, including computer-aided text analysis (CATA), media framing analysis (MFA), critical discourse analysis (CDA), and rhetorical discourse analysis (RDA). This mixed-method research, involving a combination of qualitative and quantitative approaches, seems to be relevant in this study and essential for the multidisciplinary analysis of the news articles about the global energy crisis since it enhances the validity of the results by using the strengths of each method and helps the researchers draw objective and comprehensive conclusions from linguistic, rhetorical, and journalistic perspectives.

In order to understand how stories were constructed to evoke a particular reaction from the audience, CATA was utilized to process the large amounts of news articles and visualize the most frequent keywords and key phrases that reinforced a particular representation of the energy crisis and specific emotions toward it. CATA helps avoid unconscious biases in data collection and interpretation (Short et al., 2018). Then, to identify frames in the content of the news articles, media framing analysis (MFA) was applied. MFA allows to better understand what is covered in the media, how the issues are covered, and what angles are taken in the coverage. Since this study mainly deals with examining the rhetorical appeals and language and is not focused on the visual framing of the energy crisis, MFA was applied to analyze metaphors and the most frequent keywords and phrases that were used to frame the energy crisis.

While CDA is a micro-level process of discourse analysis that aims to identify abuses of power by analyzing linguistic and semiotic features of the texts in light of the larger social and political contexts (Huckin et al., 2012), RDA is a macro-level process that deals with the analysis of the authority of the speaker, the persuasion, the goals, the interaction, the audience, and the response (Andrus, 2012). If CDA focuses on tackling ideologies and power in discourse (Wodak & Meyer, 2009), Van Dijk's (2015) socio-cognitive approach aims to study the language not only in terms of hidden power relations and ideologies that are embedded in discourse, but also in terms of cognitive processes that determine discourse structures, which is vital for linking language use with social situations and social structures (Van Dijk, 2015). This is the reason why Van Dijk's approach to CDA is relevant when studying the specific language means of public opinion manipulation in the news coverage.

The present research was carried out in several stages. Firstly, to make inferences about the news coverage of the energy crisis in different parts of the world that were seriously affected by the crisis, the four English-language mainstream newspapers (The Guardian, The New York Times, The Times of India and China Daily) were chosen from the key countries that either benefitted from the crisis (the USA) or seriously suffered from the energy shortages (the UK, India, and China) (Ozili & Ozen, 2023; Rankin et al., 2021). Mainstream papers were chosen due to their credibility and agenda-setting role in providing news. As Chomsky (1997, n. pag.) claimed, they are considered to be "the elite media, sometimes called the agenda-setting media because they are the ones with the big resources, they set the framework in which everyone else operates", which corresponds to the research aim of this paper. The credibility of the results is also supported by the fact that these papers have high circulation and engagement rates and are among the top global English-language news websites (Top 50 news websites in the world, 2024). Furthermore, all four selected newspapers are circulated in the countries' capital cities, which makes them close to the political elites of these countries and, thus, can contribute to politicization of the news coverage about the energy crisis.

Secondly, to retrieve the news articles about the 2021–2022 global energy crisis from the websites of the selected papers, this study utilized Nexis Newsdesk as a comprehensive tool for media monitoring and analytics. We aimed at analyzing the online news discourse centered around the subject of the "2021–2022 energy crisis"; hence, this keyword was used as a relevant subject of the Nexis search. When gathering the data, the consecutive sampling method was applied as one of the most popular and best nonprobability methods, since it seeks to include all accessible subjects as part of the sample (Thewes et al., 2018). The initial database included 738 online publications that included both relevant and irrelevant news articles as well as opinion pieces about the energy crisis. This is due to the retrieval nature of Nexis search, where an article with at least a single occurrence of any search keyword is retrieved. To sift out the irrelevant and opinion articles from the corpus, we restricted the search only to those news articles that had substantive coverage of the energy crisis and contained at least two mentions of a '2021–2022 energy crisis' keyword. The selection of the news articles was also defined by the research timeline between 1 August 2021 and 31 December 2022, since the global prices for gas, electricity, oil, and other fuels increased significantly in August 2021, when economies began opening up after pandemic-related lockdowns, and remained relatively high until December 2022 when the inflation rate slowed, mainly due to lower energy prices (Bolton, 2024). Thus, the guided search tool in Nexis Newsdesk allowed to gather a sample of 600 relevant news articles about the energy crisis from the selected papers, with 150 articles from each paper, accordingly. Moreover, with the help of Nexis Newsdesk, it became possible to identify news agencies as the sources of information, which allowed us to make inferences about their role in agenda setting and shaping public opinion in the selected media.

Next, to identify frames in the energy crisis coverage, this study applied media framing analysis, which often manifests itself by the choice of specific keywords and phrases that reinforce a particular representation of the reality and a specific emotion toward it. Thanks to the development of semantic web technologies and automated approaches for different kinds of framing analysis, it became possible to analyze large amounts of the news articles available on the Internet (Murzo et al., 2022; Nicholls & Culpepper, 2020). Thus, using the free online word cloud generator https://www.wordclouds.com (accessed on 24 June 2024), four word clouds were generated from each of the analyzed media, which allowed us to distinguish the top 200 most frequent keywords and visualize the top 100 most meaningful of them that were semantically close to the concept of 'energy crisis'.

The analysis of the relationships between the most common keywords allowed us to identify four main types of information in the energy crisis coverage: authorities (political, business, scientific and energy experts, and energy companies), energy transition, emotions, and statistics. Based on these types of information, the study used multiple keyword searches in Nexis Newsdesk, which allowed us to identify the frequency of the following mentions: mentions of the opinions of political, business, scientific, and energy authorities; mentions of large numbers and statistical data; mentions of emotions about the crisis; and mentions of calls for national unity and energy transition. Based on these analytics, a classification of the most common types of rhetorical appeals in the energy crisis coverage was proposed. MFA allowed us to identify five frames in the energy crisis coverage that elicited underlying assumptions behind the keywords in the news stories.

Finally, to analyze the role of the rhetorical appeals in news framing and describe manipulative language means, this study applied Van Dijk's (2015) SCA and RDA, which allowed us to tackle the specific rhetorical strategies, devices, and emotive language means that contributed to influencing public opinion on the energy-related issues. The rhetoric and discourse analyses of the fragments of the energy crisis discourse were applied to uncover hidden ideological meanings of rhetorical appeals and emotive language means and make inference about their role in inducing positive or negative feelings and shaping public perceptions on energy issues in the four analyzed media.

4. Results and Discussion

A total number of 600 news articles about the global energy crisis were collected from the websites of the four English-language mainstream media, using a '2021–2022 energy crisis' keyword in the guided Nexis search tool. To estimate how the media drew public attention to the issues of the energy crisis between 1 August 2021 and 31 December 2022, this study measured the frequency of the collected news articles on the energy crisis, which is presented in Table 1. Figure 1 is given for a visual presentation of the data from Table 1.

From Table 1 and Figure 1, it became clear that the overall trend was an exponential increase in the number of publications about the global energy crisis in all four media between August 2021 and December 2022. In fact, the number of publications fluctuated wildly, reaching a peak of over 25 articles in the British, American, and Chinese media between late August and September 2022, which was followed by a dramatic drop after October 2022. This increase could be explained by the following facts: The imports of Russian gas had fallen sharply by September 2022 and triggered an extreme natural gas

price spike between August and September 2022, which attracted a lot of media attention. After the September peak, energy prices started to decline steadily, so the wholesale electricity prices in Europe at the end of October 2022 fell by about half compared to September 2022 due to ample liquefied natural gas supplies, demand reduction, recession fears, and unusually warm weather (Bolton, 2024). As for India, by September 2022, the number of publications in the Indian media had dropped dramatically to four publications, which could be attributed to the fact that gasoline prices in India were significantly lower than in the developed countries in September 2022. In April 2022, India witnessed an acute power shortage due to an unavailability of coal supplies, which explains the peak of 19 articles in the Indian media between April and May 2022.

Date	The Guardian	The New York Times	The Times of India	China Daily
August 2021	3	4	2	2
September 2021	20	1	2	1
Ôctober 2021	8	4	15	5
November 2021	1	2	2	9
December 2021	4	2	1	4
January 2022	13	2	2	4
February 2022	4	13	10	1
March 2022	8	14	15	4
April 2022	1	8	19	4
May 2022	3	7	19	6
June 2022	9	5	15	10
July 2022	9	14	12	9
August 2022	21	10	11	10
September 2022	30	27	4	26
October 2022	7	15	8	23
November 2022	6	10	12	17
December 2022	3	12	1	15
Total	150	150	150	150

Table 1. Frequency of news articles about the global energy crisis in the four analyzed newspapers between 1 August 2021 and 31 December 2022 (N = 600).

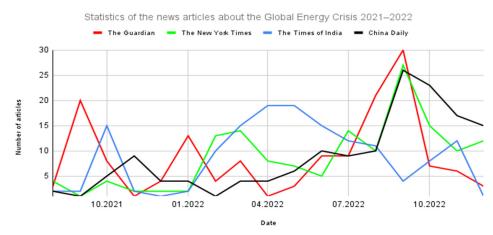


Figure 1. Frequency of news articles about the global energy crisis from 1 August 2021 to 31 December 2022.

Furthermore, Table 1 and Figure 1 also show that there were also several sharp increases in the number of publications: between August and October 2021 in all four media and between January and March 2022 in the British, American, and Indian media. By September 2021, global energy prices had increased significantly due to the post-COVID

economic recovery (Khan et al., 2022), while the beginning of 2022 was marked by the Ukraine–Russia conflict and fuel shortages in Europe, the U.S., and India (Bolton, 2024). As for China, the increase in the share of Russian oil in Chinese imports accelerated from 2022, making Russia China's main oil supplier, which explains the fact that the number of Chinese publications remained almost static until August 2022 when China experienced severe power outages lasting for two weeks (Shen et al., 2024).

Overall, the data in Table 1 and Figure 1 indicate the heightened media attention towards the global energy crisis between August 2021 and December 2022, which emphasizes the agenda-setting role of the media in creating public interest and manipulating public opinion on energy issues through increasing the intensity of their media coverage (Valenzuela & McCombs, 2019; Carroll, 2024).

Based on the Nexis search results, this study also identified the frequency of using news agencies as information sources, which is shown in Figure 2.

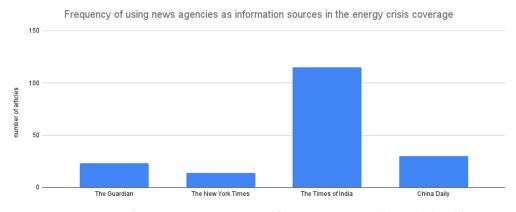


Figure 2. Frequency of using news agencies as information sources about the global energy crisis from 1 August 2021 to 31 December 2022 in the four analyzed media.

News agencies play a very important role in creating shared understanding in societies by providing information about different events (Afzal, 2012). From Figure 2, it became clear that all four media used news agencies as one of the main sources of news materials since they are considered to be the standard of reliable data during the large-scale crisis (Kultayeva et al., 2024; Van der Meer et al., 2017). Apart from using materials from such national agencies as PTI, Xinhua, and CGTN, all four media used the same global news agencies as information sources, including AP, Reuters, and Bloomberg, which can be viewed as a way of setting the same public agenda in all four analyzed media and, thus, shaping public knowledge and ideology (Tuchman, 1978) on the energy crisis. This finding contributes to the research hypothesis about the agenda-setting role of news media in influencing public perceptions about the crisis.

Next, to understand how the news on the energy crisis was framed, the study generated the lists of the top 200 most frequent keywords in each paper, using a free online generator https://www.wordclouds.com (accessed on 24 June 2024). To visualize the results, we created word clouds that included the top 100 most meaningful words from the top 200 most frequent keywords that were relevant to the subject of 'the energy crisis' and indicated the presence of frames in the energy crisis coverage. Figure 3a–d displays four word clouds which were created in a free online generator (https://www.wordclouds.com/, accessed on 24 June 2024). The size and color of each word show its frequency of occurrence in the analyzed material. Table 2 illustrates the lists of the top 200 most frequent keywords, as well as their ranking and frequency.



Figure 3. (**a**–**d**) The word clouds generated from the top 200 most frequent keywords within the 150 news articles about the global energy crisis in each analyzed newspaper: (**a**) *The Guardian*; (**b**) *The New York Times*; (**c**) *The Times of India*; (**d**) *China Daily*.

The Guardian	The New York Times	The Times of India	China Daily
1. energy (1800)	1. energy (1948)	1. power (749)	1. energy (1180)
2. gas (981)	2. gas (1719)	3. coal (665)	3. gas (662)
5. crisis (544)	4. oil (786)	4. energy (662)	4. China (504)
6. prices (465)	6. prices (669)	5. India (654)	6. percent (413)
8. government (423)	7. Europe (640)	6. oil (619)	7. crisis (360)
10. electricity (316)	8. Russia (604)	7. prices (446)	11. oil (283)
11. power (305)	10. climate (515)	9. crisis (409)	13. prices (269)
23. companies (184)	16. Ukraine (416)	12. gas (299)	15. Europe (226)
25. minister (182)	19. crisis (370)	16. Russia (252)	16. climate (207)
28. support (177)	23. government (328)	17. million (245)	23 nuclear (182)
31. Europe (163)	26. nuclear (315)	20. government (216)	27. Russia (169)
34. climate (149)	28. United States (291)	23. minister (189)	30. inflation (140)
36. need (147)	33. companies (253)	46. Europe (122)	35. economy (139)
37. oil (146)	39. president (229)	52. inflation (115)	41. shortage (131)
52. Russia (125)	57. emissions (178)	55. sanctions (111)	45. renewable (120)
66. many (110)	65. solar (169)	59. Modi (142)	63. security (97)
84. national (100)	68. Biden (167)	67. economy (98)	66. green (91)
94. Truss (93)	70. economy (163)	71. climate (91)	48. president (117)
95. green (92)	75. need (158)	83. president (83)	52. minister (111)
97. solar (92)	81. transition (146)	96. companies (74)	74. need (84)
110. economy (84)	116. inflation (120)	97. data (74)	82. transition (79)
115. reduce (82)	127. sanctions (112)	116. thermal (66)	84. fossil (78)
129. warned (78)	130. minister (111)	122. need (65)	90. national (76)
131. zero (77)	141. carbon (103)	147. solar (58)	91. pandemic (76)
137. Ofgem (71)	150. executive (95)	157. hydrogen (55)	92. companies (75)
140. pandemic (70)	189. liquefied (78)	161. green (54)	93. increase (75)
149. executive (66)	192. support (78)	168. pandemic (53)	104. domestic (70)
194. renewable (58)	200. experts (75)	186. worst (49)	186. research (47)

Table 2. The top 200 most frequent keywords, as well as their ranking and frequency, in the four analyzed newspapers between 1 August 2021 and 31 December 2022.

The analysis of the relationships of the most meaningful keywords from Figure 3a–d and Table 2 allowed us to reveal the following main types of information in the energy crisis coverage: energy crisis and its reasons; energy sources and energy transition; energy, business, and political authorities; statistics; and emotions. Thus, the occurrence of such words as 'energy', 'crisis', 'gas', 'oil', 'electricity', 'coal', 'power', 'shortage', etc., in Table 2 revealed the abundance of information related to framing of the global energy crisis and its socioeconomic ('pandemic', 'inflation', 'economy', 'prices'), political ('sanctions', 'Russia', 'Ukraine', 'security'), and environmental ('climate', 'fossil', 'carbon', 'emissions') causes and effects. The word 'energy' itself appeared to be the most frequently utilized word in all four media, with 1948 mentions in *The New York Times*, followed by 1800 mentions in *The Guardian*, 1180 mentions in *China Daily* and 749 mentions in *The Times of India*, which proves the significant role of agenda setting in emphasizing important issues in news coverage (Valenzuela & McCombs, 2019; Carroll, 2024). Such words as 'transition', 'nuclear', 'zero', 'green', 'solar', 'thermal', 'renewable', and 'liquefied' highlighted the framing of energy transition.

The names of the famous politicians ('Truss', 'Biden', 'Modi'), political institutions ('government'), political titles ('President', 'minister'), and countries ('United States', 'China', 'India') indicated the political framing of the news coverage in all four media, which is in line with the results of the recent studies (Huan, 2023; Meuleman, 2023; Molek-Kozakowska, 2024; Yun et al., 2022). It became clear from the data that the names of energy regulators, companies, and their executives were frequently mentioned in the news coverage. For instance, Ofgem, Great Britain's independent energy regulator, received 71 mentions in TheGuardian.com, while the word 'companies' appeared 253 times in NYTimes, 183 times in TheGuardian.com, 75 times in Chinadaily.com, and 74 times in Timesofindia.com, which contributed to the prominence of energy authorities in the coverage. Interestingly, the names of the corresponding countries in each paper and such words as 'national' and 'domestic' spiked in their frequency, which indicated media focus on local issues and problems rather than energy issues and corresponds to the recent findings of Panchendrarajan et al. (2024) and Huan (2023).

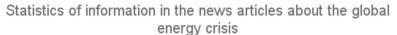
The words 'percent', 'increase', 'reduce', and 'million' and quantifiers such as 'many' signified the abundance of the words related to statistics in the news coverage, while the words 'experts', 'research', 'data', etc., showed the presence of scientific information given by energy experts. The analysis of the word clouds from Figure 3a–d also showed the abundance of modal verbs ('need', 'must') that express the necessity of transformations in energy policy as well as emotion-laden words, including 'warned', 'worst', 'support', and 'hope', which contributed to emotional framing of the news coverage.

Overall, drawing on a content analysis of the collected news articles, the following five frames were identified: 'a catastrophe for households and businesses', 'energy poverty', 'global villains', 'climate saviours', and 'government support of energy transition'. 'A catastrophe for households and businesses' and 'energy poverty' frames reflected the negative perception of the crisis as a 'global catastrophe' and its socioeconomic effects. Fossil fuels and energy companies were metaphorically framed as 'global villains', whereas clean sources of energy were framed as 'climate saviours', which allowed us to make inferences about the polarization of the attitudes towards energy sources in the news coverage. 'Government support of energy transition' allowed us to make inferences about the politicization of the energy crisis debates.

Next, in order to detect and measure the frequency of specific rhetorical appeals employed in the energy crisis discourse, we used multiple search queries in Nexis Newsdesk. The queries 'president', 'minister', 'business', 'executive', 'expert', 'energy institute', 'energy agency', 'regulator', 'supplier', 'research', 'oil company', 'European Union', 'International Energy Agency', and 'OPEC' were applied in the search to measure the frequency of mentions of authorities in the collected material (see 1 in Table 3). The queries 'percent ', 'peak', 'surge', 'hundred', 'thousand', 'million', 'billion', 'minority', and 'majority' allowed us to identify the frequency of mentions of statistical data (see 2 in Table 3. The frequency of mentions of emotions (see 3 in Table 3) was detected by applying queries containing positive and negative words such as 'hope', 'support', 'feel', 'fear', 'warn', 'pain', 'worst', 'threaten', and 'worry' that were among the most frequent keywords. Finally, the terms 'energy transition', 'renewable', 'green', 'zero emission', 'solar', 'thermal', 'wind', 'sustainable', 'hydrogen', and 'low-carbon' allowed us to measure the frequency of mentions of energy transition (see 4 in Table 3). Figure 4 visualizes the data from Table 3.

Table 3. Types and frequency of information detected in the articles of the four newspapers about the global energy crisis between 1 August 2021 and 31 December 2022.

Types of Information	The Guardian	The New York Times	The Times of India	China Daily
1. Authorities	763	726	437	447
2. Statistics	686	776	774	537
3. Emotions	637	733	325	366
4. Energy transition	462	406	146	285



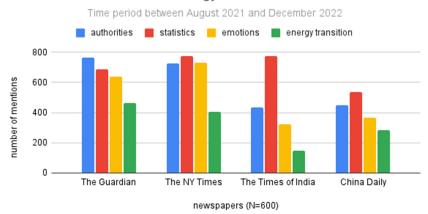


Figure 4. Statistics of information in the news articles about the global energy crisis in the four newspapers between 1 August 2021 and 31 December 2022.

Overall, Table 3 and Figure 4 show four main types of information in the news coverage of the global energy crisis. Based on these analytics, we proposed the following classification of rhetorical appeals:

- 1. Statements containing the opinions of politicians, energy and business experts, energy regulators, and companies, which are referred to as 'appeals to authorities' ('ethos');
- 2. Statements containing mentions of large numbers and numerical data, which are referred to as 'appeals to statistics' ('logos');
- 3. Statements containing emotion-laden language, which fall under the category of 'appeals to emotions' ('pathos');
- 4. Statements containing calls for energy unity and energy transition, which are identified as 'appeals to energy patriotism and energy transition' ('ethos' and 'pathos').

As is evident from this classification, appeals to authorities (1), statistics (2), and emotions (3) refer to Aristotle's rhetorical triangle ('ethos', 'logos' and 'pathos'). As for appeals to energy patriotism (4), they fall under both 'ethos' and 'pathos', since they rely on the credibility of

the speaker but also evoke emotional responses from the audience. Therefore, we put them into a separate category of appeals in the global energy crisis coverage.

Overall, the data from Table 3 show that references to statistics were very frequent in the coverage of the three media, including 776 mentions in NYTimes.com, 774 mentions in Timesofindia.com, and 537 mentions in Chinadaily.com, with the exception of TheGuardian .com, which relied more on the opinions of political and energy authorities (763 mentions) rather than on statistics (686 mentions). This finding supports the ideas of McConway (2016) who argued that numbers in the news are provided not only as factual evidence but for rhetorical reasons to increase the credibility and authority of a story, which confirms the research hypothesis about the manipulative use of rhetorical appeals.

The comparison of the data presented in Table 3 and Figure 4 also reveals discrepancies in the news coverage of the four mainstream media. As an overall trend, the articles of TheGuardian.com and NYTimes.com contained more appeals to authorities, emotions, and energy transition than the articles of Timesofindia.com and Chinadaily.com, which highlights the politicization of their coverage of the energy crisis.

Furthermore, the data from Table 3 show that journalists of the UK and US media utilized twice as many emotional appeals as their counterparts from the Indian and Chinese media. Although the appeals to energy patriotism and energy transition were the least common in all four media, they also fall under the category of emotional appeals since they aim to manipulate the audience by evoking patriotic feelings. Thus, this study identified the frequent use of rhetorical appeals in the energy crisis coverage and applied RDA and Van Dijk's (2015) approach (SCA) to analyze them.

4.1. Appeals to Authorities

When reflecting on public communication, Lippmann emphasized the role of experts who, according to his viewpoint, should guide public opinion by providing the audience with a picture of reality (Lippmann cited in Seyb, 2022). Lippmann's (1929/2021) idea of delegating the task of choosing relevant information to experts is still relevant today. Wilson (1983) also examined the role of experts (authorities) and distinguished the knowledge based on people's first-hand experience or what they have learned from the second-hand knowledge that they receive from cognitive authorities. 'Honest' cognitive authorities have credibility and expertise and are regarded as trustworthy as compared with organizational or administrative authorities that come from power hierarchies (Wilson cited in Froehlich, 2019).

The results of the rhetorical discourse analysis indicated that the news coverage of the energy crisis contained appeals to both 'honest' cognitive and organizational authorities, including citing the opinion of reputable energy scientists, thinktanks, energy agencies, and institutions as well as political leaders and institutions:

- Any loss of power this winter would be disastrous for producers, experts claim. The worrying prediction suggests blackouts could hit mechanized producers (Gale, 2022a).
- 2. Experts are in agreement that nations around the world need to stop approving new coal-fired power plants, and new oil and gas fields, to avert the most catastrophic effects of climate change (Tabuchi, 2022).
- 3. UK must insulate homes or face a worse energy crisis in 2023, say experts <...>. Experts are warning that <...> expensive and unsustainable schemes will be needed. The IfG analysis warns that energy prices are now expected to rise further <...>. Experts believe a serious energy-efficiency programme could have a real impact within a year (Savage, 2022).

Examples No. 1–3 illustrate a widespread use of the opinions of scientific experts in the energy crisis discourse that are commonly referred to as 'experts', 'analysts', 'scientists', etc.

On the one hand, such claims based on the competence of energy, business, and scientific experts aim to convince the audience and increase the credibility of information and the trustworthiness of the provided arguments. On the other hand, by utilizing a wide range of emotion-laden words, including emotional adjectives ('disastrous', 'worrying', 'the most catastrophic'), verbs expressing beliefs and feelings ('believe', 'expect', 'warn', 'could'), and modals expressing necessity and high moral obligation ('need', 'must'), these appeals can be employed with manipulative aims ('argumentum ad hominem' (Copi et al., 2018)): either to evoke a negative emotional response in the audience towards the effects of the crisis (No. 1) and the production of fossil fuels (No. 2) or to promote positive attitudes towards energy efficiency policies (No. 3). Such claims can be classified as 'argumentum ad hominem' (an appeal to authority in which the opinion of an authority figure (or figures) is used as evidence to support an argument) in Copi et al.'s (2018) classification of fallacies. These narratives containing appeals to authorities based on their opinions rather than on factual evidence can contribute to the polarization of energy debates: either portraying the effects of the energy crisis extremely negatively (No. 1) or encouraging the public to shift away from fossil energy (No. 2) and ensure energy efficiency (No. 3). This finding proves the hypothesis about the manipulative potential of using rhetorical appeals. It also brings us back to Lippmann's (1929/2021) idea of 'manufacturing consent', according to which the public is not 'omnicompetent' to make informed decisions, so it needs 'experts' and institutes ('decision-makers') that could enact this in their interests. However, these 'omnicompetent' experts often choose information and evaluate it according to the interests of those in power (Arnold-Forster, 2023). Thus, Lippmann's (1929/2021) idea of 'manufacturing consent' is relevant in the energy crisis coverage.

This study also found that experts' opinions were often provided to boost the positive international image of a country as a reliable and trustworthy energy supplier in the news coverage:

- Qatar, many energy experts said, is becoming the Saudi Arabia of natural gas—an indispensable energy supplier with vast reserves and very low costs (Krauss, 2022a).
- 5. Experts agree that the African continent is an extremely promising and interesting partner for Russia. <...> The region has excellent opportunities for the development of energy types such as geothermal, solar and nuclear power (REW-2022 hosts 'Russia-Africa: Sustainable Energy Development' session, 2022).
- 6. Renewable energy has become the principal source of the country's newly added installed generation capacity in recent years, which makes China the top country in wind and solar PV-installed capacity, said Wei Hanyang, a power market analyst at research firm BloombergNEF (Zheng, 2022).
- Economic experts agree on the massive scale of the challenge, <...> with India as a
 potential generator of much-needed economic growth (UK economy: A crisis in the
 making for some time, with India trade deal offering hope, 2022).

As is evident from examples No. 4–7, experts' opinions were utilized to create a positive image of countries as reliable energy suppliers in the coverage, which supports the findings of the recent research on how media improve their national image and promote international collaboration from the foreign public with positive attitude and active support (Banterng, 2021). The countries' positive images were constructed through the use of emotion-laden words and expressions ('an indispensable energy supplier', 'vast reserves', 'promising and interesting partner', 'the top country', 'excellent opportunities', 'a potential generator') as well as intensifying adverbs ('extremely', 'very'). Example No. 4 illustrates the metaphorical framing of Qatar as the world's major producer and exporter of natural gas ('the Saudi Arabia of natural gas') to attract the readers' attention to Qatar and improve its image in the international news coverage, which is a way to manipulate public opinion

in the news discourse. As Edelman (1971, p. 68) claimed, metaphors are a 'subtle way of highlighting what one wants to believe and avoiding what one does not wish to face'.

Prior media studies (McAllister & Quinlan, 2019; Zamir, 2024) indicated increased personalization of politics in online media where political leaders are becoming more important in the news coverage than the political parties they represent. The news articles on the energy crisis also contained a lot of appeals to the opinions of specific political leaders:

- 8. EU must act now on 'catastrophic' energy price spike, says European Council chief (Rankin, 2022).
- 9. Habeck has talked of a 'nightmare scenario' facing Europe, especially Germany (Connolly, 2022a).
- 10. Swedish Prime Minister Magdalena Andersson warned that her country was facing the prospect of a 'war winter' (Weihua, 2022a).
- 11. Energy access should not be limited to the rich, says PM Modi (Energy access should not be limited to the rich: PM Modi, 2022).

Examples No. 8–11 show that mentions of politicians were increasingly frequent, which indicates politicization of the energy crisis coverage (Chinn et al., 2020) and confirms the results of the recent media studies (Huan, 2023; Molek-Kozakowska, 2024; Panchendrarajan et al., 2024; Yun et al., 2022). This finding corresponds to Lippmann's (1929/2021) idea of media serving the interests of those in power (Arnold-Forster, 2023). The citations with the politicians' opinions contain rhetorical devices, including hyperboles ('catastrophic energy prices') and metaphors ('nightmare scenario', 'war winter') that aim to evoke negative feelings of fear and anxiety in the audience. Such appeals can contribute to public opinion manipulation about the overreliance on fossil fuels. Example No. 10 reveals the rhetorical strategy of personification: the name of the Swedish Prime Minister is utilized allegorically to represent Sweden as 'her country'. The news headline in example No. 11 contains calls for energy democracy, which aims to improve the image of the Indian Prime Minister by appealing to a sense of justice and emphasizing the idea of energy democracy in the eyes of newsreaders. As Dorofeev (2023) claimed, the images of politicians are often used in the modern media as a means of advertising either politicians or (and) manipulating public opinion on some important issues.

It was revealed that the opinions of politicians containing mainly negative emotions were used to evoke feelings of danger and stir anxiety in newsreaders by portraying the energy crisis either as a global 'catastrophe' (No. 8–10) or as an opportunity to benefit from the crisis and enhance a country's international image (No. 12–13):

- 12. He [Emmanuel Macron] said he would make France "the first major nation to abandon gas, oil and coal" ahead of his win last month (Lawson, 2022).
- 13. "We need clean, we need cheaper and we need homegrown power," Ursula von der Leyen, the European Union president, said in August (Reed, 2022a).

In example No. 12, the journalist cited the French President, who claimed the superiority of France in phasing out fossil fuels, which enhances the image of France and discredits the image of fossil fuels. Example No. 13 shows the use of anaphora ('We need...we need...') that emphasizes the urgent need and calls for shifting to RESs. It increases the emotional influence on the audience to promote the use of 'homegrown' renewable energy sources, which conceptualizes energy nationalism in the context of the energy crisis debates. Żuk et al. (2024) argue that the more energy policies are circumscribed within the borders of individual nation states, the more difficult it will be to implement climate action on a global scale.

The energy crisis discourse also contained appeals to energy companies (No. 14) and the opinions of their executives (No. 15 and 16):

- 14. Glencore—predominantly a coalminer—complains some of its facilities may have to close <...>. Alcoa, BlueScope and Opalexpress doubts they can cut emissions fast enough (Readfearn, 2022a).
- 15. Many oil executives also complain that the future of their industry is clouded by political and regulatory uncertainty (Krauss, 2022b).
- Michael Lewis, chief executive of supplier E.ON UK, said <...> he was "disappointed not to see a greater commitment to energy efficiency as a long-term solution to the current crisis" (Jolly, 2022).

References to oil companies and the opinions of their executives are extremely important in the energy crisis discourse since many of these companies were accused of profiteering from the energy crisis. As is clear from the provided examples (No. 14–16), the coverage contained emotional statements of the representatives of energy companies, which were used to improve their public image in the eyes of the newsreaders by appealing to the feelings of dissatisfaction and disappointment about the increase in energy prices and evoking a sense of solidarity of these companies and their leaders with the feelings and opinions of the news audience, which is another example of emotional and ideological manipulation in the energy crisis discourse.

4.2. Appeals to Statistics

Lippmann (1929/2021) considered facts as neutral to all our views of right and wrong. Nevertheless, the modern audience is convinced by those facts that coincide with their personal opinions and beliefs and that contain emotional experiences (Teneva, 2023). As Fuentes and Alberto (2022) claimed, objective facts are less decisive than personal opinions or emotions in the formation of public opinion. Post-truth assumes the inexistence of useful criteria to corroborate what is true and what is not; hence, emotions take center stage in the decisions that shape the world, over and above facts, the verdict of reason and self-criticism.

This study found a wide use of appeals to numbers (statistics) in the energy crisis discourse that were either accompanied by emotional elements or contained generalizations apart from providing factual evidence. On the one hand, large numbers and statistical data were embedded mostly in all news stories to increase both the credibility of information and the persuasiveness of the arguments about the crisis. On the other hand, numbers and statistics were frequently accompanied by emotion-laden words ('a determined move away'; 'broadly supportive'; 'severe shortages'; 'galloping prices') to incline the audience either in favor of energy transition (No. 17) or against energy dependence (No. 18), which indicated the manipulative use of such appeals:

- 17. The general public is also broadly supportive of a determined move away from fossil fuels, with 69 percent of Americans saying that developing sources of clean energy should be a high priority for leaders in Washington, and the same share supporting a transition of the U.S. economy to 100 percent clean energy by 2050, according to recent polling by the Pew Research Center (Gelles & Friedman, 2022).
- 18. Four out of five people in the nation of 22 million have reduced their food intake due to severe shortages and galloping prices (Bankrupt Sri Lanka seeks discounted Russian oil, 2022).

McConway (2016) noted that statistics are often used in mass media, not only for providing factual evidence but also with a manipulative aim to emphasize an issue in a news story, increase the credibility of information, and, thus, influence public opinion. This finding also echoes Lippmann's (1929/2021) ideas about facts being chosen to serve the interests of those in power. Examples show appeals to the exact number and percentage of people who either support clean energy transition (No. 17) or suffer from the increase in energy prices (No. 18), aimed to incline the audience to support a move away from

fossil fuels and support energy transition. Such appeals can be attributed to 'argumentum ad numerum' (appeals to numbers based on the number of people who hold a particular belief) in the classification of informal fallacies by Copi et al. (2018).

Frequent mentions of generalizations in statistics were also accompanied by emotionladen words. Such appeals aim to draw the audience's attention towards the large scale of the energy crisis, increase the emotionality of the provided arguments, and, thereby, manipulate public opinion, for instance:

- 19. The broadcaster quoted Tamas Kovacs, a deputy mayor in the city of Szeged, as saying his community of 160,000 is typical of many tightening their belts after natural gas bills rose sevenfold (Gale, 2022b).
- 20. The 47-year-old Truss is tasked with steering Britain through a looming lengthy recession and an energy crisis that threatens the finances of millions of households and businesses (Reuters, 2022).
- 21. Hundreds of thousands of Britons face a "very, very difficult" winter thanks to rising household costs, No. 10 has been warned <...>. Damian Green, a former cabinet minister who was deputy to Theresa May, warned of the prospect of "very, very difficult times ahead for hundreds of thousands of people in this country"<...>. Labour said many households would be crippled by the "triple whammy" of energy price rises, the NI rise and universal credit cut (Mason & Ambrose, 2021).
- 22. Tens of thousands of French workers took to the streets on Tuesday across the country, striking for pay hikes that keep up with rising inflation <...>. Thousands also took to the streets on Sunday to march against rising prices <...>. Thousands protested in Prague twice last month partly due to high energy prices, airline workers have gone on strike in Germany and Sweden to demand higher pay, and everyone from nurses to rail employees in the United Kingdom have walked off the job to demand that their wages keep pace with inflation (Xinhua, 2022).

Examples No. 19–22 indicate the frequent use of statistical overgeneralizations that refer to hyperbolic exaggerations of statistics used for rhetorical emphasis of information in the news coverage ('160,000 is typical of many...') (Cline, 2019). The language markers of these overgeneralizations in the news discourse include indefinite pronouns ('every-one', 'nobody', etc.), quantifiers ('many', 'much', etc.), and words denoting large numbers ('hundreds of thousands', 'millions', etc.). Coupled with negative emotion-laden words and intensifiers ('threaten', 'warn', 'crippled', 'very, very difficult'), overgeneralizations can act as inducers of anxiety and fear towards the fossil fuel dependency by impressing the audience with large numbers of people who suffered from the crisis. The use of anaphora ('very, very difficult'; 'thousands took to the streets... thousands protested') is a way to emphasize information and increase its emotional effect on the news audience. Such appeals based on the sheer numbers of people who agree to something are used as a reason to get the audience to agree to it (Cline, 2019) and can be classified as 'argumentum ad populum' (Copi et al., 2018).

Moreover, the findings indicated examples of using statistical overgeneralizations that refer to national attitudes towards energy dependence and energy sources:

- 23. Europe would love to end its dependence on Russia (Krauss, 2022b).
- 24. Nations remain extraordinarily dependent on fossil fuels and are struggling to shore up supplies precisely at a moment when scientists say the world must slash its use of oil, gas and coal to avert irrevocable damage to the planet (Plumer et al., 2022).
- 25. Norway is 'skeptical' about the impact that an EU gas price cap would have on tackling the energy crisis (Weihua, 2022b).
- 26. Germany is more cautious about a potential Russia energy import ban (Powell, 2022).
- 27. More and more Germans were drawn to solar energy in 2022 (Eddy, 2022).

Examples No. 23–27 illustrate that overgeneralizations about the national attitudes towards fossil fuel dependence and energy sources are frequently accompanied by emotive language, including intensifiers and emotional verbs and adjectives ('more and more', 'extraordinarily', 'would love', 'skeptical', 'cautious'), used to induce positive or negative feelings in the audience, which contributed to framing of fossil fuels as 'villains' and using them as a 'danger' in the promotion of energy transition. According to Bennett (2013), the danger of such generalizations about a nation as a group of people is that they may become stereotypes if they are definitively applied to the individual members of a group and lead to media bias and the spread of online mis- and disinformation.

4.3. Appeals to Emotions

Events that evoke strong emotions tend to be remembered better (and more vividly) than non-emotional events (Van Dijk, 1988). Emotional contagion is carried out by putting an emphasis on the importance of emotions in communication (Plantinga, 2009). Emotional appeals or 'argumentum ad passiones' (Copi et al., 2018) are powerful motivators of political action (Karl & Cormack, 2023). According to Lupia and Menning (2009, p. 355), emotions "play an important role in the outcome of our political processes". Political and media campaigns routinely appeal to citizens' emotions, since such appeals influence the political behavior of the news audience (Bil-Jaruzelska & Monzer, 2022). Journalists employ emotional statements to draw the readers' attention and influence public opinion. The manipulation of beliefs and emotions is defined as 'post-truth', a situation in which people are more likely to accept an argument based on their emotions and beliefs, rather than one based on facts (Fuentes & Alberto, 2022; Teneva, 2023). Modern news stories are rife with the examples of emotional appeals, which influences the way the audience perceives information.

The results of the discourse analysis of the news articles showed high levels of emotionalization of all four media, with predominantly negative narratives about fossil fuel energy sources that contributed to inducing anxiety and fear among the audience as well as more positive narratives about the issues related to green transition. Emotions were embedded not only into the citations of the opinions of politicians and energy experts but also into the journalists' statements about the crisis and the news headlines:

- 28. U.N. Chief Warns of 'Catastrophe' With Continued Use of Fossil Fuels (Friedman, 2022).
- 29. 'Storm coming': Britain in a mess as ruinous energy bills meet austerity (Partington, 2022).
- 30. 'Crippling' Energy Bills Force Europe's Factories to Go Dark (Alderman, 2022).
- 31. EU must act now on 'catastrophic' energy price spike, says European Council chief (Rankin, 2022).

In examples No. 28–31, the news headlines contain emotional appeals that frame the global energy crisis as a global 'catastrophe'. Such emotional appeals seek to grab the audience's attention and contribute to shaping negative public opinion about energy dependence and the use of fossil fuels, which proves Van Dijk's (2015) idea that manipulation is a form of the exercise of discursive power. In these cases, emotional contagion is carried out through the frequent use of hyperboles ('Britain in a mess', 'ruinous energy bills', 'crippling energy bills', etc.) that are powerful tools for rhetorical emphasis since they are often used as a 'hook' to draw public attention, evoke strong emotional responses, and increase the emotional impact of the journalists' arguments on the audience and, thus, manipulate it. The results of discourse analysis also revealed the appearance of a new word—'gasastrophe' (a combination of the words 'gas' and 'catastrophe')—used to describe the negative effects of the increase in gasoline prices on national economies and households during the 2021–2022 energy crisis. It contributes to framing natural gas as a key 'villain' of the crisis. These findings prove how hidden ideologies change public minds through the choice of specific words and phrases (Van Dijk, 2015).

The analysis of the material also indicated the metaphorical framing of the energy crisis in the news coverage, including metaphors such as 'storm coming' (No. 29) to describe the arrival of the energy crisis and its detrimental effects. Here are some more examples of using metaphors:

- 32. Oil remains India's Achilles heel <...>. This may well be a catalyst to recalibrate the energy transition strategy (Shetty, 2022).
- 33. In many ways, all across the continent, the Achilles' heel of Europe's green transition is gas (Eddy & Sengupta, 2021).
- 34. For months, a tsunami of high energy costs has borne down on Europe (Landler & Reed, 2022).

Metaphors play a significant role in shaping our perception of the world and influencing our actions (Carter, 2021). According to Al-Rubaie (2023), a metaphor is a mental mechanism that appears through language use and represents knowledge through its structure and its form. It not only allows information to be conveyed to readers, but it also shapes how they should think about the issues and, therefore, it is as a means of implicit speech impact (Kalinin & Ignatenko, 2024). Nevertheless, when interpreting metaphors, the context should be taken into account. In examples No. 32–33, the metaphor 'Achilles' heel' has the general meaning of a 'weak point' and expresses the negative attitude towards India's reliance on crude oil, while in example No. 34, a 'tsunami' is metaphorically compared to extremely high energy costs in Europe, which contributes to the negative framing of fossil fuel sources. Thus, metaphors are a powerful tool for manipulating public opinion (Van Dijk, 2006). Their interpretation suggests the knowledge of cognitive mechanisms involved in the macrounderstanding of the news text, which plays a vital role in tackling language manipulation (Van Dijk, 2006).

When studying the rhetoric of the energy discourse, Cozen and Endres (2024) revealed appeals to such emotions as jealousy or envy over renewable energy technologies; love or devotion for nuclear energy as a savior technology; and passion or zeal to share the story of nuclear support with others, which contributed to shaping public opinion on energy sources. The present study also found mentions of negative feelings related to fossil fuels in the energy crisis coverage, including the feelings of despair, worry, doubt, uncertainty, and fear:

- 35. It is worrying that the Organization of the Petroleum Exporting Countries and its allies have come up short on recent pledges to increase output <...>. Whether liquefied natural gas shipments could offset a complete shut-off of Russian gas to Europe is doubtful (Reed, 2022b).
- 36. It remains uncertain how much the United States will actually do to curb its dependence on fossil fuels in the years ahead (Plumer et al., 2022).
- 37. The fear is that supplies of gas to meet Europe's demand will be insufficient (Elliott, 2022).
- 38. Germany stands a chance of emerging from the current crisis. But increasingly the question is being asked: how long will it be able to afford to do so? (Connolly, 2022b).

The findings revealed that appeals to emotions combined with the use of impersonal structures (No. 35–37) and rhetorical questions (No. 38) aimed to express journalists' personal opinions about the energy crisis, which makes such appeals sound more objective, memorable, and persuasive (Derakhshani et al., 2021) by evoking the readers' emotional response and influencing their opinion about energy sources.

4.4. Appeals to Energy Patriotism and Energy Transition

Apart from appeals to authorities ('ethos') and emotions ('pathos'), this study revealed the use of appeals to energy patriotism and energy transition, which can be considered as a mixture of appeals to 'ethos' and 'pathos' since they rely on the readers' patriotic feelings, evoking strong emotions associated with being a part of a nation, on the one hand, and build on the credibility of the speaker, on the other hand. As Haines (2018) argued, patriotic appeals are electorally powerful because they bind candidates to the ideas, values, and norms that people associate with the heart and soul of a nation. The indicators of patriotic journalistic coverage include appeals to public emotions and public cognition (Ginosar & Cohen, 2019). They are often operationalized through references to national symbols and historical events that evoke positive emotional responses linked to national identity and pride (Grechanaya & Ceron, 2024). If British and American patriotism is based largely on the ideology defined by a shared duty of citizenship and service towards others and the state, Chinese and Indian patriotism has spiritual and religious nature, for instance:

- 39. Professor Solanki said, "If Mahatma Gandhi were alive today, what would he have done to educate Indians about the climate crisis? <...> That is what I am also trying to do—travel across India and encourage the use of solar energy" (Jain, 2022).
- 40. The PM said the present world situation has brought new opportunities to the country. "The whole world is looking for a reliable partner and India is fast emerging as one," he said <...> "We have strengthened India as a rashtra," he declared, pointing at one nation, one tax (GST) and one nation, one grid (for power), one nation, one ration card and one nation, one mobility card (mobile services) (Shah, 2022).

In examples No. 39–40, national symbols are used to enhance the image of India in the eyes of the newsreaders, convince the audience in the rightness of either experts', politicians', or journalists' claims, and thereby influence public opinion. Thus, in example No. 39, a reference to Mahatma Ghandi, who is an icon of inspiration and India's national symbol of peace and education, contributes to positive media representations of India as a peaceful country. The example of Professor Solanki, who is a follower of Gandhi, promotes the use of solar energy, which is a way to promote the green transition. Example No. 40 contains a quote from the Indian Prime Minister who refers to India as a 'rashtra' (a Hindu nation) in order to evoke patriotic feelings in the readers. Anaphora ('one nation', 'one tax', etc.) is used for rhetorical emphasis to foster a sense of unity among the Indian audience and, thus, incline it to support energy transition.

The results of discourse analysis also revealed polarization of attitudes in the news coverage, with predominantly negative narratives about fossil fuels and dependence on them (No. 41–42) and more positive narratives about renewables, energy transition, and energy efficiency (No. 43), which corresponds to the findings of the prior research on the competing narratives for and against the use of particular energy resources (King, 2020; Kuhl et al., 2024):

- 41. Nations remain extraordinarily dependent on fossil fuels and are struggling to shore up supplies precisely at a moment when scientists say the world must slash its use of oil, gas and coal to avert irrevocable damage to the planet (Plumer et al., 2022).
- 42. [Mr. Yergin]: Oil products are more difficult <...>. Diesel is a real problem <...>. Natural gas is the most challenging (Reed, 2022c).
- 43. Germany's finance minister Christian Lindner, of the centre-right Free Democratic Party, has taken to calling renewables "the energy of freedom" (Readfearn, 2022b).

According to Litvinenko (2020, n. pag.), HCRs are often viewed as a totally "unacceptable option without paying enough attention to the differences in fuels and the ways of their usage". Högselius (2023) also pointed out that fossil fuels are treated as metaphorical 'energy weapons'. The findings of the recent study (Dagiliūtė, 2024) confirmed the influence of positive and negative frames of energy sources on intentions to use them. Examples No. 41–43 provide evidence for these prior findings. HCRs were framed as a threat and a 'problem' that could damage the planet, whereas RESs were framed as 'energies of freedom'. Emotionality is operationalized through the use of various rhetorical strategies and emotive language means. For instance, example No. 41 contains generalization expressed by the word 'nations' to foster unity among the audience and promote energy transition. Overall, generalizations are a common rhetorical strategy used to summarize information and create a common ground in conversation, fostering rapport with the audience (Ierace, 2019).

Nevertheless, overgeneralizations can be a dangerous tool for manipulating public opinion (Teneva, 2023) when a speaker summarizes too many things or when arguments contain nothing but generalizations. Overgeneralizations can lead to misinformation and public distrust in media. Example No. 42 presents an extract from an interview with Daniel Yergin, who is a leading authority on energy, geopolitics, and the global economy. This is an example of the 'anti-hydrocarbon' narratives when a negative image of fossil fuels is created through the use of the negative words and phrases ('more difficult', 'a real problem', 'most challenging') and parallelism.

The research findings showed that the narratives about energy transition contained more positive emotions. In these cases, the 'collective' pronoun 'we' and the modal verb 'need' were widely used in the energy crisis discourse. According to Derakhshani et al. (2021), these parts of speech convey ideological meanings and can be used to manipulate public opinion:

44. We need to make faster progress on the transformation, and we need the capacity mechanism to help us do that to provide that safety net underneath as we engage in this significant transformation to a more renewable economy, a more renewable energy system with more storage (Hannam, 2022).

The use of both unification or 'we' strategy (Derakhshani et al., 2021) and anaphora ('we need...and we need') establishes a personalized connection with the audience, mystifies the responsibility of the journalists, and assumes the solidarity of journalists' feelings with the readers' feelings, thus making the readers believe that journalists are one of them and share their feelings and opinions. This is one of the common language means of public opinion manipulation (Teneva & Bykov, 2023). Overall, it was found that modals of obligation and necessity such as 'should', 'need', and 'must' were among the most frequent verbs in the energy crisis discourse and expressed the necessity of transition to RESs, which indicates their manipulative role in the energy crisis coverage.

5. Conclusions

The present study aimed to detect and analyze the most common rhetorical appeals and emotive language means that contributed to shaping public perceptions about the 2021–2022 global energy crisis in the news articles taken from the websites of the four English-language mainstream media. Four mainstream newspapers were chosen from the key countries that were seriously affected by the crisis, who either benefitted (the USA) or suffered (the UK, China, and India) from energy shortages. The results of the content, discourse, and rhetorical discourse analyses confirmed emotionalization of the energy crisis coverage in all four mainstream media, including *The Guardian, The New York Times, The Times of India,* and *China Daily*. It occurred through the use of similar rhetorical appeals expressed by a wide variety of emotive language means.

First and foremost, the findings of the computer-assisted content analysis showed that there was a significant increase in the intensity of news information about the global energy crisis from 1 August 2021 to 31 December 2022 in the analyzed mainstream media, which

contributed to drawing public attention towards the crisis, influencing public agenda, and shaping public opinion on energy-related issues (McCombs & Shaw, 1972). Notably, the analysis of the news sources also indicated that in the period of the energy crisis, all four mainstream papers relied on similar major news agencies and media companies, including AP (The Associated Press), Reuters, and Bloomberg, which is a way of standardizing information on the crisis (Kultayeva et al., 2024) as well as setting a similar public agenda in various media and, thus, shaping both knowledge and ideology on the energy crisis (Tuchman, 1978), which proves the research hypothesis about the agenda-setting role of the media on the energy crisis coverage and corresponds to Lippmann's (1929/2021) theory of public opinion.

Furthermore, the results of computer-aided content analysis revealed the top 200 most frequent keywords that related to four main topics about the crisis: authorities (scientific, political, business, and energy experts), statistics, emotions, and energy transition. The results of the content analysis allowed us to identify the following five frames in the news coverage: 'a catastrophe for households and businesses', 'energy poverty', 'global villains', 'climate saviours', and 'government support of energy transition'. These frames reflect the negative perception of the energy crisis as a 'catastrophe', fossil fuels as 'global villains', and the 'catastrophic' scale of socioeconomic effects of the crisis, on the one hand, and the more positive perception of transitions to clean sources of energy and their government support, on the other hand, which allowed us to make inference about the key role of emotions in both evoking strong emotional responses in the audience towards the crisis and energy sources and polarizing the attitudes towards energy sources in the news coverage of the analyzed media.

Drawing on the results of the content analysis, a classification of the rhetorical appeals in the energy crisis discourse was proposed, including appeals to authorities, statistics, emotions, and energy transition. The computer-aided content analysis showed that appeals to statistics and authorities were prevalent in the news coverage of the UK and US media, which indicates a higher level of politicization of their news coverage and corresponds to the findings of recent media studies (Huan, 2023; Meuleman, 2023; Panchendrarajan et al., 2024; Molek-Kozakowska, 2024; Yun et al., 2022). This finding also corresponds to Lippmann's (1929/2021) theory of public opinion and agenda-setting theory (McCombs & Shaw, 1972) about choosing 'favorable' facts to influence public opinion.

It is also worth noting that the appeals to authorities, statistics, and energy transition were frequently accompanied by emotional elements, which proved the hypothesis about emotionalization of the energy crisis coverage in the analyzed mainstream media. The results of the discourse analysis revealed similar emotive language means across all four mainstream media, starting from emotionally charged language (modals of obligation and necessity, intensifiers, emotion-laden words) to rhetorical devices (hyperboles, metaphors, repetitions, rhetorical questions, parallelism, etc.) and rhetorical strategies (unification and personification strategies, generalizations, etc.).

The findings of the rhetorical discourse analysis allowed us to conclude that emotive language means contributed to polarizing attitudes towards the crisis and sources of energy in the news discourse, with a negative framing of fossil fuels that induced feelings of anxiety and fear towards dependence on them among the audience and a positive framing of renewable sources of energy that promote green transition. Based on these findings, it was concluded that rhetorical appeals served as public opinion manipulation means in the news coverage of the four analyzed media. It also proved the relevance of Van Dijk's (2006, 2015) approach to discourse analysis that reveals the sources of power and manipulation in the news discourse.

Overall, the results of this study could also be attributed to the global race to achieve energy transition between these four countries. The competition between renewables and conventional fossil fuel power technologies still remains critical, especially for such countries as the USA, UK, China, and India that are heavily reliant on fossil fuels. Therefore, it was concluded that the media narratives, containing positive or negative emotionality, contributed to setting the public agenda, shaping public perceptions of energy sources, and energy decision-making.

It is also worth noting that the results of this study are applicable only to the news coverage of the global energy crisis in the four analyzed media. Nevertheless, the findings can add practical implications for further media research on tackling hidden ideologies in any news discourse. In fact, using rhetorical appeals as manipulation means may pose a serious threat to the credibility and objectivity of information, leading to media bias and misinformation. It may influence public perceptions and intentions to use particular energy sources (Dagiliūtė, 2024). Therefore, the understanding of the manipulative role of rhetorical appeals in the news discourse can help both journalists and individuals develop their media literacy skills, which are necessary for tackling public opinion manipulation by uncovering the hidden ideologies and understanding the implicit parts of any media text. Thus, the present study opens up perspectives for further research on rhetorical appeals in news coverage within a wide range of fields, including rhetoric, journalism, applied linguistics, and discourse analysis.

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