



# Framing Air Pollution: Analyzing Coverage, Themes, and Policy Discourse in the New York Times

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**Abstract.** The research focuses on how The New York Times covers a pressing issue of air pollution with significant implications. The research uses content analysis and a framework of agenda setting theory to analyze 53 articles published within The New York Times from July 2024 to September 2024 to provide insights into coverage intensity and themes. The three months of coverage included a dominant frequency of crisis and health themes as opposed to coverage focusing on solutions and local perspectives. National and international coverage bore more prominence than local stories of air pollution, giving a possible indication of inequality of coverage of this issue. Though emphasizing its urgent nature is important, a lack of a solutions-based discourse could be a breeding ground for public despair. The research points to a need for more balanced and holistic coverage of these critical subjects to increase community engagement and policy activism. Some of these restrictions may provide a research path to be explored in a more comprehensive and multidimensional study of diverse subjects of media and environment.

**Keywords:** Air pollution framing, agenda-setting theory, environmental policy discourse, media coverage bias, crisis and solution frames.

## Article History

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## 1. Introduction

Air pollution has become a serious environmental issue in recent years (Nguyen et al., 2024). The impact of air pollution is severe on health, economy, and environment (Tewodros, 2024). With increasing urbanization and development across the globe, air pollution's repercussions affect millions of people and several natural ecosystems (Ferdous & Khatun, 2020). The primary media, especially The New York Times, is of central importance to how this topic is defined within public perception and, consequently, public policy (Nabi, 2024). The study seeks to investigate The New York Times' coverage of air pollution to identify if there are differences within coverage and what this means further. The media act as gatekeepers, determining how issues receive coverage and importance (Nabi, 2023). Agenda setting, a concept developed by McCombs and Shaw (1972), indicates media function beyond informing. Basically, media influence how people conceptualize issues and can create a biased perspective on issues. The impact of this is crucial, especially within environmental communications, focusing on immediate issues, solutions, and efforts of institutions and individuals (Mokoena & Nkosi, 2024; Ferdous & Khatun, 2020). However, media's lack of

full coverage, lack of information within specific issues, or visual biases can contribute to a lack of public interest and a lack of apparent reason within policymaking (Bohr, 2020; Vikström et al., 2023).

Despite the notoriety and seriousness of the problem, air pollution shares the headlines with other news stories. It has been found that the media brings out stories surrounding health crises and disasters, but fails to draw enough attention to health-related policy and solutions (Ramondt & Ramírez, 2020; Mayer, 2012). These studies illustrate that stories of health and crises predominate in environmental journalism, and that this can come at the expense of more prolonged consideration of mechanisms of policy and community-level responses. Ramondt and Ramírez (2020) illustrate that precaution and solution-focused reporting happens less often compared to threat-focused narratives of air pollution risk, hindering audiences' understanding of air pollution solutions. Mayer (2012) finds that a lack of consistent descriptions of solutions lessens public understanding and relevance of policy. This body of research collectively points to a lack of balanced consideration of consequence reporting in relation to processes of governance and solutions of concern.

In fact, it can be assumed that such disproportion in media can influence the perception of the people and can create a situation of urgency in the absence of required policies to resolve the problem. In addition, there is a bias seen in the media over the entire world; media attaches importance to the environment of developed nations, whereas the environment of developing nations is of less importance (Vu et al., 2019). This study has discussed The New York Times reporting of air pollution. The reporting has been analyzed for a period of three months, and the method of content analysis, based on agenda-setting theory, has been applied for this task. The purpose of this article is to highlight the coverage of this problem, the major ideas and concepts described, the scope of policies, and the geography of media reporting.

This research is different from other studies in the following ways: First, while other studies might examine the coverage of air pollution in different media sources, this study examines the coverage within a smaller time frame, which enables it to identify how environmental concerns are framed in the contemporary time frame. Second, this study examines the coverage in relation to environmental concerns in general, while other studies might examine in relation to other environmental concerns, which enables this study to examine the agenda-setting role of air pollution in relation to other environmental concerns individually. Lastly, since this study examines the agenda-setting role of The New York Times, which is one of the most influential international newspapers, it enables this study to examine not only how environmental concerns are framed for American citizens but also international citizens who read this newspaper for environmental information.

The New York Times is a United States newspaper, but it reaches readers around the world. For that reason, the way it presents air pollution also matters for international audiences who rely on the paper as a window into environmental problems and policy debates.

To fulfill the aims of the paper, the paper will answer the following research questions:

- RQ1:** How have the frequency and prominence of air pollution coverage in The New York Times changed over time?
- RQ2:** What are the dominant themes and frames used in The New York Times to portray the issue of air pollution?
- RQ3:** To what extent does The New York Times coverage of air pollution discuss policy

solutions and the role of different actors (government, industry, individuals) in addressing the problem?

**RQ4:** Does the geographic focus of air pollution coverage in The New York Times reflect the global distribution of the problem, or are there biases in reporting?

## **2. Literature Review**

Environmental communication refers to a communication realm that pertains to the concept related to how people discuss environmental information (Nguyen et al., 2024). This type of communication pertains to how environmental perception shapes the communication process from humans to the environment (Bohr, 2020). It entails the dissemination of information related to environments (Vu et al., 2019; Nabi & Ferdous, 2025). It has a focus related to how human behaviors interact with the non-human world (Griffin & Dunwoody, 2015; Wilkins et al., 2018). A study, Ramondt & Ramírez (2020), examines how newspapers report framing about air pollution. The researcher deduces a massive concentration on threats in 39.9% rather than solutions in 7.6% reports (Ramondt & Ramírez, 2020). Furthermore, this study also deduces extreme dependence on government sources (Ramondt & Ramírez, 2020). The study outcomes deduce huge gaps regarding the level of comprehensiveness (Ramondt & Ramírez, 2020). The study highlights the need for well-structured environmental reporting, linking reports about threats and solutions for maximum mass involvement in environmental concerns (Ramondt & Ramírez, 2020). Correspondingly, another researcher, Forouzanfar et al., (2015), examines severe ramifications caused by air pollutants. It is estimated that 5.5 million deaths arise due to environmental distortions, in addition to 141.5 daily disability-adjusted life years (Forouzanfar et al., 2015). This study, like other studies, mentions the need for thorough environmental reports in order to deduce regional disparities within environmental health risks associated with other sources (Forouzanfar et al., 2015). Conversely, Mayer (2012) examines inconsistencies in newspaper reporting related to environmental links within air pollution, linked to cases of asthmatic anomalies in humans. Notwithstanding increases in newspaper reports, Mayer (2012) discovers that newspapers lack consistent reports related to the essential link within health ramifications due to environmental distortion in air (Mayer, 2012). Such inconsistencies, discovered in Mayer (2012), can decrease mass awareness regarding environmental distortions in the mass media in addition to hindering formulation regarding policies related to environmental distortions in mass media communication.

Agenda-setting theory is the most frequently utilized theory to identify the media frames and issues (Ferdous & Khatun, 2020, Masud-Un-Nabi, 2021). Agenda-setting theory, proposed by McCombs and Shaw (1972), revolves around the issue of how to frame issues and set an agenda among the people. Notably, the media also affect each other (Golan, 2006, Masud-Un-Nabi, 2021). These interactions form the concept of intermedia agenda setting, which assesses the spread of news from various media channels (Harder et al., 2017). Media channels, such as The New York Times, Washington Post, and BBC, set an agenda among other media to focus on the issues (Mathes & Pfetsch, 1991). Agenda-setting theory is explored through the interactions of social media networks and traditional media (Matei et al., 2021). The study explores the search patterns during the drought occurrences from the years 2013 to 2015 in the California states of the United States. Notably, this study revealed that Twitter quickly informs the states' drought conditions, while the media coverage is

dependent on the search patterns from the google search engines (Matei et al., 2021). Notably, the case study emphasizes the influence of search patterns that produce an agenda among the social media and the media to report, irrespective of whether the issue is related to the environment (Matei et al., 2021). In the European media study, Vikström et al., (2023) utilized the theory to identify the media coverage related to the climate policy from the years 2015 to 2020, considering the media from the country of Finland. Agenda-setting theory identified that the media from the country of Finland primarily utilized an economic frame to frame the issues related to climate but then broadened the topics to cover various issues. Notably, this theory is related to the aspect that media influences the public to receive the perception and the priorities related to policy issues. Notably, the media still focuses on the economic frame, particularly when considering the government resources (Vikström et al., 2023). The case study also proves the second level of the agenda-setting concept, particularly the hypotheses, stories, and the media guideline that focuses on the climate change issues among the media members (Vikström et al., 2023). In the scenario, the media alters the debate regarding the policy issues (Vikström et al., 2023).

Agenda setting and social constructivism can be used together to describe the process by which the press establishes what constitutes an environmental problem and how they communicate this to society. Berger and Luckmann (1966) described that social realities can be created by shared meanings that can be reproduced by institutions. This process of constructing realities in the case of environmental issues can be seen in the process by which a newspaper like The New York Times places greater emphasis on some factors and agents over others (Hannigan, 2006). This establishing of emphasis is not a reflection of reality; instead, it is also involved in defining what constitutes a serious problem and what a possible solution might be among society.

Content analysis is a methodical procedure which is utilized in finding the patterns of media coverage (Ferdous, 2023). For example, this research methodology can deduce how news reports are helpful in understanding how people display environmental awareness and activity. Most importantly, this methodology studies how things are presented in media reports. Furthermore, this methodology ensures reliability through methods, for example, integrated agreement, enhancing the consistency of results (Vourvachis & Woodward, 2015). Hase et al. (2021) utilize content analysis in order to study climate change media reports in 10 different countries from 2006 to 2018. The researcher studies an enormous data collection involving 71674 reports in the media. When it comes to analysis, this study utilizes panel analysis in order to interpret the changes in media attention as well as deduce factors, for example, politics, scientific events in climate reports. The automated analysis enables one to illustrate effective signals of frequent themes, especially focusing on the social element in climate changes (Hase et al., 2021; Ferdous, 2025). Similarly, Vu et al. (2019) did a content analysis comparison study involving 45 countries in media reports on climate changes. The study deduces seven framing methods, among which international relations and the effect are most frequent (Vu et al., 2019). This study discovers how reports in media are affected by a country's economic condition, environmental circumstances, and governance system. It is essential to acknowledge that developed countries display climate reports within the country, so it relates to internal politics, sciences, while developing nations display international relations as well as how they are affected by extreme climate changes, which are supported through external aid welfare (Vu et al., 2019; James, 2025). Moreover, this study revealed that factors, for example, GDP, CO<sub>2</sub> emission, exercise substantial effect in influencing these frameworks (Vu et al., 2019). Unlike Hase et al. (2021) who concentrated on the social

element, this study discovers economic, international aspects as basic factors, which portrays variance in themes practiced.

Bohr (2020) makes another contribution to the understanding of climate change coverage. It also analyzed a large body of data consisting of over 78,000 articles in 52 US newspapers. It examined the study from the perspective of geographical, political, and circulation variables. Then, the application of topic modeling by Bohr (2020) helps in shedding light on generic subject matters, including climate intervention and climate denialism. It is observed how regional prejudice and variables act as a determinant in media coverage. Similarly, the author's use of content analysis sheds light on the significance of content analysis in the study of environmental media coverage. In this case, rather than the study by Vu et al. (2019), the study by Matejova (2023) introduces a fresh element to the data by focusing on media coverage in three major environmental disasters, namely the 2014 Mount Polley Mine spill, the 2010 Deepwater Horizon Oil spill, and the 2011 Fukushima Nuclear disaster. By using the case study of content analysis, the study by Matejova (2023) analyses the coverage of political elements in the three disasters, pointing out the main point of media coverage in the disasters. It is observed in the study how the media coverage of the disasters had a remarkable effect on the public's opinion of the disasters. It may be inferred in the study that the study by Matejova (2023) introduces a refreshing element to the study by concentrating on three disasters, unlike the other studies, including the study by Hase et al. (2021) and the study by Bohr (2020).

A number of studies have focused on The New York Times and the way it covers issues of the environment, which provides valuable context for our current analysis. Boykoff and Boykoff, for example, have demonstrated through their work published in 2004 that even influential newspapers such as The New York Times tend to function under balance standards, which may interfere with the way science is interpreted on issues of the environment. Schmidt, et al., further stressed through their work published in 2013 that news about climate issues, as interpreted by influential newspapers, is vital in defining global climate agendas through issue and frame building processes. From a New York Times perspective, Congdon et al. validated through their work published in 2020 that the way The New York Times covered the issue of the water crisis of Flint focused on government failure and almost nothing on issues of climate injustice on the communities concerned. Wetts further, through work published in 2020, revealed that news on corporations tends to get more attention on climate issues, thus defining climate policy through sourcing practices.

### **3. Methodology**

In this paper the researcher has employed content analysis as the primary method. The research builds on agenda-setting theory. The researcher used this framework to explore how media coverage structures issue salience, frames interpretation, and sets the agenda for public discussion of environmental issues, particularly air pollution (Hase et al. 2021; McCombs and Shaw 1972). Content analysis does not measure audience attitudes directly, but it provides systematic evidence of the themes, frames, and emphases that media present to audiences, which are central mechanisms in agenda setting processes (Berkowitz & Liu, 2016). This paper includes mixed content analysis as methodology. There is utilization of both analysis types by the author to get deeper insights regarding selected articles. There is use of content analysis as method and only method for this paper because this method includes examining news in texts in a systematic manner, particularly in relation to news (Vourvachis and Woodward, 2015). There is utilization of this method as it provides effective

means of analysis and interpretation by researchers regarding media coverage of specific issues (Columbia Public Health, 2023). For the scope and analysis of this paper, the articles chosen from the New York Times are a total of 53 pieces that specifically pertain to air pollution. This selection allows the researcher to specifically and thoroughly study how the issue of air pollution is covered within the context of a major newspaper such as the New York Times. The data from the articles is collected by the researcher visiting the website from the New York Times and searching it using the keyword “air pollution.” For the scope and analysis of this paper, the keyword is specifically air pollution, and no other details or specifications were given. The selection that the researcher had chosen is from July 1st, 2024, until September 30th, 2024. These three months were chosen because they provide a recent perspective on the state of air pollution issues that tend to emerge within many regions in the course of the hotter months within the Northern Hemisphere due to heat-driven issues, ozone, and smoke levels.

Meanwhile, this period also saw heightened levels of ozone, heat-related pollution, and smoke from wildfires, and such occurrences usually garner attention in the media regarding air quality concerns. Therefore, the choice of this period for the analysis allows the phenomenon of air pollution to be framed within a context where the levels of concern for the environment and health within the media are high. The criteria for choosing the 53 articles include reports, editorials, and opinion articles. It can be seen that the sampling under consideration encompasses a complete scenario in terms of air pollution reporting. The New York Times has been chosen for its established agenda-setting power and its broad reach in influencing policymakers and international community members in addition to opinion leaders. Studies have found that publication in mainstream dailies has played a role in influencing the framing of environmental issues in the subsequent discourse within other forms of media and in public gatherings. It is abundantly clear that the New York Times has historically covered and continues to reference and refer to environmental and climate-related news in various other news sources historically and continues to be a premier agenda-setting publication in its pursuit of this practice (Nabi, 2024).

To conduct an organized analysis, it is necessary that the coding sheet is prepared on the basis of themes and objectives of the analysis. The coding categories were designed in synchronization with the four research questions and on the basis of previous studies regarding coverage of air pollution stories and environmental framing (Ramondt & Ramírez, 2020; Vu et al., 2019). The coding sheet is first piloted on selected articles and made clearer by the researcher before coding the complete data, as is suggested by Naeem et al. (2023) that the step-by-step process should be followed by researchers while performing qualitative coding. The researcher manually coded each selected article without using any statistical software package. The process entails close analysis by the researcher while carefully reading the selected articles in order to determine patterns and themes. The process involved making note of pertinent points and arranging information into categories such as the number of times it appeared, the different forms it took, the appearance of policy solutions, and geographic focus. Manual coding is usually preferred when there is a need to meticulously analyze the data concerning tone, indicator of framing cues, and emphasis on the issue (Ferdous, 2025). Manual coding involves interpretive judgment, particularly in identifying themes and frames, which introduces the possibility of subjectivity. In content analysis, the use of multiple coders and intercoder reliability testing is commonly recommended to reduce individual bias and enhance reliability. In this study, coding was conducted by a single researcher, which allowed for consistent application of categories but limited the ability to

formally assess intercoder reliability. To address this limitation, the coding scheme was carefully developed based on prior studies, piloted on a subset of articles, and applied systematically across the full sample. This approach does not eliminate subjectivity, but it follows established qualitative content analysis practices.

This study is based on the agenda-setting theory, which states that the mass media not only shape the thoughts that audiences think about, but also determine how they think about those topics (McCombs, 2001). Besides agenda-setting, another theoretical framework of significance in this research is the framing theory. This theory tries to explain how news acts as a medium in pointing to specific aspects of a story while shedding less light on other aspects in order to construct a specific interpretation of the phenomenon and solutions to the problems (Entman, 1993; Gamson & Modigliani, 1989). This can indicate solutions and moral judgments in framing and is of significance within the context of studying news that provides a larger framework that encompasses something more than the mere presence of a story in news and has aspects of importance in controlling specific aspects of the story (Entman, 1993). This serves as a complement to agenda-setting in this research and contributes greatly because this framework not only refers to what is being placed in the news agenda but how it is placed in this agenda (Pan & Kosicki, 1993). Together, agenda setting and framing provide a strong framework for examining how air pollution is prioritized, interpreted, and contextualized in The New York Times coverage. These theories are very relevant and applicable when examining the media coverage of air pollution because it will enable the researcher to investigate the influence of media highlighting specific topics on public discussion and decision-making (Matei et al., 2021). Through this theory, the research will be able to interpret how public awareness and opinion are influenced by the coverage of air pollution by the New York Times.

## 4. Results

### 4.1. Frequency and Prominence of Coverage

For answering the first research question, the investigator aimed to determine the number and intensity of air pollution articles in the New York Times. The process began with examining the number of articles published in each month, which showed variability in the number of articles published. As indicated in Table 1, there is a total of 53 articles throughout the three-month period. Based on the division of articles by month, there is a significant rise in the number of articles, especially in September 2024, where there is a record of 23 articles published, which shows the highest number of articles in three months. Conversely, there is a drop in articles in August 2024, where only 11 articles have been recorded. July 2024 registers a moderate number with 19 articles published.

**Table 1**

*Frequency and Prominence of Article by Month*

Month	Number of Articles	Prominence (Front Page, Section Header, General Section)
July 2024	19	3 Front Page, 5 Section Header, 11 General Section
August 2024	11	1 Front Page, 3 Section Header, 7 General Section
September 2024	23	4 Front Page, 5 Section Header, 14 General Section

**Total****53****8 Front Page, 13 Section Header, 32 General  
Section**


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The visibility of articles was also varying unexpectedly over the three months. In July, there was a visible number of articles, considering three were on the front page, while 5 were marked as section headers. Notably, this number shows a beginning focus on the issue, perhaps heightened public attention, or significance. Conversely, this visibility was low in August, where only 1 article was considered of sufficient significance to make a front-page report. Perhaps this signifies a falling public interest or public attention to this issue. Conversely, it is crucial to acknowledge that there was an increase in the number of articles, which became significant. Notably, this is because 4 articles were posted on the front page. In addition, there was a visible number of section head articles, standing at 5, as well as 14 within the general sections. Significantly, this signifies a commitment to regain public attention to this issue. Perhaps this signifies a dynamic relationship between public attention, editorial opinion, and issues evolving around issues of public concern. Significantly, this cumulative depiction of information signifies a clear indication of a visible article within the context of this period. Specifically, this signifies a total of 8 articles posted on the front page. Perhaps this signifies approximately 15% of articles posted had maximum visibility, a crucial contributor to comprehending media influence on public awareness. Conversely, there were 13 section head articles, contributing approximately 25% of a crucial depiction to a clear indication of media attention to this issue. Perhaps, a crucial number of articles, 32, standing within a depiction of a general section, signifies a clear indication of a topic of media attention, where a crucial depiction of issues, potentially, reaches a crucial number of people of maximum standing.

#### **4.2. *Dominant Themes and Frames***

For the second research question, the researcher aimed to discover the themes and frames that have been predominantly employed within the New York Times to frame air pollution. To offer some insight into how these frames can be realized in practice, there were some crisis framed articles whose language tended to focus on threats related to health, with very few corresponding explanations related to policies being presented. Compared to this, there were few solution framed articles whose language was oriented towards government policies or technological solutions, but very few related explanations were presented in these cases as well. The information derived from this analysis helped to shape discourse regarding awareness and implications for policy and overall narrative associated with concerns for the environment. As evident from Table 2, there are focal points discussed within the discourse of air pollution and overall concerns manifest through the media.

**Table 2**  
*Dominant Themes in Air Pollution Coverage*

Theme	Frequency (n=53)	Examples of Coverage
Health effects	16	Articles discussing respiratory issues, public health warning, etc.
Environmental impact	14	Reports on ecosystem damage and climate change linkage
Economic impact	11	Discussions on the economic costs of air pollution
Policy issue	8	Coverage of legislation, initiatives, and governmental responses
Scientific findings	4	Studies and reports highlighting recent research on air quality

The examination of the dominant themes indicates that the theme of health effects received the highest attention and appeared in 16 articles. The prominence of health effects highlights the media's preoccupation with the direct consequences of air pollution on the health of the population, especially regarding respiratory ailments. The domination of health-oriented articles in the media indicates a heightened level of influence of air quality on sensitive groups, which could be responsible for stirring community interest and shaping policy agendas. The theme of environmental impact came second and received attention in 14 articles, covering issues such as the impact of air pollution on the environment and connections to climate change. The theme of environmental impact indicates a level of attention beyond the specific community health concerns and focuses on the health of the entire ecosystem, impacted by air pollution. The media attention to the theme of environmental impact could be seen as efforts to enlighten citizens on the relationship between air quality and climate change, promoting a wider understanding of the consequences of pollution.

Economic effects of air pollution were evident in 11 articles, which dealt with economic costs involved in air pollution in terms of health care costs and economic loss due to reduced air quality. This topic reflects the fact that tackling air pollution demands consideration of multiple aspects of this problem, including both health and economic aspects. By addressing economic effects, media may reach a broader audience, specifically policymakers who are more concerned with economic issues. Topics related to policies were discussed in 8 articles, which reveal an understanding of the fact that addressing air pollution also demands action through policies and initiatives on the part of the government. This topic reflects that along with creating awareness about air pollution in the general population, media also participates in the debate of policies regarding environmental issues.

Finally, the publication of scientific findings was represented in 4 articles, emphasizing the role of sharing scientific findings about air quality and its implications. Although this theme was not as ubiquitous as other themes, sharing scientific findings about air quality and its implications highlights the role of the media in publishing scientific findings. By publishing scientific findings about air quality and its implications, the media can play a major role in improving air quality. In addition to the major themes identified in this research, there were other methods of using these themes to create a narrative about air quality. Table 3 shows the frames used in the articles, explaining the extent to which each of these frames contributes to the narrative.

**Table 3***Frames Used in Air Pollution Coverage*

<b>Frame</b>	<b>Frequency (n=53)</b>
Crisis Frame	23
Solution Frame	7
Economic Frame	12
Information Frame	10
Moral/Responsibility Frame	1

The crisis frame surfaced as the most dominant frame, where it appeared in 23 articles. Notably, this framing technique presents air pollution as a drastic and severe situation that needs instant remedies and actions. Therefore, the dominance of this crisis frame in articles indicates that there is effective coverage of public concerns over air pollution by the media. The economic frame appeared in 12 articles, meaning that air pollution is, in most instances, linked with economical concerns and factors. Interestingly, this frame fits well with the above-discussed economical impacts theme, which reinforces that economic implications constitute critical dimensions of air pollution debates and conversations. The informational frame appeared in 10 articles, where it offered vital information and statistics regarding air pollution to equip readers with insightful information and information, which, in turn, improves public perceptions and understanding of air pollution issues, accompanied by the crisis frame that emphasizes drastic situations and drastic measures and actions needed in air pollution contexts and circumstances. The solution frame appeared in only 7 articles, meaning that even as media recognizes and understands that there is a need for remedies and solutions regarding air pollution, there is some bias and overemphasis on air pollution problems and issues. Finally, and interestingly, the moral/responsibility frame appeared in only one article, which emphasizes and discusses moral concerns and dimensions in air pollution and reinforces that there is, in fact, some social and moral and civic obligation and need regarding proper environmental concerns and issues.

#### **4.3. Policy Solutions and Actor Roles**

For the third research question, the researcher wanted to find out the extent to which The New York Times coverage of air pollution discussed policy solutions and the role of different actors (government, industry, individuals, and NGOs) in addressing the problem. The results show that the coverage was quite comprehensive regarding the issue of solutions, highlighted in the data in table 4. Table 4 above illustrates the number and types of actors involved, which helps clarify the influence level and responsibility with respect to addressing these very important issues. Of the 53 articles, only 8 featured direct mentions of policy solutions. The extreme gap between the two sets of mentions draws attention to the prevailing theme, whereby most mentions, 45, did not address policy solution discussions, for the most part ignoring the issue altogether. The absence thereof is problematic because it hampers the discussion on the topic among the public and the government concerning possible mitigations for environmental issues.

**Table 4**

*Coverage of Policy Solution and Actor Roles*

<b>Policy discussion</b>	<b>Frequency (n=53)</b>	<b>Actor Types Involvement (n=53)</b>
Mentioned	8	Government (2), Industry 4, Individual (1), NGOs (1)
Not Mentioned	45	

The results show that when policy solution is raised, the level of participation of different actors is relatively low. In this case, the data shows that government actors were mentioned twice while industry actors contributed four to the discussion. Moreover, participation by individuals as well as non-governmental organizations was acknowledged. It is evident that a level of representation of involvement by stakeholders has been portrayed. The level is dominated by industry actors. It may likely convey to the audience that there is a limitation in incorporating the complexities of issues regarding environment management. The low level of discussion on policy solutions is a crucial aspect that has been overlooked within the discussion environment issues. As a result, the discussion has likely lacked providing necessary information to stakeholders to facilitate informed participation and engagement. The discussion of policy solutions plays a critical role within an informed discussion on the environment since it has the capacity to promote different actors to come up and address different environment issues together. The dominance of industry representation within the conversations raises several points regarding the driving forces within the coverage. The presence of a relatively high level of industry representation, in comparison to government and civil society representation, could be a reflection within the bias present in the way environmental stories are constructed. It could be a reflection of the dominance of industry voices, within which the primary focus is placed on economical concerns, instead of ecological. It could result in a lack of holistic development within policies, in the way they fail to consider the input of all concerned voices, specifically within government and civil society, who could potentially provide valuable insight within the study of sustainability. It is observed within the findings that the lack of representation for both NGOs and individuals within the conversations is a reflection of a potential opportunity within the inclusion of voices for grassroots and community voices within environmental conversations.

The low representation within the findings is a reflection of a necessity for their inclusion within media conversations, particularly for the way they could provide a holistic view through their experiences and perspectives, within a manner that could uniquely provide a wealth of information for the study of sustainability. Additionally, the presence of a missing conversation within the inclusion of policies within the findings, in the way policies were excluded for the first 45 instances, is a reflection within a potential gap within the coverage for solutions. The potential gap could be a reflection within the tendency for media sources to cover more on the negative presentation within the reporting of environmental issues, specifically within a context within they often ignore the potential for remedying issues. It could result within a narrative within the presentation, within the way the media could be perpetuating a lack within the potential for a solution within the public, specifically within a context within they could be presented with a warranted belief within the way environmental issues could never be solved.

#### 4.4. *Geographic Focus of Coverage*

For the 4th research question, the researcher wanted to find out the geographic focus of air pollution coverage in the New York Times. As shown in Table 5, the geographic focus of the coverage is categorized into three main types: local, national, and international. The frequency of each category is highlighted along with the breakdown of the specific regions mentioned in the international coverage.

**Table 5**

*Geographical Focus of Coverage*

<b>Geographical Focus</b>	<b>Frequency(n=53)</b>	<b>Region Mentioned</b>
Local	10	
National	25	
International	18	Europe (10), Asia (5), Africa (3)

The findings reveal that national coverage occupies a dominant position in the sample and accounts for 47.2% (n=25) of all articles that were analyzed. This dominant position indicates that cases related to environment issues are largely portrayed from a national perspective, possibly due to a high level of concern or importance attached to these issues in the national setting. On a local level, coverage stands as the least dominant and accounts for 18.9% (n=10) of all articles that were analyzed. This indicates a concern or importance question regarding attention given to issues related to the environment from a local perspective that could be vital or fundamental in localizing activities and decision-making in this setting. International coverage occupies a vital 34% (n=18) position in this analysis and highlights a macro or global perspective regarding issues related to environment in this sample. From this position, Europe stands as the dominant geographical position that has been featured in 10 articles in this study. This preference in selecting a setting that highlights environment issues in this sample could be attributed to a proactive stand that this geographical position takes regarding issues related to environment and sustainability in this setting. The Asian setting comes in a distant second position that has been featured in 5 articles. This suggests that there has been a preference or inclination towards environment issues in this setting that has experienced rapid economic growth in recent years. The African setting has been featured in this study in three articles.

The study highlights important observations about the geographic orientation of environmental reporting. The predominance of national environmental reporting implies that although international environmental issues exist, the environmental issues may be communicated through channels that are more relevant and understandable to the local audience. This could have negative implications for the local environmental issues that often play a pivotal role in mobilizing local support and action. The inadequate reporting of local environmental issues may impair awareness and subsequent action at the local level, which are most deeply affected by environmental shifts. Moreover, the orientation towards international reporting, especially between Europe, may relate to environmental biases that often target regions that boast sophisticated environmental policies and projects. This may inadvertently cultivate a perception that local environmental issues are not relevant to the locale, which may be heavily beset with environmental issues that need urgent attention. This important aspect should be addressed by the local media, which needs to include more local environmental issues that are pertinent to grassroots and everyday life.

## 5. Discussion

This study has important implications concerning the extent to which The New York Times presents air pollution and its implications. Through the review of 53 articles published within a period of three months, the research demonstrates the level of frequency and prominence, dominant themes and frames, discussions on policies, and geographical focus. Through the application of the framework of agenda-setting theory, there are important implications that demonstrate how the narratives presented within The New York Times interact with the discourse on public issues. There are fluctuations within the level of frequency and prominence of the presentation of topics concerning air pollution that reach distinct peaks and troughs within the period. The month of September 2024 had the most prominent level of presentation through numerous articles published on the front page, establishing a heightened level of interest and focus. This reflects the application of the framework of agenda-setting theory that establishes that the prominence of issues within mass media leads to heightened awareness and concern (McCombs and Shaw 1972). Yet, the level of diminished presentation within the August period raises important considerations concerning how mass media continues to draw focus to pertinent environmental issues that may indicate a lowering of concern and focus within the public.

Analysis of the most frequently observed themes indicates an obvious prioritization of themes related to health impact, followed by environmental and economic concerns. This thematic pattern is also reflected in the existing body of literature, where health concerns become given priority in the reporting of environmental issues (Ramondt & Ramírez, 2020). The dominant presentation of health-related themes would likely connect with an audience on a personal or local level, prioritizing pragmatic consequences regarding air pollution. Yet, the relative neglect of policy-based information impedes immediate applications in providing concrete information or contextualization, as indicated by Mayer (2012). Results from framing analyses confirm a strong preference for the usage of crisis-framing over solution-based narratives. While the crisis frame contributes significantly to exposing the sense of importance surrounding air pollution, a relative overemphasis upon the crisis frame may inadvertently induce a perception of hopelessness amongst consumers, as indicated by Bohr in related research on climate communication (Bohr, 2020). The relative neglect of solution frames indicates an appropriate concern for media consolidation to also provide balanced information respectively amid recommendations by Ramondt and Ramírez in related literature concerning balanced climate reporting (Ramondt & Ramírez, 2020).

Policy issues were conspicuous by their absence, with only 15% of the articles exploring possible solutions. Despite the media's critical outreach for public knowledge building, the gap in the discussion on policy issues is glaring. Similarly, the overwhelming presence of industry representatives sparked concerns regarding the likelihood of bias in storyline framing. In parallel with the view posited by Vikstrom et al. (2023), the findings showed the presence of the interests of the economy in the shaping of media stories on issues related to the environment. Similarly, the prominence accorded to national and international media stories, leaving the local aspect largely underemphasized, can be supported by the view presented by Bohr (2020). Also, the findings corroborate the view presented by Vu et al. (2019), indicating the phenomena wherein regions characterized by their defined policies continue to unfairly hold the forces of discussion in the media.

The results obtained in the study have a number of implications for the media and environmental issues. First, the dominance of crisis framing accompanied by a lack of solution-oriented media coverage can define public perceptions in a way that does not enable

active engagement. Although crisis framing is effective in emphasizing public concern, excessive reliance on the same can result in compassion fatigue or the perception of the challenge posed as insuperable (Ferdous & Khatun, 2020; Hase et al., 2021; Nabi & Ferdous, 2025). Adding more solution-oriented framing can enable active engagement among the public through the dissemination of experiential knowledge. It is crucial here, for the sake of argument, to assert that the study does not recommend the emergence of a New York Times-style news media response in the public's interest. Media practitioners have occupational ethics entailing a central emphasis on the reporting of verifiable facts and immediate occurrences. Adopting a perspective rooted in social constructivism, the resolution on prioritizing problems, their resolution, and actors may continue to define public perceptions on the issue of air pollution (Nabi, 2023). Second, the study draws special attention to the call for a more balanced representation of actors participating in the discussion of public policies. The dominance in the media reporting can lead, instead, to a biased view on public opinion, heavily biased toward the prioritization of the economy rather than ecological and other considerations. Media houses should always work toward giving a special emphasis on raising the voices of the public, including groups, civil society associations, and individuals, toward a holistic perspective on public governance.

Third, the extent to which local concerns for the environment are covered points to the missed opportunity to engage the audience with localized narratives. Localized journalism aims to identify the practical effects of air pollution, in addition to the role it plays to promote the grassroots movements for policy change. Localized journalism is also important for providing the much-needed intersection between the global concerns and the practical lives of people, improving the engagement between the audience and the environment. Lastly, the geographical risk imbalance between the European-based narratives in global journalism points to the importance of providing more balance or aims to address the need for more inclusive journalism, including more region-based narratives with the goal of providing a more comprehensive understanding of global concerns related to the environment. This is in line with the opinions presented by Vu et al. (2019) to provide more localized contexts related to the environment, including socioeconomic factors.

Even as many results conform to previous research which indicated the prevalence of crisis and health-oriented storytelling in the coverage of both environmental and air quality issues, this research verifies and represents the applicability and relevance of these results over a brief and contemporary timeframe in an influential publication (Mayer, 2012; Ramondt & Ramírez, 2020). In relation to research which investigated the prevalence over extended periods or across several sources, this research verifies the prevalence and applicability of restricted discourse and visibility even over contemporary periods (Hase et al., 2021; Schmidt et al., 2013; Vu et al., 2019). These research outcomes have identified the concern regarding the benefit and prominence which may be offered to institutional and economic interests over more general community insights regarding the framing and presentation offered within the coverage and discourse in relation to environmental issues, and the resultant impression and perception which may thereby emerge regarding the governability and solvability of the issues identified (Wetts, 2020; Vikström et al., 2023).

## 6. Limitations of the Study

Despite its benefits, there are certain limitations to the study which need to be considered. The study has only focused on the New York Times. This study may not be

generalized to other publications and regions. Although The New York Times is the most prominent and influential publication, the strategy of shaping or forming frames may not be same for smaller publications or regional publications. The study has focused on a certain period. This study may not capture long-term trends or changes. For example, the study doesn't include the June 2023 situation of air quality alert in New York City that emerged out due to Canadian wildfires. This study may not capture how frames during a period of intense focus on a certain crisis are different or similar to frames during more normal circumstances. This limitation may be removed by conducting study over a wider period of time and observing patterns and trends over multiple years. This study is conducted through manual coding. This may not be completely objective. Although certain attempts have been made to ensure that there are consistent interpretations, the study lacks the usage of automated coding and may not be completely reliable. Mixed research methods with automation text research may increase validity. Finally, although the study has focused on a very important topic related to the environmental topic, the study has focused on a single topic. This study may not be generalized to other topics that are environmental and journalism related. Although air pollution is a topic of great concern and has direct relevance to the topic, the study may focus on various topics like scarcity of water resources, deforestation, and adaptation to climate change.

## **7. Conclusion**

The results of this study help reveal important trends in The New York Times' coverage of air pollution with regard to opportunities in environmental communication. The fact that the majority of the coverage is from a crisis perspective illustrates the importance of media coverage in shaped informed attention toward pressing concerns, as well as the problematic ramifications of audience entrenchment with helplessness media narratives (Nabi, 2023). The relative lack of solution-driven coverage and engagement with policy-driven solutions demonstrates a prospective deficiency with regard to empowering citizens with regard to evidence-based informed policy. In addition, the relative overemphasis on national and international views, with a special attention to views from Europe, casts a veil over local views and voices with regard to narratives with a higher potential impact and relevance toward local populations. The implications of these relative emphases toward public understanding, policy-based engagement, and grassroots mobilization are vast. By recording how a globally prominent United States-based newspaper published recent coverage of air pollution, it is hoped that a starting point may be found with regard to understanding internationally-related readings on air quality needs, threats, and responsibility. The inclusion of varied voices, with an especial attention toward local voices currently not suitably advocated, may establish a global perspective toward understanding varied local issues with regard to more inclusive global narratives. The importance of balanced media coverage goals toward a combination of crisis representation with solution-driven coverage may enhance public agency with regard to an active discourse. The study also seeks to explore restrictions with regard to study limitations. Because this study is focused on a single newspaper source, a small time frame, with a sampling process reliant on personal coding, it may establish a relative route toward future study needs. By including a comprehensive scope reliant on varied newspaper sources with a prolonged time scope, a prospective relative study-mapping through time may establish. Furthermore, future study needs by inclusion with special regard toward varied environmental concerns, with a special attention toward varied concerns like water limitation or climate-based adaptations.

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### Notes on contributors

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## References

- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Anchor Books.
- Berkowitz, D. A., & Liu, Z. (2016). Studying news production: From process to meanings. In C. Paterson, D. Lee, A. Saha, & A. Zoellner (Eds.), *Advancing media production research: Global transformations in media and communication research* (pp. 55–72). Palgrave Macmillan. [https://doi.org/10.1057/9781137541949\\_5](https://doi.org/10.1057/9781137541949_5)
- Bohr, J. (2020). “Reporting on climate change: A computational analysis of U.S. newspapers and sources of bias, 1997–2017.” *Global environmental change*, 61, 102038. <https://doi.org/10.1016/j.gloenvcha.2020.102038>
- Boykoff, M. T., & Boykoff, J. M. (2004). Balance as bias: Global warming and the U.S. prestige press. *Global Environmental Change*, 14(2), 125–136. <https://doi.org/10.1016/j.gloenvcha.2003.10.001>
- Columbia Public Health. (2023, March 30). *Content analysis method and examples*. <https://www.publichealth.columbia.edu/research/population-health-methods/content-analysis>
- Congdon, M., Ngo, Q., & Young, E. (2020). Environmental injustice: Examining how *The New York Times* frames the Flint water crisis. *Ohio Communication Journal*, 58(1), 12–25.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>
- Ferdous, S., & Khatun, M. (2020). News coverage on environmental issues: A Study on print media of Bangladesh. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25(4), 53–59. <https://doi.org/10.9790/0837-2504085359>
- Ferdous, S. (2023). Communication approach between doctors and patients regarding COVID-19: A study on mHealth apps. *Social Communication*, 24(1), 43–53. <https://doi.org/10.57656/sc-2023-0004>

- Ferdous, S. (2025). *Immigration position, labeling, and civility: An analysis of YouTube comments during a salient policy moment in the United States* (Order No. 32395286). Available from Dissertations & Theses @ Idaho State University; ProQuest Dissertations & Theses Global. (3286139515). <https://www.proquest.com/dissertations-theses/immigration-position-labeling-civility-analysis/docview/3286139515/se-2>
- Forouzanfar, M. H., Alexander, L., Anderson, H. R., Bachman, V. F., Biryukov, S., Brauer, M., Burnett, R., Casey, D., Coates, M. M., Cohen, A., Delwiche, K., Estep, K., Frostad, J. J., KC, A., Kyu, H. H., Moradi-Lakeh, M., Ng, M., Slepak, E. L., Thomas, B. A., Murray, C. J. (2015). Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990–2013: A systematic analysis for the global burden of disease study 2013. *The lancet*, 386(10010), 2287–2323. [https://doi.org/10.1016/s0140-6736\(15\)00128-2](https://doi.org/10.1016/s0140-6736(15)00128-2)
- Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, 95(1), 1–37. <https://doi.org/10.1086/229213>
- Griffin, R. J. & Dunwoody, S. (2015). Environmental communication. *The International Encyclopedia of Communication*. <https://doi.org/10.1002/9781405186407.wbiece032.pub2>
- Golan, G. (2006). Inter-media agenda setting and global news coverage. *Journalism Studies*, 7(2), 323–333. <https://doi.org/10.1080/14616700500533643>
- Hannigan, J. (2006). *Environmental sociology* (2nd ed.). Routledge.
- Harder, R. A., Sevenans, J., & Van Aelst, P. (2017). Intermedia agenda setting in the social media age: How traditional players dominate the news agenda in Election Times. *The International Journal of Press/Politics*, 22(3), 275–293. <https://doi.org/10.1177/1940161217704969>
- Hase, V., Mahl, D., Schäfer, M. S., & Keller, T. R. (2021). Climate change in news media across the globe: An automated analysis of issue attention and themes in climate change coverage in 10 countries (2006–2018). *Global Environmental Change*, 70, 102353. <https://doi.org/10.1016/j.gloenvcha.2021.102353>
- James, P. (2025). From headlines to awareness: Examining the minimal impact of media on climate action in the United States. *Asian Journal of Media and Communication*, 9(1), 19–38. <https://doi.org/10.20885/asjmc.vol9.iss1.art2>
- Masud-Un-Nabi, M. (2021). The practice of peace journalism in the coverage of Rohingya crisis: A study on Bangladeshi newspapers. *Social Communication*, 7(1), 101–109. <https://doi.org/10.2478/sc-2021-0010>
- Matei, S. A., Kulzick, R., Sinclair-Chapman, V., & Potts, L. (2021). Setting the agenda in environmental crisis: Relationships between tweets, google search trends, and newspaper coverage during the California Drought. *PLOS ONE*, 16(12). <https://doi.org/10.1371/journal.pone.0259494>
- Matejova, M. (2023). Framing environmental disasters for nonviolent protest: A content analysis. *Environmental Communication*, 17(4), 407–420. <https://doi.org/10.1080/17524032.2023.2195589>

- Mathes, R., & Pfetsch, B. (1991). The role of the alternative press in the agenda-building process: Spill-over effects and media opinion leadership. *European Journal of Communication*, 6(1), 33–62. <https://doi.org/10.1177/0267323191006001003>
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36(2), 176. <https://doi.org/10.1086/267990>
- McCombs, M. (2001). Agenda-setting. *International Encyclopedia of the Social & Behavioral Sciences*, 285–288. <https://doi.org/10.1016/b0-08-043076-7/04310-2>
- Mokoena, Z., & Nkosi, L. (2024). Environmental issues in South African broadcast media: A content analysis of coverage, framing, and source representation. *Asian Journal of Media and Communication*, 8(2). <https://doi.org/10.20885/asjmc.vol8.iss2.art1>
- Nabi, M. (2023). The role of ownership in shaping online news content: A political economy analysis. *Social Communication*, 24(1), 165–178. <https://doi.org/10.57656/sc-2023-0013>
- Nabi, M. (2024). *Navigating the online and in-field challenges of community journalists in the digital age* (Order No. 31238208). Available from Dissertations & Theses @ Idaho State University; ProQuest Dissertations & Theses Global. (3052348213). <https://www.proquest.com/dissertations-theses/navigating-online-field-challenges-community/docview/3052348213/se-2>
- Nabi, M., & Ferdous, S. (2025). Breaking news, breaking moods? Trust, sentiment, and the emotional toll of digital news consumption. *Media Watch*, 17(1), 73–99. <https://doi.org/10.1177/09760911251376804>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22. <https://doi.org/10.1177/16094069231205789>
- Nguyen, J., Abdullah, A., & Park, J. H. (2024). The influence of social media on environmental news reporting and public discourse in China. *Khulna University Studies*, 21(2), 181–189. <https://doi.org/10.53808/KUS.2024.21.02.1212-ss>
- Pan, Z., & Kosicki, G. M. (1993). Framing analysis: An approach to news discourse. *Political Communication*, 10(1), 55–75. <https://doi.org/10.1080/10584609.1993.9962963>
- Ramondt, S., & Ramírez, A. S. (2020). Media reporting on air pollution: Health risk and precautionary measures in national and regional newspapers. *International Journal of Environmental Research and Public Health*, 17(18), 6516. <https://doi.org/10.3390/ijerph17186516>
- Schmidt, A., Ivanova, A., & Schäfer, M. S. (2013). Media attention for climate change around the world: A comparative analysis of newspaper coverage in 27 countries. *Global Environmental Change*, 23(5), 1233–1248. <https://doi.org/10.1016/j.gloenvcha.2013.07.020>
- Tewodros, Y. (2024). Navigating the digital frontier: Examining social media's influence on print media news coverage. *Social Communication*, 25(1), 20–29. <https://doi.org/10.57656/sc-2024-0003>

- Vikström, S., Mervaala, E., Kangas, H.-L., & Lyytimäki, J. (2023). Framing climate futures: The media representations of climate and energy policies in Finnish Broadcasting Company News. *Journal of Integrative Environmental Sciences*, 20(1). <https://doi.org/10.1080/1943815x.2023.2178464>
- Vourvachis, P., & Woodward, T. (2015). Content analysis in social and environmental reporting research: Trends and challenges. *Journal of Applied Accounting Research*, 16(2), 166–195. <https://doi.org/10.1108/jaar-04-2013-0027>
- Vu, H. T., Liu, Y., & Tran, D. V. (2019). Nationalizing a global phenomenon: A study of how the press in 45 countries and territories portrays climate change. *Global Environmental Change*, 58, 101942. <https://doi.org/10.1016/j.gloenvcha.2019.101942>
- Wetts, R. (2020). In climate news, statements from large businesses and opponents of climate action receive heightened visibility. *Proceedings of the National Academy of Sciences of the United States of America*, 117(32), 19054–19060. <https://doi.org/10.1073/pnas.1921526117>
- Wilkins, E. J., Miller, H. M., Tilak, E., & Schuster, R. M. (2018). Communicating information on nature-related topics: Preferred information channels and trust in sources. *PLOS ONE*, 13(12). <https://doi.org/10.1371/journal.pone.0209013>
- World Health Organization. (n.d.). *Air pollution*. World Health Organization. [https://www.who.int/health-topics/air-pollution#tab=tab\\_1](https://www.who.int/health-topics/air-pollution#tab=tab_1)