
Linguistic Framing of Climate Change Responsibility in News Media: A Cross-National Analysis of Pakistani and American Newspapers

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Abstract

Climate change is not only a scientific and political concern but also a discursive phenomenon constructed through media language. This study examines how English-language newspapers from Pakistan and the United States linguistically frame responsibility for climate change, utilizing Hallidayian Systemic Functional Grammar, specifically the transitivity system, in conjunction with Entman's Framing Theory. A corpus of 50 articles—25 from each country, published from January 2024 to December 2024—was analyzed using both quantitative and qualitative methods. Corpus tools (AntConc, LancsBox, UAM CorpusTool) were employed to identify process types and participant roles that construct agency, blame, and action in climate discourse. Findings reveal that Pakistani newspapers emphasize material processes and human agency, often foregrounding global injustice and vulnerability. In contrast, U.S. newspapers favor nominalizations and passive constructions that frame climate action as a shared or institutional responsibility. This contrast reflects deeper geopolitical asymmetries: Pakistan's discourse appeals to moral and financial accountability, whereas U.S. media prioritize technocratic solutions and collective action. By integrating linguistic analysis with framing theory in a comparative context, the study contributes to critical discourse analysis and climate communication scholarship. It highlights how language encodes ideological positioning and power dynamics, ultimately shaping public understanding of environmental justice and global responsibility.

Keywords: Climate change discourse, media framing, systemic functional linguistics, transitivity analysis, climate responsibility, Pakistan, United States, environmental communication

1. Introduction

Climate change has evolved from a purely scientific phenomenon to a socially constructed crisis that is deeply embedded in political, economic, and cultural discourses. While the physical effects of climate change—rising temperatures, intensified weather events, and

ecosystem disruptions—are well-established in scientific literature, public perception and policy responses are largely shaped by how these phenomena are represented in news media. Media do not merely report climate change; they actively construct narratives through linguistic and rhetorical choices that reflect and reinforce national ideologies, geopolitical interests, and moral stances (Boykoff, 2008; Carvalho, 2007; Schäfer & Painter, 2020).

Central to this construction is the concept of responsibility—who is to blame for the crisis, who is suffering its consequences, and who should act. The way responsibility is framed linguistically has profound implications for public understanding, policy support, and global climate negotiations. Media framing, therefore, becomes a crucial lens through which we can understand how different countries narrate climate change in alignment with their respective global positions. In particular, countries in the Global South, such as Pakistan, often emphasize climate injustice and victimhood, whereas nations in the Global North, including the United States, tend to stress innovation, adaptation, and shared responsibility (Mahmood et al., 2021; Chen et al., 2023).

This study situates itself at the intersection of linguistics, media studies, and climate communication by examining how newspapers in Pakistan and the United States linguistically frame climate responsibility. Drawing on Hallidayian Systemic Functional Grammar (Halliday, 1994), particularly the transitivity system, which examines how verbs (processes) and nouns (participants) construct agency, and Framing Theory (Entman, 1993), this study investigates how linguistic structures reflect broader ideological and geopolitical perspectives. Specifically, the research focuses on the use of process types (material, mental, relational, etc.), the presence or absence of actors, and patterns of nominalization that either clarify or obscure responsibility for climate change.

The purpose of this study is to uncover discursive patterns that reveal how two nations—one historically responsible for emissions (the U.S.) and one highly vulnerable to climate impacts (Pakistan)—differ in their portrayal of responsibility. It addresses the following research questions:

1. How do Pakistani and American newspapers linguistically assign agency and responsibility for climate change?
2. What linguistic and thematic differences exist in the framing of climate responsibility?
3. Do newspapers emphasize global accountability, national policy failures, economic interests, or mitigation efforts?

The study is significant for several reasons. First, it contributes to the growing body of work on climate communication by offering a comparative, linguistically grounded analysis. Second, it addresses a research gap: while many studies examine thematic framing, few

explore the grammatical encoding of responsibility in climate discourse using Systemic Functional Linguistics (SFL). Third, by analyzing media texts from both the Global North and South, it provides insight into how language perpetuates or resists geopolitical power asymmetries in climate politics.

Through this inquiry, the study ultimately argues that the linguistic framing of climate change is not ideologically neutral but reflects contested narratives of blame, obligation, and justice. By examining how language constructs climate responsibility across various contexts, the research deepens our understanding of environmental discourse and the media's role in shaping collective responses to the climate crisis.

2. Literature Review and Theoretical Framework

Climate change is not merely a scientific or environmental issue—it is a highly contested social phenomenon shaped by communication. Media play a central role in shaping public understanding of climate risks, responsibilities, and responses (Boykoff, 2008; Carvalho, 2007). Through selective reporting, lexical choices, and narrative structures, the media construct versions of climate change that align with national ideologies, economic interests, and geopolitical realities.

The concept of framing is central to understanding these constructions. According to Entman (1993), framing involves selecting aspects of a perceived reality and making them more salient in a communicative text, thereby promoting a particular problem definition, causal interpretation, moral evaluation, and solution. In climate change discourse, framing determines how causes are attributed, who is held responsible, and what forms of action are legitimized (Nisbet, 2009).

Studies show that framing varies across national and ideological lines. In the Global North, especially in U.S. media, climate change is often framed through lenses of policy debate, economic impact, and technological optimism (Boykoff & Boykoff, 2004; Painter et al., 2016). In contrast, media in the Global South, such as Pakistan, emphasize vulnerability, injustice, and the need for international accountability (Mahmood et al., 2021; Khan et al., 2024). These divergent frames reflect deeper geopolitical asymmetries, wherein historically high-emitting countries shift their focus to future mitigation, while low-emission countries stress moral responsibility and reparative justice.

Beyond thematic framing, linguistic structures themselves play a decisive role in shaping perceptions of climate responsibility. Systemic Functional Linguistics (SFL), developed by Halliday (1994), offers a framework for analyzing how language encodes meaning through grammar. Central to this is the transitivity system, which describes how clauses represent experience through process types (e.g., material, mental, relational) and participants (e.g.,

actors, goals). In climate discourse, transitivity analysis reveals how agency is assigned or obscured. For instance, the clause “Corporations emit carbon dioxide” assigns clear agency via a material process. In contrast, “Carbon emissions are rising” uses passive voice and nominalization, obscuring the actor and diffusing responsibility (Fairclough, 1995; Stibbe, 2015).

Multiple studies have demonstrated the ideological implications of such grammatical choices. U.S. media, for example, often use nominalizations (“adaptation,” “mitigation”) and passive constructions to present climate change as a systemic issue, thereby avoiding direct blame (Aiello, 2022; Kramar, 2023). In contrast, media from vulnerable nations frequently employ active voice and material processes to highlight causal agency and stress external responsibility (Fløttum & Gjerstad, 2017; Nazeer et al., 2024).

Thus, linguistic structures—far from being neutral—serve to legitimize particular worldviews. They influence whether climate change is portrayed as a shared challenge, a historical injustice, or a moral imperative. In doing so, language becomes a powerful vehicle for shaping public opinion and political narratives. This study bridges SFL's transitivity system with Entman's Framing Theory to explore how climate responsibility is constructed at both grammatical and thematic levels. While framing theory focuses on what is emphasized (problem, cause, remedy), SFL investigates how it is linguistically realized (e.g., through verbs, nouns, and clause structures).

The integration of these frameworks allows for a multi-layered analysis:

- Framing theory identifies national discursive priorities: whether the focus is on justice, innovation, blame, or cooperation.
- SFL reveals how these priorities are enacted through language: who acts, who is acted upon, and whether responsibility is individualized, collectivized, or abstracted.

For example, a Pakistani headline such as “*Global North must pay for climate destruction*” frames climate change as a moral issue (Entman) and uses a material process (“must pay”) that assigns clear agency (SFL). In contrast, a U.S. headline like “*New policies aim to reduce emissions*” frames the issue in technocratic terms and uses nominalization (“policies”) to shift focus from actors to institutions.

This combined approach enables the study to move beyond thematic content and uncover the underlying ideologies embedded in grammar, providing a richer understanding of how nations position themselves within global climate discourse.

While considerable scholarship exists on climate change communication and media framing, few studies apply transitivity analysis in a comparative, cross-national context, especially between countries of starkly unequal climate vulnerability. Most research is either focused on the Global North or relies on thematic content analysis without attention to grammatical structures.

This study addresses that gap by:

- Applying SFL-based transitivity analysis to newspaper articles from two contrasting geopolitical contexts: Pakistan (climate-vulnerable, low-emitter) and the United States (historical high-emitter).
- Combining this analysis with Framing Theory to interpret how different nations use language to construct responsibility, agency, and solutions.
- Offering insights into how linguistic framing reflects and reproduces geopolitical inequalities in climate discourse.

By examining how newspapers from these two countries linguistically frame climate responsibility, the study contributes to critical discourse analysis, climate communication, and environmental media studies. It highlights how language not only reflects ideological positions but also helps to shape public consciousness about one of the most pressing issues of our time.

3. Methodology

This study adopts a mixed-methods research design that integrates quantitative corpus linguistics with qualitative discourse analysis. Grounded in Systemic Functional Linguistics (SFL) and informed by Framing Theory, the methodology is designed to uncover how climate responsibility is linguistically constructed in English-language newspapers from Pakistan and the United States.

The methodological framework draws upon transitivity analysis, a key component of Systemic Functional Linguistics (SFL), to investigate the linguistic encoding of agency and responsibility. This was complemented by thematic interpretation guided by Entman's (1993) framing model. The design enables both the identification of frequency-based linguistic patterns and the in-depth analysis of how these patterns function ideologically.

The research addresses the following core questions:

1. How do Pakistani and American newspapers linguistically assign agency and responsibility for climate change?

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2. What linguistic and thematic differences exist in the framing of climate responsibility?
 3. Do newspapers emphasize global accountability, national policy failures, economic interests, or mitigation efforts?

3.1 Corpus Description

The corpus consists of 50 English-language news articles published between January and December 2024, with 25 articles each from Pakistan and the United States. Articles were purposively sampled based on the presence of the keyword “*climate change*” in the title, ensuring thematic relevance.

Dawn, The Express Tribune, The News International, Daily Times, The Nation. U.S. Newspapers: CNN, AP News, Fox News, NBC News, CBS News. These newspapers were selected for their national prominence and broad readership, and all are included in the Scimago Media Rankings.

To support corpus-based analysis, the following digital tools were employed:

- AntConc 4.3.1: For generating word frequency lists and keyword-in-context (KWIC) concordance lines.
- LancsBox 6.0: For tagging and categorizing process types and participant roles.
- UAM CorpusTool 6: For annotation and qualitative transitivity analysis.
- Microsoft Excel: For organizing frequency data and supporting thematic classification.

These tools enabled both macro-level lexical analysis and micro-level syntactic investigation.

3.2 Research Design

The analytical process was conducted in two major phases:

3.2.1. Quantitative Corpus Analysis

- A frequency-based keyword list was generated using AntConc for each national corpus.
- Relevant lexical items linked to climate responsibility (e.g., *emit*, *cause*, *reduce*, *adaptation*, *policy*) were extracted.
- Using LancsBox, process types were identified and classified into material, mental, relational, verbal, and behavioral processes.

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- Nominalizations and passive constructions were also identified to assess the degree of agency diffusion.

3.2.2. Qualitative Discourse Analysis

- KWIC lines were used to analyze selected keywords in their immediate textual context.
- Halliday's transitivity model was applied to each clause to determine:
 - Process type (e.g., material, mental)
 - Participant roles (actor, goal, beneficiary)
 - Voice (active vs. passive)
 - Use of nominalization

The final thematic coding included four primary categories:

- Global accountability
- National policy failures
- Economic interests
- Mitigation and adaptation efforts

These categories aligned directly with the research questions and provided a structured interpretive lens. Several delimitations were imposed to ensure focus and analytical depth:

- Only English-language articles were analyzed, excluding regional languages and non-verbal media (e.g., TV, visuals).
- The corpus is limited to print and digital newspapers, excluding social media or government press releases.
- The transitivity system was the primary grammatical focus; other aspects of SFL (e.g., modality, appraisal) were beyond the study's scope.
- Although Framing Theory was employed, a complete frame-mapping analysis was not conducted; framing served to guide the interpretation of linguistic patterns.

4. Findings and Discussion

4.1. Research Question 1:

This section examines the grammatical construction of agency and responsibility through a transitivity analysis of newspaper articles from Pakistan and the United States. The findings reveal clear contrasts in how each country's media linguistically frames responsibility, primarily through process types, participant roles, voice, and nominalization.

In Pakistani newspapers, material processes dominate, signalling a strong tendency to assign clear causal responsibility to human agents. These processes often involve explicit actors (e.g., industries, developed nations, government) and foreground climate-related actions (e.g., emit, cause, exacerbate, lead to). This finding aligns with previous studies, which have shown that Pakistani newspapers frequently employ explicit causal verbs and human actors to construct responsibility and highlight geopolitical inequities (Mahmood et al., 2021; Khan et al., 2024).

| Text | Actor | Process | Goal | Interpretation | |
|--|-------------------|-----------------------------|-------------------------------------|---|---|
| Text 1: “Human activities have significantly contributed to the current crisis.” | Human activities | Material (have contributed) | The current crisis | Here, the clause makes the actor explicit and the action accountable. There is no ambiguity regarding who is responsible. | |
| Text 2: “The developed nations should honour their financial pledges...” | Developed nations | Material (should honour) | Financial pledges | This construction combines direct agency with a moral imperative, reinforcing the theme of global accountability. | |
| Text 3: “The global north is responsible for historical emissions...” | The global north | | is responsible (relational process) | historical emissions | Such relational clauses align with the climate justice frame, where Pakistan is positioned as a victim of |

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|---|-----------------------|--------------------|------------------|--|
| | | | | external emissions. |
| Text 4: “Pakistan's industries release large quantities of greenhouse gases.” | Pakistan's industries | Material (release) | Greenhouse gases | Thus, Pakistani media employ a dual attribution approach, blaming developed countries for historical emissions and critiquing national inaction on mitigation and policy reform. |

CLAUSE-TYPE



Figure 4.1: Pakistani Process Types Pie Chart

In contrast, U.S. newspapers tend to construct climate agency using a mix of processes, often framed in ways that soften or diffuse responsibility. This pattern is consistent with the work of Aiello (2022) and Kramar (2023), who demonstrate that nominalizations such as implementation and transition abstract human agency and promote a policy-centered framing of climate discourse in U.S. media.

| Text | Actor | Process | Goal | Interpretation |
|---|-------------------------------------|--------------------------|-------------------------|--|
| Text 1: "The U.S. government helped millions of people adapt to climate change." | U.S. government | Material (helped) | People adapt | Although this clause assigns agency, it emphasizes positive action rather than blame. |
| Text 2: "Climate change has made hurricanes more intense." | Climate change (metaphorical agent) | Material (has made) | Hurricanes more intense | This construction anthropomorphizes climate change, shifting agency away from human actions toward an abstract phenomenon, effectively naturalizing the problem. |
| Text 3: "The U.S. has developed a comprehensive plan to mitigate climate effects." | The U.S. | Material (has developed) | Plan (nominalization) | The focus shifts to the plan, not the actors responsible for emissions or delays. |
| Text 4: "There is a growing crisis of climate- | Implicit/absent | Existential (there is) | Crisis | Here, both agency and cause are obscured. This tendency to |

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|------------------------|--|--|--|--|
| induced displacement.” | | | | background the actor, especially in clauses about harm, was more prevalent in U.S. discourse |
|------------------------|--|--|--|--|

CLAUSE-TYPE

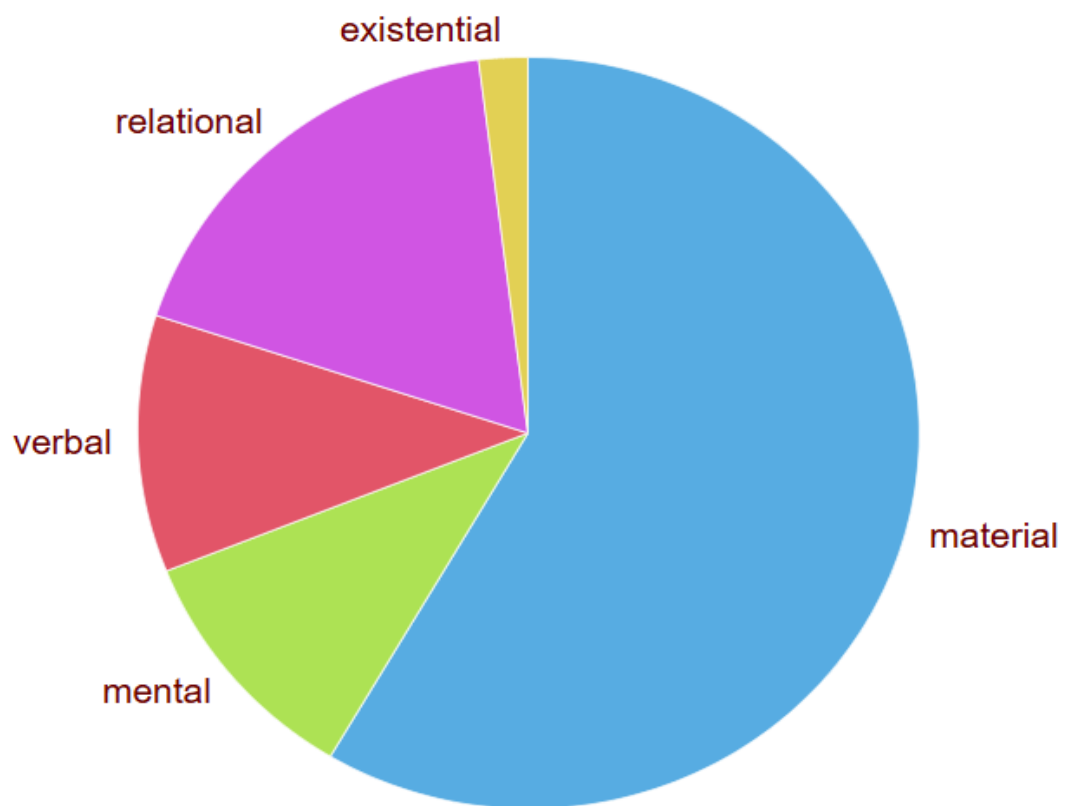


Figure 4.2: USA Process Types Pie Chart

Table 4.1.1
 Comparative Summary

| Feature | Pakistani Newspapers | U.S. Newspapers |
|------------------------------|------------------------------------|--|
| Dominant Process Type | Material (cause, contribute, emit) | Material + Mental + Verbal (help, plan, believe) |

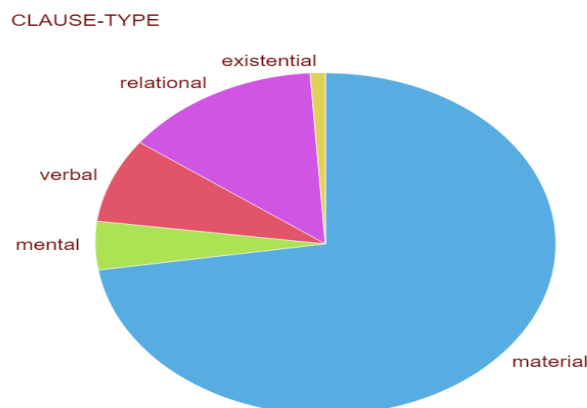
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|-----------------------|---|---|
| Agency Clarity | High: actors often explicit | Mixed: actors often abstracted or metaphorical |
| Voice | Active | Mix of active/passive |
| Nominalization | Used to frame obligations (mitigation, reduction) | Used to shift focus to systems (policy, transition) |
| Framing Focus | Moral blame, climate injustice | Institutional response, collaborative action |

Pakistani media use active, explicit structures to assign blame and call for action, both globally and nationally. In contrast, U.S. media often generalize responsibility through the use of abstract nouns and passive constructions, emphasizing policy solutions over culpability. These linguistic choices are not neutral. Pakistani discourse embodies a climate justice ideology, underscoring the asymmetry between emissions and vulnerability, and emphasizing the importance of international obligations. The grammar reinforces these claims through frequent use of agents and high-modality verbs (must, should).

U.S. discourse encodes a technocratic and managerial ideology. Responsibility is collective and future-oriented, often expressed through abstract goals and institutional plans. This reflects a policy-first, blame-diffused framing, consistent with the U.S.'s geopolitical interest in avoiding historical liability.

Pakistani newspapers assign direct, often moral agency through active material processes. U.S. newspapers tend to diffuse agency, use nominalizations, and focus on institutional action over individual or national blame. These patterns reflect broader geopolitical narratives: justice versus pragmatism, blame versus responsibility, and vulnerability versus leadership.

4.2. Research Question 2: This section examines how Pakistani and U.S. newspapers frame



climate responsibility in terms of both theme and language, revealing underlying ideological differences. The analysis identifies four dominant frames—climate injustice, vulnerability,

economic impact, and collective action—but each national media corpus foregrounds different ones, realized through distinct language choices.

Pakistani newspapers primarily frame climate responsibility through the lenses of vulnerability, climate injustice, and moral obligation. These frames are linguistically constructed using material processes, high-modality verbs, and relational attributions. The most prominent theme in Pakistani articles is national vulnerability, particularly Pakistan's disproportionate exposure to climate-induced disasters despite its minimal emissions.

Text 1: “Pakistan faces the brunt of a crisis it barely contributed to.”

- **Process:** Material (faces)
- **Theme:** Victimization
- **Frame:** Moral appeal + injustice

The actor is Pakistan, positioned as a passive sufferer. The adverbial “barely contributed” amplifies the frame of unjust harm. Developed nations are framed as historical polluters with an obligation to support vulnerable countries.

Text 2: “Developed countries must honour their financial pledges to vulnerable nations.”

- **Process:** Material (must honour)
- **Modality:** Obligation
- **Frame:** Global justice

The verb must adds force, while “honour” invokes moral accountability. Such clauses rely heavily on relational processes (is responsible for, must compensate) that attribute blame and duty. While global injustice is emphasized, a frame of national policy failure is also presented, framed through necessity and deficiency.

Text 3: “The government must implement climate adaptation strategies.”

- **Process:** Material (implement)
- **Modality:** High (must)
- **Frame:** Urgent reform

These constructions demonstrate internal reflection, reinforcing the dual narrative of global blame and national responsibility. This supports findings by Fløttum and Gjerstad (2017), who note that such structures are often used in the Global South to highlight vulnerability and seek reparative justice.

U.S. media frames climate responsibility in terms of policy innovation, shared global action, and technological solutions, constructed through nominalizations, verbal processes, and future-oriented language. Responsibility is linguistically distributed across multiple actors, reducing the focus on direct blame.

Text 1: “Global institutions call for urgent climate financing.”

- **Process:** Verbal (call for)
- **Frame:** Cooperative action

Here, no one is blamed; the discourse emphasizes collaboration and forward-looking engagement. The emphasis is on government action, funding, and innovation rather than past emissions.

Text 2: “The U.S. is investing in green technologies to reduce emissions.”

- **Process:** Material (investing)
- **Participant:** U.S. government
- **Frame:** Progress and mitigation

These sentences use institutional actors and developmental lexis (investing, planning, transitioning), reflecting a managerial ideology. U.S. media are increasingly highlighting business-sector accountability, but frame it as an evolving responsibility rather than past wrongdoing.

Text 3: “Corporations must take responsibility for the emissions they generate.”

- **Process:** Material (must take)
- **Modality:** Moral urging
- **Frame:** Modern corporate ethics

This frame aligns with public-private partnerships and voluntary accountability, avoiding direct regulatory criticism. These results align with those of Painter et al. (2016) and Boykoff and Boykoff (2004), who identify a technocratic and pragmatic discourse in American climate media, focusing on incremental policy responses.

Table 4.2.1
Comparative Summary

| Framing Element | Pakistan | United States |
|------------------------|-----------------|----------------------|
| | | |

| | | |
|-----------------------------|---|---|
| Dominant Themes | Climate injustice, vulnerability, national failure | Innovation, cooperation, corporate responsibility |
| Agency | Direct and explicit (developed nations, industries) | Diffused or collective (institutions, corporations, “we”) |
| Modality | Strong obligation (must, should) | Moderate to soft obligation (plan to, aim to) |
| Voice | Predominantly active | Mixed (active + passive + nominalized) |
| Actor Types | Human actors, governments, Global North | Institutions, corporations, systems |
| Key Lexical Patterns | cause, emit, blame, vulnerable, justice | invest, adapt, transition, mobilize, innovate |
| Temporal Focus | Past and present (blame and crisis) | Present and future (solutions and progress) |

Pakistani newspapers frame climate responsibility through moral urgency, blame attribution, and vulnerability, supported by explicit agency and high-modality constructions. U.S. newspapers emphasize policy and innovation, framing responsibility as shared, abstract, and solution-focused. These distinctions highlight competing discursive logics rooted in differing geopolitical and economic positions.

4.3. Research Question 3:

This section examines how Pakistani and U.S. newspapers prioritize specific themes—global accountability, national policy failures, economic interests, and mitigation efforts—and how these emphases reflect distinct socio-political contexts. Each theme is realized through distinct lexical items, transitivity structures, and evaluative stances. Pakistani news discourse emphasizes global accountability most prominently, followed by reflections on national policy failures and the economic consequences of climate inaction. Mitigation efforts, although present, are often reliant on external support and funding. Developed nations are consistently framed as historically responsible for the climate crisis. The discourse draws heavily on relational processes (e.g., is responsible for), material verbs (e.g., caused, emit, failed to deliver), and high-modality markers (e.g., must, should).

Text 1: “The global North is responsible for the historical emissions that have contributed to Pakistan’s suffering.”

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- **Process:** Relational (is responsible for)
 - **Frame:** Moral blame + historical causality

This direct attribution underlines the justice-oriented framing that dominates Pakistani media. While global injustice is highlighted, self-critical narratives about domestic governance also appear. These are framed through material processes (e.g., failed to implement, neglects, lacks) and often express unfulfilled obligations.

Text 2: “Pakistan’s climate policy has failed to address the urgent needs of vulnerable communities.”

- **Actor:** Pakistan’s climate policy
- **Process:** Material (has failed)
- **Goal:** Urgent needs
- **Frame:** Internal accountability

This balance between external blame and internal reform contributes to a narrative of dual responsibility. Climate change is framed as a direct threat to Pakistan’s agricultural economy, water security, and national infrastructure. The lexicon includes damage-oriented nouns (losses, burden, collapse) and material processes (affect, destroy, threaten).

Text 3: “The country faces billions in economic losses due to climate-induced floods.”

- **Process:** Material (faces)
- **Goal:** Economic losses
- **Frame:** Structural vulnerability

This economic framing appeals to international donors and supports Pakistan’s call for climate finance. Mitigation is often associated with external aid, rather than self-sufficiency. The verbs used (e.g., needs, requires, seeks) portray Pakistan as a resource-deficient country.

Text 4: “Pakistan needs \$6.8 trillion to effectively mitigate climate damage.”

- **Process:** Material (needs)
- **Frame:** Dependent mitigation

Thus, even when local efforts are mentioned (e.g., reforestation, green energy), they are framed within the context of global cooperation and funding gaps. This mirrors observations made by Carvalho (2007) and Schäfer et al. (2014), who argue that media in vulnerable nations tend to foreground international injustice and call for compensation.

U.S. newspapers foreground mitigation efforts and economic interests, with less emphasis on historical blame or national policy failure. The overall framing is forward-looking and technocratic. U.S. media construct mitigation as a policy-driven and market-led solution, emphasizing institutional actors and action-oriented verbs.

Text 1: “The U.S. government is investing \$150 billion in climate adaptation programs.”

- **Process:** Material (is investing)
- **Actor:** U.S. government
- **Goal:** Climate programs
- **Frame:** State-led solution

The lexical field encompasses investment, innovation, transition, and carbon pricing, reflecting a policy of optimism. Climate change is often framed as both a financial risk and an economic opportunity, particularly in the context of green technologies and job creation.

Text 2: “Climate-smart agriculture could open new markets while reducing emissions.”

- **Process:** Material (open, reduce)
- **Frame:** Market-based opportunity

This framing uses positive modal structures (e.g., can boost, will drive growth) and reflects a capitalist logic of sustainability. While individual or national blame is rare, corporations are sometimes portrayed as responsible actors, albeit in a reform-oriented rather than accusatory manner.

Text 3: “Corporations must take responsibility for their emissions and invest in greener practices.”

- **Process:** Material (must take, invest)
- **Frame:** Ethical obligation without punitive tone

Responsibility is framed as voluntary and progressive, aligning with ESG discourse (environmental, social, governance). Unlike Pakistani newspapers, U.S. media rarely highlight national policy failures. Criticism, when present, is diffused through passive voice or framed as a legacy issue.

Text 4: “Earlier administrations delayed climate action, but new policies aim to reverse that trend.”

- **Voice:** Passive

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- **Frame:** Institutional course correction

As noted by Chen et al. (2023) and Stibbe (2015), this depersonalized approach reflects a broader ideological stance that reframes climate discourse around leadership rather than liability.

Table 4.3.1

Comparative Summary

| Theme | Pakistan | United States |
|---------------------------------|--|---|
| Global Accountability | Dominant; historical emissions blamed explicitly | Rare; responsibility is generalized or diffused |
| National Policy Failures | Moderately frequent; internal critique present | Infrequent; often backgrounded or historicized |
| Economic Interests | Focused on losses and vulnerabilities | Framed as opportunity and green investment |
| Mitigation Efforts | Urgent but externally dependent | Proactive, institutional, and tech-centred |

- **Pakistan:** The themes coalesce around moral and material vulnerability. The country is positioned as a victim in need of redress and capacity building. Linguistic constructions emphasize urgency, blame, and financial need.
- **United States:** Themes reflect governance, progress, and leadership. Responsibility is depersonalized and oriented toward innovation, minimizing historical culpability.

These contrasting thematic emphases reflect different national agendas. Pakistan employs discourse to negotiate reparative justice, while the U.S. utilizes it to assert agency and control over future solutions. Pakistani newspapers emphasize global accountability and economic vulnerability, while the U.S. emphasizes mitigation and innovation. National policy failure is acknowledged more frequently in the Pakistani media. U.S. discourse positions the nation as a leader, not a historical energy emitter. Linguistic framing across both corpora reflects broader power dynamics in international climate politics.

5. Conclusion

This study examined how the responsibility for climate change is linguistically framed in English-language newspapers from Pakistan and the United States, utilizing Halliday's transitivity system and Entman's framing theory. Through a comparative analysis of 50 news

articles—25 from each country—this research uncovered significant linguistic and thematic differences rooted in each nation’s geopolitical positioning, economic status, and media ideology.

Pakistani newspapers frame climate change as a moral and existential crisis, characterized by direct attributions of blame to developed nations and strong calls for climate justice. Material processes and high-modality verbs foreground human agency and ethical accountability. Simultaneously, internal discourse reflects self-critique, acknowledging national policy failures and institutional deficiencies. The economic burden of climate change on Pakistan, particularly in the agricultural and infrastructure sectors, is a central aspect of the discourse, accompanied by appeals for global climate finance. Although mitigation efforts are discussed, they are framed as contingent on external support, revealing a discourse of dependency shaped by structural inequality.

In contrast, U.S. newspapers frame climate change as a technocratic challenge that can be addressed through innovation, policy reform, and institutional collaboration. While acknowledging the need for action, they tend to diffuse responsibility through the use of passive constructions, nominalizations, and collective framing. Agency is assigned to institutions, markets, and “we”-based collectives rather than historical emitters. Climate action is presented as a forward-looking investment opportunity, with mitigation framed in terms of progress rather than redress. National policy failures are rarely emphasized, and when mentioned, they are historicized and softened through depersonalized language.

These findings reveal the ideological work of language in climate discourse. Grammatical choices—such as voice, nominalization, and participant selection—are not neutral; they shape the way climate change is understood, who is held accountable, and what forms of action are legitimized. Pakistani media align with a discourse of climate justice, while U.S. media align with a discourse of climate governance. Both reflect their respective national interests: one seeks recognition, compensation, and reform; the other emphasizes leadership, innovation, and global coordination. This study emphasizes the importance of readers critically engaging with media texts, not just for what they convey, but also for how they convey it. Understanding linguistic framing can empower the public to identify underlying ideologies and power dynamics in climate communication. The contrast in framing between a high-emitting nation (the United States) and a climate-vulnerable nation (Pakistan) mirrors the dynamics of international climate negotiations. Policymakers and diplomats must recognize that discourse shapes not only perception but also political positioning and claims to justice or leadership. This study demonstrates the value of combining SFL with framing theory in a comparative design. Future research can build on this model to explore climate discourse across additional contexts, particularly from underrepresented nations in the Global South. For climate justice advocates, this research underscores the importance of grammatical

agency in advocacy materials. Messaging that foregrounds specific actors and uses active voice can more effectively assign accountability and generate public engagement. While this study offers a rigorous and comparative analysis, it is limited to English-language print media and a one-year timeframe. Future research could expand the scope by including visual or multimodal content (e.g., images, headlines, infographics), analysing longitudinal trends to assess shifts in framing over time, and investigating audience reception and interpretation of framed messages. This study demonstrates that language is a crucial site of climate politics. Through grammar and discourse, nations construct their identities in the climate narrative—as victims, leaders, innovators, or reformers. Understanding these narratives is essential for shaping a more equitable and informed global response to the climate crisis.

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