
Linguistic Representation of Climate Change in National and International Newspaper

Zunaib Sadaf¹, Maheen Bibi², Anees Ur Rehman³

¹ COMSATS University Islamabad. (**Corresponding Author**): zunaibsadaf@gmail.com

² COMSATS University Islamabad.

³ COMSATS University Islamabad.

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Abstract

This paper examines the linguistic manifestations of the issue of climate change by looking at its coverage in both national (Dawn, The Express Tribune) and international (The Guardian, Reuters) newspapers in a corpus-based ecolinguistic approach. Based on the Systemic Functional Grammar (Halliday, 2004) and the narratives explored in (Stibbe, 2015) in the book known as *The Stories We Live By*, the study examines the idea of disclosing underlying ideologies towards the environment in the use of grammatical and lexical patterns. Analysis through the AntConc software at the nominalization and passive constructions, collocational and frequency analysis using key climate words was conducted. Results show the national corpus is inclined towards the use of nominalization (adaptation, pollution, degradation, and development) and passive voice constructions that hide human agency and responsibility. The language pattern would build an anthropocentric and bureaucratic mode of discourse, shaping the problem of environmental degradation as a technical or institutional problem, instead of a moral crisis. Conversely, it is possible to note that in the international corpus, we have nominalizations, which include emissions, cooperation, litigation, and action that pre-empt global responsibility and ethical obligation. These options reflect ecocentric decision-making, focusing on collective will and the moral action of climate problems. The paper using the prism of SFG and ecolinguistic indicates that language not only mirrors but also solidifies ecological world views. The results indicate the influence of seemingly neutral grammatical forms regarding the perceptions of the population regarding environmental responsibility. It is concluded that sustainable discourse can be encouraged through reconfiguring the language of the media in a way that focuses on existing agencies, empathy, and ethical responsibility towards the planet. The contribution that the study makes to the area of critical ecolinguistic is in highlighting the way in which grammatical analysis of corpora will reveal the ideological background of climate communication. Future researchers can conduct diachronic study.

Keywords: Systemic Functional Grammar (SFG), Ecolinguistics, Climate Discourse, Nominalization, Passive Voice, Media Ideology, Environmental Responsibility.

1. Introduction

Climate change, climate crises, global warming and climate breakdowns have become universal issues. These are considered as one of the most debated issues of the 21st century. Media coverage plays a central role in constructing and framing public understanding of this particular phenomenon for the purpose of awareness. The way green press and journalists choose linguistic items around “climate change” often decides whether viewers perceive it as a crisis, controversy, opportunity, manageable challenge or moral responsibility. Language goes beyond communication. It discusses morals, politics, and ideas. (Boykoff & Boykoff, 2007;

Carvalho, 2007) found that journalists' writing and editing may influence climate change education. News reports utilize words, photos, and frames to help readers determine who is to blame, what must be done, and how awful things are. Ecolinguistics suggests that the "stories we live by" contain enduring linguistic patterns, according to Stibbe (2021). These tendencies might be healthy for the environment or promote terrible human ideals. Research on climate debate terms shows how language may aid or damage eco-friendly people. Climate change is a hot topic in Pakistan, yet the environment is vulnerable and pollution is minimal. Dawn and the Express Tribune cover problems, adaptation, and government action. People usually turn to other countries for support when things go wrong at home. People throughout are striving to protect the environment and live in a harsh world. Foreign news agencies like The Guardian and Reuters cover environmental concerns thoroughly. Global governance, environmental reduction, and technological improvement are their key areas of focus. This is a good place to start because it demonstrates that local failure and world duty are not the same thing.

This study implements corpus-based linguistic approach to observe how the term climate change is constructed and framed through lexical and collocational patterns in national and international newspapers. The build corpus consists of full-length English-language news articles published between October 2024 and October 2025 in Dawn, The Express Tribune, The Guardian, and Reuters. The research analyzes word frequencies, collocates, N-Gram for conceptual framing and concordance lines surrounding the key term climate change for understanding whether the journalism is responsible or not. Using latest version of Antconc, the corpus tool these linguistic patterns are examined to evaluate underlying meanings, semantic prosodies, and ideological orientations embedded in newspaper discourse. Through comparative analysis of national and international sources, the study aims to reveal how linguistic framing reflects differences in cultural values, ecological awareness and journalistic ideologies. This methodological choice integrates quantitative evidence through word frequency and collocates and with qualitative interpretation through KWIC. Corpus linguistics give the tools to determine statistically significant patterns in large sets of data which is difficult to handle manually, while Eco linguistics (Stibbe's, 2015) stories we live by provide theoretical foundation to interpret how these patterns shape environmental worldviews. It allows us to understand the relationship between humans and environment through language. Furthermore, applying Systemic Functional Grammar (Halliday's, 2004) helps in examination of how agency and responsibility are encoded within climate discourse or reporting—who is actor, who suffers, and who is represented as open to change.

Corpus-based linguistic approach is opted to observe how "climate change" is framed in environmental journalism through the collocational patterns. This research scrutinizes word frequencies, collocates, and key words in context (concordance lines) of news articles published by national and international media. By comparative analysis of lexical patterns, the research aims to reveal emotional tones (ethos), and assessment prosodies associated with climate discourse in green press. Ultimately, the research will provide linguistic insights into how newspaper writers represent political and scientific knowledge regarding ecological dilemmas. Climate change is not just a scientific issue to be discussed; media discourse plays significant role in shaping public understanding of environmental issues. language used to describe "climate change" varies across different media outlets, reflecting differing ideological and political agendas, and cultural perspectives. Previously, environmental news articles have examined the frequency of climate-related terms. Systematic, corpus-based analysis focusing on the collocational patterns and lexical items that surround the phrase "climate change" are still untouched. These collocates uncover how the phenomenon is framed and influence perception. The problem, hence, lies in lack of empirical detailing of how such lexical choices contribute to the framing of meaning and hidden ideology in environmental journalism. This understanding will help in assessing whether either language promotes public awareness or treats climate change unethically.

This research addresses that untouched area by using latest version AntConc to conduct corpus-based collocation analysis, disclosing understanding linguistics meanings and ideology embedded in environmental

press.

1.1 Research Questions

1. What are the most dominant lexical collocates linked with the word “climate change” in green press and how do they participate in the construction of meaning?
2. How do the semantic prosodies and collocation patterns surrounding “climate change” differ across international and national news agencies?
3. Based on the results, what recommendations can be proposed to encourage more balanced media representation of climate Change?

2. Literature Review

2.1 Climate Change and Media Representation

Language shapes both scientific and social reality of climate change. The media plays key role in transforming scientific data into social narrative and in shaping public understanding (Boykoff & Boykoff, 2007; Carvalho, 2007). Representation of climate change in media has become crucial for environmental communication studies. According to Boykoff (2011), notion of balance as bias explains the pursuit of neutrality can create misleading equivalence between scientific consensus and climate skepticism. This tendency can diminish perceived urgency for climate action.

According to Carvalho (2007) and Schafer and Schlitching (2014), cultural, political and institutional contexts shape the portrayal of climate change. In wealthiest countries, climate change is framed as political or economic issue while in less developed nation its depiction is made through vulnerability, adaptation and natural disasters (Takahashi & Meisner, 2013). Abbas and Shehzad (2020) examined Pakistani newspapers, Dawn and The Express Tribune to report crisis like droughts, floods or extreme weather events but they paid little attention to global policy, so lacking preventive strategies. Dryzek (2013) suggests that framing patterns contribute to moral geography of environmental discourse. Moreover, recent studies including Yus (2023), and Chen (2022) emphasized that linguistic framing within climate narratives play important role in expressing both ideological and ethical perspective on environmental responsibility. Therefore, examining semantic and collocational patterns of term climate change can uncover the moral, political and ecological meanings conveyed through language.

2.2 Ecolinguistics and “Stories We Live By”

Ecolinguistic has appeared as a strong multidisciplinary framework that connects language, environmental issues and ideology. Deep-rooted in the Haugen’s Work (1972), followed by scholars like Fill and Mühlhäusler (2001), and more recently extended by Stibbe (2015, 2021), the field of ecolinguistic examines how the language systems shape human interaction with the natural world. “Stories We Live By”, main proponent Aran Stibbe highlights how fundamental narratives are carried by everyday language. News distributed in environmental discourse most of the times effect our actions and values towards the environment. We live by different stories, and these stories are embedded in the grammatical and lexical choices of language. It shapes the Ideological framework of how societies acknowledge and participate in environmental issues.

Stibbe (2015) distinguishes between beneficial and destructive narratives, explaining that beneficial stories encourage sustainability, empathy and mutual dependence while destructive stories sustain ideas of exploitation and human supremacy. Anthropocentric narrative view nature as resource focusing on control and extraction while portraying nature as a community of life. Ecolinguistic analysis aims to expose harmful discourses and also reshape language to promote ecological balance.

Building on Stibbe’s ideas, researchers have applied his framework to examine media and policy language. Alexander and Stibbe (2014) reveal that linguistic erasure is used to mask environmental degradation diminishing non-human perspective. Similarly, more studies show that corporate sustainability reports

frequently use “green” vocabulary to fabricate sense of environmental responsibility. Eco linguistics serve as tool to uncover underlying ideologies and to encourage development of language that support ecological sustainability.

2.3 Ecolinguistics Framing and Ideological Construction of reality

The idea of framing originates in sociology (Goffman, 1974) and later it is used in media studies by few theorists to reveal media construction of reality (Entman, 1993; Lakoff, 2010), so, in this way this concept offers a complementary lens for ecolinguistics inquiry. Frames embedded in different linguistic structures help to identify how reality is constructed linguistically highlighting certain aspects of an issue while obscuring or backgrounding others. In ecolinguistic terms, framing considers how language positions humans relative to the natural environment by showing the relationship between both, influencing conceptual perceptions of agency, responsibility, and value (Harré et al., 1999; Chen, 2022).

For instance, headlines such as “Nations pledge to combat emissions” create an agentive frame emphasizing ethical action and ethical responsibility, whereas “Millions killed by floods” construct humans as most suffering victims and nature as the violator entity aggressor. These subtle linguistic shifts have moral and ethical significance that they can either inspire collective responsibility or reinforce vulnerability or fatalism. Lakoff (2010) emphasizes that metaphors and frames are not only persuasive and rhetorical devices but they are cognitive structures (conceptual frameworks) that direct moral reasoning. When applied to environmental journalism, this insight uncovers how language sustains particular ideological worldviews often by emphasizing human-centered (anthropocentric) over nature-centered (ecocentric) ethics.

Feng and Li (2023) discovered that global green media increasingly frame climate change as a “climate crises” and “moral emergency,” indicating a discursive shift from scientific explanation to ethical evaluation. Yet, Media produced at national level often lag behind in implementing such ethical frames due to political or economic restrictions. Hence, ecolinguistic framing analysis is not just about linguistic description but also ideological diagnosis. Stibbe framing exposes the cultural assumptions that reinforce environmental communication.

2.4 Systemic Functional Grammar and How It Affects the Environment

Systemic Functional Grammar (SFG), Halliday provided an influential work in 1978 and 1990, It gives us a lot of information about how language is used as a tool to serve different functions and affects our lives. It gives a foundation to observe how we connect with others, and how meanings in texts fit together. He gives three main functions of SFG are ideational, interpersonal, and textual. Together, they show how meanings are made and shared in the world internationally.

The ideational metafunction, especially the transitivity system. It shows how grammar build power and responsibility in any text. SFG reveals the phenomenon of verb shared between things and people (agents, goals, and circumstances). Ecolinguistics this point of view, this kind of study shows what people are doing in environmental stories. "Rivers are polluted" takes away people's power and involvement, makes it seem like the pollution just happens by normalizing the phenomenon through hiding the process. While "Industries pollute rivers" gives people the power to do something. According to Goatly (2000) and Fill (2022), these choices in grammar show deep ecological beliefs by showing whether people see themselves as protectors or exploiters of the natural environment.

SFL looks at how people feel and what they think in human relationships metafunction. This shows that they use moderation and evaluation to show how they really feel about environmental problems, whether they are sure, emotional, or uncertain. Within the textual metafunction, the organization of material is looked at, and the relationships between different ideas are shown. People who study SFG and ecolinguistics together can do more than just look at words. Nominalization, euphemism and active/ passive voices reveal the information about the agent presence responsibility assignment. They might also think about how grammar affects the

world. We can use this method to see how the arrangement of words and phrases, along with the roles of choice, duty, and feeling, can support either an anthropocentric or an ecocentric view of the world.

2.5 Research gap and rationale

Existing media discourse on climate change is site of ideological controversy. Nevertheless, some studies integrate Halliday’s SFG, Stibbe’s ecolinguistic narratives, and corpus-based analysis within a unified research design. Most research papers use either purely qualitative analysis, focusing mainly on critical discourse analysis, or purely quantitative, focusing more on just frequency without environmental interpretation. In addition, very little attention has been paid to other media context except British like South Asian news are unstudied, where linguistic framing and Conceptual structure link up with postcolonial identity due to colonization, political vulnerability, and environmental instability.

This study tackles these gaps by applying a comparative corpus-based ecolinguistic approach. It scrutinizes collocational and linguistics patterns of the phrase “climate change” in top South Asian national (Dawn, The Express Tribune) and international (The Guardian, Reuters) newspapers articles in between October 2024 – October 2025, 1-year data. Using latest version AntConc 4.0, the study highlights dominant collocates, analyzes their keywords in context, and interprets data through Stibbe’s Stories We Live By, ecolinguistic framing theory (2015), and Halliday’s systemic functional grammar (1960). This research design uncovers many aspects of the environmental journalism mainly focusing on whether media language remains anthropocentric or fosters ecocentric view.

3. Data Analysis and Discussion

The scientific evidence is searched through word frequency which helps both to reveal most frequent words and to reveal them. 15 most frequent words of both national and international newspaper’s editorial are searched. The list of word frequency is as below.

Sr No	Type	Rank	Frequency
1.	climate	7	260
2.	change	16	105
3.	global	25	68
4.	flood	36	46
5.	water	36	46
6.	environmental	45	35
7.	government	47	34
8.	energy	50	32
9.	adaptation	54	30
10.	economics	58	27
11.	Development	68	24
12.	green	68	24
13.	population	63	25
14.	emission	75	23
15.	rainfall	75	23

Figure 1.1: **Word frequency** (National Newspaper)

It can be seen in the word frequency that the discourse of the national newspapers (Dawn and The Express Tribune) primarily refers to the indigenous and event-based approaches to climate change. The most common lexical terms are: climate (260), change (105), floods (46), water (46), government (34), energy (32), and adaptation (30), which show that it is the narrative of environmental vulnerability, disaster response, and

governmental responsibility. This word choice indicates that reports on climate change usually associate climate change with physical manifestations of floods, rains, water scarcity, and other physical and socio-economic effects, but not a moral or a global issue. Repetition of such words as government and adaptation is also an indication of reactive positioning wherein climate change is described as a crisis to be controlled by policy-based solutions instead of being relieved by individual accountability or behavior change. The nature of such framing is that of an anthropocentric approach, in which humans are portrayed primarily as being the victims of climatic forces. The frequency data then suggest that national newspaper focus in the interest of as opposed to the support of long-term sustainability stories emphasizes the instant environmental impact as opposed to empowerment and environmental responsibility discourse.

Sr No	Type	Rank	Freq
1.	climate	10	201
2.	global	23	99
3.	change	30	80
4.	people	33	69
5.	extreme	57	40
6.	crises	72	32
7.	sustainability	74	30
8.	floods	80	28
9.	heating	85	26
10.	water	85	26
11.	economic	109	23
12.	government	136	19
13.	humans	136	19
14.	rainfall	143	18
15.	disasters	155	17

Figure 1.2: **Word frequency** (International Newspaper)

The linguistic orientation proposed by the word frequency analysis of the international newspapers (The Guardian and Reuters) creates the climate change as the global, ethical and humanity-focused problem. The most repeated words - climate (201), global (99), change (80), people (69), extreme (40), crises (32), sustainability (30), and heating (26) reflect a broader scope of theme that is human agency, global responsibility, and conservation. The international corpus builds moral and ecological aspects, in contrast to the national one, which focuses on local influences, and climate change is a common global crisis. The style of referring to people, sustainability, and crisis over and over again portrays a tone of shared responsibility and a sense of moral urgency resembling an ecocentric way of understanding the world in which humans are depicted as members of and not outside the natural ecosystem. This orientation liaises with the work of the international media in ensuring the global climate narratives emphasizing cooperation, mitigation and long-term environmental stewardship. In general, in international newspapers, the frequency analogy term describes an utterance that transcends national borders and calls to moral action, which depicts climate change as not only a scientific fact but also a moral obligation.

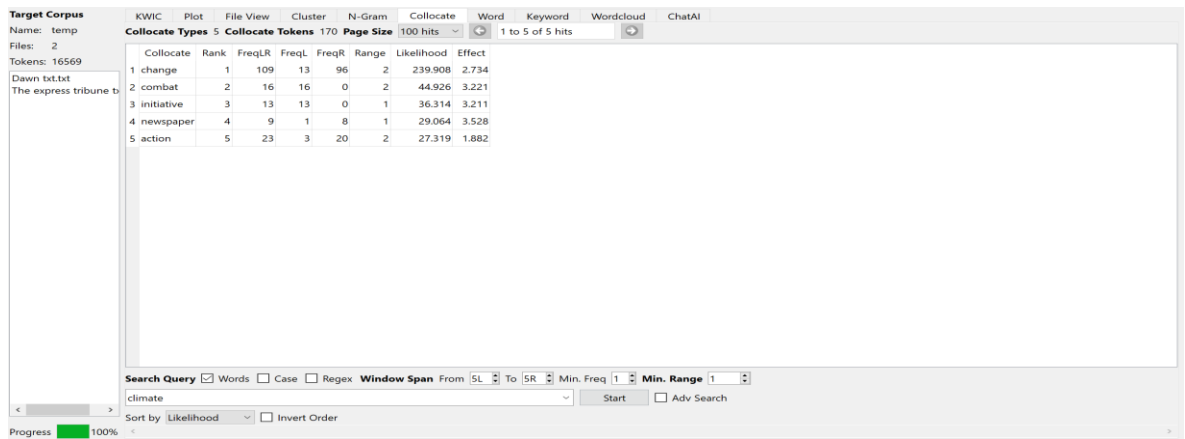


Figure 2: **Collocates for climate** (National Newspaper)

The collocational analysis of the keyword climate on the national newspapers (Dawn and The Express Tribune) has revealed five important collocates, including change, combat, initiative, newspaper and action. The most strongly collocated change denotes that climate change is more of a fixed lexical unit than an independent concept, and reflects the fact that the discourse of climate in the national press is more of a formulaic coverage than thematic diversification. The emergence of fighting and initiative suggests the recognition of the active participation or policy-oriented reactions to the situation as the government or institutional actors as the main stakeholders in solving the environmental problems. Nevertheless, they are relatively infrequent, which implies that the discussion of the alleviation or preventive intervention is narrow. Meta-discursive or general references, and not significant framing of the thematic element, may arise through the presence of newspaper and action as weaker collocates. Generally, the collocational profile indicates that the tendency of national reporting creates climate in a way that is more policy-response oriented or, to be more precise, administrative or institutional, in which environmental problems are analyzed through an administrative or institutional perspective and not through the lenses of an encompassing moral, social or even ecological perspective. Such lexical restrictiveness reflects a human-centered and reactive discourse in which governance and management of problems are more in focus than the ecological inter-relatedness or moral obligation.

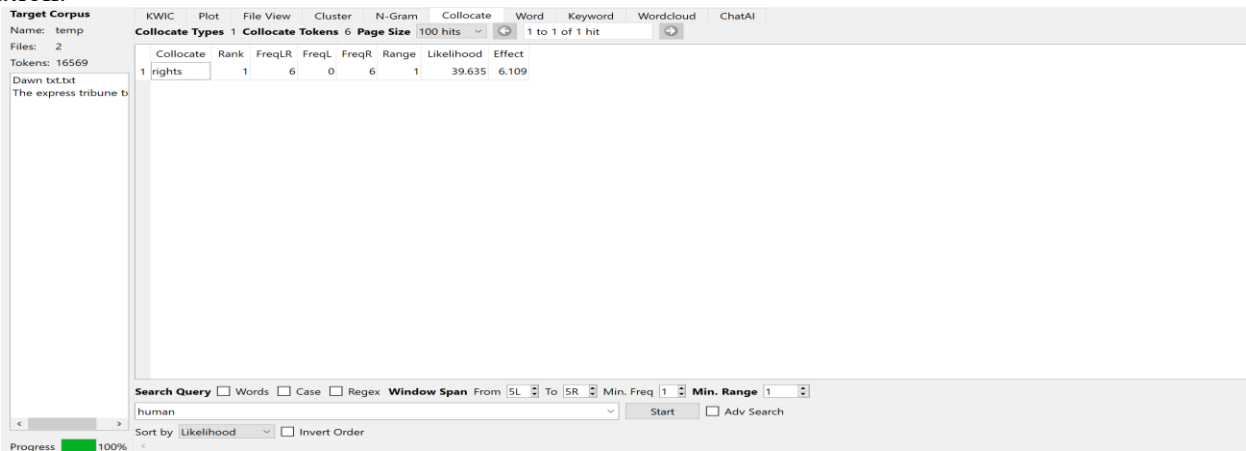


Figure 2.1: **Collocates for human** (National Newspaper)

The collocational analysis of the keyword human in the corpus of the national newspapers create one statistically significant collocate i.e. rights. This lexical restriction is narrowness of thematic range when integrating national media is concerned in how human matters are presented in the context of environmental

discussion. The term human rights collocation suggests that the climate discourse sometimes coincides with the domains of social justice or humanitarian, and in this case, the moral and ethical aspects of climate change impacting the human well-being might have been accepted in some way. Nevertheless, the absence of other cohorts, like impact, activity, responsibility, or behavior, is a significant absence of interaction with human agency in the climate story. Instead of placing human beings as contributors of, or relievers of, change in the environment, the linguistic data suggest that human beings are placed as more likely to receive, or to be affected by the effects of climate. Such a limited illustration corresponds to the discourse pattern of anthropocentrism where human well-being takes centre stage yet human responsibility or environmental interdependence is given secondary attention. This collocational scarcity of the human thus reinforces the finding of concatenated doctrine of national newspapers being characterized by the tendencies of adopting environmental reporting, which addresses humanitarian aspects, lacking full consideration of ecological ethics or systemic human responsibility.

Target Corpus		KWIC	Plot	File View	Cluster	N-Gram	Collocate	Wc	
Name: temp		Collocate Types 4		Collocate Tokens 102		Page Size	100 hits	↩	
Files: 2		Collocate	Rank	FreqLR	FreqL	FreqR	Range	Likelihood	Effect
Tokens: 20338		1 change	1	68	2	66	2	178.674	3.101
Reuters txt.txt		2 crisis	2	24	1	23	1	57.121	2.920
The guardian txt.txt		3 climate	3	4	2	2	1	19.242	-2.316
		4 summit	4	6	1	5	2	17.454	3.335

Figure 2.2: Collocates for climate (International Newspaper)

An evaluation of the keyword climate in the global news corpus (The Guardian and Reuters) as collocated has revealed that the most frequent word that can be used together with climate is change, crisis, climate, and summit. Change (Likelihood = 178.674) has the highest connection, which suggests that the term "climate change" is quite popular in the international media. However, certain neighboring words such as crisis, summit provide evidence of a wider discursive framing that features the urgency and diplomacy. This is contrasted with the national corpus. The intersection of such words as climate and crisis is an indication that there is a change of language that can define environmental change as an existential and urgent threat. This is in line with world discourse that contends it to be a planetary crisis which requires a moral and political action by all. The collocate summit also renders the discussion within the framework of international cooperation and governance, and it is evident that climate decisions are made at the institutional level. The fact that climate has become a self-collocate demonstrates the significance of the topic of discussion and its frequent occurrence in the world news. As a rule, these collocational configurations suggest that global newspapers discuss climate change in terms of assertivity and global coordination, by combining the scientific urgency with political actions. The discussed method of presenting the issue results in an ecocentric and ethical discussion where climate change is perceived as an issue of environment, and both a moral and a diplomatic responsibility, which we all ought to engage.

The keyword human was identified to fall in two major groups of words induced and change in the world newspaper corpus. The biggest correlation, which is: induced (Dawn = 20.346), demonstrates that global media houses often use the phrase human-induced in their habit of bringing out categorical links between human activities and climate change. The association to rights and not causality was dominating with "human" in the national corpus. This is a significant difference between the linguistic pattern in which people discuss things. The term human induced change demonstrates direct correlation between the way people behave and the way the environment changes and this contributes to the fact that people are responsible of their behaviors.

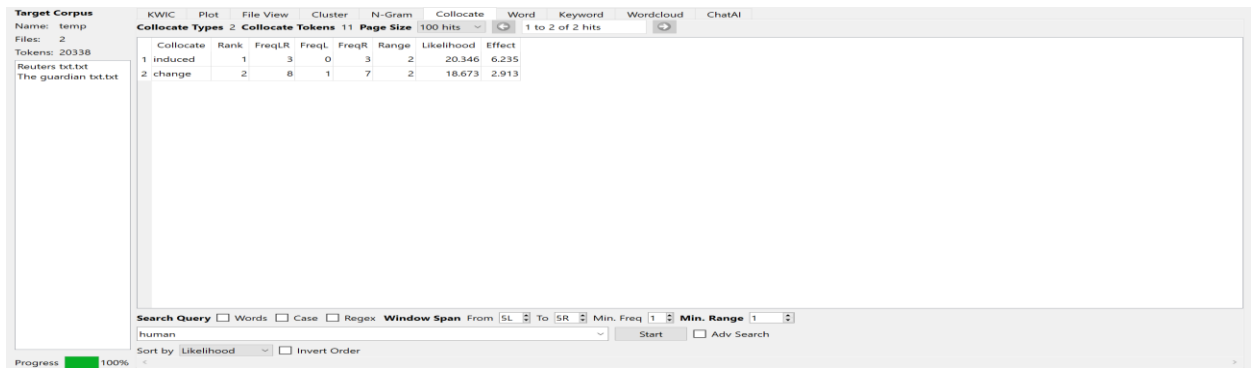


Figure 2.3: Collocates for human (International Newspaper)

As it pays more attention to human culpability, international reporting goes beyond the limits of telling people about being passive receivers of environmental events and makes people active agents contributing to the ecological disturbance. This category assimilates under an ecocentric worldview that urges individuals to be conscious that they have a common duty and moral concern of the world. In brief, the connotes of human in global newspapers indicate a discourse which stems on science, morals and duty. This indicates that the world media is determined to bridge the gap between global areas wellness and individual decision and duty.

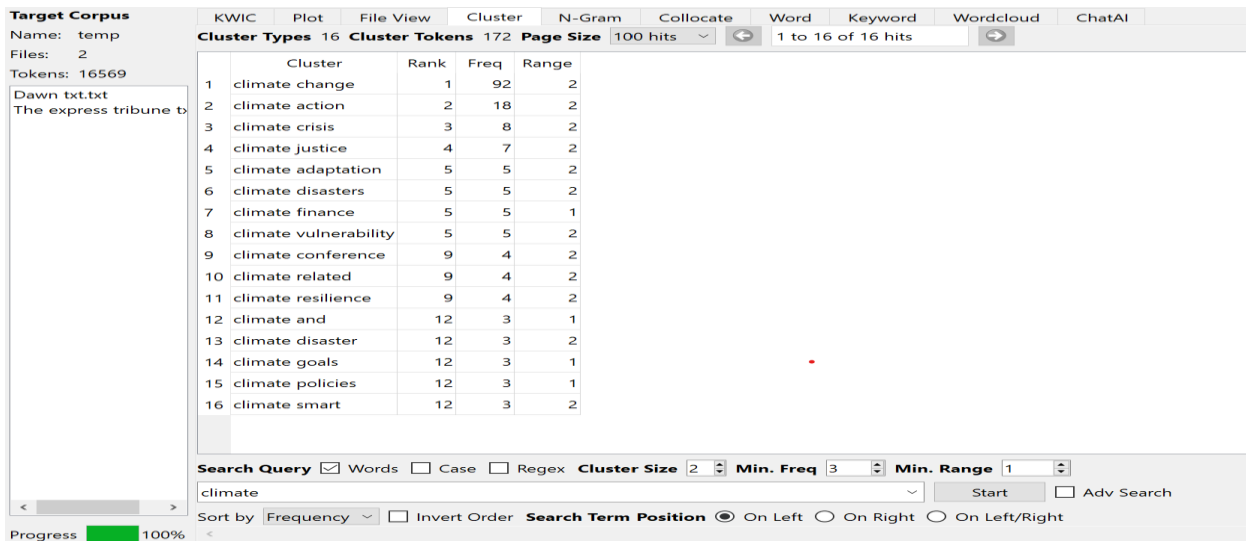


Figure 3.1:

Cluster for climate (National Newspaper)

The outcomes of the cluster analysis form the visualization of two different versions of the ecolinguistic story due to the national and international media discourse about climate. In the national corpus (Dawn and The Express Tribune), the terms climate change, climate action, climate justice, climate adaptation and climate finance make clusters, and these clusters have an institutional and developmental framing approach to the discourse. The shining cluster climate change (92 appearances) plays the role of the fixed lexical object which has repeated formulaic, not contextual expansion. This implies that national reporting views climate change as a reality and occurrence and placed within the context of the bureaucratic and policy discourse. Such terms as action, adaptation, and finance beleader us into thinking that governments and institutions are the main actors and those words, justice and vulnerability, keep revisiting the same, with humans being taken as the target of the environmental influence as opposed to the active participants in the ecological process. Ecolinguistically, this trend can be viewed as a so-called destructive story we live by, i.e., a narrative that

further divides humans and continuity, building the environment as an issue that is external to society (Stibbe, 2015). The rhetorical repetition of climate change with no moral or ecological variety shows an anthropocentric model of the world when human well-being is very important in the story, and ecological interdependence is linguistically relegated.

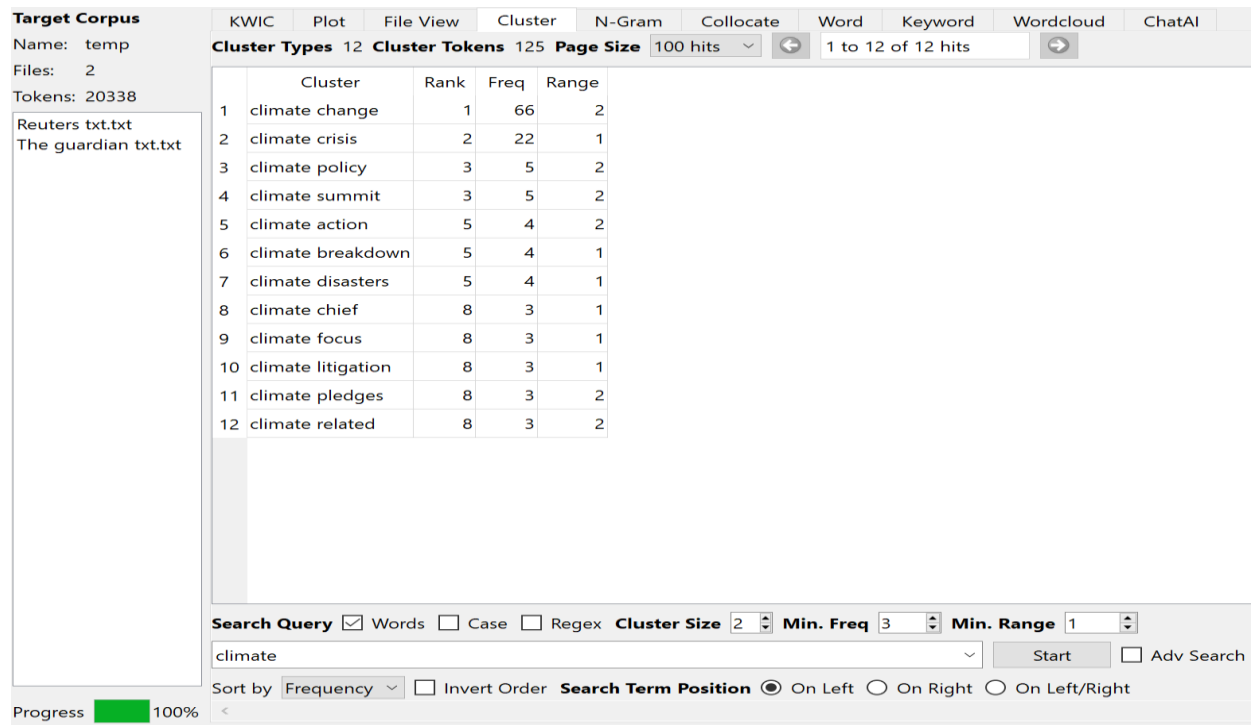


Figure 3.2:

Cluster for climate (International Newspaper)

The international corpus (The Guardian and Reuters), in its turn, forms a quite different narrative. Clusters like climate crisis, climate policy, climate summit, climate litigation and climate pledges are articulations of a moral and political expression of climate discourse. The common occurrence of the climate crisis (22 times) indicates the use of more evaluative and emotive language, presupposing a shift to urgency, responsibility, and global ethics. In the same manner, movements such as climate summit and climate pledges incorporate the discourse in the normative and institutional agency with the focus on international collaboration and dedication. These collocates illustrate Stibbe in its ecolinguistic perspective of beneficial stories that we live by and are developed through practices that build on ecological consciousness and moral interactions instead of disengagement. The crisis and policy frame of climate is constructed rhetorically through the language of climate; it makes climate seem more like a collective moral emergency- a narratives that re-posit humans as an agent of moral ecological responsibility.

Relative to each other, there are contrasted tendencies between the two corpora: the national media narrates of an administrative response and defensiveness, and the international media narrates of the moral necessity and interracial responsibility. Using framing theory (Entman, 1993), the foreground of national coverage the definition and response of the government to problems, whereas ethical causation and global solution-seeking is enhanced via the international coverage. Reflecting on the construct developed by Stibbe, one can obtain a clear understanding that the former perpetuates a destructive discourse of human-centeredness and environmental helplessness, whereas the latter develops a positive discourse of interrelatedness, stewardship, and moral responsibility. These dichotomous groups, therefore, represent two entirely different stories we live with one being reactive and anthropocentric and the other proactive and ecocentric, displaying how discourses

of climate recreate or challenge mainstream ideologies of environmental responsibility.

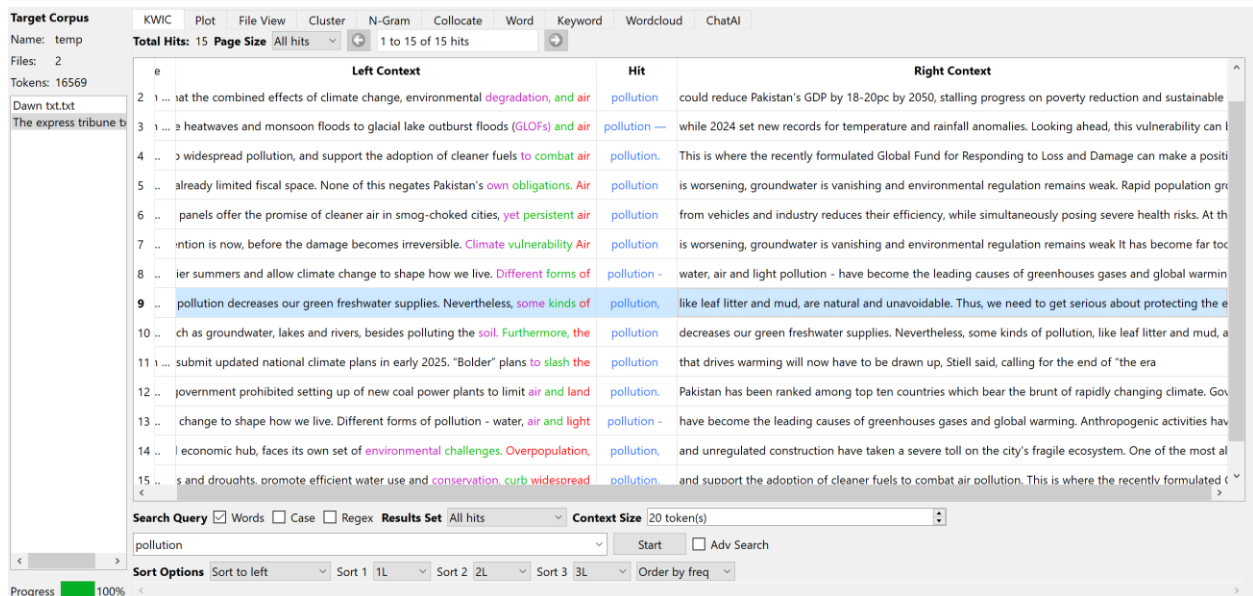


Figure 4.1: KWIC for pollution (National Newspaper)

The national corpus which is comprised of Dawn and the express tribune portrays the extensive usage of this nominalization, pollution, as used in the climate talk. Pollution throughout the sample, is always the use of an abstract noun, completely divorced of the very process of its production (to pollute), and thus wiping out any reference of what exactly it is that does so. In the systemic functional grammar paradigm proposed by Halliday (2004), this is a manifestation of this ideational metafunction of grammatical options to achieve a variant of reality in which agency is obfuscated. Indicatively, the use of a words like Air pollution is worsening and Pollution decreases our freshwater supplies place grammatically the pollution as an independent entity and not as an anthropomorphic outcome. This trend naturalizes the idea of environmental degradation making it not a moral issue, but a technical condition or an environmental state. In addition, the discussion of pollution in the same category with overpopulation and construction causes a combination of anthropogenic and natural origins resulting in the creation of the anthropocentric discourse and lessening human responsibility. They legitimize pollution through the statement that there is a certain form of pollution which is natural and unavoidable e.g. air, mud and leaf pollution. Destruction is not beauty as is depicted here in natural phenomena.

These constructions, in light of the ecological language approach, are what Stibbe (2015) defines as destructive stories we live by which are linguistic frameworks that neutralize ecologically destructive behavior by omitting the agent and abstraction. Although the reports are emotional in promoting cleaner fuels and regulation of policies, the gross grammar separates the human being of direct duty, making environmental destruction a peripheral state of development. In such way, the nominalization of the national media, besides the technical reporting service, indicates deeper ideological leanings: the institutional inertia towards detachment, the systematization of moral responsibility and support of the bureaucratic worldview, according to which climate crises belong to management rather than proprietorship.

The guardian txt.txt	a small number of wealthy people, be it the workers who toil in the mines for metals or the city dwellers subjected to greater air	pollution	due to the use of private vehicles.
The guardian txt.txt	Seven of the nine planetary boundaries are now breached, with ocean acidification added to the danger list. Yet the world has proved that cooperation works: the ozone layer is healing, air	pollution	controls are working.
The guardian txt.txt	Canadian wildfires were again extreme although not at the record scale of 2023.” The fires caused high levels of air	pollution	across continents for weeks, he said.
The guardian txt.txt	By ensuring the collapse of UN talks seeking the first legally binding agreement on tackling plastic	pollution,	blockers in Geneva have failed the next generation.
Reuters txt.txt	“Due to over-exploitation of natural resources,	pollution	and invasive alien species, more than 80% of protected habitats are in a poor or bad state”

Figure 4.1: **KWIC for pollution** (International Newspaper)

The international corpus is typically associated with nominalization and passive grammatical forms in the context of the term pollution being listed and this demonstrates the way the responsibility and agency are linguistically regulated in the context of climate. The act of polluting is also made an abstract noun in some phrases like, air pollution controls are working and plastic pollution, a tendency unique to Halliday (2004) grammatical metaphor in the ideational metafunction. This transformation eclipses the human or industrial actor doing the action focusing instead on the phenomenon itself. This leads to the development of a perception of pollution as a technical or natural situation to be restrained and not a socially based behavior to be altered. In like manner, Canadian wildfires lead to elevated degrees of air contamination generates ecological deterioration as an outcome of forces of nature, and restructures ecological catastrophes as products of nature. The linguistic strategies in question are what Stibbe (2015) has defined as the destructive stories we live by, i.e. discourses that legitimize environmental destruction by making people seem innocent of the fault. The term cooperation functions in the same textual context, though, alludes to a different, more positive narrative, which creates a suggestion of what the collective agency of people can do when view in a positive light. In general, the nominalization and passive structures of international reporting are a slight impressionism in maintaining the balance between the technocratic faith in the control mechanisms to work (controls are working) and the moral indifference (absolutely no polluters).

Nominalization SFG Function (Ideational Meaning)

KWIC (Keyword in Context)	Nominalization
... commitments to adaptation and loss and damage, not in the billions, but ...	adaptation
... effects of climate change, environmental degradation , and air pollution could reduce Pakistan's GDP by ...	degradation
... progress on poverty reduction and sustainable development. This underscores the necessity ...	reduction
... target a 30pc reduction in carbon emissions and a renewable energy mix ...	emissions
... the delays in their operationalization and absence of prioritization erode the synergistic impact ...	operationalization
... increase implementation and accountability systems. Four key lessons emerge from ...	implementation
... governments increase implementation and accountability systems. Four key lessons emerge ...	implementation
... addressing the twin crises of overpopulation and environmental degradation . There is an urgent need ...	degradation

Concordance analysis shows that there is a high usage of nominalization in reporting on climate-related issues, which explains how the ideological positioning as displayed through grammar use. Such essential words like adaptation, degradation, reduction, emissions, implementation and cooperation are frequent throughout the national newspaper corpus. These nominalized forms according to the grammatical metaphor of Halliday (2004), Systems functional Grammar can be viewed as grammatical metaphors that make verbs (processes) come into a form of a noun (object). This act of doing being takes away the explicit human or institutional agency and generates the impression of neutrality and inevitability. To give some examples, environmental degradation hides the culpability of humanity in ruining the environment, whereas carbon emissions gives the prospective of the result instead of the industrial polluters. Equally, the process of adaptation and implementation repackages dynamic processes as policy mechanism, which creates detached and technocratic tones. Such linguistic practice corresponds to what Stibbe (2015) describes as the so-called destructive stories we live by the examples of discursive strategies that, as the author notes, are used to normalize the nature of environmental degradation by incriminating the ethical responsibility. Nominalization therefore acts as a grammatical device to keep human actors out of their ecological implications in building an anthropocentric world that the change of environment is a manageable phenomenon, instead of a communal ethical moral issue. Such media discourse repetitions emphasize the ways in which seemingly neutral grammars may still reproduce mainstream ideologies regarding powers, dominance, and human nature interactions.

KWIC (Keyword in Context)	Nominalization
... greenhouse gas emissions and the need for countries to cooperate on reduction targets ...	emissions
... unsustainable production and consumption, especially in the food system ...	production
... Organisation for Economic Co- operation and Development (OECD) ...	cooperation
... consequences for climate litigation and multilateral negotiations ...	litigation
... the sustained destruction of local social structures under European colonial rule ...	destruction
... degradation of our natural world jeopardises the European way of life ...	degradation
... countries to cooperate on reduction targets for greenhouse gas emissions ...	emissions
... unsustainable production and consumption patterns driving biodiversity loss ...	production
... “It sets a new global standard for urgent and effective climate action ...”	action

The corpus of the international media, with reference in particular to The Guardian and Reuters, shows that the international media extensively use climate-related nominalizations like emissions, production, pollution, degradation, action, and cooperation. Under the purview of the concept of Grammar Halliday (2004) has developed (Systemic Functional Grammar), such forms are grammatical metaphors which transform dynamic processes into abstract nouns. According to this linguistic transformation, human and institutional actors are pushed aside, which introduces environmental change as an autonomous or technical but not a socially motivational phenomenon. As an example, the greenhouse gas emissions obsess with the outcome of the industrial production but not on the producer, thereby building what can be called a depersonalized and scientific account. In a similar fashion, the phenomenon of production and consumption reinvent human overexploitation as an economic practice, and degradation and pollution define environmental degradation and pollution as being an unattached phenomenon relative to human action. Even some of the ostensibly progressive language, such as climate action and global cooperation is an exercise in institutional abstraction, in which the ideals or policy frameworks take precedence over moral action.

These grammatical selections can be viewed, ecolinguistically (Stibbe, 2015), as part of what he describes as destructive stories we live by, the stories that succumb to environmental degradation by deleting any sense of responsibility and moral feeling. The continual nominalization of climate-related processes is indicative of a technocratic and anthropocentric view of the world, environmental crisis is presented not as a moral problem that should be addressed collectively but as an administrative concern that must be handled. The writing patterns of international media can, therefore, become distorted despite its apparent objective tone as it contains an ideological tendency to diminish human abilities in favor of scientific disengagement of empathy with the ecological environment. This shows that even grammatically minor forms like nominalization can replicate the hegemonic ideology of control, distance and moral vacuity in global climate discourses.

4. Findings and Discussion

This paper aimed at examining the linguistic framing of climate change in national (Dawn and The Express Tribune) and international (The Guardian and Reuters) newspapers using a corpus-based ecolinguistic analysis that would combine Halliday (2004) Systemic Functional Grammar (SFG) with Stibbe (2015) so-called Stories We Live By. The study found that there are important ideological differences in how environmental realities are linguistically constituted by using AntConc to conduct collocation, concordance and nominalization analyses. These findings indicate that lexical and grammatical decisions in media communication are not neutral; they encode both different ecological worldview; these encode and image dominant anthropocentric ideologies, as well as challenge them.

The national corpus largely meant climatic change reactive and event-based stories that focused either on disasters, floods, rainfall, or the action of the government. A bureaucratic and managerial focus was in frequent terms used lexical items including adaptation, reduction and implementation. Other nominalizations, like pollution, degradation, and development, proposed environmental degradation as an impersonal state, but not as an outcome of man. In the SFG model by Halliday environmental harm is personified through such grammatical metaphors to put emphasis not on who harms the environment but on what carnage is carried out. This de-agentivization promotes what Stibbe (2015) refers to as destructive stories we live by, whereby the language can naturalize ecological decline and naturalize the environment as a technical issue to be managed instead of a moral relationship that should be cultivated. The national press, therefore, has expressed an anthropocentric discourse of vulnerability, reliance, and institutional alienation and has placed human beings in the forefront as victims and minimum culprits in the ecological systems.

The international corpus, on the other hand, was more ecocentric and ethically colored, and such collocates as crisis, pledges, policy, sustainability, and cooperation were pre-empting collective responsibility and care of the world. The nominalizations, emissions, action, production, and litigation placed climate change in the scientific, political, and moral plane, demonstrating a consciousness of the human agency in the system. The foregrounded by these linguistic constructions is the moral urgency and global ethics, as well as what Stibbe (2015) calls as a set of beneficial stories we live by, i.e. discourses that foster ecological empathy, cooperation and responsibility. Therefore, when the national media was masking agency through nominalization, international media applied the same to institutionalize responsibility and inculcate moral involvement. The difference shows the interaction of the linguistic form with ideology: same resources in grammar can be used to support detachment or activism in a discursive purpose.

Altogether, this comparative analysis of ecolinguistics proves that grammar and vocabulary are important ideological locations of climate communication. The paper has shown how using passive structures and nominalizations to obscure agency is systematic, in contrast to active and evaluative framing which can be enlightening, through the ideational metafunction proposed by Halliday. The results as well uphold the key assertion of ecolinguistics that linguistic disposition is reflected in ecological morality; national reporting is more trended toward anthropocentric pragmatism whereas international journalism is more oriented on ecocentric morality. This implies that sustainable environmental discourse must be encouraged not only through correct reporting but also through linguistic reorientation which entails taking a conscious move to foreground human responsibility, interdependence and ecological care.

5. Conclusion

The theoretical and practical contributions to the study are made. It, in theory, fills the gap between corpus linguistics, SFG, and ecolinguistics and demonstrate that quantitative linguistic evidence can express ideological meaning. In practice, it brings out the necessity of media institutions, particularly in developing contexts, to use language that reflects responsibility and not resignation. Public knowledge about climate change can be restructured by encouraging journalists to use active verbs, de-agentive nominalizations, moral framing and collective, human effort to view climate change as an ethical and collective problem rather than as a distant policy question. To build up on this study, future studies could consider multimodal ecolinguistic analysis and investigate how these grammatical ideologies can be reinforced or challenged by visual and digital media. In the end, however, the language of climate change does not simply need to be changed, it is a move towards another re-imaginings and reoccupations of the planet by human beings.

References:

Abbas, Z. (2020). Media coverage of climate change in Pakistan: A review of national newspapers. *Journal of Cleaner Production*, 255, 120303. <https://doi.org/10.1016/j.jclepro.2020.120303>

- Boykoff, M. T. (2011). *Who speaks for the climate? Making sense of media reporting on climate change*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511978586>
- Boykoff, M. T., & Boykoff, J. M. (2007). Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum*, 38(6), 1190–1204. <https://doi.org/10.1016/j.geoforum.2007.01.008>
- Carvalho, A. (2007). Ideological cultures and media discourses on scientific knowledge: Re-reading news on climate change. *Public Understanding of Science*, 16(2), 223–243. <https://doi.org/10.1177/0963662506066775>
- Chen, Y. (2022). The evolution of climate change frames within and across global news media: A quantitative analysis. *International Journal of Communication*, 16, 17609–17631.
- Dryzek, J. S. (2013). *The politics of the Earth: Environmental discourses* (3rd ed.). Oxford: Oxford University Press.
- 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>
- Fill, A., & Penz, H. (2022). Ecolinguistics: History, today, and tomorrow. *Journal of World Languages*, 9(3), 237–255. <https://doi.org/10.1515/jwl-2022-0008>
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, MA: Harvard University Press.
- Goatly, A. (2000). *Critical reading and writing: An introductory coursebook*. London: Routledge.
- Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An introduction to functional grammar* (3rd ed.). London: Arnold.
- Harré, R., Brockmeier, J., & Mühlhäusler, P. (1999). *Greening discourse: Environmental discourses and the social construction of environmental meaning*. London: SAGE Publications.
- Haugen, E. (1972). The ecology of language. In A. S. Dil (Ed.), *The ecology of language: Essays by Einar Haugen* (pp. 325–339). Stanford, CA: Stanford University Press.
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication*, 4(1), 70–81. <https://doi.org/10.1080/17524030903529749>
- Mühlhäusler, P. (2001). *Language of environment, environment of language: A course in Eco linguistics*. London: Battlebridge Publications.
- Schäfer, M. S., & Schlichting, I. (2014). Media representations of climate change: A meta-analysis of the research field. *Environmental Communication*, 8(2), 142–160. <https://doi.org/10.1080/17524032.2014.914050>
- Stibbe, A. (2021). *The stories we live by: An (eco)linguistic investigation of the stories that shape our world* (2nd ed.). New York, NY: Routledge.
- Takahashi, B., & Meisner, M. (2013). Climate change in Peruvian newspapers: The role of foreign voices in a context of vulnerability. *Public Understanding of Science*, 22(4), 427–442. <https://doi.org/10.1177/0963662511431204>