

## RESEARCH ARTICLE

# Ecological discourse analysis of COVID-19 news reports in CNN Philippines and Rappler

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### ABSTRACT

Ecological Discourse Analysis (EDA) examines the relationship between language and the environment, focusing on how discourse shapes and reflects ecological and social behaviors. By analyzing linguistic patterns, EDA seeks to uncover how language conveys ideologies, values, and attitudes towards ecological issues, such as sustainability, environmental justice, and human-nature relationships. This paper was positioned to analyze the appraisal characteristics of COVID-19 news reports in CNN and Rappler from January 2020 to November 2021. A total of 28 news articles, evenly sourced from the two outlets, were analyzed. AntConc 4.0.2 identified the use of appraisal resources, including attitude, engagement, and graduation. The findings revealed that CNN Philippines adopted a more balanced tone, characterized by 32.67 percent attitude, 38.07 percent engagement, and 29.26 percent graduation resources. In contrast, Rappler demonstrated a more critical stance, with 36.46 percent attitude, 36.94 percent engagement, and 26.6 percent graduation resources. The engagement system showed that both outlets favored heteroglossic expressions, incorporating multiple perspectives to enrich their reporting. The graduation system, focusing on force, highlighted how both news organizations used intensity in their language to emphasize the significance of COVID-19-related issues. These linguistic patterns reveal distinct ideological orientations and strategies for engaging audiences, highlighting the media's role in shaping public understanding and response during a global health crisis. The study underscores the significant impact of linguistic choices in news reporting, offering insights into how media narratives influence public discourse in times of uncertainty.

**Keywords:** appraisal framework, COVID-19, ecological discourse analysis, journalism

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## 1. Introduction

In late 2019, the world was suddenly confronted with an unexpected challenge: a global pandemic caused by the Coronavirus, widely referred to as COVID-19. The global spread of the COVID-19 pandemic impacted various sectors, particularly higher education, leading to the suspension of in-person classes<sup>[1]</sup>. This pandemic not only brought widespread distress but also elicited a range of responses across different countries regarding the outbreak's severity and the strategies employed by governments to mitigate the virus's spread. These varied responses were prominently reflected in the media, where close examination reveals significant differences in reporting styles.

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Media coverage of COVID-19 has been shaped by cultural contexts, political positions, and public ideologies, leading to diverse portrayals of the pandemic<sup>[2]</sup>. This concurrently contextualizes current public discussions regarding policy responses, highlighting the conflicting priorities associated with the timing and rigor of enacted policies<sup>[3]</sup>. The integrity and the ideal state of scientific reporting, particularly when it accurately represents the current state of scientific understanding without exaggeration, has an essential part in promoting trust in scientific endeavors and ensuring accountability in decision-making processes<sup>[4]</sup>. This is what makes linguistic analysis in media coverage fundamental in understanding human discourses, as it uncovers the subtle ways in which language frames, interprets, and ultimately influences public perceptions of complex issues like the pandemic.

It is well-established that language, whether in literature or journalism, is a powerful tool for shaping perceptions and emotions<sup>[5,6]</sup>. Just as fiction writers use language to influence their readers' thoughts and feelings through the narratives of their characters<sup>[7,8]</sup>, the language used in the press is similarly influential, serving as a prime example of this control<sup>[9,10]</sup>. Newspapers, whether in print or online, reflect their distinct perspectives, and their reporting is invariably influenced by their underlying agendas, ideologies, and viewpoints<sup>[11]</sup>. Fundamentally, readers often internalize the content of news articles without recognizing the structural elements that shape the message, inadvertently accepting the embedded ideologies as factual<sup>[12]</sup>. Therefore, newspapers are valuable sources for analyzing the ideological biases of specific social groups as they are expressed in written form.

As technology shifted over time, people are now more exposed to online content on the internet than print. In politics, media representation occurs in numerous ways<sup>[10]</sup>. For example, 63.8% of the news coverage in the United States were mainly in about politics<sup>[3]</sup>. Similarly, media coverage also has an essential purpose in delivering news to the public. In 2016, Hoffman and Justicz<sup>[4]</sup> stressed out that the insufficient scientific rigor in the media's reporting on previous pandemics has resulted in significant risks and constrained the ability to effectively communicate public health recommendations and organize responses. More recently, Aslam et al.<sup>[13]</sup> conducted an analysis of 141,208 COVID-19 headlines, revealing that 52% exhibited negative sentiment.

In COVID-19 media coverage, Krawczyk et al.<sup>[14]</sup> found that overall COVID-19 reporting was not strongly polarized toward either a highly negative or positive sentiment, contrary to what might be expected given the subject matter. This lack of extreme polarization suggests a diversity, or heterogeneity, in how news outlets covered the pandemic, likely due to its far-reaching impacts on various aspects of life. Now, this paper was positioned to add context to this finding by integrating EDA in the assessment of COVID-19 news coverage. Assessing the emotional gravity of an article might not be enough to contextualize its linguistic essence. For example, Chang-Chen and Zhang<sup>[15]</sup> conducted an ecological discourse analysis of the ecotourism texts associated with Jiuzhaigou scenic spots, focusing on the dimensions of transitivity and attitude resources. The findings indicate that the primary objective is to establish a favorable ecological environment within ecotourism scenic areas, stimulating a positive, equitable, and amicable relationship between humans and nature, while emphasizing the popularity of eco-tourism destinations. It was expected for this study to go beyond emotional analysis to examine how linguistic patterns, such as appraisal, convey underlying ideological positions and attitudes in COVID-19 reporting. EDA provides a more comprehensive perspective, enhancing our understanding of the linguistic and ideological subtleties that sentiment analysis alone might overlook.

## 2. Literature

Since the emergence of COVID-19, there has been a significant surge in news reports covering the pandemic. Linguists worldwide have been gathering COVID-19-related discourse, creating pandemic corpora to analyze the relationship between the pandemic's progression and the corresponding discourse from a linguistic standpoint<sup>[2,16]</sup>. Broadly speaking, research on COVID-19-related discourse can be categorized into two primary areas: sentiments and discourse.

The first area involves the analysis of COVID-19 sentiments across various social media platforms. Studies have identified substantial differences in how different groups discuss the pandemic on these platforms. For example, research indicated that content related to COVID-19 posted by Arab Twitter users predominantly focused on religious and health-related topics, often with a generally passive tone<sup>[17]</sup>. Similarly, a study focusing on African Americans found that they generally maintained a positive outlook in their discourse on combating the pandemic<sup>[18]</sup>. However, in Malaysia, a significant portion of online correspondence associated COVID-19 with negative sentiments<sup>[19]</sup>.

The second area of research involves the analysis of news discourse from mainstream media across different countries. A common finding in these studies is that news discourse regarding the pandemic reflects the distinct ideological and cultural contexts of various nations. For instance, a study examining headlines from eight newspapers in four countries found that differences in how the pandemic was named were closely tied to ideological disparities<sup>[20]</sup>.

In China, Xue and Xu<sup>[21]</sup> used EDA to analyze the news coverage of COVID-19, particularly articles published in *The Times* and *The New York Times*. The analysis reveals that all three sub-types of attitudinal resources are utilized in the coverage across the two news outlets. Notably, judgement and appreciation resources are common, indicating a journalistic commitment to objectivity in news reporting. Nevertheless, the data indicates a preference for negative attitudinal resources over positive ones. Certain facets of the issues—specifically, some objects and attributes—such as the measures implemented by China to combat COVID-19 are either overlooked or misrepresented, while other aspects, like the potential negative consequences of these measures, are highlighted in the coverage of COVID-19 in the two news outlets.

Similar approach was done in this paper using articles from major news outlets in the country: CNN Philippines and Rappler. Ecolinguistics is fundamentally the integration of ecology and linguistics—two fields that may initially seem unrelated<sup>[22]</sup>. EDA, an integral method in ecolinguistics, arises in response to the ongoing global environmental crises, which involve the examination of various discourses, including those specifically addressing environmental or ecological issues, as well as other forms of discourse that may influence behaviors that either harm or protect ecological systems<sup>[23]</sup>. Thus, given the function of language in ecological discourses, it could also have the power to motivate individuals to take actions, like protecting the ecosystems or contributing to its destruction<sup>[24]</sup>.

For a substantial number of individuals globally, news media function as an essential conduit for information regarding contemporary events, profoundly influencing their understanding of reality. The collective data shared by news organizations is fundamental in shaping these perceptions<sup>[25-27]</sup>. Agenda setting emphasizes directing the audience's attention, underlining the importance of the media's social responsibility and its power to intervene in societal issues<sup>[28]</sup>. News coverage serves as a medium for conveying meaning, often reflecting the reporters' evaluations and the attitudes of the news organizations towards the events being reported<sup>[21]</sup>.

Published articles discussing COVID-19 media coverage in the Philippines was insufficient. Metila, Morallo and Zara<sup>[29]</sup> study served as a good starting point regarding news frames of banner stories on COVID-19. They applied discourse analysis in analyzing the news frames across 97 banner stories from three Philippine broadsheets and examines how these major frames represented COVID-19 during its initial spread in the country. The primary frames identified include Action, New Evidence, Reassurance, Conflict, Economic Consequence, and Social Consequence. The portrayal of the pandemic in newspapers predominantly emphasized the government's response and the dissemination of new COVID-19 information, rather than focusing on narratives that could incite fear and panic. Discrepancies were observed in the newspapers' distinct emphasis on the pandemic, the controversies surrounding it, and its economic repercussions—subtleties that mirrored the newspapers' standing. Now, to expand this understanding, this paper introduced EDA in analyzing the linguistic subtleties of Philippine news context during the COVID-19 period.

### **3. Theoretical framework**

Ecolinguistics critiques language that encourages ecologically harmful behaviors while promoting language that fosters care for the environment. The term has been in use since the 1990s<sup>[30]</sup>, with Einar Haugen introducing the concept of 'language ecology' in 1972. Haugen<sup>[31]</sup> defined it as the study of a language's interactions with its societal environment, emphasizing that language exists in the minds of its users and connects them with their social and natural surroundings<sup>[24]</sup>. Part of this ecology is psychological, involving language interactions between bilingual and multilingual individuals<sup>[24]</sup>.

Sociologically, ecolinguistics has been applied to various fields, including studies on language diversity, endangered languages, and environmental discourses like ecotourism and climate change<sup>[24]</sup>. Stibbe<sup>[32]</sup> explains that this diversity stems from different interpretations of 'ecology,' ranging from general interactions to environmentalism. He emphasizes that ecolinguistics uses linguistic analysis to uncover and challenge the narratives that shape human behavior from an ecological perspective. Alexander and Stibbe<sup>[33]</sup> assert that if linguistics is defined merely as 'the study of language,' then ecolinguistics can be characterized as "the study of the impact of language on the life-sustaining relationships among humans, other organisms, and the physical environment." The orientation is fundamentally aimed at maintaining relationships that are essential for sustaining life<sup>[24]</sup>. Ecolinguistics examines the role of language in shaping, sustaining, influencing, or undermining the relationships among humans, other living beings, and the environment.

EDA, as a significant framework within ecolinguistics, broadens the scope of discourse analysis to include the entire ecosystem, including the social system. The objective is to elucidate the ecological factors that hinder the harmonious development of humanity and nature within the discourse<sup>[23]</sup>. It encourages individuals to contemplate and rectify the ecological crisis, eventually developing an increased understanding of environmental protection and contributing to the harmony of the ecological system.

This paper was anchored to the appraisal framework of Martin and White<sup>[34]</sup> that functions within the discursive semantic layer<sup>[35]</sup> and provides a framework for classifying interpersonal meanings that are intricately linked to the structures of speech function and negotiation<sup>[36]</sup>. Contrary to the grammatical aspect of language, this leads towards analysis of "meanings in context and towards rhetorical effects rather than towards grammatical forms"<sup>[34]</sup> because the grammar and discourse of language are understood as a collection of resources that generate meanings, rather than merely as rules for structuring organization<sup>[36]</sup>. Appraisal refers to how speakers or writers' express attitudes and align or misalign themselves with their audience's views. Through this process, they reveal their level of ideological agreement or disagreement with potential readers or listeners<sup>[37]</sup>. Fundamentally, Martin<sup>[38]</sup> highlights that appraisal helps researchers

analyze how individuals use language to craft their own identity or persona through expressing attitudes, and that expressing an opinion is not just a personal commentary but fundamentally interpersonal, as it aims to create a sense of solidarity or connection with the listener or reader. The examination of language focusses on the ways in which evaluation manifests, both implicitly and explicitly, generating valorative prosodies within discourse that can be systematically categorised at a lexicogrammatical level through various resources<sup>[35]</sup>.

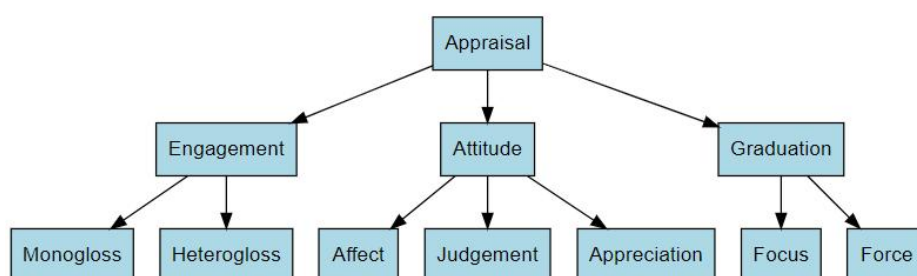


Figure 1. Basic system of appraisal framework.

The Appraisal framework (Figure 1), as developed by Martin and White<sup>[34]</sup>, focuses on how language expresses attitudes, the gradability of those attitudes, and how interpersonal meanings are negotiated within discourse. One key subsystem, *Attitude*, relates to the expression of feelings as a system of meanings and can be divided into three semantic categories: *Affect*, *Judgment*, and *Appreciation*. *Affect* deals with emotions and feelings, both positive and negative, while *Judgment* concerns ethical evaluations of behavior (whether to praise or condemn), and *Appreciation* involves aesthetic evaluations of objects, actions, or phenomena. Martin<sup>[39]</sup> further explains that *Judgment* and *Appreciation* can be seen as institutionalized forms of *Affect*, with *Judgment* governing social behavior and *Appreciation* managing cultural taste.

The subsystem of *Graduation* concerns the scaling of attitudes, allowing speakers to either intensify or diminish their meanings. *Graduation* operates through two dimensions: *Force* (the strength or intensity of a proposition) and *Focus* (the precision of category boundaries). For instance, it is possible to increase or decrease the force of a statement through words like “real” or “kind of,” which sharpen or soften categorical meanings, respectively<sup>[39,40]</sup>. In appraisal analysis, it is crucial to specify how such evaluative instances accumulate to radiate positive or negative sentiment throughout the text.

*Engagement*, another key subsystem, explores how speakers negotiate the origin and sources of attitudes in discourse, aligning with a dialogic perspective inspired by Bakhtin and Voloshinov’s work<sup>[41]</sup>. *Engagement* distinguishes between *monoglossic* (single voice, without acknowledging alternative viewpoints) and *heteroglossic* (recognizing or incorporating alternative perspectives) discourses. Martin and White<sup>[34]</sup> discuss how authors use various linguistic resources, such as projection, modality, and polarity, to either expand or contract heteroglossic space, revealing their level of commitment and the openness of the discourse to alternative opinions. Through this, *Engagement* theorizes the extent to which discourse opens or shuts down alternative viewpoints, thus managing interpersonal negotiation of meaning.

## 4. Methods

### 4.1. Research design

Grounded in the ecosophy principles of “diversity and harmony, interaction and co-existence” and utilizing an ecolinguistic appraisal framework, this study performed EDA of COVID-19 news coverage from two prominent Philippine media outlets—CNN Philippines and Rappler. Ecolinguistics has the potential to examine the narratives that shape human lives—cognitive frameworks that affect actions and are central to the ecological issues human currently face<sup>[42]</sup> (Stibbe 2021). Ecolinguists have investigated ecological discourses through various lenses and have employed a range of methods, including Critical Discourse Analysis and the more contemporary Positive Discourse Analysis<sup>[43,44]</sup>. Positive discourse analysis discerns linguistic patterns present in positive discourses that promote respect and care for the natural environment<sup>[45]</sup>. Consequently, EDA emerged to examine not only discourses that directly pertain to environmental issues but also those that influence individuals' behaviors and perceptions regarding the environment<sup>[46]</sup>. Trivially, based on the absorption of ecological philosophy and ethical considerations regarding the relationship between humans and nature, this approach involves the integration and innovation of these concepts in relation to actual circumstances and specific issues<sup>[23]</sup>. The goal is to establish a scientifically grounded and cohesive ecological philosophical perspective that is appropriate for a particular context, which can then be utilized as a standard to evaluate the ecological orientation of discourse.

## 5. Corpus screening

CNN Philippines and Rappler have been chosen as the data sources due to their status as leading news platforms with significant authority and influence in both national and international news. Their coverage can offer insights into the public's perceptions and understandings of various events. In April 2016, CNN Philippines won six awards at the Golden Dove Awards organized by the Kapisanan ng mga Brodkaster ng Pilipinas. That same year, it was named “Television Station of the Year” by the Rotary Club of Manila Journalism Awards. A survey conducted by Publicus Asia on August 3, 2021, identified it as the most trusted news source among Filipinos. Conversely, although Rappler has faced criticism for being one of the least trusted news sources in the Philippines and dealing with numerous legal challenges<sup>[47]</sup>, it remains a prominent news outlet, notable for its co-founder and CEO, Maria Ressa, who is the first Filipino to receive a Nobel Prize<sup>[48]</sup>. Hence, giving contrasting viewpoints about the COVID-19 ecological contents from news articles.

Articles from the said outlets were manually scanned, from January 2020 to November 2021. Fourteen notable national COVID-19 news events were identified within the timeframe, as presented in **Table 1** with their publication date. These events were chosen based on the high volume of reactions and comments on the outlets' social media platforms, where significant public interaction occurred in the comment sections.

**Table 1.** COVID-19 news events reported in CNN and Rappler.

CNN and Rappler News Events (2020-2021)	Publication Date
1. First confirmed COVID-19 case in the country	January 30, 2020
2. Declaration of a public health emergency	March 8, 2020
3. Imposition of enhanced community quarantine (ECQ) on Luzon and associated islands	March 16, 2020
4. Enactment of the ‘Bayanihan to Heal as One Act of 2020,’ which granted President Rodrigo Duterte additional powers to manage the pandemic	March 25, 2020
5. Approval for limited face-to-face classes in Modified General Community Quarantine (MGCQ) areas as proposed by Education Secretary Leonor Briones, to be implemented by January 2021	July 17, 2020
6. Start of the 2020–2021 school year through blended learning in over 47,000 public schools (October 5, 2020)	July 21, 2020

7.	Endorsement of face-to-face classes in low-risk areas by DepEd for January 2021	December 14, 2020
8.	A Filipino traveler testing positive for a new COVID-19 strain in Hong Kong	January 6, 2021
9.	Confirmation by the Philippine Genome Center (PGC) and the Department of Health (DOH) that the B.1.17 variant had arrived in the country	January 13, 2021
10.	Reopening of leisure facilities and an increase in religious gathering capacities in areas under General Community Quarantine	February 12, 2021
11.	Detection of six cases of the B.1.351 South African variant by UP-PGC, as announced by DOH	March 2, 2021
12.	World Health Organization confirms community transmission and the predominance of the SARS-CoV-2 Delta variant in the country	August 31, 2021
13.	Extension of the national state of calamity due to COVID-19 by President Duterte through Proclamation No. 1218	September 10, 2021
14.	Pilot run of face-to-face classes in public schools	November 15, 2021

**Table 1.** (Continued).

A total of fourteen articles were gathered from each news source, yielding 7,419 words from CNN Philippines and 7,654 words from Rappler. After collecting the texts, the data was cleaned by removing irrelevant content such as advertisements, sidebars, metadata (e.g., publication dates), and formatting issues. The text was then standardized by converting it to plain text format to ensure a consistent structure across all articles. The articles were categorized based on key features, such as publication date, genre, and author, and organized into folders. These categorized articles were then used to create two distinct corpora for analysis.

## 6. Data analysis

AntConc 4.0.2 was used to analyze the appraisal resources within the datasets. AntConc 4.0.2 is a free, open-source corpus analysis tool developed by Laurence Anthony, widely used in linguistic research for analyzing large collections of text (corpora). The appraisal resources in the COVID-19 news reports from CNN Philippines and Rappler were identified and annotated using Martin and White<sup>[34]</sup> framework on appraisal systems. Once the manual annotations were completed, descriptive statistics were applied to assess the frequency and distribution of appraisal resources in the news coverage. The analysis began with a detailed micro-evaluation of the specific appraisal characteristics within the texts and further explored the ecological perspectives conveyed through these resources. In addition, a macro-evaluation was conducted to assess the overall attitudes of the two media outlets toward the Philippines’ response to the COVID-19 pandemic, focusing on how objects and attributes were presented in the reports.

## 7. Results

Appraisal framework is a model within systemic functional linguistics that focuses on how language expresses attitudes, emotions, and evaluations. In this framework, Martin and White<sup>[34]</sup> identified three main subsystems: *attitude*, *engagement*, and *graduation*, each of which deals with different ways in which speakers or writers position themselves and their audience, express their evaluations, and engage with other viewpoints. Using AntConc 4.0.2, this paper identified the prevalence of the attitude, engagement, and graduation systems in the COVID-19 news articles published from January 2020 to November 2021.

**Table 2.** Distribution of appraisal resources employed in the data.

Source	CNN Philippines		Rappler		
	<i>n</i>	<i>Percent</i>	<i>n</i>	<i>Percent</i>	
Appraisal System	Attitude	278	32.67%	303	36.46%
	Engagement	324	38.07%	307	36.94%
	Graduation	249	29.26%	221	26.6%

Total	851	100%	831	100%
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**Table 2.** (Continued).

Frequency distribution in **Table 2** presents that the CNN and Rappler used appraisal system to convey COVID-19 ecological messages across the country through news articles. The table shows that within the 14 sampled articles from each source, CNN employed the appraisal system 851 times, while Rappler employed it 831 times.

Analyzing the prevalence of attitude resources, *i.e.*, feelings, judgments, and values are expressed in language, Rappler used attitude 9% times more frequent compared to CNN. In **Table 3**, it shows that Rappler (n=132) used negative attitudinal resources approximately 60% more often compared to CNN (n=82), when reporting COVID-19 ecological news. In contrast, they used 171 positive attitudinal resources, 12.76% less often compared to 196 instances of CNN. This disparity may indicate that Rappler was less inclined to optimistic reporting related to the pandemic, which could affect the narrative of resilience and hope that some audiences may seek in times of crisis. By focusing less on positive aspects, Rappler may inadvertently contribute to a negative or pessimistic outlook among its readers.

**Table 3.** Distribution of attitudinal resources across news articles.

Source	CNN		Rappler		Total	
	Positive	Negative	Positive	Negative		
Attitudinal Resources	Affect	33	29	35	55	152
	Judgment	107	23	74	40	244
	Appreciation	56	30	62	37	185
	Total	196	82	171	132	581

Descriptive analysis for the prevalence of engagement resources, *i.e.*, how speakers/writers position themselves in relation to the viewpoints they present, is presented in **Table 4**. As shown, CNN (n=324) was observed to use engagement resources 5.53% more often than Rappler (n=307). Specifically, CNN (n=302) used heterogloss (alternative views) 3.78% more often compared to Rappler (n=296). In terms of monogloss (simple assertions), CNN (n=22) used it 37.5% more often than Rappler (n=16). This finding may imply that while CNN was more assertive in presenting its viewpoints, it also strives to offer a balanced narrative through incorporating different perspectives. These trends suggested that CNN approach may encourage dialogue among its audience given its engagement resources, while Rappler was restrained use of engagement resources could impact the depth of its discourse.

**Table 4.** Distribution of engagement resources across news articles.

Source	CNN	Rappler	
Engagement Resources	Monogloss	22	16
	Heterogloss	302	291
	Total	324	307

Descriptive analysis for the prevalence of graduation resources, *i.e.*, amplification or downscaling the force of evaluations and expressions, is presented in **Table 5**. Findings indicated that CNN (n=249) used graduation resources 28.57% more often than Rappler (n=63) when reporting COVID-19 ecological news. CNN (n=168) used force (intensity or degree) 6.32% more often than Rappler (n=158). Similarly, CNN (n=81) used focus (specificity or vagueness) 28.57% more often than Rappler (n=63). The findings imply



that CNN approach may give impactful narrative about urgency and specificity of issues, potentially leading to awareness and responsiveness among its audience. In contrast, Rappler use of graduation resources might result in a more subdued portrayal of the pandemic’s ecological implications, which could affect how audiences perceive and engage with these critical topics.

**Table 5.** Distribution of graduation resources across news articles.

	Source	CNN	Rappler
Engagement Resources	Force	168	158
	Focus	81	63
Total		249	307

These findings suggested that CNN COVID-19 ecological reporting tends to convey a dynamic and engaged narrative, characterized by a balance of perspectives, greater intensity, and specificity. In contrast, Rappler reports may lean towards a more critical but less optimistic narrative, oftentimes negative, which could influence audience perceptions and emotional responses to the ongoing challenges presented by the pandemic.

## 8. Discussion

EDA demonstrates its adaptability by allowing the integration of various linguistic theories to reveal the linguistic patterns that are present in discourse<sup>[49]</sup>. The ecological perspective considers language to be a fundamental component of the behaviors exhibited by humans, including patterns acquired through interactions within a community of users<sup>[50]</sup>. In previous studies, EDA examines elements such as framing, metaphor, rhetoric, as well as narratives and storytelling in their diverse forms<sup>[32,51]</sup>. Similarly, this paper anchored the analysis to principles of Martin and White<sup>[34]</sup> appraisal framework, which provides a comprehensive set of tools for examining how language expresses attitudes, emotions, and evaluations. This offered a robust semantic model for analyzing how COVID-19 journalists position themselves through language, making it particularly suitable for discourse analysis.

Appraisal provides a structure for analyzing the positions expressed in language, revealing the prosodic significance inherent in texts<sup>[39,52]</sup>. The evaluation, among other factors, can be examined through appraisal frameworks formed by adjectives, verbs, adverbs, and modalities<sup>[52]</sup>. From an ecolinguistics standpoint, evaluation constitutes one of the narratives that shape existence, impacting cognition, communication, and behavior<sup>[53]</sup>. Consequently, examining prevalent appraisal patterns that depict entities in either a positive or negative light within discourse serves as a method to explore the ideologies that influence language choice<sup>[52]</sup>. This paper observed that CNN and Rappler employed distinct appraisal strategies in their COVID-19 ecological news coverage from 2020-2021, reflecting differing ideological stances and audience engagement approaches. Judgement was the most prevalent type of appraisal across the published news articles of CNN and Rappler. CNN and Rappler used judgement resources to convey the meanings in COVID-19 reporting. By using judgment resources, CNN and Rappler assess and express attitudes toward the behavior of individuals or groups, potentially praising or criticizing actions related to the events they report.

However, there were subtle differences on how CNN and Rappler approach the COVID-19 events in the year 2020-2021. In Martin and White<sup>[34]</sup> appraisal framework, *attitude* refers to how feelings are structured into “a system of meanings”<sup>[35]</sup>. In *attitude* system, its domain is essential for the expression of emotions, which is divided into three semantic areas: Affect (direct expression), Judgement (ethics), and Appreciation (aesthetics)<sup>[54]</sup> (Wei & Hu, 2024). Patterns in writing news article revealed that Rappler was critically inclined in reporting direct “negative” attitude about the COVID-19 pandemic, while CNN used positive

affect, judgement, and appreciation. This assessment aligns with the findings from a University of the Philippines Diliman study<sup>[55]</sup>. One of the participants explained that “*I believe the negative perceptions of these people aroused from Rappler’s inaccuracy when delivering news.*” In attitude system, the meanings associated with attitudes are not static for individual terms; rather, they are elicited through the interaction of word combinations within contexts<sup>[56]</sup>. Consequently, a single term may express varying attitudinal implications based on the context in which it is used; thus, when analyzing the COVID-19 news articles from CNN and Rappler, it appears that they used attitude in varying prevalence and range. It is important to not label Rappler’s reporting as “attacks.” From an ecolinguistics standpoint, it is more appropriate to view their approach as a form of “critical” discourse, which seeks to question and evaluate social and environmental issues rather than simply criticize. This exemplifies the studies about Rappler that still considered it to be a “reliable” and “trustworthy” news agency in the country<sup>[57,58]</sup>.

The engagement system, categorized as *heterogloss* and *monogloss*, reflects the interaction of perspectives within the discourse, as well as the methods by which the author forges connections with the audience<sup>[35]</sup>. These are linguistic tools that speakers or writers utilize to express their stance regarding the value positions referenced in the text, as well as their relationship to the audience they are addressing<sup>[59]</sup>. It was evident in this paper that heterogloss was more prominent than homogloss expressions across COVID-19 articles of CNN and Rappler in the year 2020-2021. These news outlets at the time of pandemic were generally *heteroglossic* as they acknowledge alternative views or other voices (e.g., modal verbs, attribution, concession). The *heteroglossic* utterance indicates the presence of alternative viewpoints, demonstrating that the assertion represents only one perspective among numerous possibilities<sup>[59]</sup>. It is no surprise that *heteroglossic* utterances were common in human speech and written works. For example, the study of Sari and Alyousef<sup>[59]</sup> compared the prevalence of *homoglossic* and *heteroglossic* resources in English as first and second language International General Certificate of Secondary Education (IGCSE) reading texts. Their findings indicated that *heteroglossic* was more common in the IGCSE reading texts compared to *homoglossic* statements. They believed that it is mainly because of the nature of the reading texts of having argumentative goals. This aspect was particularly obvious in the context of COVID-19 where news outlets (like CNN and Rappler) were critical in expressing their perspectives. This receptiveness to perspectives probably encouraged an inclusive and conversational engagement with the audience, prompting readers to reflect on various perspectives and interact thoughtfully with the presented information.

Graduation pertains to the assessment or scaling of values, whether regarding the interpersonal weight that the speaker assigns to a statement or the clarity and precision with which an item illustrates a value relationship<sup>[60]</sup>. In the graduation system, *force* and *focus* refer to the ways in which the intensity or specificity of evaluations is modified in language<sup>[35]</sup>. The author typically employs the semantic value of graduation as a persuasive tool to emphasize certain aspects of the event through high-level graduation, while diminishing other aspects with low-level graduation<sup>[61]</sup>. This strategy is designed to direct the reader’s focus toward the area the author intends to highlight. This paper observed that both CNN and Rappler utilized force and focus in their reporting on COVID-19 events, with a predominant emphasis on force in their narratives. This linguistic pattern can also be observed in other aspects of human life, say, human rights. In the study of Chefor, Zhiying and Kyaw<sup>[60]</sup>, they examined how evaluations are expressed in the analyzed African human rights corpus using a range of lexical and grammatical elements that indicate varying degrees of intensity or quantity. Their findings indicate that even when the expressions are somewhat vague or imprecise, other linguistic choices within the force category help to reveal the speaker’s subjectivity and the strength of their appraisals—making court judgements somehow subjective. In the context of COVID-19 events, such subjectiveness in *force* holds significance as the use of high-level graduation could prompt

readers to recognize the gravity of the issues presented. This approach can enhance the perceived importance of the information conveyed, encouraging greater engagement and responsiveness from the audience.

Consequently, this paper highlighted the strategic use of appraisal, engagement, and graduation systems of CNN and Rappler in shaping public perception during their COVID-19 coverage. Employing appraisal strategies, both outlets revealed differing ideological stances, with Rappler being more critical and CNN adopting a balanced tone evaluation. Their report was not just about informing the public, but also about positioning themselves in specific ideological frameworks. Rappler's tendency to lean toward a more critical discourse, particularly with negative attitudes, indicates an intention to challenge or question existing structures, which aligns with its goal as a watchdog in society<sup>[62,63]</sup>. In contrast, CNN used of affect, judgment, and appreciation implies an approach that balances critique with positive reinforcement, perhaps aimed at maintaining public trust and encouraging optimism amid a global crisis<sup>[64]</sup>.

## **9. Conclusion**

This study revealed the use of appraisal, engagement, and graduation systems in CNN and Rappler COVID-19 coverage from 2020 to 2021. Both outlets employed these linguistic resources to shape public perception and express their ideological stances. Rappler leaned towards a more critical discourse, emphasizing negative attitudes in its reporting to challenge existing structures. CNN, on the other hand, maintained a balanced tone with positive affect, judgment, and appreciation to retain public trust and optimism. EDA showed that language choice in news reporting is not merely informational but was also used in positioning the outlets within specific ideological frameworks.

Linguistic choices in news coverage could significantly influence public perception and discourse. Hence, making it a valuable method in politics, leadership roles, education, business, and workplace dynamics. Media outlets can employ varying appraisal strategies to align their reporting with their ideological positions, shaping how audiences interpret and engage with information. This highlighted the need for media literacy, as readers should critically engage with the linguistic nuances in news reports. For journalism, understanding the impact of appraisal systems can guide more conscious reporting practices that consider both ethical responsibility and audience influence, not only during global crises like the COVID-19, but in any events that affect hundreds of human lives.

However, there are limitations that need to be addressed. This study was limited by its focus on a specific timeframe (2020-2021) and only two media outlets (CNN and Rappler), which may not fully represent the broader landscape of COVID-19 news reporting. The analysis was restricted to the linguistic frameworks of appraisal, engagement, and graduation, leaving out other potential factors such as cultural contexts or political pressures that could have influenced the reporting, especially emphasizing press freedom. Future studies could expand on these limitations by analyzing a wider range of outlets and incorporating additional frameworks or interdisciplinary perspectives. It also requires them to conduct robust statistical tests that govern critical assessment of journalistic narratives along with online engagement from readers that follows.

## **Conflict of interest**

The authors declare no conflict of interest.

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