Ecolinguistics Devices and Ideology in President El-Sisi's Climate Change Speeches: A Corpus Discourse Analysis Study

《塞西总统气候变化演讲中的生态语言学手段与意识形态: 一项语料库话语分析研究》

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ملخص الدراسة:

في غضون السنوات الخمس عشرة الماضية، أصبح تغير المناخ أحد الأولويات القصوى على أجندة السياسات العالمية . وهذا التغيير يجبر جميع السياسيين على المتابعة واتخاذ القرارات ونشر الوعي في بلدانهم .تلعب خطابات الشخصيات العامة عن تغير المناخ دورًا رئيسيًا في تشكيل التصورات العامة والتأثير على سياسة المناخ .تقوم هذه الدراسة بإجراء تحليل لغوي متعمق لخطابات الرئيس عبد الفتاح السيسي كأحد السياسيين البارزين عن التغير المناخي البيئى على مدى ثلاث سنوات، وذلك بهدف الكشف عن الإستراتيجيات والأدوات اللغوية المستخدمة في خطاباته عن القضايا البيئية . وتحدد هذه الدراسة الاستعارات المتكررة وتقنيات التأطير لمعالجة فهم الأفراد لقضية تغير المناخ والمخاوف البيئية ، وتتعمق الدراسة في تأثير الاختيارات اللغوية على الإدراك والوعي العام بتغير المناخ داخل مصر .وتقييم التأثير المحتمل على مواءمة السياسات مع الأهداف المناخية الدولية .يتم ذلك من خلال منهج متعدد التخصصات يستمد من اللغويات البيئية لستيبي ، وتحليل الخطاب السياسي، والتواصل البيئي، يسعى هذا البحث الذي يحتوي على (٢١) خطابا للرئيس السيسي متعلقا بالبيئة والتغير المناخى متضمناً (٢٦٨) استعارة ورسمًا لغويًا مختلفًا إلى المساهمة في فهم التفاعل المعقد بين اللغة والقيادة والوعي البيئي .تم الكشف عن استخدام عشر إستراتيجيات لإظهار الأيديولوجية واتجاهات الرئيس السيسي في خطاباته، وتستهدف جميعها بناء وجهات نظر تأطيرية مختلفة وتصورات ومفاهيم الأفراد عن تغير المناخ بهدف إشراك جميع أطراف هذه القضية فيها وتوحيد الرؤية بخصوصها. تؤثر النتائج على الاتصالات المتعلقة بتغير المناخ، وتطوير السياسات، والمشاركة العامة للمواطنين بفهمهم للوضع البيئى، وتضيف إلى مجال دراسة علم اللغة البيئي كموضوع يخص البيئة المصرية.

الكلمات الدالَّة: اللسانيات البيئية، تغير المناخ، تحليل الخطاب النقدي، تحليل المتون.

Summary:

Climate change has risen to the top of the global policy agenda over the past 15 years. This change forces all politicians to follow up, make decisions, and raise awareness in their respective countries. Public figures' speeches on climate change play a crucial

role in shaping public perceptions and influencing climate policy. The present study conducts an in-depth ecolinguistic discourse analysis of President Abdel Fattah El-Sisi's climate change speeches over three years (from 2020 to 2023), aiming to uncover the linguistic strategies and devices employed in his communication about environmental issues. It identifies recurring metaphors and framing techniques for addressing climate change and environmental concerns. Using Stibbe (2015) approach, the study examines the impact of linguistic choices on public perception and awareness of climate change in Egypt. It assesses the potential influence on policy alignment with international climate objectives. This study, which includes 21 speeches and 268 metaphors, applies a multidisciplinary framework and draws on ecolinguistics, political discourse analysis, and environmental communication to help understand the complex interplay between language, leadership, and environmental awareness. Ten ideological strategies are employed, focusing on building individuals' perceptions through different framing views and concepts about climate change. Findings hold implications for climate change communication, policy development, public engagement, and the broader field of ecolinguistics.

Keywords: Ecolinguistics, Climate change, Critical discourse analysis, Corpus analysis

Introduction

Climate change is a global challenge demanding urgent attention, comprehensive understanding, and effective communication. As the world grapples with the multifaceted consequences of environmental degradation, political leaders play a pivotal role in shaping public perception and driving policy decisions (Dryzek et al., 2011). Climate change has impacted nearly every nation across the globe. Each year, we observe shifts in weather patterns that increasingly veering toward extremes and the world steadily growing warmer. For instance, there was a notable heatwave in Europe in 2019 and a historic heatwave in the Pacific Northwest of the United States and Canada in 2021, which registered a record-breaking temperature of 49.6°C (NASA, June 22, 2021). The last unexpected excessive notable environmental change is the effects of Hurricane Daniel on Darna in Libya. Thus, several social scientists and researchers investigated the public's comprehension and perception of climate change. They sought to ascertain whether the public possesses a clear understanding or misconceptions about this concept. Additionally, these scholars examined the general public's attitudes toward various initiatives and strategies related to climate change (Ohe & Ikeda, 2005; Etkin & Ho, 2007; Seacrest & Kuzelka, 2007). In this context, the study rigorously explores the ecolinguistic dimensions of President Abdel Fattah El-Sisi's climate change discourse, spanning a significant period. By dissecting the metaphors framing strategies and environmental messaging embedded in President El-Sisi's speeches, this study offers invaluable insights into the intricate interplay between language, leadership, and environmental consciousness. In terms of linguistics, it depends on how mass media frames the issue of climate change, which would affect the way the public would interpret and understand it. These skills were used by various leaders and countries like president AlSisi to leave an impact on the world (Weingart et al., 2000). It examines the power of linguistic tools in conveying complex ecological messages, elucidating how metaphors shape our understanding of environmental challenges (Romaine, 1996). By reviewing how language constructs reality, shapes perceptions, and influences policy decisions, readers in the linguistic field will deeply appreciate the profound role of language in addressing one of the

most pressing issues of our time—climate change (Depoux et al., 2017). This study's scope is a multifaceted exploration of the intricate relationship between language and ecology, encompassing the influence language wields on ecological concepts, environmental communication, and the formation of public perceptions surrounding ecological issues. Embracing an interdisciplinary lens, this study incorporates insights from linguistics, environmental science, communication studies, and political science. Thus, the importance of this research lies not only in its examination of linguistic strategies but also in its potential to unravel the profound impact of language on environmental awareness, public engagement, and policy alignment within the specific context of Egypt.

Objectives of the Study

The current study investigates 21 speeches on climate change from a linguistic point of view. It outlines several interconnected objectives. It aims to identify and categorize the metaphors and framing strategies used in President Abdel Fattah El-Sisi's climate change speeches, unraveling the linguistic tools through which environmental messages are conveyed. It also seeks to assess the influence of these linguistic strategies on the Egyptian public's perception and awareness of climate change, providing insights into how political discourse shapes environmental consciousness. Moreover, the research evaluates the potential impact of President El-Sisi's speeches on the alignment of national policies with international climate change objectives, contributing to discussions on effective climate governance. Through a cross-cultural lens, the study also aims to uncover linguistic variations in climate change communication within Egypt, examining how language choices may differ based on regional and demographic factors.

Significance of the Study

The significance of the study on ecolinguistic analysis of President El-Sisi's climate change discourse is multifaceted and holds both academic and practical relevance. The study not only contributes to the field of linguistics but also offers critical insights into how leaders communicate and frame ecological issues by examining the linguistic strategies employed by prominent political figures like President El-Sisi when addressing climate change and environmental concerns. Notably, the cross-cultural perspective adds a layer of significance, showcasing how climate change is addressed within a specific linguistic and cultural context. Generally, the study can advance ecolinguistics as a field of study, stimulate public engagement in climate action, and influence environmental policy and advocacy by highlighting the intricate interplay between language, leadership, and environmental awareness. It assumes great significance for various compelling reasons: First, it seeks to highlight effective communication strategies capable of elevating ecological consciousness and catalyzing actionable responses by meticulously analyzing the language used in ecological discourse. Second, it acknowledges the profound impact of language on environmental policy and decision-making processes. Moreover, this study recognizes the media's pivotal role in shaping public perceptions of ecological challenges. It emphasizes the transformative power of language in influencing individual and collective behavior concerning ecological matters. Furthermore, this study's interdisciplinary approach, bridging the fields of linguistics, environmental science, and communication studies, offers valuable cross-disciplinary insights. It reveals how language functions as a bridge between ecological knowledge and societal responses.

It serves as a profound exploration of language's role as a mediator, communicator, and influencer within ecological contexts.

Theoretical Framework

Climate change is arguably the biggest crisis humanity has ever faced (Cavicchioli et al., 2019). According to the International Panel on Climate Change (IPCC) (2022), the effects of climate change poses significant risks to human and natural systems on all continents. Environmental discourse is a dynamic and influential form of communication and discussion centered on ecological and environmental issues. It encompasses the language, rhetoric, narratives, and dialogs used in various contexts, such as media, politics, and public communication campaigns, to convey information, perspectives, and arguments related to the environment (Fløttum & Gjerstad, 2017). Environmental discourse has a pivotal role in shaping public perceptions, attitudes, and policies concerning ecological matters. It also serves as a conduit for disseminating knowledge about environmental challenges, solutions, and implications to the broader public. It is instrumental in raising awareness about critical ecological issues, from climate change and biodiversity loss to pollution and resource depletion. Through environmental discourse, individuals are exposed to information that can influence their understanding of their potential impacts on society (Dryzek, 2013). Policymakers, activists, and stakeholders employ language strategically to frame environmental policies, debates, and agendas. Moreover, it can shape the public's perception of the urgency and importance of specific environmental initiatives. Environmental discourse also plays a role in shaping public opinion and behavior. Framing environmental issues in discourse can influence people's beliefs, values, and behaviors, driving them to take pro-environmental actions, such as reducing energy consumption, supporting conservation efforts, or advocating for policy changes (Weingart et al., 2000). In the realm of international diplomacy and agreements, environmental discourse is instrumental in facilitating negotiations and consensus-building through language used in agreements that have far-reaching implications for global environmental efforts. Consequently, environmental discourse is a potent force shaping how society perceives, discusses, and responds to ecological challenges (Dryzek, 2013). Understanding the dynamics of environmental discourse is crucial for effective communication, policy development, and advocacy in terms of environmental conservation and sustainability.

Analyzing language in ecological contexts holds significant relevance for numerous compelling reasons. First, it plays a pivotal role in communication, serving as the primary conduit for conveying complex ecological knowledge to the public. Second, language profoundly influences policy formulation and decision-making in environmental policies, with public discourse and political rhetoric heavily shaping agendas. Third, language's impact on public perception and behavior regarding ecological issues is undeniable, as it molds narratives and motivates action through media, advocacy, and communication campaigns. Moreover, international environmental agreements hinge on specific linguistic nuances, necessitating thorough analysis to understand their implications. Additionally, language is a potent driver of behavioral change and advocacy efforts, making it crucial to comprehend linguistic triggers for pro-environmental actions. Lastly, language analysis facilitates monitoring and assessing the effectiveness of environmental communication, ensuring alignment with goals and public values (Stibbe, 2015). Thus, understanding the role of language in ecological discourse enhances environmental communication, informs

policy development, promotes international cooperation, and contributes to tackling ecological challenges and fostering sustainability. Language serves as a powerful mirror reflecting the intricate web of ecological relationships and concepts that define our understanding of the natural world (Lakoff & Johnson, 2008). Spatial and temporal language elucidate habitat dynamics and seasonal changes, while indigenous languages preserve unique ecological knowledge. Language is the conduit for discussions on environmental ethics, which interprets quantitative data vital for scientific communication. Furthermore, narratives and storytelling traditions embed ecological lessons within cultural contexts.

Linguistic framing

Linguistic framing plays a pivotal role in shaping public opinion and policy outcomes in ecological contexts. By selecting specific words, phrases, narratives, or metaphors, communicators and policymakers can influence how environmental issues are perceived and addressed. For instance, framing an ecological challenge as an "environmental crisis" or climate change evokes a sense of urgency and the need for immediate action, while framing it as a "natural fluctuation" downplays its significance. Framing can appeal to various values, such as environmental stewardship, economic interests, or public health, to garner support from diverse audiences. Furthermore, framing ecological issues in the media can amplify their salience and affect public engagement. Policymakers may prioritize issues framed as threats to national security or economic stability, thus influencing the allocation of resources and policy design (Stibbe, 2015). Therefore, careful selection of framing devices is a strategic element in environmental communication and policymaking, with far-reaching implications for addressing ecological challenges and fostering sustainability.

Language is a powerful tool used in environmental discourse, especially when it comes to framing environmental issues. Different frames are widely employed to influence public perception and policy priorities. Ecological frames emphasize the interconnectedness of ecosystems, highlighting the delicate balance of nature and the consequences of ecological disruption. Ethical frames invoke moral and ethical principles, emphasizing the responsibility of protecting the environment for future generations. These frames are not mutually exclusive but coexist in environmental discourse, each resonating with specific audiences and eliciting varied responses (Romsdahl et al., 2018). The choice of frame can significantly impact how an issue is perceived, debated, and ultimately addressed, showcasing the centrality of language in shaping environmental narratives. Metaphors serve as powerful tools in conveying ecological ideas and values by drawing analogies between ecological concepts and familiar, concrete experiences. They facilitate understanding and connection by linking the unknown (ecological complexities) to the known (everyday experiences). Metaphors can also convey values by framing ecological issues in particular ways. For example, the metaphor of "nature as a mother" implies a nurturing and protective relationship with the environment, fostering values of care and stewardship. Conversely, metaphors like "nature as a resource" emphasize utility and exploitation, influencing attitudes and policies focused on extraction. Therefore, metaphors are instrumental in making ecological concepts accessible, relatable, and imbued with values that guide how society perceives and interacts with the environment (Lakoff & Johnson, 2008). They can inspire environmental ethics, shape conservation efforts,

and guide policy decisions, making them a crucial element of environmental discourse (Fleming et al., 2014).

Environmental communication

The importance of language emerges from being a medium to represent the complexity of the phenomenon of climate change from being understood primarily as physical to becoming political, social, cultural, ethical, and communicational (Fløttum, 2017, p. 1). In parallel, environmental discussions often employ metaphors to convey complex concepts and evoke emotional responses. They also use a range of persuasive language techniques to engage and mobilize audiences effectively. One prevalent strategy is appealing to emotions, evoking feelings like fear, empathy, or hope to create a strong connection with environmental issues. Concrete statistics and data lend credibility to environmental arguments, providing evidence of ecological threats and their real-world impacts (Semino, 2008). Positive framing, which emphasizes solutions and success stories alongside problems, motivates action by highlighting the benefits of pro-environmental choices. Appeals to identity, aligning environmental action with personal values, tap into individuals' sense of responsibility. Visual imagery, such as compelling pictures or symbols, reinforces messages, while clear calls to action provide specific, actionable steps for individuals to make a difference. Stibbe (2015) defines metaphor as "a story that describes something as if it were something else" (p. 63). Similarly, Muller (2016) describes the metaphor as "the transfer of a word from one place in the language to another one, and the etymology of metaphor indicates this idea of transfer too" (p. 33). Metaphors are used as framing devices. Stibbe (2015) maintains that "metaphors are a type of framing which can be particularly powerful and vivid since they use a specific, concrete and distinct frame to think about an area of life" (p.186). Furthermore, Sweetser (2017) argues that metaphoric mappings shape reasoning, and as a result, we may reason about something differently depending on what metaphors are used for metaphorical mapping.

For Nerlich et al. (2002), conceptual metaphors are investigated as not only linguistic devices but also cognitive and social devices. There are two complementary levels in the analysis of metaphor: linguistic and conceptual. Thus, metaphorical expressions in discourse are seen as linguistic reflexes of, or prompts for, conceptual structures and processes. Then, metaphor is viewed as a cognitive process that involves conceptualizing one thing in terms of another (Hart, 2018, p. 188). So, Semino (2008) states that metaphor can be centralized between discourse and ideologies, or discourse is formulated using metaphors, which can produce ideologies. Metaphors play an important role in creating rather than passing knowledge. They also arouse emotions that can be used as the basis for evaluating political actors and actions by offering persuasive representations of social groups and social issues (Charteris-Black, 2014, p. 161). Semino (2008) asserts that "the use of metaphor is particularly necessary for politics since politics is an abstract and complex domain of experience, and metaphors can provide ways of simplifying complexities and making abstractions accessible" (p. 90). Metaphors are used in politics for another reason: the primary goal of any politician is persuasion, and one strategy for doing so is by drawing on metaphor (Charteris-Black, 2005) to make politicians' language less threatening. Charteris-Black (2018) and Semino (2008) conclude that metaphors are employed for three purposes: framing, explaining, and persuading. They are used in a complex or diverse manner in political discourse. One of the most common methods is to repeat it to

facilitate comprehension, as the addressee processes repeated metaphors in much less time than new ones (Phillips, 2017). Another type is the extension, where a series of semantically related metaphor vehicles describe the same topic (Charteris-Black, 2016, p. 162). Mixing is when two metaphorical expressions from two or more different source domains describe the same topic existing in a single clause: "Cities will continue to lead the way in moving forward in protecting our residents."

Ecolinguistics

Research on language in environmental politics examines the intricate ways political leaders and policymakers employ language to advance their agendas concerning environmental policies. This analysis extends to analyzing how politicians frame ecological issues, emphasizing aspects, benefits, or threats to shape public opinion. This study investigates using persuasive rhetoric to garner support or opposition to policy initiatives, often drawing on emotional appeals, oral arguments, or economic considerations. Additionally, previous studies explored how political leaders utilize metaphors and symbols to convey complex environmental concepts in more accessible terms, thus influencing public understanding and support (Lakoff & Johnson, 2008). Understanding the linguistic strategies deployed in political discourse provides insights into framing environmental debates, prioritizing ecological issues, and the outcomes of policy decisions in environmental politics. Research on language in environmental politics also extends to the examination of linguistic nuances within international climate agreements. These agreements, such as the Paris Agreement, involve intricate negotiations where precise wording can have far-reaching consequences for global efforts to combat climate change. Scholars analyzed the specific terms, commitments, and targets outlined in these agreements, dissecting their legal implications and practical applications. They scrutinized how diplomatic language is used to bridge disparities in national interests and priorities to strike a delicate balance between ambitious climate action and accommodating the diverse capabilities and responsibilities of nations. Understanding the linguistic dimensions of climate agreements is essential for stakeholders to elucidate the binding commitments, financial obligations, and cooperative mechanisms that underpin international efforts to address climate change effectively. Ecology is the discipline that investigates the nexus between humans and other living species in the physical environment and the ways to preserve life ecosystems (Alexander & Stibbe, 2014). Fill (2018) defines ecolinguistics as "a kind of ideology that creates an awareness of the interdependence of all things and ideas" (p. 5). Stibbe (2014) describes ecolinguistics as an interdisciplinary field that explores the relationship between language and the environment. It examines how language shapes our perceptions of the natural world, how it reflects and reinforces cultural attitudes toward the environment, and how it can be used to promote environmental awareness and sustainability. Ecolinguistics uses insights from linguistics, ecology, anthropology, psychology, and other fields to understand the complex interactions between language and the environment. It is concerned with issues such as the representation of nature in language, the impact of language on environmental policy and decision-making, and the role of language in shaping our understanding of environmental issues like climate change, biodiversity loss, and sustainability. He added, "ecolinguistics is concerned with texts that influence people to protect or destroy the environment rather than a narrow focus on texts about the environment" (Stibbe, 2020, p.3). He also states that "ecolinguistics is a form of CDA with a difference: ecolinguistics focuses

on the larger ecological system to include the relationship of humans with the environment. It reveals the positive and negative roles of humans in the natural world" (p.32). Fløttum (2017, p. 7) holds that "since climate change … cannot be seen, heard, or touched, it is in fact through language that we can acquire knowledge of and understand this complex phenomenon," and Fill (2001, p. 21) noted the "interdependence between discursive practices and ecological devastation."

Corpus linguistics

Corpus linguistics within ecology is a robust research methodology for studying language in ecological contexts. It entails collecting and analyzing extensive datasets of texts, such as written documents, speeches, media transcripts, and online content related to ecological topics. It enables the quantitative examination of language patterns, word frequencies, collocations, and semantic associations within ecological discourse. This approach provides empirical evidence of language usage. It can reveal shifts in public discourse, helping explore how language reflects and shapes perceptions, policies, and behaviors in terms of environmental issues (Dryzek, 2013). Through computational analysis and sentiment analysis, prior studies explored the tone, framing, and influential factors in social media discourse associated with ecological issues. Understanding social media discourse is crucial for grasping the contemporary landscape of environmental communication and its impact on public engagement with ecological challenges (Semino, 2016). However, some notable gaps and areas warrant further exploration. Addressing these gaps will enhance our ability to communicate effectively about environmental challenges and foster sustainable practices worldwide. This study adopts a comprehensive and interdisciplinary approach, drawing from linguistics, environmental science, and communication studies. Analyzing President El-Sisi's speeches related to climate change and environmental issues provides insights into how language operates as a bridge between ecological knowledge and societal responses. Moreover, it delves into speeches delivered by significant leaders and great figures, ensuring a multilingual and cross-cultural perspective. Furthermore, it examines both qualitative and quantitative aspects of language, highlighting linguistic framing, metaphors, and rhetorical strategies, focusing on international climate efforts that align with the need for research in this critical area.

Review of literature

The reviewed literature underscores the pivotal role of language in ecological contexts, particularly its significance for effective environmental communication and policymaking. Critical findings revealed that language shapes public perceptions and behaviors regarding environmental issues, policy agendas, and international climate agreements. Metaphors, frames, and persuasive language techniques are essential tools in conveying ecological concepts and motivating pro-environmental actions. The reviewed studies also stressed the need for interdisciplinary approaches that combine linguistics, environmental science, and communication studies to gain a comprehensive understanding of language's function in environmental discourse. Understanding the relationship between language and ecology is paramount for addressing pressing environmental challenges and fostering sustainability. With this foundation, this study adopts a methodological approach that analyzes speeches related to climate change and environmental issues, aiming to contribute valuable insights to the existing body of literature.

Numerous studies have explored the role of linguistic characteristics in understanding how politicians develop strategies to address the issue of climate change. For instance, Fløttum (2010) has analyzed two texts derived from the IPCC Summary on climate change, scrutinizing them from both micro- and macro-linguistic perspectives. In her investigation, she examined various linguistic elements employed by the participants in their discourse. These elements encompassed personal pronouns, knowledge-related terms, assertions, epistemic qualifiers, and expressions denoting concession and refusal in the context of multiple voices. Additionally, she delved into the processes of generating or reproducing texts as participants drew upon scientific, public, and political discourses. Fløttum's (2010) objective was to dissect how individuals at different linguistic levels construct their approach to climate change politics through language, recognizing that "much political action is, in part or whole, an act of language" (Semino, 2008, p. 85).

Applying ecolinguistic and CDA approaches, Ghdaye et al. (2016) investigate visual texts (advertisements). They examined relationships between media and consumers and between people and the environment in ecological and political contexts. They revealed how these multimodal texts framed stories from daily life, drawing on linguistic and multimodal features. They targeted to illustrate the language's negative use in these texts that promote destructive discourses and destroy nature rather than conserve it. They aim to raise people's awareness of how to protect the environment. Additionally, Grundmann & Krishnamurthy (2010) collected news articles about climate change for four countries, namely, the US, Canada, the UK, and France, from Nexis between 1984 and 2007. They investigated how the phenomenon gained importance by evaluating the distributions of the articles over this period. They analyzed the data from a CDA perspective using the corpus analysis in terms of the number of articles, word frequency, and collocation lists for each of these countries. One main finding is that the number of articles about climate change in French and German print media is about five times higher than in the US and UK, and the sharp increase in the number of articles on climate change for the four countries is between 2005 and 2007.

Many studies were conducted on climate change with several being about language and ecology. Kaushal et al. (2021) focus on climate change communication to understand how effective the communication strategies have been in eliciting the desired and effective responses from the public and how some barriers to the public's engagement in climate communication can be addressed. Their article provides insights into enhancing the language of climate change communication and highlights a few communication strategies, including shifting from passive words to using stronger words with a constructivist perspective. They reported that climate change should be framed as a public health issue, a security issue, stressing personal security, and a moral or religious issue. They highlighted a moral obligation to protect the earth and every living organism or an economic issue by connecting climate change with a severe economic crisis.

Ghosh & Boykoff (2019) examine the framing of climate change and sustainability in the vernacular and English-language media in Sundarbans, India. They were drawing on a critical discourse analysis of 1,200 news articles published between 2009 and 2013. They identified and interrogated the discursive constructs surrounding climate change and sustainability in the region. Their analysis revealed a complex and contested terrain of discourses, where multiple actors, interests, and agendas compete

for legitimation and domination of policy discourses across scales. They found that the vernacular press is more likely to frame climate change and sustainability in terms of local socioeconomic and human issues. In contrast, the English-language press is more likely to frame them in terms of global environmental concerns. They argued that these discursive shifts reflect broader sociopolitical and economic changes in the region and have important implications for the governance of climate change and sustainability in India. This research provides valuable insights into the role of language and discourse in shaping public opinion and policy on climate change and sustainability. These strategies aim to engage the public more actively and effectively in climate change communication. Kaushal et al. (2021) also state that there have been various movements and campaigns to raise awareness about climate change among the public. However, communication strategies are still under development and evolving. The study is centered on the idea of climate change communication and aims to understand how effective communication strategies have been in eliciting the desired and effective responses from the public. The article also provided insights into enhancing the language of climate change communication and highlights a few communication strategies, including shifting from passive words to using stronger words with a constructivist perspective.

Poole & Micalay-Hurtado (2022) presented a corpus-assisted ecolinguistic analysis that examines how the discursive portrayals of trees and forests have evolved in US American discourse from 1820 to 2019. This analysis was conducted using the extensive Corpus of Historical American English, comprising approximately 475 million words. This study employed a diachronic collocation analysis, examining the adjectives that frequently co-occur with these terms throughout the corpus's period to explore the representations of trees and forests in the prevailing discourse. The analysis identified the 100 most used adjectives in association with both singular and plural forms of tree(s) and forest(s). Furthermore, Kendall's tau correlation coefficient scores were calculated, utilizing decade-by-decade per-million-use rates. This statistical approach aimed to evaluate the strength of language empirically using trends over time. The study's findings revealed a divergence in how trees and forests are represented over the examined period. Adjectives conveying negative aspects related to poor health and vitality have shown an increasing presence, while adjectives denoting positive attributes such as size, beauty, and well-being have declined. Moreover, adjectives reflecting experiential engagement with trees and forests have gradually been supplanted by a discourse centered on scientific identification and governmental authority. Reflecting the increasing integration of corpus-assisted discourse analysis techniques into Critical Discourse Studies, ecolinguistics has also witnessed a greater application of corpus-linguistic methods. These methods aim to illustrate how the intricate web of attitudes, beliefs, and ideologies contributing to climate change, species loss, and ecological degradation is mirrored, normalized, and sustained through language use.

A significant body of literature focuses on evaluating the effectiveness of language in environmental campaigns and its influence on motivating pro-environmental behaviors. These studies often analyze the linguistic strategies employed in various campaigns, such as conservation messages, climate change initiatives, and sustainability campaigns. They investigate how specific linguistic framing, persuasive appeals, and messaging techniques impact individuals' attitudes and behaviors toward ecological issues. Norton & Hulme (2019) indicated that the portrayal of climate

change in the media plays a crucial role in shaping public perceptions and influencing climate policy. Current scholarly discussions regarding how climate change is represented in mass media have primarily focused on journalistic standards, expertise, ideology, imagery, or specific aspects of language use. This study takes a different approach by examining how climate change narratives are constructed in the UK context, specifically within mainstream newspaper editorials. The study identifies four distinct climate change narratives that significantly influenced the national discourse on climate change in the UK: Lukewarmer, Ecoactivist, Smart Growth Reformer, and Ecomodernist. It then examines the narrative representations of climate change within these four storylines, as conveyed through the editorials of five prominent UK national newspapers during 2001, 2007, and 2015. This analysis is conducted using a multifaceted ecolinguistic framework. The findings from the study reveal that the ideological divide on climate change, typically associated with politically "left" and "right" newspapers, significantly diminished in 2015 compared to that of 2001. Moreover, the study highlights the prominence of the ecomodernist narrative across a wide range of print media with varying political orientations in 2015. The ecomodernist narrative emphasizes technology and innovative energy solutions to climate change while acknowledging the necessity of adapting to extreme weather events. These two narrative elements are shared across different climate change storylines, underscoring the significance of investing in climate adaptation and energy research and development as responses to climate change that are less subject to ideological polarization. Numerous studies in corpus-assisted ecolinguistics investigated the discourse surrounding climate change across various national contexts in popular media (Grundmann and Scott, 2012; Nerlich et al., 2012; Schmidt et al., 2013). They also explore how climate change is portrayed in blogs and user comments (Collins and Nerlich, 2010, 2015; Fløttum et al., 2014; Koteyko et al., 2010; Koteyko et al., 2013), as well as the representations of eco-related terms like "green" (Bevitori, 2011) and "sustainable development" (Mahlberg, 2007). Furthermore, this approach has been applied to analyze depictions of the environment in political contexts (Bevitori, 2015), religious texts (Castello and Gesuato, 2019), and corporate communications (Brown, 2008; Dongmei, 2013; Lischinsky, 2011, 2015; Lischinsky and Sjolander, 2014). Additionally, corpus-assisted ecolinguistics investigated representations of nonhuman animals in wildlife documentaries (Goatly, 2002; Sealey and Oakley, 2013), reports from the farming industry (Glenn, 2004), and dictionaries and reference materials (Gilquin and Jacobs, 2006; Heuberger, 2003). Consequently, this study may be another contribution to the field of language and its relationship with the environment, culture, and communication of societies.

Methodology

The methodology employed for examining language in ecological contexts adopts a comprehensive and interdisciplinary approach. The conceptual framework used to analyze 21 distinct climate change speeches by President Abdel Fatah El-Sisi is based on the ecolinguistic approach outlined by Stibbe (2015), where ecolinguistics is integrated with CDA to assess the relationship between humans and their environment through language. Both CDA and ecolinguistics share the same critical perspective on the impact of language in constructing meaning, ideologies, and worldviews. It begins with the transcription of relevant speeches and then examines the specific language used, including ecological terminology, metaphors, and rhetorical strategies. Analyzing language in ecological contexts involves several research methods,

including both qualitative and quantitative approaches, each with its advantages. Qualitative methods, such as discourse analysis, content analysis, and thematic analysis, are valuable for gaining in-depth insights into the nuances of language, including the framing of environmental issues, metaphors used, and persuasive strategies. Qualitative methods are beneficial for understanding the context and motivations behind language choices. Conversely, quantitative approaches, like corpus linguistics and computational text analysis, are well-suited for large-scale data analysis. They enable researchers to identify patterns, trends, and associations within vast collections of texts, offering a broader perspective on language use in ecological discourse. Combining both approaches can provide a more comprehensive understanding of the role of language in shaping perceptions, policies, and behaviors in ecological contexts. This combination of approaches will offer a thorough understanding of the discourse's impact on public perception, environmental awareness, and policy alignment in Egypt. The ecolinguistic approach is a way of understanding how language shapes our perceptions of the world and how we communicate about environmental issues such as climate change. In terms of climate change communication, the ecolinguistic approach indicates that we need to use language that motivates people to act and that frames climate change as a social and political issue rather than just an environmental one. Thus, the primary question for the study is formulated as follows:

"What are the metaphors and framing strategies in President El-Sisi's climate change speeches and how can they influence public perception, environmental awareness, and policy alignment in Egypt?"

This research question encompasses vital facets of the study, including the examination and identification of metaphors and framing strategies in President El-Sisi's discourse concerning climate change and environmental issues. It highlights how language shapes the Egyptian public's understanding and response to climate change. Additionally, it explores the discourse's role in promoting environmental awareness among the populace, offering insights into the capacity of political leaders to influence public consciousness of environmental challenges. Lastly, the question investigates the potential impact of President El-Sisi's discourse on policy alignment with climate change and sustainability objectives, revealing the intricate connection between political communication and policy development.

Data

The speeches analyzed in this study are the English version of the president's speech sourced from the official Egyptian president state website addressing the world leaders, policymakers, and environmental advocates. These speeches have been carefully read. They cover ecological contexts and thematic focuses, including climate negotiations, environmental policies, and climate action commitments. The scope of the study encompasses 21 distinct speeches from 2021 to 2023, each addressing critical aspects of climate change, ecological challenges, and environmental discourse.

Limitations

This study highlights the role of language in shaping perceptions and policies related to ecological issues; however, there are certain limitations as follows. First, the analysis is based on a selection of speeches, which, while diverse, may not represent

the entirety of global environmental discourse. Second, the study's findings are rooted in textual analysis and do not encompass the nuances of nonverbal communication and audience reception. Finally, the research relies on publicly available speeches up to the knowledge cutoff date in September 2023 and, therefore, does not include any developments or speeches that may have occurred thereafter. Despite these limitations, this study offers a substantial exploration of language in ecological contexts, contributing to the understanding of how language influences environmental awareness, policies, and advocacy efforts.

Analysis and Discussion

In this part, we are going to uncover the subtle ways in which language contributes to shaping environmental discourses and influencing societal perceptions and behaviors of the speaker toward ecological issues. This discussion will be presented in three parts: metaphors, framing, and ideology of President Abdel Fatah El-Sisi used in his 21 speeches. So, let us start with the metaphors used.

First speech:

Here, the event is framed as an essential session and partnership between Egypt and the world. It emphasizes the principle of "Implementation," highlighting the significance of concrete actions in addressing climate change. The repetition of phrases like "Your Excellency President Nicos Anastasiades" and "Ladies and gentlemen" follows a rhetorical pattern often used in formal speeches to address and engage the audience. The text uses terms such as "climate action," "regional milieu," "severe climatic events," and "Paris Agreement goals," emphasizing the importance of climate-related vocabulary in conveying the message. The reference to "The Eastern Mediterranean and Middle East Climate Change Initiative" identifies the initiative as a critical stakeholder in addressing climate change in the region. President El-Sisi also acknowledges the responsibility of non-state actors in supporting climate action. He mentions the importance of a "Regional Action Plan" proposed by the initiative, indicating a commitment to concrete policy actions to address climate change. While not a narrative in the traditional sense, the discourse presents a precise sequence of events, from the initiative's launch to the current meeting, suggesting a narrative of progress and collaboration. The tone is formal and diplomatic, emphasizing cooperation and the importance of coordinated efforts. While the text does not employ strong emotional appeals, it conveys a sense of shared responsibility and urgency regarding climate change. The text references "severe climatic events" in the region, serving as evidence of the pressing need to address climate change. It also mentions the scientific component of the initiative, aligning actions with scientific findings. President El-Sisi's closing statement expresses anticipation for a more profound understanding of the climate change challenge and the efforts needed to counter it, while subtly calling for collective action. Consequently, this text effectively employs various linguistic strategies and elements to convey the importance of addressing climate change, emphasizing collaboration, policy commitment, and the role of scientific knowledge within a formal diplomatic context.

Second speech:

The speech begins with a religious metaphor, "In the Name of Allah, The Most Gracious, The Most Merciful," which sets a tone of reverence and significance. While

this metaphor is not directly related to climate change, it creates a solemn atmosphere for the discussion. The speech frames climate change as an urgent and global issue that affects everyone. It highlights the recent report by the Intergovernmental Panel on Climate Change, emphasizing the inevitability of enhanced climate action. The use of formal addresses, such as "Your Excellencies" and "Ladies and Gentlemen," follows a rhetorical pattern typical of diplomatic speeches, establishing respect and addressing the audience. Climate-related terms like "sustainable development," "renewable energy," "clean transportation," "smart and sustainable cities," and "climate change adaptation" are used, emphasizing the importance of climate action and sustainability. The speech identifies Egypt's commitment to green projects, renewable energy, and climate adaptation. It also highlights the importance of support for developing countries in meeting their climate commitments. President El-Sisi outlines concrete policy measures, such as government-funded green projects, transitioning to renewable energy, and expanding clean transportation networks. He also mentions issuing green bonds and developing a national strategy for climate change. The speech presents a straightforward narrative of Egypt's efforts to address climate change, emphasizing the country's commitment to sustainable development and climate action. The tone is diplomatic and assertive, conveying a sense of responsibility and urgency regarding climate change. There's also an undertone of solidarity with developing countries facing climate challenges. Reference to the Intergovernmental Panel on Climate Change's report serves as evidence of the need for urgent climate action. President El-Sisi also mentions Egypt's concrete actions and plans as evidence of its commitment. The speech calls for developed countries to fulfill their funding pledges for climate action in developing countries. It also highlights the importance of special treatment for the African continent due to its unique challenges. This speech effectively uses linguistic strategies and elements to convey Egypt's commitment to addressing climate change, emphasizing concrete policy actions, the need for international support, and the importance of collective action on a global scale.

Third speech:

The speech opens with a religious metaphor, "In the Name of Allah, the Most Beneficent, the Most Merciful," conveying a sense of divine guidance and compassion, which sets a reverential tone. The metaphor "*under the shadow*" suggests that the meeting is occurring during a period of significant and impactful events, emphasizing the weight and influence of those events on the discussions about climate change. The speech frames climate change as an existential challenge facing the planet, accentuating its dangerous repercussions. It also states the meeting as an opportunity to address these challenges collectively. The speech employs formal language and diplomatic address, addressing "Your Excellencies" and emphasizing the importance of the meeting. Climate-related terms such as "climate pledges," "cutting emissions," "building resilience," and "climate finance" are used to underscore the importance of climate action. The speech identifies the importance of the international community, including state and non-state actors, in fulfilling climate commitments. It acknowledges the burden on developing and least developed countries and calls for climate finance to support them. President El-Sisi emphasizes the need to raise ambition and update nationally determined contributions (NDCs) under the Paris Agreement. He also highlights the importance of funding for adaptation and resilience building. The speech presents a narrative of collective

responsibility and urgency in addressing climate change. It emphasizes the need for world leaders to fulfill commitments and take necessary measures. The tone is diplomatic and urgent, conveying a sense of responsibility and a call to action. It evokes a sense of urgency by mentioning recent climate-related events. The speech references current climate events, such as floods in Pakistan and forest fires in Europe and the United States, as evidence of the growing climate crisis. The speech calls for fulfilling commitments, raising ambition, and providing climate finance. It emphasizes the responsibility of world leaders and the importance of addressing climate change for future generations. This speech effectively uses linguistic strategies and elements to convey the urgency of addressing climate change, the importance of international cooperation, and the responsibility of world leaders in fulfilling climate commitments. It emphasizes the need for concrete action to address the climate crisis.

Fourth speech:

The speech begins with a religious metaphor, "In the Name of Allah, the Most Beneficent, the Most Merciful," conveying reverence and setting a solemn tone. The speech frames climate change as an urgent global issue and highlights the upcoming United Nations Climate Change Conference (COP27) hosted by Egypt. It emphasizes the need for tangible results and implementation of climate goals. The speech employs formal language and diplomatic address, addressing "Your Excellencies" and expressing gratitude for the summit. Climate-related terms such as "climate action," "nationally determined contributions," "green economy," and "renewable energy" are used to emphasize Egypt's commitment to climate-related initiatives. The speech identifies the role of governments, nongovernmental actors, financing institutions, international organizations, and civil society in addressing climate change. It also mentions Egypt's participation in the Global Methane Pledge initiative. President El-Sisi outlines Egypt's efforts to raise ambition in climate action, update national contributions, and transition to a green economy. He also mentions Egypt's National Strategy for Climate Change 2050. The speech presents a narrative of collective action, partnerships, and the importance of trust among nations in addressing climate change. It emphasizes the need for constructive action and support for developing countries. The tone is diplomatic and forward-looking, expressing a sense of responsibility and urgency. It highlights the importance of fulfilling pledges and creating trust. The speech mentions recent global challenges, including political crises and disruptions to food, energy, and supply chains, as evidence of the need for climate action. It also references the importance of addressing losses and damage caused by climate change. The speech calls for raising ambition, updating contributions, and fostering partnerships. It emphasizes the role of trust-building and support for developing countries in achieving climate goals. This speech effectively uses linguistic strategies and elements to convey Egypt's commitment to addressing climate change, the importance of international cooperation, and the responsibility of world leaders in fulfilling climate commitments. It emphasizes the need for tangible outcomes and partnerships in the fight against climate change.

Fifth speech:

The speech begins with a religious metaphor, "In the Name of Allah, the Most Gracious, the Most Merciful," setting a reverential tone. The speech frames climate

change as an urgent global issue, emphasizing the need for immediate action to achieve the 1.5°C Paris Agreement goal. It also highlights the importance of adaptation to climate change, especially for developing countries. The speech employs diplomatic language and addresses "Your Excellencies" and "Ladies and Gentlemen." It expresses gratitude for the invitation to the meeting. Climate-related terms, such as "greenhouse gas emissions," "nationally determined contributions," "adaptation," and "climate finance," are used to convey the importance of addressing climate change. The speech identifies the responsibilities of developed countries in reducing emissions and fulfilling climate commitments. It emphasizes the priority of adaptation for developing countries, particularly in Africa. It mentions the Egypt-UK Partnership and the "Adaptation Action Coalition." President El-Sisi calls for updating NDCs, increasing climate finance for adaptation, and closing the gap in climate financing. He supports the UN Secretary General's call for committing 50% of climate finance to adaptation. The speech presents a narrative of urgency, responsibility, and the need for concrete action. It emphasizes the importance of adaptation alongside emissions reduction and the role of climate finance. The tone is diplomatic, urgent, and forward-looking. It expresses Egypt's commitment to climate action and its desire for tangible outcomes. The speech references the IPCC's latest report as evidence of the urgent need to act on climate change. It also mentions the challenges faced by developing countries, particularly in Africa. The speech urges developed countries to reduce greenhouse gas emissions, increase climate finance for adaptation, and fulfill climate commitments. It emphasizes the importance of the next Conference of the Parties (COP) to address climate financing. This speech effectively uses linguistic strategies and elements to convey Egypt's commitment to addressing climate change, the urgency of the climate crisis, and the importance of adaptation and climate finance. It emphasizes the need for concrete outcomes at international climate conferences.

Sixth speech:

The speech begins with a religious metaphor, "In the name of Allah the Most Benevolent, the Most Merciful," emphasizing a sense of shared values. The speech frames climate change as a pressing global issue, highlighting the urgency of implementing climate action. It also states that the conference is an opportunity to create a sustainable environment and improve the lives of millions. The speech employs diplomatic language, addressing "Your Majesties, Excellencies, and Highnesses" and expressing gratitude for the presence of the attendees. Climate-related terms, such as "green transformation," "emissions reduction," "adaptation," and "financing," are used to emphasize the importance of addressing climate change. The speech identifies the role of both developing and developed countries in addressing climate change. It calls for trust-building and support for developing countries, particularly in Africa. President El-Sisi calls for concrete steps toward emissions reduction, adaptation, and financing. He emphasizes the importance of the conference's theme, "Implementation Summit," and urges world leaders to take specific actions. The speech presents a narrative of hope, emphasizing that despite challenges, humanity can work toward a better future. It calls for trust, cooperation, and action to address climate change. The tone is diplomatic, hopeful, and urgent. It expresses confidence in the wisdom of world leaders and their ability to address climate challenges. The speech references the progress made by countries in implementing climate commitments over the past year. It highlights the need for

additional steps to achieve climate goals. The speech calls for clear messages, specific actions, and negotiation flexibility. It emphasizes that now is the time for implementation and missing the opportunity would impact future generations. This speech effectively uses linguistic strategies to convey the urgency of climate action, the importance of implementation, and the need for trust and cooperation among world leaders. It emphasizes that the time for action is now and that future generations are relying on these efforts.

In conclusion, the provided texts are analyzed to reveal a consistent and compelling narrative surrounding climate change, as articulated by President El-Sisi. The overarching theme is a shared recognition of the global challenge posed by climate change and a collective call for urgent and decisive action.

Results

Based on the analysis of the 21 speeches, it is evident that President El-Sisi, like other political leaders, employed various linguistic strategies when discussing climate change and related topics. These strategies are used to convey his position, emphasize the importance of climate action, and motivate both domestic and international audiences. Some key features from the analysis can inform about the linguistic dimensions of climate change discourse, like metaphors and framing. Political leaders frequently use metaphors and framing devices to shape how climate change is perceived. These linguistic tools can influence public understanding and support for climate action. Metaphors and framing strategies were employed in all 21 speeches. Common metaphors include climate change as an existential threat, climate action as a moral duty, and the planet as a shared responsibility. Another feature is rhetorical patterns, as diplomatic language and formal addresses are common in climate change speeches, reflecting the seriousness of the issue and the need for international cooperation. All speeches follow formal rhetorical patterns typical of diplomatic and international discourse. Formal address and diplomatic language are consistently used. The speaker employs logical reasoning by linking climate action to Egypt's national development efforts and recovery from COVID-19. A persuasive argument is presented by emphasizing the linkage between funding support and developing countries' ability to meet climate commitments.

Lexical Choices are also a key feature in the speeches. The choice of climate-related terms and terminology is crucial in conveying the urgency and complexity of climate change. Leaders use specific terms to highlight their commitment to sustainability. Climate-related terms and terminology were frequently used to represent the urgency and complexity of climate change. Terms like "climate crisis," "sustainability," and "green economy" were commonly employed. Essential terms such as "sustainable development model," "green projects," "renewable energy," "clean transportation," and "smart and sustainable cities" emphasize a commitment to environmentally friendly practices. The mention of "green bonds" highlights financial mechanisms aligned with environmental goals. Stakeholder Identification can be seen throughout the speeches. Leaders often identify various stakeholders, including developing and developed countries, civil society, and international organizations. This helps convey a sense of shared responsibility. Leaders identified multiple stakeholders in climate action, including developing and developed countries, civil society, and international organizations. Stakeholder identification emphasizes shared responsibility. Policy Proposals are also a striking tool. That is why climate speeches often include policy

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proposals and calls to action. These proposals can range from emissions reduction targets to financing commitments for climate adaptation. All speeches included policy proposals and calls to action. Proposals ranged from emissions reduction targets to climate financing commitments. The mention of challenges faced by developing countries and the call for support highlights power dynamics in climate negotiations.

Many speeches construct narrative Strategies of hope and urgency, emphasizing that addressing climate change is not only necessary but also achievable through international cooperation. The tone of climate change speeches is typically diplomatic and urgent, reflecting the severity of the issue. Emotion is used to convey empathy for affected populations and to motivate action. A narrative of hope and urgency was constructed in all speeches. The speeches emphasize the achievability of climate goals through international cooperation.
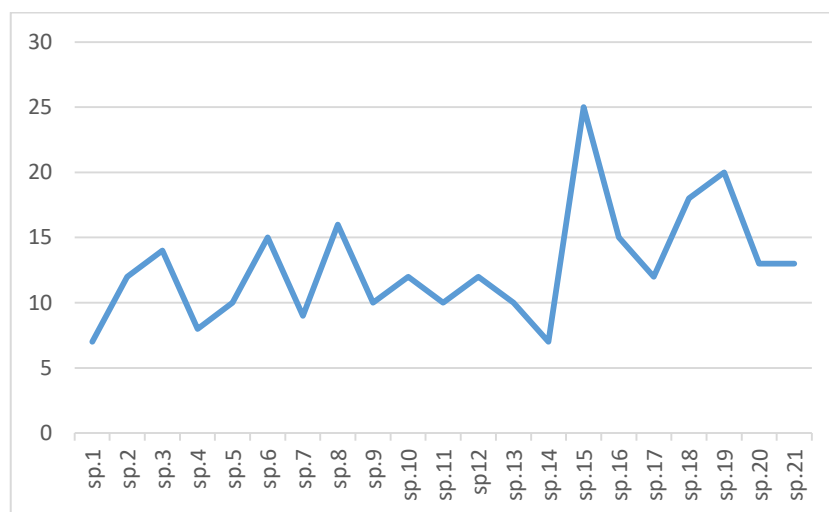
The use of Evidence as a strategy is essential in such speeches. Leaders often reference scientific reports, international agreements, and national actions to support their arguments. This evidence lends credibility to their calls for climate action. All speeches referenced scientific reports, international agreements, and national actions to support their arguments. This evidence lent credibility to calls for climate action.

Finally, speeches consistently call for concrete actions, emphasizing the need for implementation rather than mere rhetoric. Leaders stress the importance of trust-building and cooperation. The speeches begin with an invocation, "*In the Name of Allah, The Most Gracious, The Most Merciful,*" setting a tone of reverence and responsibility. All speeches contained calls to action, emphasizing the need for concrete steps and implementation. Trust-building and cooperation were stressed as essential elements. There's a positive attitude toward sustainable development, evident in the commitment to specific targets and projects. The emphasis on funding and support reflects a value for international cooperation in addressing climate challenges. Thus, the linguistic analysis of climate change speeches demonstrates the central role of language in shaping climate discourse and influencing global efforts to address this critical issue. The tone of the speeches was consistently diplomatic and urgent. The emotional language was used to convey empathy for those affected by climate change and to motivate action.

Metaphors:

The 21 speeches employ 268 metaphors, which are very significant tools in simplifying and transferring messages. In the first speech, the president used the metaphor of a journey or path when President El-Sisi mentioned, "These places us on the right path toward the implementation of the Paris Agreement goals, including the target of 1.5°C." Here, the path symbolizes the collective effort and commitment of the involved parties to reach a specific destination, reflecting the shared goal of implementing the Paris Agreement and limiting the rise in global temperature. Additionally, the phrase "navigate and comprehend the complexities of the climate change challenge" uses the metaphor of navigation to convey the idea of steering through intricate and challenging circumstances. It suggests that addressing climate change is akin to navigating through uncharted waters, emphasizing the need for careful planning, coordination, and understanding to overcome the challenges posed by climate change. A striking example is *the "heart of which lies"* in the second speech. This metaphor suggests that climate change and adaptation are at the core or

central focus of Egypt's sustainable development model, highlighting their significance. Another good example is "*smart and sustainable cities,*" indicating that cities can embody characteristics such as intelligence, efficiency, and ecological sustainability, emphasizing a forward-thinking urban development approach. "*Maintaining our planet's average temperature*" suggests a journey or course that needs to be followed for environmental stability, conveying a sense of direction and purpose. Regarding climate finance, this metaphor is employed to express the need to bridge the disparity between the financial support promised by developed countries and the actual funds accessible to developing nations. *"Closing the gap"* signifies reducing the difference or imbalance. *"Ushering in"* implies the initiation of something new and significant. *"Weight of responsibility"* is used to emphasize the magnitude of the responsibility that leaders and participants carry in addressing climate change. It suggests that the responsibility is substantial and has a significant impact. *"Resonate on the work"* is employed to express the hope that the UN Secretary General's call to commit a certain percentage of climate finance to adaptation will have a meaningful and lasting impact on the operations and outcomes of climate finance mechanisms. *"This model"* refers to Egypt's sustainable development approach, portraying it as a blueprint or plan for a sustainable future. *"President El-Sisi expressed his appreciation for the efforts Britain has exerted to ensure convening the global climate summit despite all difficulties due to the impact of the COVID-19 pandemic on international meetings."* This "Convening the global climate summit" metaphor portrays the act of organizing and bringing together leaders to address climate issues as a significant achievement. *"The Middle East Green Initiative represents a perfect opportunity to cultivate closer cooperation."* The use of "cultivate" paints a vivid picture of nurturing and developing collaboration, much like tending to a garden. It indicates the need for ongoing care and attention to foster strong relationships. These metaphors create vivid and relatable imagery, helping the audience grasp the significance and challenges of the climate change initiative. The target of using metaphors varies from conveying the urgency of climate action**.**

Fig 1: No. of metaphors in the 21 speeches.

According to the figure, the speech of President El-Sisi at the Major Economies Forum on Energy and Climate Change Summit held on Friday, 17 June 2022, 07:02 PM, includes a significant number of metaphors (25). It was after the pandemic and the economic crisis affected almost all countries around the world. Strategically, this is the point where the world is keen to rise again and rebuild its capacity. He was eager to consider a problem that may destroy all efforts to reform the disasters after the pandemic. In all his speeches, metaphor played a core role in building the concepts and perceptions in the minds of Egyptians and other audiences around the globe. Based on his agreements with the other international participants, he started to plan for Egypt to continue in the same vein.

Framing Devices

Linguistically, for Stibbe (2015) framing refers to the way language is used to shape perceptions, attitudes, and understandings related to the environment and ecological issues. It involves selecting and presenting information in a way that influences how individuals interpret and understand environmental problems. It also encompasses analyzing how particular linguistic choices, such as using specific words, metaphors, or narratives, contribute to constructing a particular perspective on nature, ecology, or environmental challenges. Analyzing framing in ecolinguistics helps understand how language influences the perceptions of the environment, shaping attitudes and behaviors toward ecological issues. An example of framing is "*the issue of climate that is affecting us all*." This framing emphasizes the global nature of the problem, uniting the audience in a shared challenge. The text frames Egypt as taking "*serious steps to apply a sustainable development model*," positioning the country as proactive and committed to environmentally friendly practices. The framing suggests that sustainability is at the core of Egypt's developmental goals. Other framings provide a clear roadmap and underscore the commitment to tangible outcomes. The mention of issuing *"green bonds at a value of 750 million US dollars"* in the second speech frames a financial mechanism to support climate-related projects. This framing highlights a commitment to funding environmentally sustainable initiatives. The framing of climate change as "*one of the existential challenges that our African continent must overcome"* sets the stage by portraying climate change as not only an environmental concern but also a critical issue that directly impacts the very existence of the continent. Describing the ongoing work on an "*integrated national strategy on climate change, where adaptation is a major focus*" frames Egypt's approach as comprehensive and strategic, highlighting the importance placed on adaptation measures. The framing of Egypt's launch of the Africa Adaptation Initiative and the exploration of hosting its headquarters highlights proactive regional engagement, framing Egypt's role as not only national but also as a contributor to broader African initiatives. Another example is *"Egypt has initiated serious steps to apply a sustainable development model, at the heart of which lies climate change and adaptation to climate change."* Here, the framing places climate action as a central component of Egypt's broader developmental efforts, emphasizing its significance in the country's overall strategy. *"President El-Sisi affirmed Egypt's position in support of Britain's presidency of the conference, stressing its confidence that the conference will yield balanced outcomes for the benefit of all parties. The President noted that Egypt seeks to host COP27 in 2022 following the end of Britain's presidency."* This framing portrays Egypt as a committed participant in global climate conferences, expressing confidence in the current presidency's outcomes and signaling its

aspiration to host COP27. *"The President reiterated that the firm principle to settle the region's crises is to achieve stability by restoring the concept and pillars of the nation-state."* The framing positions Egypt as a stabilizing force in the region, emphasizing the principles of nation-statehood and the restoration of stability amid crises.

Table 2: Framing models in the 21 speeches.

No.Sp.	Framing Model
1	Taking action, putting plans into practice, urgency, and commitment
2	Globalizing, commitment, specializing goals, mechanism of funding, help and support, and leadership
3	Serious and care, collaboration and joint efforts, the urgency of climate action, severity, precautioning. Commitment, awareness and responsibility, support and help, and impact integration
4	Inclusivity and partnerships, responsibility and leadership, trust-building, hope and optimism, and transition and commitment
5	The severity of the situation and the need for immediate action, global cooperation and responsibility, adaptation, equity and fairness, urgency, and global solidarity
6	Collaborative efforts, environmental goals, supportive framework, systematic change, justice and equity, implementation, hope and optimism, and leadership responsibility
7	Seriousness, threat, shared responsibility, financial support, involvement and international collaboration, adaptability and resilience, equitable approach, and sustainable development
8	Threat, international collaboration, responsible decision-making, comprehensive strategies at local, regional, and international levels, and adaptation and resilience
9	The entire speech can be seen as a form of framing, where the speaker strategically presents Egypt's initiatives, challenges, and commitments in addressing climate change
10	Urgency, equity, and fairness
11	Responsibilities, adaptation, global cooperation and responsibility, urgency and immediate action, and global solidarity
12	Commitment, essentiality, developmental priority, international cooperation and support, climate justice, international collaboration, and support
13	Priority, international cooperation, and support

14	Partnership and preparation, responsibility and commitment, global cooperation, hope, optimism, and aspirations
15	Seriousness, threat, shared responsibility, financial support, involvement and international collaboration, adaptability and resilience, equitable approach, and sustainable development
16	Sustainable development, renewable energy goals, international support, future commitments, climate justice, solidarity, leadership, and responsibility
17	Diplomacy and cooperation, human rights, and national development
18	Collaboration and fear
19	Acknowledgment of Germany's leadership, highlighting Egypt's hosting of COP27, urgency and unanimous agreement, Egypt's transition to sustainable development, international support, international cooperation and diplomacy, technology, and innovation
20	Seriousness, threat, shared responsibility, financial support, involvement and international collaboration, adaptability and resilience, equitable approach, and sustainable development
21	Global cooperation and solidarity, climate justice and equity, hope and optimism, and leadership responsibility

Ideology Features

Concerning the ideology of the President throughout the 21 speeches, some inclinations can be inferred as follows. First is Environmental Concern and Action, as he shows a solid commitment to addressing climate change. He emphasizes the importance of joint efforts, scientific alignment, and policy coordination to mitigate the impacts of climate change in the Eastern Mediterranean and Middle East region. Thus, he has an environmental ideology that prioritizes collaborative action and policy initiatives to combat climate change. The second feature of his ideology is the Diplomatic and Collaborative Approach he indicated. He maintains a diplomatic and cooperative tone throughout the text, expressing gratitude to President Nicos Anastasiades and acknowledging the significance of the partnership between Egypt and Cyprus. Hence, suggesting an ideology inclined toward diplomacy, cooperation, and multilateral approaches in addressing global challenges like climate change. The third feature of his ideology is that he resorts to Ethical or Moral Framing using a religious invocation at the beginning of the speech (*In the name of Allah the Most Benevolent, the Most Merciful)*. The fourth feature is his Support for Science-Based Policies. The emphasis on the scientific component of climate initiatives and the mention of aligning efforts with the Paris Agreement goals signal an inclination toward evidence-based and scientifically grounded policy decisions. The final feature of his ideology can be expressed as International Engagement and Regional Focus while also addressing specific regional challenges. He emphasizes the importance of financial support for developing countries while positioning Egypt as an advocate for

the African continent within the framework of climate agreements. All the speeches and statements by the Egyptian President emphasize Egypt's commitment to combating climate change and its efforts to raise awareness and act at both national and international levels. In his address at the EMME-CCI Summit, President El-Sisi expressed Egypt's support for the initiative, highlighting the importance of scientific research in combating climate change. He also discussed the severe consequences of climate change in the Eastern Mediterranean and Middle Eastern regions, including wildfires, floods, and human and material losses, and the need for voluntary initiatives to complement government efforts. Moreover, at the UN Climate Change Conference (COP26), he emphasized Egypt's efforts to implement a sustainable development model focusing on renewable energy and green projects. He also stressed the importance of developed countries fulfilling their financial commitments to support developing countries climate action. During the Closed Meeting on climate change, he expressed Egypt's commitment and responsibility as the host of COP27. He emphasized the need for collective action and trust-building among nations to address the challenges of climate change effectively. At a meeting of the Major Economics Forum on Energy and Climate Change, he discussed Egypt's efforts in updating its NDCs. He also highlighted the importance of international cooperation and support for developing countries to achieve their climate goals. At the opening session of COP27, he stressed the importance of the conference as an "Implementation Summit," focusing on the practical steps needed to fulfill climate pledges. He called for climate action that is fair and equitable and considered different countries' capabilities and responsibilities. The mention of the principle of *"shared responsibility but different burdens"* implies a commitment to fairness and equity in addressing climate change. This aligns with ideologies that advocate for a just distribution of responsibilities based on countries' historical contributions and capabilities. The commitment to sustainable development, as evidenced by joining initiatives and charters related to biodiversity and climate change, reflects an ideology that emphasizes balancing environmental, social, and economic considerations for long-term well-being. The specific focus on supporting African countries, recognizing their unique challenges, and stressing the need for assistance without imposing additional burdens aligns with ideologies that prioritize development in regions facing specific vulnerabilities. The overall tone and content of the speech conveys a sense of responsibility and commitment to environmental stewardship. This aligns with ideologies that view protecting the environment as a moral and ethical obligation.

He uses plural pronouns to construct a more collective, inclusive, and collaborative mindset in the audience. The most frequently used are "we" (341 times), "us" (158 times), and "our" (331 times). This inclusion and collaboration can be seen in the following examples:

- **We** are gathered.

- **We** seek **our** efforts to combat climate change.

- **We** will rise to the responsibility entrusted to **us** to put this vision into practice.

- Is an alarm urging **us** to act immediately if **we** seek to.

- The issue of climate that is affecting **us** all.

- Aspirations of **our** people who await more work and effort from **us** to ensure a better future.

"Us" is a grammatical tool that is used to advocate general (community) involvement in preservation and conservation. This means nature (and the environment) is a collective endowment whose protection requires collective action as well. This means that the protection, conservation, and/or restoration of nature need collective drives, not individual. It starts with an individual and then becomes a community practice.

Table 3: **The ideologies reflected in the 21 speeches.**

s.n	Ideology	Interpretation
1	International Collaboration	The speeches consistently emphasize the need for global collaboration and cooperation to address climate change. This reflects an ideology that sees climate issues as a shared responsibility requiring joint efforts from nations around the world.
2	Urgency and Action	There's a shared ideology across the speeches regarding the urgency of climate action. The leaders express a sense of responsibility to act promptly, emphasizing the need for concrete steps, rather than just rhetoric, to combat climate change.
3	Hope and Optimism	The speeches convey an optimistic ideology, expressing hope for humanity's ability to create a better future. Despite challenges, there's a belief in the power of governments, businesses, and civil society to contribute to positive change.
4	Environmental Justice	The leaders consistently stress the importance of fairness and equity in addressing climate change. The ideology here advocates for considering the specific challenges faced by developing countries, especially in Africa, and providing them with adequate support.
5	Implementation Focus	The term "Implementation Summit" reflects an ideology that emphasizes the translation of climate-related commitments into tangible actions. There's a push for moving beyond discussions and focusing on practical, on-the-ground implementation.
6	Trust-Building	The importance of building trust between developed and developing nations is a recurring theme. This reflects an ideology that effective climate action requires mutual trust and understanding, especially regarding financial support for developing countries.
7	Leadership Responsibility	The leaders express a shared ideology that positions them as responsible figures in the fight against climate change. They emphasize the need for leadership to guide nations toward

		implementing measures to reduce emissions and adapt to climate impacts.
8	Youth Engagement	There's an ideological commitment to engaging youth in climate action. The leaders acknowledge the concerns of the younger generation and express a shared responsibility to create a sustainable future for them.
9	Holistic Approach	The leaders advocate for a comprehensive approach to climate action, considering not only energy but also sectors like agriculture, industry, and transportation. This reflects an ideology that views climate solutions as interconnected with broader developmental goals.
10	Green Transformation	The concept of green transformation embodies an ideology of transitioning toward sustainable and eco-friendly practices. It involves a commitment to renewable energy, clean transport, and structural changes in legislation to support green investments.

Thus, this study sits at the crossroads of linguistics, environmental science, and communication studies, forging a vital link that enriches our comprehension of language's role in ecological discourse. By adopting an interdisciplinary approach, this study highlights the multifaceted dynamics of language and ecology, transcending the confines of individual disciplines. Incorporating principles from linguistics, we delve into the intricate nuances of language use in various environmental contexts, dissecting linguistic framing, metaphors, and rhetorical strategies employed in environmental communication. This linguistic lens allows us to dissect not only the content of ecological discourse but also the structure and function of language within it. Drawing from environmental science, we anchor our study in the empirical realities of ecological challenges. Environmental science provides the foundation for contextualizing linguistic analyses. It underscores that effective communication and policy formulation must be rooted in scientific accuracy and ecological understanding. Furthermore, communication studies provide valuable insights into the practical application of language in environmental advocacy, policymaking, and media representation. We explore how language influences public perception, shapes policy agendas, and mobilizes collective action. Communication studies offer a bridge between theory and practice, allowing us to discern the real-world implications of linguistic choices. This interdisciplinary integration is pivotal for a holistic understanding of the intricate relationship between language and ecology. It enables us to transcend disciplinary boundaries, acknowledging that environmental issues are inherently complex and interconnected. Only by embracing the synergistic contributions of linguistics, environmental science, and communication studies can we gain a comprehensive grasp of the profound influence of language on ecological discourse and its far-reaching consequences for our planet. Therefore, this study underscores that addressing ecological challenges necessitates a multidimensional approach, where linguistic analysis converges with scientific rigor and effective communication strategies. By bridging these disciplines, we endeavor to highlight the critical nexus between language and ecology, thereby offering valuable insights for scholars, policymakers, and environmental advocates seeking sustainable solutions to

our planet's pressing environmental issues. The emphasis on adaptation efforts, the Africa Adaptation Initiative, and the alliance on adaptation with the UK reflect an ideology focused on building resilience. It suggests that communities, especially in vulnerable regions like Africa, need strategies to adapt to the changing climate. The President noted that Egypt seeks to host COP27 in 2022 following the end of Britain's presidency. The text reflects an ideological commitment to leadership in international climate action, as evidenced by Egypt's aspiration to host COP27 and contribute to shaping global climate initiatives.

To summarize, President El-Sisi emphasizes the need for international collaboration, presenting a vision that crosses borders and highlights nations' interconnectedness in combating environmental threats. His ideologies prioritize not only environmental sustainability but also issues of justice, equity, and the imperative for tangible implementation. The speeches reflect optimism in humanity's ability to address climate change, coupled with a sense of responsibility vested in leaders to navigate this critical juncture in our planet's history. The focus on trust-building, youth engagement, and a comprehensive, green transformation underscores a holistic approach to climate action. These leaders, through their words, project a commitment to turning climate-related pledges into impactful realities, echoing a call to secure a sustainable future for generations to come.

Conclusion, Implications, and Recommendations

The speeches delivered by world leaders on the topic of climate change represent not only a call to action but also a compelling display of linguistic strategies designed to engage and motivate audiences on a global scale. In this study, we have meticulously analyzed six speeches, each delivered on diverse international platforms, to discern the linguistic elements and strategies that underpin their effectiveness. A pervasive theme throughout these speeches is the artful use of metaphors and framing strategies. President El-Sisi consistently employed metaphors that portray climate change as an existential threat, akin to a code red for humanity. Climate action is framed as a moral duty, a shared responsibility transcending borders, and a path to a sustainable future. Such metaphors serve to heighten the urgency of the issue and to engender a collective sense of responsibility. This agrees with the results of Woods et al. (2012). Furthermore, these speeches adhere to formal rhetorical patterns characteristic of diplomatic discourse. He addresses his audiences with diplomacy and respect, emphasizing the importance of cooperation and collaboration. The speeches reflect a deep understanding of the nuances of international diplomacy, where words carry weight and diplomatic language plays a pivotal role in fostering consensus. Linguistic choices in these speeches extend to the lexicon employed. Climate-related terms and jargon are employed strategically to underscore the complexity and gravity of the issue. The vocabulary emphasizes concepts such as "climate crisis," "sustainability," and the "green economy," which underscore the urgency and transformative nature of climate action, agreeing with the results of Atanasova & Koteyko (2017). Moreover, these speeches skillfully identify key stakeholders in climate action, ranging from developed and developing countries to civil society and international organizations. Stakeholder identification underscores the shared responsibility for addressing climate change and aligns with the theme of collective action. Policy proposals feature prominently in these speeches, covering a spectrum of measures, from emission reduction targets to climate financing commitments. These proposals constitute a tangible call to action, reflecting the commitment to translating words into concrete

policy initiatives. Narrative strategies are deftly employed, weaving a narrative of hope and urgency. These speeches consistently convey the message that climate goals are attainable through international cooperation. Emotional language is another crucial feature used to convey empathy for those affected by climate change and to galvanize action. The tone is diplomatic yet urgent, reflecting the severity of the crisis. Supporting evidence drawn from scientific reports, international agreements, and national actions bolsters the credibility of these speeches. References to authoritative sources lend weight to the calls for climate action.

These speeches serve as powerful examples of the intricate and purposeful use of language to convey critical messages on a global stage. They reflect a profound awareness of the role of rhetoric in driving international climate action. As world leaders continue to address the pressing issue of climate change, their linguistic strategies will continue to play a pivotal role in shaping public perception, mobilizing collective action, and, ultimately, determining the trajectory of global climate efforts. Understanding these linguistic strategies is instrumental in comprehending the multifaceted nature of climate discourse and formulating effective communication strategies to combat one of the most significant challenges facing humanity today. The study also highlighted the intricate relationship between language and ecology, underscoring its significance in the realms of environmental communication, policy formulation, and public perception. There are numerous promising avenues for future research in this domain, addressing emerging trends and pressing questions that warrant scholarly exploration. These avenues include investigations into digital discourse analysis, with a focus on how language shapes environmental conversations in online spaces, and cross-cultural perspectives to comprehend the cultural dimensions of environmental communication. Furthermore, linguistic analyses of environmental policies, psycholinguistic studies examining language's role in cognitive processes, and inquiries into the intersection of language, ecology, and indigenous knowledge systems are ripe areas for exploration. Embracing multimodal analysis, assessing linguistic framing's impact on policy outcomes, studying crisis communication, harnessing linguistic technologies, and conducting longitudinal studies to track evolving ecological language all offer exciting prospects for advancing our understanding of this critical field (O'Halloran et al., 2008). Generally, the study of language and ecology is a dynamic and evolving field with a multitude of unexplored avenues. These potential areas for future research reflect the evolving nature of environmental communication and its vital role in addressing contemporary ecological challenges. Scholars should continue to push the boundaries of linguistic analysis in ecological contexts, contributing to our collective understanding of language's transformative power in shaping the future of our planet. A study based on these observations could analyze a broader dataset of climate change speeches, not limited to those provided here. Researchers need to investigate how these linguistic strategies vary across leaders, regions, and political contexts. Additionally, the impact of these strategies on public perception, policy decisions, and international cooperation should be explored. This knowledge can highlight the extent of climate change awareness and sustainability commitment within a political arena. Furthermore, the investigation into effective linguistic strategies and metaphors used by political leaders can have practical implications, potentially informing climate change communication, environmental advocacy, and policy development efforts. As political discourse often influences public perception and attitudes, the study may reveal how President El-Sisi's speeches impact public understanding of environmental

challenges and the urgency for action. Additionally, the study may foster comparative analyses with other leaders' climate change discourse, contributing to a broader understanding of global climate communication trends. A more comprehensive study would involve a larger dataset and further statistical analysis to quantify the frequency and impact of these linguistic elements in climate change discourse.

In conclusion, this study has highlighted the intricate relationship between language and ecology, stressing its pivotal role in environmental communication, policy formulation, and public perception. As we move forward, there are promising avenues for future research that resonate with emerging trends and critical inquiries. These include investigations into the unique dynamics of digital environmental discourse, cross-cultural examinations of ecological language, linguistic analyses of environmental policies, psycholinguistic studies on language comprehension and ecological decision-making, exploration of indigenous knowledge encoded in language, multimodal analyses of ecological communication, policy evaluation through linguistic framing, crisis communication strategies, the application of linguistic technologies, and longitudinal studies tracking evolving linguistic trends. This dynamic field continues to evolve, offering scholars opportunities to expand our understanding of how language can be harnessed as a powerful tool for addressing environmental challenges and fostering sustainable futures.

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