Ecolinguistics is a relatively young field in the study of language. It studies the interaction of human behaviour with the environment. It is believed that language is a cognitive activity that one can employ to conceptualise beliefs. Due to this, the study aims to examine the ecological alarms, including climate change, within the speech of the current Executive Secretary in the United Nations Panel on Climate Change at a global conference held in Sharm El-Sheikh in November 2022. The researchers draw on the eight cognitive structures outlined in Stibbe’s (2015) framework. The qualitative analysis tackles the structures of two approaches, ecolinguistics and critical discourse analysis to investigate the politician’s speech linguistic choices employed to convince the public community of his beliefs by answering the following question: what are the linguistic devices that help us understand the cognitive structures and ideologies embedded in the selected speech? The speech is retrieved from the official website of the United Nations Climate Change. The findings indicate that the application of lexical structures and grammatical structures promotes the identification of all cognitive structures discussed in Stibbe’s (2015) theoretical framework. This shows that language is not inherently neutral, and that politicians have the ability to use their own linguistic style to convey words in a way that matches with their intentions, and still makes a difference.

INTRODUCTION

The relationship between language and ecology is variably presented by many authors, such as Haugen (1972) who is the first to propose an ecosystem metaphor to elucidate (i) how languages around the world are interconnected, and (ii) how languages interrelate with the regions where they are spoken. Thus, an ecology-of-language approach considers issues such as language variety, linguistic minority issues, and endangerment of language, loss, or demise.

As such, the target of ecolinguistics, is to display how linguistic investigation can help researchers divulge “the stories we live by – and open them up to question – and help contribute to our search for new narratives as we resist stories which oppose the ecosophy” (Stibbe 2015, p. 183).

The comprehension of the environmental aspects within the discipline of ecolinguistics gives rise to Sapir’s viewpoint (as cited in Fill & Muhlhausler, 2001, p.14) regarding the encompassing nature of both the physical and social environment. The physical environment encompasses aspects of physical geography, such as the topographical features of a region including coastal, valley, and land and so on, climate patterns, and rainfall intensity. It also includes the economic foundation of human
existence, which encompasses the diverse range of fauna, flora, and mineral resources present in a
given area. On the other hand, the social environment encompasses the multifaceted societal
influences that shape the thoughts and experiences of individuals. This includes factors such as
religion, ethics, various forms of political organisation, and artistic expressions. Fill and Muhlhausler
(2001) also conceptualise the phenomenon of language ecology within the framework of
ecolinguistics, positing it as a logical extension of Haugen's pioneering research. Some individuals
argue that it aligns more closely with sociolinguistics, as the ecological aspect is perceived to be
metaphorical rather than literal, distinguishing it from the core principles of ecolinguistics.

Based on the aforementioned information, it can be inferred that ecolinguistics exhibits a strong
correlation with the ways in which language functions to shape, foster, impact, or harm the
connections among individuals, their surroundings, and the natural world. According to Stibbe
(2010), the emergence of ecolinguistics can be attributed to the interconnectedness and
interdependence of various systems, including economic, social, religious, cultural, linguistic, and
ecosystem structures, which have evolved next to human ecological development.

**Steffensen and Fill (2014) infer the following definition from a naturalistic view of language:**

“Ecolinguistics is (1) the study of the processes and activities through which human beings – at
individual, group, population and species levels – exploit their environment in order to create an
extended, sense-saturated ecology that supports their existential trajectories, as well as (2) the study
of the organismic, societal and ecosystemic limits of such processes and activities, i.e. the carrying
capacities for upholding a sound and healthy existence for both human and non-human life on all
levels”. (p. 21)

According to Stanlaw (2021), the International Ecolinguistics Association (IEA) provides a definition
of ecolinguistics as an academic discipline that investigates the crucial role of language in the
interactions between humans, other organisms, and the environment. The goals of ecolinguistics
encompass both theoretical and practical aspects. The first goal includes the development of
linguistic theories that acknowledge humans as integral components of not only society but also the
wider ecosystems upon which life depends on. The second goal is more pragmatic in nature, targeting
to determine how linguistics can be efficiently employed to tackle significant ecological challenges,
starting from the climate change and decline of biodiversity to the issues of environmental justice.

As noted above, many studies are conducted in this area of knowledge. However, based on our
understanding as researchers, there is no previous published study that explores the ecological
concerns from a political and academic perspective. The present study holds significance in
addressing this existing research gap. As a matter of fact, ecological problems, precisely climate
change is one of the global issues that raise concerns of researchers, politicians, governments and
scientists around the world. This study is not merely substantial in American context, but also
specialists of this type of international issues including recent economic, political and ecological
problems around the world.

The current study is aimed to analyse the ecological issues in the language of Mr. Simon Stiell
depending on the cognitive structures presented by Stibbe's (2015) framework to examine the
relationship between the language used and cognition to unveil the underlying stories that found in
peoples’ minds. Mr. Stiell is currently the Executive Secretary of the United Nations Panel on Climate
Change. His speech was obtained from the Conference of the Parties (COP27) on climate change, held
in Sharm El-Sheikh in November 2022. It was retrieved from the official website of the United Nations
Climate Change. In order to achieve this, the study tries to answer the question how language usage
enhances our comprehension of the relationship between humans and the environment. Hence, the
study will focus its attention on the examination of both linguistic structures and cognitive structures
employed in the chosen green extracts. Stibbe (2015) introduces a set of structures that contain ideology, framing, metaphor, evaluation, convictions, identities, erasure, and salience.

To begin with, ideology is introduced as “belief systems about how the world was, is, will be or should be which are shared by members of particular groups in society” (Stibbe, 2015, p. 23). Thus, the ideologies are characterised by the lexical choice, grammatical choice and additional linguistic choices which are employed by a certain group (Stibbe, 2015). Framing from an ecolinguistic perspective, “is the use of a story from one area of life (a frame) to structure how another area of life is conceptualized” (Stibbe, 2015, p. 47). Linguistically, framing occurs when there are trigger words indulged in describing ideas. Metaphors according to Stibbe’s (2015, p. 65) framework “are a type of framing – one where the source frame is from a specific, concrete and imaginable area of life which is clearly different from the target domain”

Furthermore, Evaluations are described as “stories in people’s minds about whether an area of life is good or bad” (Stibbe, 2015, p. 84). By examining the patterns of appraisal in language usage, one can uncover the underlying evaluations or stories that shape our thoughts. These evaluations can then be exposed to scrutiny and inquiry (Stibbe, 2015). Ecologically, an identity is described as “a story in people’s minds about what it means to be a particular kind of person, including appearance, character, behaviour and values” (Stibbe, 2015, p. 107). Identities illustrate themselves in specific ways to dress, write, speak and behave. Convictions are manifested from an ecolinguistic view as “stories in people’s minds about whether a particular description is true, certain, uncertain or false” (Stibbe, 2015, p. 129). These convictions are illustrated by facticity patterns which are a set of linguistic structures that can come together to signify true or false descriptions.

Ecologically, “erosure is a story in people’s minds that an area of life is unimportant or unworthy of consideration” (Stibbe, 2015, p. 146). Linguistically, it is a linguistic exemplification of a field of life as irrelevant or marginal through the systematic absence or backgrounding any area of life in texts (Stibbe, 2015). Salience is another ecolinguistic technique that is depicted as “a story in people’s minds that an area of life is important or worthy of attention” (Stibbe, 2015, p. 162). Salience patterns are linguistic representations of a certain aspect of life that deserves attention through concrete, precise and vivid interpretations.

**METHODS AND TECHNIQUES**

This research employs a qualitative approach of analysis. Qualitative research uses numerous methods which are interactive and humanistic (Creswell, 2009). In this regard, it employs descriptive approach to analyse the green texts in the selected speech for the study of ecolinguistics. In this approach, the researchers can adopt extra strategies of analysis as a guide for the techniques in the qualitative inquiry (Creswell, 2009).

Generally and not surprisingly, this research uses ecolinguistic enterprise to analyse the selected texts. The field of ecolinguistics holds significant potential in its ability to critically describe and examine the stories that shape our lives, while also contributing to the exploration and development of alternative stories (Stibbe, 2015). Given this, Stibbe (2015) argues that linguistics offers analytical tools for examining the texts that encompass our daily existence and influence the societal context to which we are affiliated. These tools have the capacity to unveil the latent stories that exist in within the lines of any text. The concept of ‘story’ based on “Eisenstein means ‘a matrix of narratives, agreements and symbolic systems that comprises the answers our culture offers to life’s most basic questions” (2012, p. 4 as cited in Stibbe, 2015, 498). These stories that shape our lives permeate various aspects of society, including advertisements, news media, educational materials, political discourse, legal frameworks, medical practices, and even our everyday interactions.

In essence, this research depends on an adapted version of Stibbe’s (2015) framework of ecolinguistics which is a method that addresses the field of language ecology. Drawing on the
theoretical frameworks of critical discourse analysis and cognitive linguistics, these fields of inquiry employ diverse methodologies to examine linguistic features with the aim of revealing hidden ideologies, metaphors, framings, and stories that influence our life as manifested in textual discourse. The integration of linguistic methodologies with the perspectives of environmental and ecological scholars can be regarded as a manifestation of ecolinguistics (Stibbe, 2015).

It is argued that while texts may not provide a comprehensive representation of all the texts generated by a specific group of individuals, they can reveal the discourses that are prominently employed by a select subset of influential members within the group (Stibbe, 2015). The chosen data are sourced from a speech delivered by an academic and political character; Mr. Simon Stiell, which has been obtained from the official website of the United Nations Climate Change, as previously indicated.

FINDINGS AND DISCUSSION

The ecolinguistic study involves the analysis of green texts found in political speech. This analysis aims to examine the various forms in which stories are represented in relation to environmental issues. The concepts proposed by Stibbe (2015) serve as a framework for understanding these representations. As demonstrated below, these concepts shed light on the analysis of green texts in the selected political speech. It is an official document delivered by the website of United Nations Climate Change.

Ideology

According to Stibbe (2015), ideology is represented by linguistic features to reveal stories hidden among the lines of texts as demonstrated in the first extract:

“Paris gave us the agreement.
Katowice and Glasgow gave us the plan.
Sharm El-Sheikh shifts us to implementation.
No one can be a mere passenger on this journey.
This is the signal that times have changed” (United Nations Climate Change, 2022)

The extract above is a direct quotation of Mr. Stiell’s speech to depict the link between words and environment. At the outset, connotations are employed, such as “Paris”, “Katowice”, “Glasgow” and “Sharm El-Sheikh” not merely to express places, capitals or major cities, but also to express the important role of the conferences that are established in those cities about environmental issues, especially climate change. The Grenadian politician mentions those places this way in a reference to the chronological order of the conferences of these cities. In the same regard, words, such as “plan”, “journey” and ”signal” are inserted as synonyms to refer to the sharing goal of all these conferences that help to protect the environment from the expected danger.

In this milieu, one personal pronoun is employed many times by Mr. Stiell in the abovementioned extract which is “us” referring to the objective case of all the mentioned sentences in this extract. Mr. Stiell uses this pronoun standing for him, his country and all the audience of this conference that have the leading role to solve the ecological problems. The active voice used in this extract clearly presents the elements of the sentences, such as subject, verb and direct object. This shows the idea of the direct relationship between those conferences and the right way to solve the problem.

“I come from Grenada - a state of three islands with Carriacou and Petite Martinique.
Carriacou is my home, where my family live on a 13 square mile island, with a population of 7,000 people.
Our history is of seafarers, fishers, boat builders, farmers - surviving on their wits and the strength of their communities - working closely together.

My roots lie in a life full of beauty and adversity.

As a teenager, I became involved in the global issues of the day – the proliferation of nuclear weapons – and the anti-apartheid movement”. (United Nations Climate Change, 2022)

In the above second extract, Mr. Stiell refers to “Grenada”; his hometown with two connotations, such as “beauty” and “diversity”. These words with positive description are employed by the politician that refer to the purification of life he previously lived. He adds more synonyms, such as “seafarers”, “fishers”, “boat builders” and “farmers” to confirm the idea of purity and rich life those people lived in past.

Other set of personal pronouns are also involved in this extract, such as “I”, “my” and “our”. It is obvious that the personal pronoun (I) is allocated two times in the subjective case with the verb phrase “come from Grenada” and “became involved in the global issues of the day” standing for the uniqueness of his position as politician and environmentalist as well. This direct quotation presents the possessive pronoun “my” with two words; (roots, home) as two subjects followed by active sentences, such as “live on a 13 square mile island” and “lie in a life full of beauty and adversity” that represent verb phrases in this extract. This pronoun denotes the direct link between his life and his perfect past life.

“The heart of implementation is: Everybody,

Everywhere in the world,

Every single day,

Doing everything they possibly can to address the climate crisis” (United Nations Climate Change, 2022).

This third extract presents another set of synonyms that have nearly the same meaning, such as “everybody”, “everywhere”, “every single day” and “everything” to express the idea of inclusivity that everything in this world is interested in the environment and its destruction.

“There are others who need support so they’re able to do everything they possibly can for their countries and communities. Specifically, highly vulnerable nations.

And then there are those who still refuse to act unless others do. They will not be allowed to slow down our collective response”. (United Nations Climate Change, 2022)

In this extract, Mr. Stiell presents connotative words, such as “others”, “countries”, “communities” and “nations” which are allocated negatively with verbs, such as “need support”, “still refuse” and “slowdown” in a reference to the weak role that these countries play in the ecological crisis.

Various pronouns are also introduced in this part, such as “they”, “their”,

And “our”. The above direct quotation presents the plural pronoun “they” as a subjective case with the verb phrase “’re able to do everything”, “possibly can for their countries and communities” and “will not be allowed to slow down.” The pronoun in this quotation enhances the destructive role that some nations play towards their environment. Accordingly, “their” as the possessive form of the plural pronoun “they” is also inserted to indicate the nature of the relationship between those countries and the tendency to protect the environment standing as the object to the modal verb “can”.

In addition, the personal plural pronoun “our” is employed in its possessive form for the pronoun “we” as an object for the verb “slow down” to reflect the positive role of “we” as the only nations who have the responsibility to defend the world from ecological destruction.
"I want to take a moment now to recognize the Glasgow Climate Pact.
We made this Agreement together only last year.
I am not in the habit of rescinding my word.
I firmly expect all parties to act the same way.
Stick to your commitments. Build on them here in Egypt.
I will not be a custodian of back-sliding”. (United Nations Climate Change, 2022)

Quoted from his speech, Mr. Stiell uses many synonyms, such as “recognize”, “not rescinding”, “firmly”, “stick” and “not back-sliding” that have nearly the same sense of expressing power and authority to inspire others “parties” to have the same plans in order to achieve the protection goal. As for pronouns, the politician frequently inserts the first personal pronoun “I” as a subject to the verbs “want”, “am not”, “firmly expect” and “will not” in a reference to his uniqueness and to be the first leader that supports the plan of protecting the world. With a sense of togetherness, he adds the pronoun “we” one time with the past simple form to give this impression of unity in the past and to be more precise; a year ago, the Glasgow Conference held. The pronouns “your” and “them” are also inserted as objects to the verbs “stick” and “build on” referring to others; countries, parties and all audience in an imperative form to renew their promises here in Egypt after Glasgow.

“To paraphrase the wonderful, Nobel prize-winning, Egyptian writer, Naguib Mah-fooz:
You can tell whether a person is clever by their answers. You can tell whether a person is wise by their questions.’
We have demonstrated the very best in human wisdom, by asking the right questions. Now we know what must be done... by everybody, everywhere, every single day, doing everything we possibly can”. (United Nations Climate Change, 2022)

In the final extract, many synonyms are involved, such as “everybody”, “everywhere”, “every single day” and “everything” to strengthen the sight of inclusivity that everyone has an influential role to stop this destruction. Moreover, Mr. Stiell inserts intertextuality by borrowing the words of the Egyptian writer “Naguib Mahfooz” to confirm the power of his speech and consequently the power and wise of America, which sets the right answers and the right plans to solve environmental problems.

**Framing**

According to Lakoff (2010, p.73), “words can be chosen to activate desired frames”. In this realm, Mr. Stiell’s speech sets on trigger words, such as “policies”, “businesses”, “infrastructure” and “action” to evoke the spirit of holism that everybody is responsible for what has happened and what will happen in the future.

Moreover, the speech introduces an international challenge frame through the terms “greatest challenge” and “stripped” as we note in the following extracts:

“As Executive Secretary of the UN climate convention, it is an honour to be standing in a room of people dedicated to tackling humanity’s greatest challenge” (United Nations Climate Change, 2022).

“This has stripped generations of their lives and livelihoods” (United Nations Climate Change, 2022).

Mr. Stiell hints that climate change represents the greatest challenge for all humans on this planet to reframe the concept of climate change in the minds of those individuals and make them feel the great responsibility placed on their shoulders.
Other extracts quoted from Mr. Stiell employ the word “finance” twice in relation to the concept of climate change crisis as illustrated below:

“The second line of action. We must cement progress on these critical workstreams – mitigation, adaptation, finance and crucially - loss and damage” (United Nations Climate Change, 2022).

“I welcome detailed plans on how we deliver what we have promised across finance, adaptation and mitigation” (United Nations Climate Change, 2022).

The second point of instructions presented by Mr. Stiell signals that climate change is a financial loss to reframe the idea of the impact of climate change in different ways and this time illustrated as economic problem.

**Metaphor**

Fairclough (2014) maintains that speakers or writers look at linguistic structures, mainly metaphor, as an operative procedure to legitimize or delegitimize realities in political discourse. In the analysis of conceptual metaphor, the idea of mapping is one-directional way since information is proposed from a familiar and concrete domain to a less familiar target domain (Wolf & Gentner b, 2011). In Mr. Stiell’s speech, climate change is conceptualized as “a journey” as exemplified in the following extract:

“No one can be a mere passenger on this journey” (United Nations Climate Change, 2022).

The target domain of climate change is mapped onto using terms from the source domain of journey. This metaphor sets up a particular case which is climate change that should be conceptualized as an idea that is drawn from the source domain.

**Evaluation**

Stibbe (2015) posits that an analysis of appraisal patterns in language has the potential to unveil the fundamental evaluations, or stories established within individuals' minds. A variety of explicit appraisal patterns are mentioned in this speech including “unique”, “new era”, “safe”, “better”, “concrete actions” and “empowerment”. These expressions can trigger a positive appraisal that refers to the active attendees and their participation in solving the global climate crisis. Certain selected expressions are used to trigger a negative appraisal including “refuse”, “unless”, “slow down”, “hard” and “back-sliding” that refers to the negative affect of those expressions according to our world knowledge. These expressions are employed to indicate the negative role of some nations that do not have any action towards this global crisis.

Additionally, another set of explicit appraisal patterns are negatively employed, such as “limit”, “loss” and “damage” to describe climate change with negative impact on the economy and the world as well. As a matter of fact, there is nothing positive about some employed expressions, such as “forward”, “further” and “faster”, but these expressions are employed by the speaker to introduce the bad effect of climate change on the global economy.

Another variety of explicit positive appraisal expressions including “closely together”, “beauty”, “adversity”, “proliferation” and “anti-apartheid” trigger the positive image of the speaker’s country and its workers. The marked word “anti-apartheid” is positively employed to evaluate his homeland as a pure country without pollution.

**Convictions**

In this speech, the process of choosing modifiers including “possibly” (expressing possibility) points to the uncertain future of solving the climate crisis and how this crisis is constrained by the cooperation of all. Modifiers, such as “specifically”, “highly”, “closely”, “clearly”, “firmly” and “permanently” (expressing certainty) are used by the speaker to convince his audience of the high
facticity of all “parties” and “civil society organizations” who have the pure wish to work together in order to contain the problem.

Critically, a set of linguistic structures includes modal verbs, such as “must” and “have to” that explore how the speaker makes obligations towards many issues, such as the global commitment of Paris agreement, principles of transparency, global peace, transforming words into actions and finally, the participation of females in decision making of climate change. The modality here is built by employing the above facticity patterns to describe true processes and actions to solve the current ecological problems.

**Identity**

The speaker sets up the identity of the keeper of the universe who has a permanent environmentalist identity. The “I” as an inclusive pronoun in this speech refers to Mr. Stiell’s character as an important and unique leader who has the influence and power to attract readers to agree with his point of view as illustrated in the next extract:

“I want to take a moment now to recognize the Glasgow Climate Pact.

I am not in the habit of rescinding my word.

I firmly expect all parties to act the same way.

I will not be a custodian of back-sliding”. (United Nations Climate Change, 2022)

Besides, the speaker also uses “you” as a second personal pronoun to directly reach out the readers and persuade them of his statements as shown in the following lines:

“This is my promise to you

I want you to focus on three critical lines of action.

This is what I want you to deliver on” (United Nations Climate Change, 2022).

As mentioned above, the speaker employs this pronoun many times to attract his audience’s attention about what he is going to say after that. He will be critical and resistant to the destructive impact of climate change, both ecologically and economically.

The pronoun “we” as a personal plural pronoun is introduced many times in Mr. Stiell’s speech to place the inclusivity over others as we see below:

“We have that opportunity over the next two weeks” (United Nations Climate Change, 2022).

“We must create a safe political space, shielded from whatever is going on “out there”, to do our jobs and deliver world change” (United Nations Climate Change, 2022).

“We need to enable enhanced finance to flow to addressing impacts. What is said in these negotiating rooms has to reflect of the urgency outside. There are areas of commonality which we can lean into and build bridges upon (United Nations Climate Change, 2022).

The speaker this time makes himself part of this community that cares about the environment, and its effect on politics, jobs and money. He confirms the identity of the policymakers who put rules and plans to save nature. This unity is delivered positively through the words “world change” and “opportunity” to place the speaker and the addressee on the same side.
Erasure

Erasure through lexical choice is manifested in Mr. Stiell’s speech more than once, as in the following extracts:

“There are those who just need to be nudged into taking further action, to go beyond business-as-usual” (United Nations Climate Change, 2022).

“And then there are those who still refuse to act unless others do. They will not be allowed to slow down our collective response” (United Nations Climate Change, 2022).

In the abovementioned extract, the word “those” which appears many times, erases or backgrounds the names of those countries, and represents as mere matters that are uncovered according to the processes of gathering and abstracting.

Salience

Along with the lines of this speech, salience is showed through the use of a set of linguistic patterns, such as activization and modifiers, as mentioned in the following lines:

“I want to take a moment now to recognize the Glasgow Climate Pact. We made this Agreement together only last year. I am not in the habit of rescinding my word. I firmly expect all parties to act the same way. Stick to your commitments. Build on them here in Egypt”. (United Nations Climate Change, 2022)

In the extract above, personal pronouns are introduced by Mr. Stiell including "I” and “we”. These linguistic devices construct himself and his audience as the active agents of the material process who have the right to be the doers of the whole action. The speaker represents himself saliently in order to call the attendance’s attention and gain their approval.

CONCLUDING REMARKS

Based on the above ecolinguistic analysis, the researchers scrutinize how certain frames, suggested by Stibbe (2015) encourage beneficial or destructive ideologies embedded through the language used. Language plays a significant role in attracting individuals’ attention and facilitating the construction of stories surrounding their world. The text employs various linguistic structures to convey the concept of ideology, thereby reinforcing the persuasive impact of the speaker’s speech. Consequently, it underscores the authority and sagacity of America in formulating appropriate solutions and strategies to address environmental challenges. Framing theory suggests that climate change represents a significant financial burden, thereby offering an alternative perspective on the ramifications of climate change by emphasising its economic implications. With metaphor, one can establish a specific scenario, namely climate change, which ought to be understood as an idea derived from the source domain.

Moreover, it can be concluded that the speaker uses his lexical expressions to positively describe his behaviours towards many things, and in return, he uses other lexical expressions to negatively describe his behaviour towards others. Convictions are employed in the text including modality that can describe true processes, such as obligations and possibilities to deal with current environmental matters. As for identity, employing personal pronouns, such as “I” and “we” indicates the power of policymakers who set rules and programmes to safeguard nature. The lexical choice and structural choice facilitate the implementation of erasure and salience techniques. These techniques serve the purpose of concealing the responsibility of states and officials, both legally and nationally, on one hand, while also affirming it on the other hand. The findings of the study can be of essential
importance for readers and scholars in the same major who are interested in recent ecological trends in any discourse.

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