

## Conviction in Greta Thunberg's Selected Speeches: An Eco-linguistic Discourse Analysis

“Greta Thunberg 的精选演讲中的信念：生态语言话语分析”

By

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### ملخص:

يسعى البحث إلى دراسة القناعة في ثلاث خطب للناشطة البيئية جريتا ثانبرج التي تبلغ من العمر تسع عشرة سنة باستخدام نموذج تحليل الخطاب اللغوي البيئي الذي وضعه ستايب (٢٠٢١). الخطب قيد التحليل تم إلقاؤها في قمة الأمم المتحدة للعمل المناخي (٢٠١٩) والمنتدى الاقتصادي العالمي (٢٠٢٠) والدورة السادسة والعشرين لمؤتمر الأطراف في اتفاقية الأمم المتحدة (٢٠٢١). وللبحث ثلاثة أهداف هي: (١) دراسة الأدوات اللغوية المستخدمة لتكوين القناعة بأن من هم في السلطة لا يقومون باتخاذ الإجراءات التي من شأنها وقف التغير المناخي (٢) معرفة الوظائف التي تؤديها تلك الأدوات اللغوية و(٣) معرفة نوع الخطاب الذي تنتمي إليه الخطب قيد التحليل أي هل هذه الخطب تنتمي للخطاب المدمر أم المتناقض أم النافع للنظام البيئي. وقد أظهرت النتائج أنه يتم استخدام عدد من الأدوات اللغوية لتكوين القناعة مثل محدد الكمية و الكيفية والاستعارات والتكرار. وتتضمن وظائف تلك الأدوات اللغوية توجيه النقد لمن هم في السلطة لعدم اتخاذ الإجراءات اللازمة للتصدي لتغير المناخ وتحميلهم مسؤولية الأضرار الناجمة عن ارتفاع درجات الحرارة العالمية وتأكيد أهم مجرد متظاهرين بتقديم الحلول لمشكلة المناخ. كما أظهرت النتائج أن خطب جريتا ثانبرج تعزز الخطاب النافع للبيئة حيث إنها تهدف إلى حث قادة العالم على اتخاذ إجراءات بشأن تغير المناخ.

## **Abstract**

Employing Stibbe's (2021) framework for Eco linguistic discourse analysis, the present study investigates conviction in three speeches delivered by Greta Thunberg, the 19-year old eco-activist. These are: the 2019 UN Climate Action Summit, the 2020 World Economic Forum, and the 2021 26<sup>th</sup> UN Conference of the Parties (COP 26). The aims of the study are threefold: (1) examine the linguistic devices used to construct the conviction that the people in power are not taking action to counter climate change; (2) investigate the functions of these linguistic devices; (3) identify the discourse type of the speeches, i.e. whether they are destructive, ambivalent or beneficial. Results show that a number of linguistic devices are used to construct conviction such as quantifiers, modality, metaphors and repetition. The functions of the linguistic devices used include criticizing the people in power for not taking action to stop climate change, holding them responsible for the ill consequences of the rise in global temperature, and asserting that they only pay lip service regarding finding a solution for the problem of climate change. Results also show that Greta Thunberg's speeches enhance beneficial discourse as they serve to urge world leaders to take a climate action.

**Keywords:** Ecolinguistic discourse analysis – Greta Thunberg – climate change – UN Climate Action Summit - World Economic Forum- COP 26

## **(1) Introduction**

Although the world is facing several important ecological issues in the 21<sup>st</sup> century, climate change remains one of the greatest challenges and most heated topics of the century due to its harmful effects on the ecosystems and the different aspects of life on earth (Arlt et al., 2018; Eggleton, 2012). The danger of global warming and climate change has driven governments, environmental organizations and intergovernmental organizations such as the United Nations Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC), and the Kyoto Protocol (KP) to set policies to protect the world from the environmental and ecological issues that could happen because of global warming, and raise people's awareness about the dangers of climate change. In addition to these bodies, environmental activists have played a role in facing climate change through speeches and statements that not only serve to raise awareness about climate change but also urge world leaders to take more active steps to save the world and future generations from the dire consequences of environmental issues like climate change. One of these activists is Greta Thunberg, a 19-year old Swedish student whose international movement against global warming and fiery speeches on climate change before world

leaders and politicians on several international events have earned her wide acclaim (Jung et al., 2020; Mansyur et al., 2022).

## **(2) Aims of the Study**

The advent of industrial and economic technology has resulted in global warming and climate change which have caused various ecological problems such as floods, forest fires and increased sea levels (Fujiwara, 2022; Mansyur et al., 2021). Therefore, given the concern with the deterioration of ecosystems and the widespread environmental problems, ecolinguistics emerged as a discipline that examines the relation between language and ecology. It investigates the role of language in highlighting how humans interact with each other, with other species as well as the environment, thereby contribute to ecological preservation or destruction by carrying out an ecolinguistic discourse analysis of ecological discourse that reflects ecological problems such as environmental degradation, pollution, destruction of ecosystems and loss of biological diversity (Dash, 2019; Huang & Zhao, 2021; Stibbe, 2015; Zhdanova et al., 2021). Following the IPCC 2018 report which shed light on the role of human beings in increasing global temperatures, Greta Thunberg began to promote a discourse on human role in preventing climate change and building a sustainable future. In this respect, the present study attempts to answer the following research questions:

- 1- What are the facticity patterns or linguistic devices used to construct conviction and raise facticity about the description “the people in power are not taking action to stop climate change” in Greta Thunberg’s speeches?
- 2- What are the functions performed by these linguistic devices?
- 3- What kind of discourse type (destructive, ambivalent or beneficial) are Greta Thunberg’s speeches?

## **(3) Data and Methodology**

The data of the present study consists of three of Greta Thunberg’s speeches which were delivered in three major and important international events. These are: the 2019 UN Climate Action Summit which took place on September 23, 2019 at UN headquarters in New York, the World Economic Forum that took place in Davos, Switzerland from January 21-24, 2020, and the 26<sup>th</sup> Conference of the Parties (also known as COP 26) which took place in Glasgow, Scotland from October 31 to November 12, 2021. The transcripts of Greta Thunberg’s 2019 and 2021 UN speeches have been obtained online whereas the transcript of the World Economic Forum speech has been downloaded from the site of the forum. The three speeches have been selected on the basis of being delivered in international events where concerns and challenges related to climate change are discussed. The selected speeches also have the highest views on YouTube. The 2019 UN Climate Action Summit speech has 5 million views on YouTube, the 2020 World Economic Forum speech has 130

thousand views, and the 2021 26<sup>th</sup> UN Climate Change Conference of the Parties speech has 238 thousand views.

To conduct an eco-linguistic discourse analysis of Greta Thunberg's selected speeches, Stibbe's (2021) framework for eco-linguistic discourse analysis is employed. The qualitative approach is used as well. All instances that represent the story form of conviction in the selected speeches are determined then the facticity patterns or linguistic devices which express the truth or certainty of the description "the people in power are not taking action to stop climate change" are highlighted. The different linguistic devices that express the facticity of the form of story in question are given and underlined in illustrative examples which are explained. The functions performed by the linguistic devices employed in the data are also presented.

#### **(4) Theoretical Background**

##### **(4.1) Ecolinguistics**

The emergence of the field of ecolinguistics is attributed to the realization of the important role language plays in ecological conservation and influencing how people think about the world (Stibbe, 2021). Ecolinguistics is based on the premise that language can affect the environment as it can lead to saving or killing animals and species, afforestation of deserts or desertification of forests. Therefore, ecolinguistics examines harmony, or lack of it, between humans and nature, analyses texts that tackle ecological or environmental issues, critically analyses language that can potentially increase the destruction of ecology, and seeks to support sustainable growth, inspire humanity to protect and save nature and denounce acts that result in climate change, biodiversity loss, global warming, disappearance of species and death of the environment (Chen et al., 2021, Fill & Penz, 2018; Wu, 2018; Zuo, 2019a). In this respect, ecolinguistics is defined as "the study of the impact of language on the life-sustaining relationships among humans, other organisms and the physical environment. It is normatively oriented towards preserving relationships which sustain life" (Alexander & Stibbe, 2014, p. 104).

The above definition reveals that ecolinguistics is concerned with maintaining and preserving ecological sustainability through language. In other words, the concern of ecolinguistics is with exposing how language helps form, influence, maintain or destroy relationships between humans, different forms of life and the environment (Alexander & Stibbe, 2014; Dash, 2019; Wu, 2018). Thus, the "linguistics" aspect of ecolinguistics refers to the use of different linguistic techniques to construct, reproduce, spread and resist worldviews whereas the "eco" aspect is concerned with the ecological framework to consider how these worldviews preserve or undermine the different conditions and systems that can help support life. Accordingly, the relation between ecology and language is that how humans deal with each other and the natural world is influenced by the ideologies, worldviews, and thoughts which in turn are reflected through language (Stibbe, 2014, 2021).

There are two models in ecolinguistics, namely the Haugen model and the Halliday model. The former focuses on the relation between language and context. It considers language as part of a larger ecology depending on the interaction among the human mind, society and the natural environment. To study the environmental factors that can either weaken or strengthen linguistic functions, Professor Einar Haugen introduced the notion of 'ecology of language' in 1972, which refers to the interaction that takes place between language and its environment. The notion of ecology of language paved the way for the birth of the field of ecolinguistics as it sheds light on the relation between language and the environment, and promotes a linguistic study of ecology and the ecological study of language (Dash, 2019; Haugen, 2001; Song & Tang, 2020). The latter is a functional approach that is concerned with the effect of language on the environment and highlights the role of language use in environmental degradation. Halliday's contribution to the emergence of ecolinguistics was sparked by investigating aspects of grammar which "conspire to construe reality in a certain way...that is no longer good for our health as a species" (Halliday, 1990, p. 25). Thus, the Hallidayan model aims to promote awareness within the linguistic community about ecolinguistic and ecological issues to care about the environment in which language is used (Dash, 2019; Song & Tang, 2020; Stibbe, 2014; Zuo, 2019b).

#### **(4.2) Ecosophy**

In ecolinguistics, the ideology or worldview used to judge discourses against are known as ecological philosophy or ecosophy for short. The term *ecosophy* was first used by the environmental thinker and philosopher Arne Naess (1995) to refer to philosophical principles of ecological harmony as well as norms and values concerning life-sustaining interrelationship of humans, the environment and other organisms. He states that:

By an ecosophy I mean a philosophy of ecological harmony...openly normative it contains norms, rules, postulates, value priority announcements and hypotheses concerning the state of affairs...The details of an ecosophy will show many variations due to significant differences concerning not only the 'facts' of pollution, resources, population, etc. but also value priorities. (Naess, 1996, p. 8)

Ecosophies can be explicit or implicit, and as they include norms and values, there is no single correct ecosophy that ecolinguistic studies should be based on. Moreover, ecosophies should be plausible, scientifically possible and have no internal contradictions. They are also judged by whether available evidence confirms or contradicts the ecolinguist's beliefs about the state of affairs. Therefore, personal ecosophies change in light of people's different experiences with the natural world, exposure to different discourses and new ideas and discovery of new evidence (Klaver, 2018; Mansyur et al., 2021; Stibbe, 2015, 2021).

#### **(4.3) Ecosophy-Based Types of Ecological discourse**

As ecolinguists examine the interaction between humans, nature and other species according to their own ecosophy, Stibbe (2015) classifies ecological discourses into three types: destructive,

ambivalent and beneficial. Destructive discourses "convey ideologies that strongly oppose multiple aspects of the ecosophy" (Stibbe, 2015, p. 24). They lead to ecological destruction as they encourage people to carry out actions that can harm the ecosystem upon which life depends. Therefore, such discourses, which include economics discourse, advertising, consumerism and intensive agriculture, should be resisted by raising awareness about the harmful effects and destructive impact of the ideology conveyed in the discourse on the ecosystem that supports life (Chen et al., 2021; Klaver, 2018; Stibbe, 2021).

Ambivalent discourses, also known as "Green speak", such as discourses of ecology, environmentalism, green advertising, conservation and sustainability, "contain some aspects which align with the analyst's ecosophy and some others which oppose it" (Stibbe, 2021, p. 29). The reason for having aspects that are in line with the analyst's ecosophy and others which do not is that although ambivalent discourses aim to deal with the ecological problems resulting from destructive discourses, they may be influenced by different commercial or political interests because they take place in the same society as the destructive discourses. Accordingly, as ambivalent discourses seem to be constructive and have some aims of the analyst's ecosophy, they should be improved by working with those responsible for the discourse to handle problematic aspects and preserve positive ones in the same discourse (Klaver, 2018; Stibbe, 2014, 2021).

Beneficial discourses align with the analyst's ecosophy and promote ecologically beneficial behaviour. As eco-beneficial discourses are not widespread in an unsustainable society, they should be promoted, adapted and incorporated in mainstream discourses that cover different areas of life such as news reports, weather forecasts, economics textbooks and education to become widespread. This can be done by using linguistic features, such as grammatical structures, pronouns and presuppositions, which communicate ideologies that encourage people to protect the ecosystem that supports life (Stibbe, 2021).

#### **(4.4) Eco-Linguistic Discourse Analysis**

According to Stibbe (2021), societies are prevalent with certain stories that influence how people perceive the world and act in it. These stories are not narratives but mental models that are found in different forms of expression, such as writing, talking, singing, dressing and filming, and are represented via linguistic features that communicate certain worldviews. Stibbe calls these mental models "stories-we-live-by" and holds that ecolinguistics is concerned with "questioning the stories that underpin our current unsustainable civilization, exposing those stories that are clearly not working, that are leading to ecological destruction...and finding new stories that work better in the conditions of the world that we face" (Stibbe, 2014, p.117). Accordingly, an ecolinguistic analysis of language aims to expose the stories we live by, judge them according to the analyst's ecosophy, resist those stories which oppose his/her ecosophy because they are ecologically destructive, and search for new ones that promote care and respect for the ecosystem (Stibbe, 2014, 2021; Song & Tang, 2020).

Stibbe (2015) introduces one central approach in ecolinguistics which is Eco-linguistic Discourse Analysis (EDA). Also known as Ecological Discourse Analysis, EDA examines how language affects humans' relation with each other, other organisms and the natural environment. He defines it as follows:

Ecological Discourse Analysis considers the impact of discourse within an ecological framework not only on human society, but on the larger ecosystems that life depends on. It, therefore, includes racism, sexism, and oppression within the human world but goes beyond that to consider environmental issues such as climate change, biodiversity loss, and resource depletion, as well as more general issues about the relationship of humans with other species and the physical environment. (Wei, 2021, p. 306)

Based on the above definition, ecolinguistic discourse analysis has a critical aspect since the language used to highlight environmental and ecological problems helps reveal ideologies and activities which are harmful to the environment, humans as well as different species. In other words, by unearthing the unreasonable ways of dealing with nature and evaluating and criticizing the language, ideologies and activities that are harmful to the ecosystem, EDA aims to raise people's awareness of ecological problems and the necessity of building a harmonious and stable relation between man and nature, thereby overcome ecological and environmental crises (Huang & Zhao, 2021; Song & Tang, 2020; Stibbe, 2015).

Stibbe (2021) proposes a framework for ecological discourse analysis in which he provides eight forms that stories-we-live-by take so as to resist ecologically harmful stories and promote those which encourage protecting the ecosystem. These story forms have been chosen because "there are useful linguistic and cognitive theories available for analyzing them" (Stibbe, 2021, p. 16). The eight forms of stories are: ideology, framing, metaphor, evaluation, identity, conviction, erasure and salience. According to Stibbe (2021, p.23), *ideologies* are "belief systems about how the world was, is, will be or should be". They are shared among specific groups in society such as journalists, economists and environmental activists, and are expressed by linguistic features used by each specific group. *Framing* refers to "the use of a story from one area of life to structure how another area of life is conceptualized" (Stibbe, 2021, p. 47). It occurs when trigger words are used to describe a particular area of life. For example, the area of life of climate change can be framed as a security threat by using trigger words such as "conflict", "risk", "devastation" and "threat" (Klaver, 2018). *Metaphors* are a special type of framing which "use a frame from a specific, concrete and imaginable area of life to structure how a clearly distinct area of life is conceptualized" (Stibbe, 2021, p. 64). For example, metaphors used to describe climate change include CLIMATE CHANGE IS A ROLLER COASTER and CLIMATE CHANGE IS A TIME BOMB.

*Evaluations* are mental models or "stories in people's minds about whether an area of life is good or bad" (Stibbe, 2021, p. 84). *Identities* are stories in people's minds that are manifested in specific ways of speaking, dressing, behaving and writing, and which show what it means to be identified as a particular kind of person. Ecological identities are constructed by establishing in-groups and out-groups through language. *Convictions*, which are the sixth story form, are "stories in people's minds about whether a particular description is true, certain, uncertain or false" (Stibbe, 2021, p. 129). People's convictions are expressed using facticity patterns which are "clusters of linguistic devices which come together to represent descriptions as certain or true, or to undermine descriptions as uncertain or false" (Stibbe, 2021, p. 129). Facticity patterns comprise linguistic features such as modals, calls to expert authority and the authority of consensus, quantifiers, hedges, and presuppositions.

The seventh story form, i.e. *erasure* refers to "a story in people's minds that an area of life is unimportant or unworthy of consideration" (Stibbe, 2021, p. 146). In other words, it is used to background something that should receive attention. When erasure occurs in a text, it forms an erasure pattern which is "a linguistic representation of an area of life as irrelevant, marginal or unimportant through its systematic absence, backgrounding or distortion in texts" (Stibbe, 2021, p. 146). Thus, an erasure pattern is used to appraise something as unimportant and unworthy of consideration. *Saliency*, the eighth story form, is the opposite of erasure as it refers to "a story in people's minds that an area of life is important or worthy of consideration" (Stibbe, 2021, p. 162). Saliency patterns are used to linguistically depict an area of life as worthy of attention through vivid and concrete representations. Patterns include personalization, naming, individualization, pronouns, sense images, transitivity, co-hyponyms and similes.

As the existence and structure of the different stories-we-live-by are expressed through the language used, the eight story forms are manifested through a number of linguistic features. Table (1) presents the eight forms of stories, their linguistic manifestations adapted from Stibbe (2021) and the linguistic features used to realize them. The linguistic features have been compiled by Klaver (2018).

Table (1): Stibbe's (2021) forms of stories, manifestation in language and linguistic features

<b>Form of Story</b>	<b>Manifestation in Language</b>	<b>Linguistic Features</b>
Ideology	Discourses, i.e. clusters of linguistic features characteristically used by the group	Transitivity, modality, opposition, hedges
Framing	Trigger words which bring a specific frame to mind	Choice of lexis
Metaphor	Trigger words which bring a specific and distinct frame to mind	Choice of lexis
Evaluation	Appraisal patterns, i.e. patterns of language which represent an area of life positively or negatively	-Explicit appraisal items -Implicit appraisal items -Positive and negative connotations -Words with un, in, dis and their unmarked counterparts -Certain metaphors -Expressions of affect
Identity	Forms of language which define the characteristics of certain kinds of people	Pronoun use, hyponymy, transitivity, choice of lexis, metaphor, semantic extension
Conviction	Facticity patterns, i.e. patterns of linguistic features which represent descriptions of the world as true, uncertain or false	Modality, choice of lexis, modifiers, hedges, quantifiers, metaphor
Erasure	Erasure patterns, i.e. patterns of language which fail to represent a particular area of life at all, or which background or distort it.	Nominalization, metonymy, transitivity, hyponymy, co-hyponymy, massification
Salience	Salience patterns, i.e. language patterns which give prominence to an area of life	Choice of lexis, transitivity, metonymy, pronoun use, naming, basic level terms, sense images, simile

#### **(4.5) Greta Thunberg**

As global warming and climate change are causing major changes in our world, the role of humans, not only in causing the climate change problem but also in solving it, has gained wide attention. One famous climate and environmental activist whose speeches and statements on climate issues in different occasions before world leaders, politicians and economists spearheaded youth climate protests and gained her a lot of international media coverage is Greta Thunberg who constantly criticizes world leaders and governments for not taking enough action to solve the climate problem and save humanity from an existential crisis that is bound to happen because of climate change (Afridita et al., 2022; Runge, 2021).

Greta Thunberg is a 19-year old Swedish climate activist whose growing concern about the effect of global warming on the ecosystem and belief that too little is done to deal with climate change drove her to stop going to school in winter 2018 and protest in front of the Swedish Parliament holding a sign that has "Skolstrejk för Klimatet" (i.e. school strike for climate) written on it. This action gained her wide attention on Twitter with the hash-tag #schoolstrike4climate and went viral on other social media platforms. The protests and strikes took place every Friday and became a large movement supported by over 1.6 million young people in over 300 cities (Carrington, 2019; Dash, 2019; Schreuer et al., 2019; Watts, 2019). Thunberg's protests sparked the launch of the "Fridays for the Future" climate strike which was joined by thousands of young protesters around the world and was deemed the largest movement for the climate in human history as four million people in 150 countries demonstrated to raise awareness about the danger of climate change (Alter et al., 2019; Rice & Stanglin, 2019).

In 2018, Thunberg was invited to speak at the World Economic Forum in Davos at COP24 in Katowice in Poland. In the months that followed as the school strike movement gained more followers around the world and gained international attention, Thunberg met with the Pope, addressed heads of the state at the UN and sparred with the Prime Minister of Canada and the U.S. President. She also spoke at the European Parliament meeting in Strasbourg before EU leaders and MEPs in April 2019. In all these events, Thunberg urged world leaders to take immediate actions and adopt effective policies to stand up against global warming and climate change (Alter et al., 2019; Rankin, 2019).

Because of her actions and powerful speeches and statements that inspired millions of people all over the globe, Greta Thunberg was considered by *The Guardian* a "climate change warrior" and "a model of determination, inspiration and positive action". The *New York Times* also deemed her a "modern-day Cassandra for the age of climate change". Thunberg was named as *Time Magazine's* 2019 "Person of the Year" and she was included in the Forbes list of the 2019 world's 100 most powerful women. She was also chosen by *Time Magazine* as one of the 25 most powerful and influential teenagers in the world in 2018. Thunberg also received the honorary fellowship of the

Royal Scottish Geographical Society and was a winner of the Svenska dagbladet debate article writing competition on climate for the youth in May 2018. She was further nominated for the Nobel Peace prize in 2019 by the Norwegian government (Afridita et al., 2022; Alter et al., 2019; Sengupta, 2019; Watts, 2019).

Previous research has analyzed a number of discourses from an ecolinguistic perspective. These discourses include economics (Stibbe, 2020), nature (Chen et al., 2021; Hansen, 2006; Knight, 2010), animals (Glenn, 2004; Goatly, 2006; Stibbe, 2012; Zhdanova et al., 2021), advertising (Hogben, 2009; Slater, 2007), environment (Alexander, 2010; Benton & Short, 1999; Farooq & Umar, 2021), climate change (Ali, 2019; Ihlen, 2009; Sedlaczek, 2016), media (Bailey et al., 2014; Cheng & He, 2021; Doulton & Brown, 2009; Painter, 2013) and politics (Bevitori, 2015; Gjerstad, 2017; Malik et al., 2022; Rukman, 2016). A few studies have conducted an eco-linguistic discourse analysis of texts (Gong & Liu, 2018; Mansyur et al., 2021; Zuo, 2019b) and the focus of the few studies that have analyzed Greta Thunberg's speeches was on certain aspects such as the discourse of youth, rhetorical analysis, modality and transitivity (Afridita et al., 2022; Leung, 2020; Mansyur et al., 2022; Vavilov, 2019). To the researcher's knowledge, the existing research neither examined ecological issues such as climate change nor the speeches of climate activists like Greta Thunberg either using eco-linguistic discourse analysis or Stibbe's (2021) framework hence the contribution of the present study.

## **(5) Analysis and Discussion**

This section aims to present the facticity patterns used in Greta Thunberg's speeches to construct the description that "the people in power are not taking action to stop climate change" as a fact. It explores the linguistic features used to undermine or support this description to influence people's conviction about the truth, certainty, uncertainty or falsity of this description. A number of the facticity patterns or linguistic features provided by Stibbe (2021) are used to build the facticity of the above-mentioned description. These are: authoritative sources, quantifiers, presupposition, word choice, modality, metaphors and repertoires of empiricism. Extract (1) demonstrates calling on authoritative sources, namely the IPCC.

### **Extract (1)**

To have a 67% chance of staying below a 1.5 degrees global temperature rise— the best odds given by the Intergovernmental Panel on Climate Change – the world had 420 gigatons of CO<sub>2</sub> left to emit back on Jan. 1<sup>st</sup>, 2018. (Thunberg, 2019)

In extract (1), Greta Thunberg builds the facticity of her claim that 420 gigatons of CO<sub>2</sub> were left to emit in 2018 so as to "have a 67% chance of staying below a 1.5 degrees global temperature rise" by attributing this piece of information to the IPCC to prove the truth of what she says.

Quantifiers are used in Thunberg's speeches to build the facticity and increase the certainty of what she says about world leaders, their deeds as well as future generations. This is shown in extracts (2) and (3).

### **Extract (2)**

This is all wrong. I shouldn't be up here. I should be back in school on the other side of the ocean. Yet you all come to us young people for hope... We are in the beginning of a mass extinction, and all you can talk about is money and fairy tales of eternal economic growth. (Thunberg, 2019)

In this extract, the quantifier "all" is used to criticize the people in power and their deeds concerning taking effective measures to curb the increase in global temperature. They are criticized for caring only about money and economic growth although the world is on the verge of "a mass extinction" because of global warming. Because of the unacceptable deeds of the world leaders, Thunberg judges everything that has been done as "wrong". Accordingly, "all" those in power find hope in young generations to contribute to solving the climate crisis.

### **Extract (3)**

It should be obvious that we cannot solve a crisis with the same methods that got us into it in the first place and more and more people are starting to realize this. Many are starting to ask themselves "what will it take for the people in power to wake up?" (Thunberg, 2021)

In extract (3), the quantifiers "more and more" and "many" are employed to hit home two messages, the first of which is that the methods used by the people in power to try to deal with the problem of climate change are ineffective as these are the methods that caused the problem in the first place. The second message is that everyday more people are starting to realize that those in power are not aware of the futility of the techniques used to stop global temperature rise.

Presupposition refers to the meanings which are presented as given in a text. What is assumed in texts can be revealing and ideological as language "is continually used to foreground certain things and silence others" (Machin & Mayr, 2012, p. 153). Accordingly, language is replete with presupposition which is employed to build logical arguments and advance certain ideologies (Machin & Mayr, 2012).

There are five types of presupposition, namely structural presupposition, counterfactual presupposition, lexical presupposition, existential presupposition, and factive presupposition. In

structural presupposition, some structures presuppose that part of the structure is true, as in wh-questions:

- When did he leave? >> He left

In counterfactual presupposition, counterfactual conditionals presuppose that the information given in the if-clause is the opposite of what is true and not just not true, as in:

- If you were my friend, you'd have helped me >> You are not my friend

Lexical presupposition includes implicative verbs and change of state verbs, as in:

- He managed to open the door >> He tried to open the door

Here the implicative verb "managed" is used to assert a certain meaning, namely that he tried to open the door, and presuppose an unstated meaning which is that he tried to open the door.

- He stopped beating his wife >> He had been beating his wife

Here "stopped" is a change of state verb

Existential presupposition includes definite descriptions and possessive constructions, as in:

- John saw a man with two heads >> These exists a man with two heads

Factive presupposition includes factive verbs such as "regret", "realize", "know", "be sorry", "be proud", "be glad", and "be sad" which are so-called as the information following them is deemed facts, as in:

- She didn't realize he was ill >> He was ill

(Levinson, 1983; Yule, 2008)

The five above-mentioned types of presupposition are employed in Greta Thunberg's speeches, as shown in extracts (4) and (5):

#### **Extract (4)**

We couldn't care less about your party policy. From a sustainability perspective, the right, the left as well as the center have all failed...And unless we start facing this now together...we won't be able to solve this in time. In the days running up to the 50<sup>th</sup> anniversary of the World Economic Forum, I joined a group of climate activists who are demanding that you, the world's most powerful and influential business and political leaders, begin to take the action needed. (Thunberg, 2020)

In extract (4), existential presupposition is used in "the right...all failed" which presupposes the existence of different political parties worldwide and the failure of all these parties to solve the problem of climate change. Counterfactual presupposition, found in "unless we start...in time", presupposes that the people in power have not started to reach out to young generations to end the crisis in question to save these generations from the undesired effects of temperature rise. Lexical presupposition is used in "I joined a group...begin to take the action needed" in which the change of state verb "begin" presupposes that world leaders have not started taking the measures needed to face climate change yet. As a result, they are required to change their attitude and start taking swift, effective and corrective action.

### **Extract (5)**

Many are starting to ask themselves "What will it take for the people in power to wake up?" But let's be clear – they are already awake. They know exactly what they are doing. They know exactly what priceless values they are sacrificing to maintain business as usual. (Thunberg, 2021)

In this extract, structural presupposition is used in "what will it take...wake up?" to presuppose that the people in power are not aware of the dire consequences of climate change or of the ineffectiveness of the methods they use to solve this problem. Factive presupposition is seen in the use of the factive verb "know" in "They know exactly...as usual". It is used to criticize world leaders and accuse them of protecting their interests by deliberately not taking action to deal with the global temperature rise. By using the factive verb "know", it is presupposed that it is a fact that world leaders care more about maintaining "business as usual" than addressing climate change.

Thunberg's conviction about the inaction of world leaders with respect to climate change is established through using some words, phrases and expressions that serve to build high facticity about this conviction. Extract (6) demonstrates some of these words, phrases and expressions.

### **Extract (6)**

This is an active choice by the leaders to continue to let the exploitation of people and nature and the destruction of present and future living conditions to take place...And this is the uncomfortable result of our leaders' repeated failure to address this crisis...The people in power can continue to live in their bubble with their fantasies...They have had decades of "blah, blah, blah" and where has that led us? This is shameful...We are tired of their "blah, blah, blah". (Thunberg, 2021)

In this extract, there are two groups of words, phrases and expressions that are used to refer to the role played by the people in power in the climate crisis. The first group, which includes the phrases "exploitation of people and nature", "the destruction of present and future living conditions", and

"live in their bubble with their fantasies", all of which are used to highlight the negative deeds of the world leaders and accuse them of contributing to the increase in global temperature by continuing to exploit people and destroy nature. The second group, which includes the words and phrases "our leaders' repeated failure", "decades of blah, blah, blah", and "shameful", constitutes an assessment of world leaders' performance with regard to the climate crisis as well as criticism of their passivity and mere use of big, albeit empty, words concerning solving the climate problem.

In terms of modality, categorical assertions, rather than modals, are employed in Thunberg's speeches to raise facticity about the truth and certainty of her proposition that the people in power are not taking action to combat climate change. This is shown in extract (7):

### **Extract (7)**

My message is that we'll be watching you. This is all wrong...You have stolen my dreams and my childhood with your empty words...People are dying. Entire ecosystems are collapsing. We are in the beginning of a mass extinction...You are failing us.  
(Thunberg, 2019)

In this extract, categorical assertions are used to shed light on the undesirable consequences of climate change and hold the people in power responsible for the occurrence of these dire consequences because of their inaction and false promises. In "we'll be watching you". This is all wrong", categorical assertions are used to evaluate the deeds of world leaders with respect to the rise in global temperature and implicitly warn them against continuing to use empty words rather than taking effective actions to face climate change and save the ecosystem.

Because metaphors are ideologically loaded, they help form understandings as they "make arguments seem more plausible" (Machin & Mayr, 2012, p. 164). Extracts (8) and (9) demonstrate the use of metaphors in Thunberg's speeches.

### **Extract (8)**

You have stolen my dreams and my childhood with your empty words...We will not let you get away with this...The world is waking up and change is coming, whether you like it or not. (Thunberg, 2019)

The metaphor is used in this extract to criticize the people in power because of their false promises and inaction. Dreams and childhood are represented as objects, rather than concepts, that can be stolen. This helps shed light on the gravity of using "empty words" and not taking enough action to protect the ecosystem from the damaging effect of climate change. Personification is also employed in "the world...coming" in which "the world" and "change" are represented as agents to further reinforce the idea that people everywhere will no longer remain passive with respect to the climate crisis and will start to take corrective measures to solve this problem.

### **Extract (9)**

One year ago I came to Davos and told you that our house is on fire... We are not telling you to "offset your emissions" by just paying someone else to plant trees in places like Africa while at the same time forests like the Amazon are being slaughtered at an infinitely higher rate. (Thunberg, 2020)

In extract (9), the world is objectified and represented as a house that is burning because of the unprecedented increase in global temperature. Moreover, forests are represented as animals that are being slaughtered. These metaphors serve to persuade world leaders of the importance of saving life on earth by taking more effective steps to face global temperature change.

Drawing on the repertoire of empiricism is shown in extract (10).

### **Extract (10)**

We're not telling you to rely on technologies that don't even exist today at scale and that science says perhaps never will. (Thunberg, 2020)

In this extract, "science" is placed as the Actor of the verb "says" so as to present Thunberg's statement that the technologies needed to control temperature change and remain below 1.5 degrees as an incontrovertible fact. Thunberg aims to convince world leaders of the necessity and urgency of taking immediate steps to realize the goal of averting global warming.

In addition to the above-mentioned linguistic features provided by Stibbe (2021), the data has revealed that the facticity of the description "the people in power are not taking action to stop climate change" is raised through using repetition and speech acts, as shown in the following extracts:

### **Extract (11)**

I shouldn't be up here. I should be back in school on the other side of the ocean. Yet you all come to us young people for hope. How dare you!...We are in the beginning of a mass extinction, and all you can talk about is money and fairy tales of eternal economic growth. How dare you! For more than 30 years, the science has been crystal clear. How dare you continue to look away and come here saying that you're doing enough, when the politics and solutions needed are still nowhere in sight...How dare you pretend that this can be solved with just 'business as usual' and some technical solutions? (Thunberg, 2019)

In this extract, the phrase "How dare you" is repeated four times to prove that the people in power are only paying lip service with respect to finding a solution to the problem of climate change. It

is also used to criticize them for not being fully aware of the hazardous outcomes of the rise in global temperature as well as for adopting unpractical solutions for the problem.

### **Extract (12)**

We demand that at this year's World Economic Forum participants from all companies, institutions and governments:

Immediately halt all investments in fossil fuel exploration and extraction

Immediately end all fossil fuel subsidies

And immediately and completely divest from fossil fuels. (Thunberg, 2020)

In extract (12), a number of directive speech acts are used to compel participants in the 2020 World Economic Forum to put an end to the problem of climate change. This is realized by using the verbs "demand", "halt", "end", and "divest" which serve to provoke certain actions from these participants so as to effectively minimize global temperature and save the ecosystem.

### **Extract (13)**

The leaders are not doing anything. They are actively creating loopholes and shaping frameworks to benefit themselves and to continue profiting from this destructive system...The people in power...can continue to ignore the consequences of their inaction but history will judge them poorly...believing that our civilization as we know it can survive a 2.7 degree or 3 degree hotter world is not only extremely radical. It is pure madness. (Thunberg, 2021)

In this extract, high facticity concerning the inaction of the people in power with respect to the climate crisis is expressed through using the assertive speech act that is used to assert the statements and propositions made by Greta Thunberg. The illocutionary force of affirming is used in "the leaders are not doing anything...system" and "Believing that...pure madenss" to confirm the truth of Thunberg's conviction that world leaders are not taking enough action to face the rise in global temperature. In "history will judge them poorly", the illocutionary force of avowing is used to assert that the people in power, who are responsible for finding solutions to the climate problem, will be held accountable for their inaction. Thus, the assertive speech act serves to implicitly urge the people in power to take more effective procedures to end the climate problem.

### **(6) Conclusion**

The present study examines conviction in three of Greta Thunberg's speeches on climate change, namely the 2019 UN Climate Action Summit speech, the 2020 World Economic Forum speech, and the 2021 26<sup>th</sup> UN Climate Change Conference of the Parties (COP26). It investigates the

facticity patterns or linguistic devices used to construct conviction and raise facticity about the description "the people in power are not taking action to stop climate change", the functions performed by these linguistic devices as well as the kind of discourse type (destructive, ambivalent or beneficial) of the analyzed speeches.

With respect to the first research question, the data has revealed that seven facticity patterns or linguistic devices are used to construct conviction. These are: authoritative sources, quantifiers, presupposition, word choice, modality, metaphors and repertoire of empiricism. The data has also revealed that two more linguistic devices are used in addition to the above-mentioned ones, namely repetition and speech acts.

Concerning the second research question, it has been found that the seven linguistic devices help build the facticity of the description "the people in power are not taking action to stop climate change". More specifically, drawing on authoritative sources serves to prove the truth of Greta Thunberg's words by attributing the information said to the IPCC. Quantifiers are used in the speeches to increase the certainty of what Greta Thunberg says about the futility and ineffectiveness of the methods used to face climate change. Presupposition has five functions in the data, namely assert that the different political parties worldwide have failed to end the climate crisis, show that the people in power have not reached out yet to young generations to help solve the climate problem, indicate that world leaders have not yet taken effective measures to minimize the rise in global temperature, show that the people in power are unaware of the ineffectiveness of the methods used to solve the problem in question and of the drastic consequences of climate change, and present world leaders' care about maintaining their business at the expense of dealing with the rise in global temperature as a fact. Regarding word choice, it has been found that some words, phrases and expressions are used to shed light on the negative deeds of world leaders, accuse them of contributing to the rise in global temperature, and criticize them for using empty words instead of taking effective steps to end the problem. With respect to modality, the data has revealed that only categorical assertions are used, rather than modal verbs, to hold the people in power responsible for the adverse consequences of the increase in global temperature because of their inaction in this respect and to implicitly warn them against continuing to use empty words and not working on solving the climate problem. Metaphors are used in the data to criticize world leaders for their inaction, express the dangers of not doing enough to protect the ecosystem, and attempt to persuade the people in power of the necessity of taking effective measures to face the climate crisis. Repertoire of empiricism is employed to present what Greta Thunberg says concerning climate change as a fact and thus assert the importance of working diligently to minimize the rise in global temperature. Repetition is used to assert that the people in power are only paying lip service regarding solving the climate problem, and to criticize them for not realizing the dangerous consequences of climate change and for not developing effective solutions to resolve the problem. Regarding speech acts, directive speech acts are used to press participants in the 2020 World Economic Forum to work hard to end the issue of the rise in global temperature. In assertive speech acts, the illocutionary force of affirming is used to prove the truth of Greta

Thunberg's conviction that the people in power are not taking serious action to combat the climate problem. The illocutionary force of avowing is used to assert that the people in power will be held accountable for their inaction regarding the problem of climate change.

As for the third research question, it has been found that the linguistic devices employed in Greta Thunberg's speeches enhance beneficial discourse because of the ideologies they express as they mainly promote protecting the ecosystem. This beneficial discourse fosters an ecosophy that is concerned with promoting the prosperity of current and future generations through raising ecological awareness and urging the people in power to adopt effective and environment-friendly solutions to put an end to the problem of climate change.

The present study has revealed the importance of Greta Thunberg's beneficial discourse in raising awareness about the environmental and ecological problems that all countries suffer from as a result of climate change. By using a number of linguistic devices to build facticity about the certainty of her statements, Thunberg has asserted her conviction that the people in power are not taking action to counter climate change, and sought to urge world leaders to find practical solutions to protect the ecosystem against the harmful consequences of the rise in global temperature.

The study has also shown that young eco-activists play an important role in raising the awareness of governments, media and organizations about the challenges posed by climate change and the necessity of taking effective measures to create a harmonious relation between man and the environment to save nature and promote sustainability, and thus preserve life on earth and protect future generations from the harmful effects of climate change.

The present study has examined conviction in three of Greta Thunberg's speeches on climate change using the eco-linguistic discourse analysis framework proposed by Stibbe (2021). Future research can examine how presidential candidates tackle climate change and other environmental issues in their campaigns. Research can also examine the language used in mass media and social media to raise awareness about the dangers of climate change. Moreover, as the present study has focused on Greta Thunberg's speeches, future research can be conducted on the language used by other young activists such as Autumn Peltier, Mari Copeny, Xiuhtezcatl Martinez and the two sisters Ella and Caitlin McEwan to shape people's opinion and promote eco-friendly behaviors. Some celebrities have also indulged in work on urging world leaders to take climate action and inspiring the people worldwide to preserve the environment. Therefore, further research can investigate the language used by celebrities such as Leonardo DiCaprio, Jane Fonda, Prince Harry, Prince William and Mark Ruffalo.

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