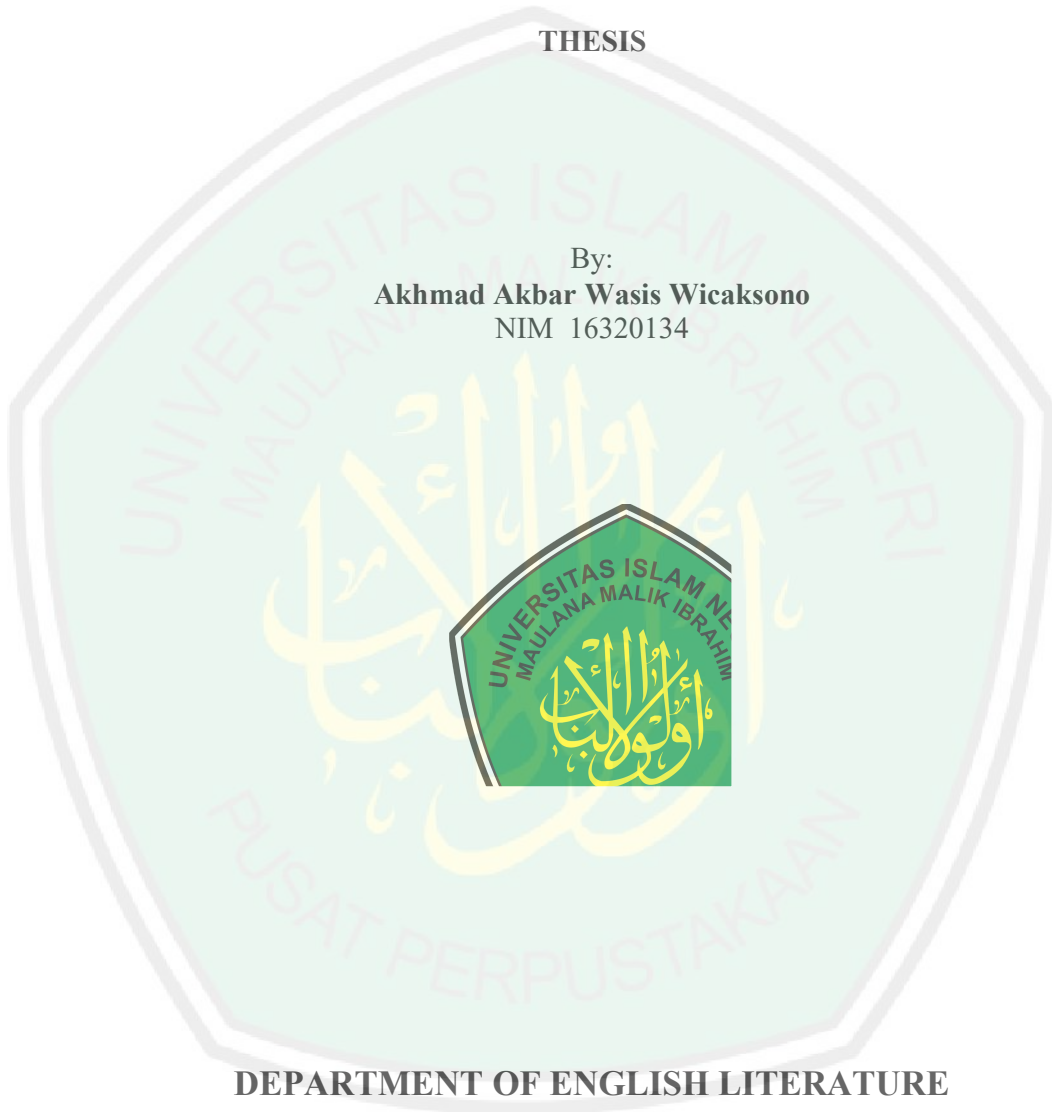


**METADISCOURSE MARKERS FOR DELIVERING
ARGUMENTS ON SPEECH**

THESIS

By:
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**DEPARTMENT OF ENGLISH LITERATURE
FACULTY OF HUMANITIES
UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM
MALANG**

2020

**METADISCOURSE MARKERS FOR DELIVERING
ARGUMENTS ON SPEECH**

THESIS

Presented to

Maulana Malik Ibrahim State Islamic University Malang in Partial Fulfillment of
The Requirement for The Degree of *Sarjana Sastra (S.S)*

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2020

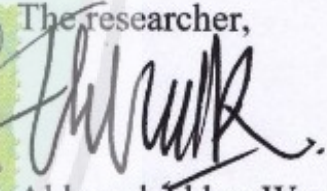
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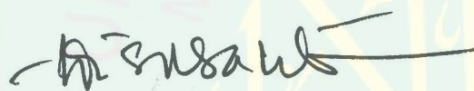
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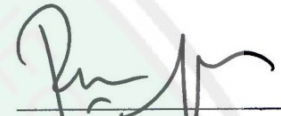
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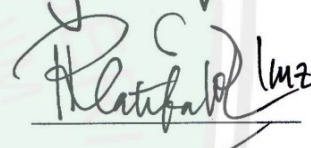
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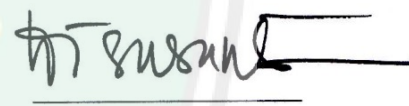
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MOTTO

سَعَى مَا إِلَّا لِلْإِنْسَانِ لَيْسَ وَأَنْ

And that there is not for man except that [good] for which he strives.

(QS. An-Najm :39)



DEDICATION

The thesis cannot be finished without any support and love. I thank to lots of people who give affection and make me believe that nothing impossible. My praises belong to Allah SWT, the most Merciful who has given guidance and blessing to do my thesis. My endless love for several special people who give me a fascinating support and lots of pray, they are my honorable teachers and advisor H. Djoko Susanto, M.Ed., Ph.D. My beloved family, they are my father Istijab, my mother Listyowati, my brothers and my sisters. All my friends who have been bothered by me and my friends at MB10 who have shared many things for about 2 years.

ACKNOWLEDGMENT

Bismillahirrahmanirrahim...

All my deepest gratituded and praise are always to Allah SWT, the Lord of the world and the Hope of all oppressed. Shalawat and Salam are always delivered to Muhammad SAW, the prophet of ummah who has ingerited Islam as a peace and blessing to the entire universe. Alhamdulillah Rabbil Aalamin, due to his mercies and blessings through His Prophet, I am able to accomplish my thesis as one of the requirement for the degree of *Sarjana Sastra* (S.S) in English Literature Department, Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia.

Furthermore, I would like to express my best gratitude to people who have helped me to accomplish my thesis, especially H. Djoko Susanto, M.Ed., Ph.D, as my advisor who is always willing to guide me, share his ideas, and spend his busy time for this thesis. Besides, I also thankful to Dr. Galuh Nur Rohmah, M.Pd., M.Ed. and Dr. Meinarni Susilowati, M.A. as my academic adviser who always remind me to be responsible for the study and also the worship. The last, I would like to extend my gratitude to all my friends who always support me in any situation.

Finally, I do realise that there are some imperfections and weakneses in this thesis. Therefore, the criticism and suggestions are welcome to make it better. May this thesis be useful for all readers in order to deepen understanding about metadiscourse markers.

ABSTRACT

Wicaksono, Akhmad Akbar Wasis. 2020. *Metadiscourse Markers For Delivering Arguments on Speech*. Minor Thesis (Skripsi) Department of English Literature, Faculty of Humanity, Universitas Islam Negeri Maulana Malik Ibrahim Malang

Advisor : H. Djoko Susanto, M.Ed., Ph.D.

Keywords : Metdiscourse Markers, Interactive Metadiscourse, Interactional Metadiscourse, Greta Thunberg, Speech.

The research deals with the study of metadiscourse markers for delivering arguments on Greta Thunberg 's speech. The Greta Thunberg's speeches have been used because she succeeded in creating a global attitudinal shift, transforming millions of vague, middle-of-the-night anxieties into a worldwide movement calling for urgent change. There are two problems in this research. First, this study aims to find out the types of metadiscourse markers used in Greta Thunberg's speeches. Then, this study also describes the impact of metadiscourse markers that appear in Greta Thunberg's speeches.

To get the intended results, this study used a descriptive qualitative method to describe the types and functions of the metadiscourse markers used in Greta Thunberg 's speeches. The speeches videos of the speeches was converted to transcript manually. Then, the result was identified into the utterances containing metadiscourse markers. The researcher classified the data types based on the metadiscourse markers types based on Hyland (2005). There are two types presented, namely: Interactive and Interactional metadiscourse. In interactive metadiscourse there are five sub-category: transition, frame markers, endophoric, evidentials and code glosses. While in interactional metadiscourse there are five sub-categories: hedges, boosters, attitude marker, self mention and engagement marker.

The result shows that in Greta Thunberg's Speeches, transition markers became the highest percentage because the transition is a conjunction that functions to relate one sentence with other sentences. Meanwhile, self-mention is dominant because when Greta Thunberg speaks about her opinion, she states to listeners, and also, the speaker invites the listeners to maintain climate change. Furthermore, the engagement marker is also frequently used by Greta Thunberg to attract the listener's attention to her speeches. While in the booster, hedges and attitude markers are used to support her statements or idea. The researcher did not find the endophoric markers in Greta Thunberg's speech because it seems that there is no need for the speaker to refer to other parts of the text. The speakers may think that there is no need to place endophoric markers in the speech because they only offer a brief point and the limit time.

ABSTRAK

Wicaksono, Akhmad Akbar Wasis. 2020. *Penanda Metadiscourse Untuk Menyampaikan Argumen Dalam Pidato*. Skripsi. Jurusan Sastra Inggris, Fakultas Humaniora, Universitas Islam Negeri Maulana Malik Ibrahim Malang

Pembimbing : H. Djoko Susanto, M.Ed., Ph.D.

Kata kunci : Metadiscourse Markers, Interaksional Metadiscourse, Interaktif Metadiscourse, Greta Thunberg, Pidato.

Penelitian ini berkaitan dengan studi penanda metadiscourse untuk menyampaikan argumen pada pidato Greta Thunberg. Pidato Greta Thunberg telah digunakan karena dia berhasil menciptakan perubahan sikap global, mengubah jutaan kecemasan samar-samar, tengah malam menjadi gerakan di seluruh dunia yang menyerukan perubahan mendesak. Ada dua masalah dalam penelitian ini. Pertama, penelitian ini bertujuan untuk mengetahui jenis penanda metadiscourse yang digunakan dalam pidato Greta Thunberg. Kemudian, penelitian ini juga menjelaskan dampak penanda metadiscourse yang muncul dalam pidato Greta Thunberg.

Untuk mendapatkan hasil yang dimaksudkan, penelitian menggunakan metode deskriptif kualitatif untuk menggambarkan jenis dan fungsi penanda metadiscourse yang digunakan dalam pidato Greta Thunberg. Video pidato dikonversi menjadi transkrip secara manual. Kemudian, hasilnya diidentifikasi ke dalam ujaran yang mengandung penanda metadiscourse. Peneliti mengklasifikasikan tipe data berdasarkan tipe penanda metadiscourse berdasarkan teori Hyland (2005). Ada dua tipe yang disajikan, yaitu: *Metadiscourse Interactive* dan *Interactional*. Dalam metadiscourse interaktif ada lima sub-kategori: *transition, frame markers, endophoric, evidentials* dan *code glosses*. Sementara dalam metadiscourse interaksional ada lima sub-kategori: *hedges, boosters, attitude marker, self mention* dan *engagement marker*.

Hasil penelitian menunjukkan bahwa dalam pidato Greta Thunberg, penanda transisi menjadi persentase tertinggi karena transisi adalah gabungan yang berfungsi untuk menghubungkan satu kalimat dengan kalimat lainnya. Sementara itu, menyebut diri dominan karena ketika Greta Thunberg berbicara tentang pendapatnya, dia menyatakan kepada pendengar, dan juga, pembicara mengundang pendengar untuk mempertahankan perubahan iklim. Selanjutnya, penanda keterlibatan juga sering digunakan oleh Greta Thunberg untuk menarik perhatian pendengar pada pidatonya. Sementara di *booster, hedges* dan *attitude markers* digunakan untuk mendukung pernyataan atau idenya. Peneliti tidak menemukan penanda endoforik dalam pidato Greta Thunberg karena tampaknya tidak perlu bagi pembicara untuk merujuk ke bagian lain dari teks. Para pembicara mungkin berpikir bahwa tidak perlu menempatkan penanda endoforik dalam pidato karena mereka hanya menawarkan poin singkat dan batas waktu.

مستخلص البحث

ويكاسونو، أحمد أكبر وسييس. 2020. علامات **Metadiscourse** لتقديم الحجج في الخطب. بحث الجامعي. قسم الأدب الإنجليزي، كلية العلوم الإنسانية، جامعة مولانا مالك إبراهيم الإسلامية الحكومية في مالانج.

المشرف Ph.D. ،M.Ed. ،: H. Djoko Susanto:

الكلمات الرئيسية : علامات Metadiscourse ، Metadiscourse ، متفاعلية ، Metadiscourse ، التفاعلي ، Greta Thunberg، الكلمات.

يرتبط هذا البحث بدراسة علامات metadiscourse لنقل الحجج في خطاب Greta Thunberg. تم استخدام خطاب غريتا ثونبرغ لأنه نجح في إحداث تغيير في المواقف العالمية، وتحويل الملايين من القلق الغامض، منتصف الليل إلى حركة عالمية تدعو إلى التغيير العاجل. هناك مشكلتان في هذا البحث. أولاً، تهدف هذه الدراسة إلى تحديد أنواع علامات metadiscourse المستخدمة في خطاب غريتا ثونبرغ. ثم تشرح هذه الدراسة أيضاً تأثير علامات metadiscourse التي تظهر في خطاب غريتا ثونبرغ.

للحصول على النتائج المرجوة، تستخدم هذه الدراسة طرقاً وصفية وصفية لوصف نوع ووظيفة علامات metadiscourse المستخدمة في خطاب غريتا ثونبرغ. يتم تحويل الكلام الكلام الفيديو إلى نص يدوياً. بعد ذلك، يتم تحديد النتائج في الكلمات التي تحتوي على علامة metadiscourse. يصنف الباحثون أنواع البيانات على أساس أنواع علامات metadiscourse على أساس (Hyland 2005) هناك نوعان مقدمان، وهما: تفاعلية و Metadiscourse تفاعلية. في metadiscourse التفاعلي، هناك خمس فئات فرعية: التحولات، وعلامات الإطار، والأجزاء الداخلية، والأدلة، ورموز المصطلحات. بينما في metadiscourse التفاعلي، هناك خمس فئات فرعية: التحولات والمعززات وعلامات المواقف والذكريات وعلامات المشاركة.

تظهر النتائج أنه في خطاب غريتا ثونبرغ، هناك نوعان من علامات metadiscourse المستخدمة؛ هم metadiscourse تفاعلية وتفاعلية. أنواع metadiscourse التفاعلي الموجودة في خطاب Greta Thunberg هي التحولات وعلامات الإطار والأدلة ورموز المصطلحات. يصبح الانتقال أعلى نسبة لأن الانتقال عبارة عن تركيبة تعمل على ربط جملة بجملة أخرى. وفي الوقت نفسه، فإن أنواع الأساليب التفاعلية الموجودة في خطابات Greta Thunberg هي التحولات والمعززات وعلامات الموقف، والذكريات وعلامات المشاركة. في فئة التفاعل، يكون ذكر الذات هو المسيطر، لأنه عندما تتحدث غريتا ثونبرغ عن رأيه، يدلي ببيان للمستمع، كما يدعو المتحدث المستمع للدفاع عن تغير المناخ. بالإضافة إلى ذلك، غالباً ما تستخدم غريتا ثونبرغ علامة المشاركة لجذب انتباه المستمع في خطابه. وفي الوقت نفسه، في مكبر الصوت، يتم استخدام علامات السور والمواقف لدعم البيان أو الفكرة. لم يجد الباحثون علامات إندوفوري في خطاب غريتا ثونبرغ لأنه بدأ من غير الضروري أن يشير المتحدث إلى أجزاء أخرى من النص. قد يعتقد المتحدثون أنه ليست هناك حاجة لوضع علامات endophoric في الكلام لأنها تقدم فقط نقاط قصيرة وحدود زمنية.

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CHAPTER I

INTRODUCTION

The aim of this introductory chapter is to elucidate a general overview of how the research is carried out. This chapter includes some important aspects, including research background, research questions, objectives of the study, research significance, scope and limitation, the definition of key terms, previous studies, and research method.

A. Background of Study

This study examines the use of metadiscourse markers in an oral context, especially in speech. In this study, the researcher tried to analyze Greta Thunberg's speeches. She is an environmental activist from Sweden. In the last 18 months, Greta Thunberg "has succeeded in creating a global attitudinal shift, transforming millions of vague, middle-of-the-night anxieties into a worldwide movement calling for urgent change," the editors of Time wrote in December, when they named her the magazine's 2019 person of the year (Woodward, 2020).

Vande-Kopple (1985) argued that meta-discourse functions as a linguistic device in writing that indicates the writer's presence but does not add any additional propositional information. Crismore, Markkanen, and Steffensen (1993, p. 40) also maintain this notion, adding that metadiscourse lets the listener and reader "organize, interpret, and evaluate the information given."

Hyland and Tse (2004) also see metadiscourse in a similar way as a writing tool that lets writers organize their writing discourse and show their attitude

towards the text or the reader. Williams (2007, p. 65) commented that metadiscourse is the language that refers "not to the substance of your ideas, but yourself, your reader, or your writing." Metadiscourse markers is a term that has a relationship between speaker and audience in the field of discourse analysis and aims to help the speaker communicate his idea and involve the audience in receiving the speaker's knowledge.

With these various meanings, one argument is clear: the use of correct metadiscourse in writing allows the writer to control his writing to meet the demands and expectations of the discourse community (Nasiri, 2012; Hyland, 2005). Metadiscourse markers is usually only for text discourse or article text. However, in this study, the researcher tried to analyze the metadiscourse markers in a Greta Thunberg's speeches text using the Hyland (2005) theory since Hyland's theory is the most recent development model of metadiscourse markers.

Hyland (2005) ordered the metadiscourse markers into two classifications, the first is Interactive, and the second is Interpersonal. The interactive resources focus on the information being constructed to convey the speakers' or listeners' explicit message or listeners' preferred interpretation. Interactive resources are composed of sub-categories such as transition markers, frame markers, endophoric markers, evidentials, and code glosses. At the same time, there are five interactional classification sub-categories: hedges, boosters, attitude marker, self-mentions, and engagement markers.

Several previous studies related to metadiscourse markers have been carried out. Sari (2014), with the title “Interpersonal Metadiscourse markers Used in Michelle Obama's Speech,” analyzes the function of interpersonal metadiscourse markers in Michelle Obama's speech. The researcher used a descriptive qualitative method to describe the function and the types of metadiscourse markers in speech. The researcher stated that there are two categories of interpersonal in Michelle Obama's speech: interactive and interactional. Transitional and self-mentions are the highest percentage in the speech because of the function to relate a sentence with another sentence. When Michelle Obama talked about her opinion, she gave the audience a statement that became the audience's author.

Then, Esmer (2017), with the title “Interpersonal Metadiscourse markers in Turkish Election Rally Speeches Delivered by Pro-Turkish and Pro-Kurdish Leaders” in Turkish election speeches given by two candidates leader, the usage of behavioral markers on metadiscourse was analyzed. The research used the concept of a detailed sample, using a qualitative and quantitative method. The researcher used Dafouz's theory in his research. According to the theory of Dafouz (2003) classified that there are five classifications in interpersonal metadiscourse: macro-category hedges, certainly markers, attributors, attitude markers, and commentaries. The research concluded that when both leaders use identical interpersonal metadiscourse markers in their speeches for election, metadiscourse markers serve a different role in their political perspective.

The last, Sukma (2017), with the title “Interpersonal Metadiscourse markers as Persuasive Strategies in Barack Obama's 2012 Campaign Speeches,” analyzed the

interpersonal metadiscourse markers as persuasive strategies in speeches. Explained that is there any relation between metadiscourse markers in Barack Obama's speeches to his persuasive strategies. The researcher analyzed the data using Dafouz's Theory (2003) of interpersonal metadiscourse markers categorization. The finding showed that the researcher used metadiscourse to know that metadiscourse can be used in Obama's speech. Therefore, the previous studies only covered investigation on argumentative writing and argumentative speech context; most of them used Dafouz's Theory in their research.

Kuswoyo & Siregar (2019), entitled "Interpersonal Metadiscourse Markers as Persuasive Strategies in Oral Business Presentation." The researcher analyzed using Hyland's model to apply interpersonal metadiscourse markers (IMDMs) in Steve Jobs's business presentation. It also aimed to examine the categories and sub-categories of interpersonal metadiscourse that were introduced and mostly occur in the form of oral business presentations. The researcher found that the researcher had dominant use of the engagement markers and transition markers.

After reviewing several previous studies above, Most of them used Dafouz's (2003) theory of metadiscourse classification. Besides that, they classify interpersonal methods in their research with different findings. Kuswoyo & Siregar (2019) found the metadiscourse markers that are often used in Steve Job's presentation are engagement markers and self-mention, while in research that discusses by Sari (2014) found how the use of transition markers was used on Michele Obama. In contrast, the other researchers used different theories, and just in one example speech. Hence, the researcher in this study proposes using

metadiscourse markers in speech, especially Greta Thunberg's speeches, with different results.

The speeches delivered by Greta Thunberg were mostly about global climate change. The researcher focused only on one person, that is, Greta Thunberg's speeches because each person has their speaking style. Even when the person speaks the different speech topics, the person used metadiscourse is likely different, in terms of both amount and purpose. However, if examining only one person, we can determine how much she used the metadiscourse markers in her speech. This is the importance of my research to find out the type of metadiscourse markers used by Greta Thunberg and also what the impact on her speech is. Therefore, that gap will be interesting to observe.

There are several reasons the researcher wants to analyze the speech by using metadiscourse analysis. First, the researcher would like to discuss metadiscourse, which is also one element of the discourse with different types and functions, particularly metadiscourse markers. Second, the researcher wants to know the use of metadiscourse markers in a speech. Third, researchers attempt to elucidate the function of each category.

B. Research Questions

Based on the background that has been explained above, the research questions are:

- 1) What are the types of metadiscourse markers used in Greta Thunberg's speeches?

- 2) What are the impact of metadiscourse markers that appear in Greta Thunberg's speeches?

C. Objectives of the Study

Considering the statement of the research questions above, the aim of this study are:

- 1) To find out the types of metadiscourse markers used in Greta Thunberg's speeches.
- 2) To describe the impact of metadiscourse markers that appear in Greta Thunberg's speeches.

D. Significances of the Study

The findings of this research have two contributions, theoretically and practically, based on the research question and the objective of the above study. Theoretically, this study is expected to contribute to developing the theory of Metadiscourse markers in oral/spoken context, especially in speech. Practically, this study's results can increase knowledge about Metadiscourse markers, especially about markers in the context of speaking for students. The researcher hopes that the students use this study to understand metadiscourse markers when they are doing the speech, especially in argumentative speeches in front of the public. Not only for students, the researcher expects that the finding of this study can improve the teacher about metadiscourse markers. Perhaps this study will help the teacher when teaching about the roles of metadiscourse markers in speeches.

E. Scope and Limitation

This study concentrates only on using Metadiscourse markers in speeches. This research took the whole section of speech from 2018 to 2019 and the speech was taken from the speeches of Greta Thunberg which of the speech has the same speaker but in the different events. Furthermore, the researcher only takes speeches at significant events held every month from November 2018 to December 2019. The researcher used the data from Greta Thunberg because, at her age now, she dared to speak in international events. Furthermore, she is very concerned with our earth by expressing her opinion about global climate change in world congresses. In addition, the researcher uses the theory by Hyland (2005) in analyzing the data. Metadiscourse markers based on Hyland (2005) have two types: Interactional and Interactive Metadiscourse markers. Therefore, the researcher only analyzed the data that included the criteria for Metadiscourse markers by Hyland (2005).

F. Definition of Key Terms

- 1. Metadiscourse:** According to Hyland metadiscourse embodies the idea that communication is more than just the exchange of information, goods or services, but also involves the personalities, attitudes and assumptions of those who are communicating. In this study, metadiscourse is the way speakers use words or phrases to organize the speeches and engage listeners.
- 2. Metadiscourse Categories:** The researcher uses Hyland's model of metadiscourse to define metadiscourse categories in this study. His

model comprised of two main categories (Interactive and Interactional Metadiscourse) and five sub-categories in each main category (Interactive: transition markers, frame markers, endophoric markers, evidentials, and code glosses; and Interactional: hedges, boosters, attitude markers, self-mentions, and engagement markers).

- 3. Speech:** An activity of speaking in front of the public to convey the statements, ideas, instructions, or advice with good wording.

G. Research Method

This research has a research method that focuses on:

1. Research Design

In conducting the analysis data, this study uses a qualitative approach. The researcher uses the qualitative method to identify the metadiscourse markers in a speech in which the data were analyzed using Hyland's theory (2005). The qualitative approach is the most suitable to be applied in this research. This present study is applied to get in-depth understanding focusing on metadiscourse markers.

2. Research Instrument

This study uses a human instrument, and the instrument of this study is the researcher himself because there is no other instrument involved in this study. As the main instrument, the researcher will collect the speeches from Greta Thunberg from 2018-2019. Some processes will be done either in collecting and analyzing the data, such as watching the speeches several times, marking the data, and

analyzing all of the data using metadiscourse markers classification by Hyland's (2005) theory.

3. Data Source

In the data source, the researcher takes nine speeches. There were nine from twelve speeches uttered by Greta Thunberg. The researcher only took nine speeches because one speech in Bradenburg, Germany, was too short and the other two held in the same places, precisely in North America. So, the researcher only took one speech from three speeches in North America, New York City. Those speeches were; TEDxStockholm in Swedia, COP24 in Poland, World Economic Forum in Switzerland, UK Parliament in England, The R20 Austrian World Summit in Vienna, National Assembly in Paris, United Nations Summit on Climate Action at United Nations Headquarters in New York City and United Nation Climate Change Conference (COP25) in Madrid under the presidency of Chilean Government. In this research, the writer expressly referred to the speeches of Greta Thunberg. Here was the speeches list by Greta Thunberg chosen by the researcher,

Speech 1

<https://www.youtube.com/watch?v=EAmUIEsN9A>

November 24th, 2018: TEDxStockholm in Sweden.

Speech 2

<https://www.youtube.com/watch?v=VFkQSGyeCWg>

United Nations Climate Change Conference is also known as the Katowice Climate Change Conference (COP24). It was held between 2 and 15 December 2018 in Katowice, Poland.

Speech 3

<https://www.youtube.com/watch?v=O4FOTcQ3wsE>

on January 25th, 2019: World Economic Forum in Davos, Switzerland.

Speech 4

<https://www.youtube.com/watch?v=sVeYOPJZ8oc>

on February 21st, 2019: European Economic and Social Committee and to European Commission chief Jean-Claude Juncker.

Speech 5

<https://www.youtube.com/watch?v=rYNM4rsnNFM&t=24s>

April 2019: UK Parliament, England.

Speech 6

<https://www.youtube.com/watch?v=FwptXauY2is>

May 2019 at the Austrian World Summit R20 in Vienna, Austria.

Speech 7

<https://www.youtube.com/watch?v=J1yimNdqhqE&t=95s>

July 23rd, 2019: National Assembly in Paris.

Speech 8

<https://www.youtube.com/watch?reload=9&v=KAJsdgTPJpU>

September 23rd, 2019: United Nations Climate Action Summit.

Speech 9

<https://www.youtube.com/watch?v=11FCyUB81rI>

December 11th, 2019: COP25 United Nations Climate Conference in Madrid, Spain.

4. Data Collection

The researcher used several steps to collect the data. The data collection technique will be executed in several steps:

- a. The researcher selects nine Greta Thunberg's speeches videos, as the researcher explained in the data source above from YouTube in

- a total of twelve speeches listed so far on Wikipedia and downloaded them.
- b. The researcher watched the speeches several times in order to understand the entire content using a laptop.
 - c. After watching the videos, the researcher takes a laptop to make the transcript and type it.
 - d. The researcher printed out the transcripts of the speeches in order to assist the researcher in analyzing.
 - e. The researcher compares the transcript with the data to check whether it is included in the classification in theory or not.
 - f. Lastly, the researcher classifies the words, phrases, and parts of sentences indicated as an interactive and interactional metadiscourse marker.

5. Data Analysis

After collecting the data, the researcher did several steps to analyze the data, as follows:

The first step is watching Greta Thunberg's speeches from youtube. This is done by inspecting the data collected from the chosen videos. The researcher classifies the data and applies the theories that is Hyland's (2005) classifications of interactive and interpersonal metadiscourse markers. Relating to the study issue and any aspects appropriate to fulfill the study's objectives. Then, the researcher watched the speeches videos to find the metadiscourse markers used by Greta Thunberg.

Moreover, the researcher makes a transcript as a data source of all the words spoken by the speaker. Besides, selecting and classifying the whole data. The researcher categorized types of metadiscourse markers using Hyland's theory (2005) and summarizing the finding of the data into the table to make the process of analysis clearer and easier.

Table 3.1 Interpersonal Metadiscourse Markers Found in the Transcript of Greta Thunberg's Speeches.

No.	Types	Σ	%
Interactive Metadiscourse			
1.			
2.			
3.			
4.			
5.			
Interactional Metadiscourse			
1.			
2.			
3.			
4.			
5.			
	Total		

The researcher classified each marker of the metadiscourse markers: frequency and percentage. The researcher used the following formula to find many data used by the speaker:

$$\text{Percentage of each markers} = \frac{x}{y} \times 100\%$$

x: the frequency of each marker

y: the total number of frequency

The researcher used the table of classification markers to facilitate the researcher in classifying. From this step, the first and the second number of the research questions were answered. The last step is analyzing the metadiscourse markers in Greta Thunberg's speeches that have been found, and the researcher finishes with the data analysis and discussion and draws a conclusion.



CHAPTER II

REVIEW ON RELATED LITERATURE

The researcher would like to explore some theories relating to the use of metadiscourse in the spoken context in this chapter. To relate the subject and the study, the researcher will explain the metadiscourse markers in spoken context, especially in speeches, in a detailed and elaborate way.

A. Metadiscourse

Metadiscourse is a term that is more widely used in discourse analysis and is a part that is related to new ways proposed by writers or speakers who project themselves into the texts they use with their recipients. Despite the importance of this term, this understanding is often understood in different ways for each reader or listener. This matter will be discussed by providing a critical review of the metadiscourse that has been proposed by some scholars. Kopple (1985) had proposed the first metadiscourse model. He proposed two significant forms of “textual” and “interpersonal” metadiscourse. “Textual metadiscourse” has four sub-categories, code glosses, illocutionary markers, narrators, and text connectives. “interpersonal metadiscourse” has three sub-categories, validity markers, attitude markers, and commentaries. The theory offered by Kopple had several issues with the categories, markers that are considered to overlap with other markers (Pooresfahani & Khajavy, 2012). Finally, this theory is revised by other scholars.

Crismore (1983) became the first figure to revise the theory of Kopple. He explained the sub-category in the metadiscourse into three parts, broke down, separated, and reorganized. Crismore, Markkanen, and Steffensen (1993) also define and subdivide metadiscourse into "textual" and "interpersonal." Textual markers are features that can help organize the discourse, and interpretative markers make it easier for the reader to understand and appreciate the skill of the writer and his writing technique (Pooresfahani & Khajavy, 2012).

After that, Ken Hyland became a model that introduced his theory on metadiscourse. Hyland (2005) stipulates that metadiscourse is a linguistic feature that describes how a person composes sentences and communicates with the reader to facilitate the reader. (Hyland, 2005) defined this metadiscourse as

“The cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community” (p. 37).

After seeing the growth of the metadiscourse, Hyland & Tse (2004) identify three concepts in the metadiscourse, namely that the metadiscourse is separate from the content of the proposition, relating to aspects of the text that connect the relationship between the writer and the reader, and which relate only to the internal discourse (Hyland & Tse, 2004; Hyland, 2005). Besides, Hyland & Tse (2004) argue that the idea of metadiscourse applies to those aspects of the text that actualize the interaction between writer and reader. It deals with the writer's decisions to examine specific relationships and aspects of an organization to provide the reader's understanding, direct their reading, and make them aware of

the writer's messages. So, it can be assumed that metadiscourse refers to the relationship that both the writer and the reader are engaged in.

Hyland (2005, 2013) classified two types of metadiscourse, "interactive" and "interactional" metadiscourse. The interactive approach has to do with the way the writers write the text. Writing in the text can affect the readability of reading, and reading can easily read the text. This metrics also demonstrates how the writer instructs the reader to interpret the text for the benefit and response of the reader in the text. As an interactive metadiscourse involving the author in providing explanations related to information provided in a text. Thus, the major metadiscourse categories and sub-categories will be further described as follows.

2.1 Interactive Metadiscourse

One of the classifications mentioned by Hyland (2005) is about the awareness of the writer. Interactive metadiscourse explains how the writer transmits his ideas to the reader. So, the reader joins the thoughts of the writer. Besides, interactive metadiscourse will guide the reader to understand the relationship between text and another that has been written. Finally, a relationship between the reader and the writer will be formed through the text (Hyland, 2005).

Interactive resources also provide the author with the means to coordinate the flow of knowledge to build the desired interpretations in a vivid manner (Hyland, 2015). So it can be argued that interactive metadiscourse deals with the speaker's efforts to organize the discourse. It also defines the writer's expectation that must be generated beautifully to guide the recipient into desired

interpretations as the author wishes to be presented. Hyland (2005) divides the interactive metadiscourse sub-categories into five parts and is discussed below.

Interactive metadiscourse has five significant sub-categories. The first is the transition markers, a process composed of specific instruments, in particular conjunctions, used to direct the additive, opposing, and profound phases in conversation, to conflict with the external environment or this, can also be interpreted as to express semantics relation between text with another text (Hyland, 2004). Martin and Rose (2007: 116) Summarize the various positions in discourse that internal and external transitions perform. They divided transition markers into three parts; Addition, Comparison, and consequence. Addition markers add elements to a statement which may consist of things like and, by the way, furthermore, moreover, and so on. Comparison labels mark the statements either identical (similarly, equally, in the same way, and so on) or different just like (contrary, but, however, and so forth). Consequence connections either inform the reader that an inference is drawn or validated (thus, in summary, etc.) or that a point is being answered (although, anyway, etc.). Hence, without using the proper transition, the text becomes ambiguous, and the transition between text and another text will be difficult to understand.

The second is Frame markers; frame markers deal with the schematic structure elements that function to sequence, label, and move the statement. It also aims at establishing a clear dialog for readers or listeners. Therefore sequencing part of the text or organizing an argument inside the text is beneficial. It is also used to represent additive relationships (first, then, next, etc.). In addition, frame

markers may be used to identify the phases of the text (to sum up, in brief, etc.). They also inform the purpose of the discourse (my purpose is, there are several reasons, I argue, etc.). Finally, it is used to denote changes in the subject (let us go back to, well, right, etc.).

Thirdly, Endophoric markers are the components that refer to the other part of the text. It can be argued that it is a supporting factor by referencing the earlier content or expecting it. It consists of additional material that is influential and allows the reader or listener to understand the meaning of the writer/speaker. For example, as stated above, and see Chapter 2, it can be referred to as endophoric markers.

Fourthly, evidentials suggest the origins of textual knowledge from outside the existing text (Hyland, 2004). This element is aimed at establishing the author's authorial command and leading understanding of the reader. It refers to a reliable source and significant arguments rather than to the position of the author, such as the Hyland claims, according to, cites, established, said, says, quote, and so on.

And the last, Code glosses covers the additional details provided by the author through the elaboration and clarification of the proportional sense that has already been mentioned. It is used to determine whether or not the reader can grasp the intended sense of the writer. Therefore, it refers to the expectation of the writer to know the knowledge base of the reader. For example, there are many examples of code glosses, such as, for example, etc., for instance, e.g., in fact, namely, this means, such as.

Table 1: Model of Interactive Metadiscourse

Interactive Metadiscourse		
Category	Function	Examples
Transition Markers	Show the semantic relationship between the main clauses.	In addition, but, therefore, so, because, and
Frame Markers	Refer to the text stages explicitly.	Finally, to repeat, the aim, my purpose, I would like to
Endophoric Markers	Refer to other parts of the text for information.	Noted above, example, fig, page, below
Evidentials	Refer to other text information sources.	According to X or Y, cite, quote, X states.
Code Glosses	Help the reader understand ideational content meanings.	Namely, e.g., i.e., in fact, such as

Source: Adapted from (Hyland, 2005, p. 49).

2.2 Interactional Metadiscourse

Interactional is another part of one of the classifications described by Hyland. Interactional deals with the author's engagement to create explicit content and involve readers by enabling them to react, interpret, and analyze the materials. This feature invites the reader to collaborate with the author in developing the text. So, the author allows the reader to respond to the unfolding text; hence the reader can get involved in the text. Interactional metadiscourse lets the author draw readers into his concept (Hyland, 2005). Hyland (2005) also classifies interactional metadiscourse as follows into five sub-categories.

There are also five sub-categories of it. First, hedges are concerned with the writer's decision to consider alternate viewpoints and points of view to withhold the undertaking. It refers to the author's attempt to stress the subjectivity of facts by claiming an opinion rather than a reality in order to open a

conversation with readers. Hence, hedges deal with the author's claim, which is more probable than specific information. These markers, for instance, almost, apparently, assume, believe, generally, often, perhaps, and so forth.

Second, boosters involve the aspect that, by claiming confidence, writers can establish a close dialogue. This is meant to indicate that the author wants to narrow down the complicated position rather than expand this. Thus, it expresses conviction and establishes a bond by closing the discussion by supplying the engagement with the content and unity with the receiver. Similarly, it is used to validate the points by claiming both an equivalent perception and similar to the assumption of the speaker. These markers, for instance, *actually, apparent, always, I believe, certainly, certain that, clearly*, and so forth.

Third, Attitudemarkers are intended to suggest the author's practical attitude to propositions. This means that this item includes how the author applies the surprise, the compromise, the obligation, and so on. Attitude is conveyed mainly by verbs of attitude (agree, choose, etc.), adverbs of sentences (hopefully, sadly, etc.), and adjectives (logical, exceptional, acceptable, etc.).

Fourth, Engagement markers refer to an aspect that defines a connection with the reader as part of the dialogue audience. By reflecting on the listener's interest, Hyland (2005) defines the two primary goals of the engagement markers. First, it recognizes the need for reader expectations by addressing the reader while arguing with listener pronouns such as you, yours, etc. And interjections, as you can note, by the way, etc. Finally, it requires the listener to be rhetorically placed,

to be involved in the debate, and to direct the reader to the desired interpretation. These markers are accompanied by queries, instructions (note, consider, must, should, etc.) and sources for exchanging information. The last, self-mentions suggest the extent of author presence and participation in terms of pronouns and possessives for the first person. For instance, these markers *include my, me, mine, our, we*, and so on. Classification of metadiscourse types and sub-types can be seen in the following table;

Table 2 Model of Interpersonal Metadiscourse

Interactional Metadiscourse		
Hedges	Withhold the full commitment of the writer to the statement.	Might, perhaps, almost, believe, mostly
Emphatics (Boosters)	Emphasize the strength of the writer's certainty in the message.	In fact, decidedly, obviously, it is known that.
Attitude markers	Express the writer's attitude to the content of the propositional.	Surprisingly, even, unfortunately, disagree
Relational markers	Refer to the reader for/create a relationship explicitly.	Frankly, note that, you can see
Person markers	An explicit reference to the author(s).	I, we, mine, our, my, me

Source: Adapted from (Hyland, 2005, p.49).

CHAPTER III

FINDING AND DISCUSSION

This chapter includes the findings and discussions. The findings include the presentation and analysis of the data based on the metadiscourse markers theory proposed by Hyland (2005). The discussion then covers a description of the results of the data analysis.

A. Findings

The data were collected from Greta Thunberg's speeches from YouTube in November 2018 – December 2019. There were nine from twelve speeches uttered by Greta Thunberg. The researcher only took nine speeches because one speech in Bradenburg, Germany, was too short and the other two held in the same places, precisely in North America. So, the researcher only took one speech from three speeches in North America, which was in New York City. The speeches were TEDx Stockholm (Speech 1), COP 24 (Speech 2), World Economic Forum (Speech 3), European Economic and Social Committee (Speech 4), MP's at the Houses of Parliament Britain (Speech 5), Austrian World Summit R 20 (Speech 6), France National Assembly (Speech 7), United Nations Climate Action Summit in New York (Speech 8), and COP 25 United Nations Climate Conference (Speech 9).

1. The types of metadiscourse markers used in Greta Thunberg's speeches.

In order to answer the first research question about the types of metadiscourse markers used in the speeches of Greta Thunberg. The data were gathered through nine speeches by Greta Thunberg. These data were examined using the metadiscourse model of Hyland, divided into two main types: interactive metadiscourse and interactional metadiscourse. Based on the findings in nine speeches, there were 1512 metadiscourse items, consisting of 568 interactive categories and 936 interactional categories. Details on the use of metadiscourse are shown in the table below. Interpersonal Metadiscourse markers used in Greta Thunberg's speeches is presented in the following table.

Table 3.1 Interpersonal Metadiscourse Markers Found in the Transcript of Greta Thunberg's Speeches.

No.	Types	Σ	%
Interactive Metadiscourse			
1.	Transitional	516	34
2.	Frame	17	1.1
3.	Endophoric	-	-
4.	Evidentials	35	2.3
5.	Code glosses	8	0.5
Interactional Metadiscourse			
1.	Hedges	94	6.2
2.	Boosters	92	6.1
3.	Attitude	22	1.4
4.	Self-mentions	497	33
5.	Engagement	231	15.3
Total		1512	100

From Table 3.1, the researcher found 1512 interpersonal metadiscourse markers used in Greta Thunberg's speeches with the kinds of types; interactive

and interactional metadiscourse. The interactive types were transitional, frame markers, evidential, and code glosses. While, in interactional types were hedges, boosters, attitude markers, self-mentions, and engagement markers. Transitional markers were the highest type that appeared in interactive metadiscourse markers used by the speaker in her speeches. Moreover, self-mention was the highest type that appeared in interactional metadiscourse markers used by the speaker in her speeches.

a). Interactive Metadiscourse

1). Transitional Markers

According to Hyland (2004), transition markers could be interpreted to express semantics relations between text and another text. Martin and Rose (2007: 116) explained the separate discourse positions of internal and external change. Additional contribute components to the argument, which technically included things such as, and, furthermore, by the way, etc. The comparison referred to statements either as similar or as different. Consequent relationships either informed the readers that inference was drawn or justified or that a point was opposed.

In this category, the researcher found 516 transition markers used in a total of 1.512 metadiscourse markers in Greta Thunberg's speeches. All the speeches delivered by Greta Thunberg used transition markers with a 34% rate from 38%. This was the highest type that appeared in interactive metadiscourse markers used

by the speaker in her speeches. We could see the examples of transitional words below:

Table 3.2 Transition Markers

No.	Remarks	Total
1.	And	270
2.	Or	71
3.	But	66
4.	Because	50
5.	So	20
6.	Also	8
7.	Then	7
8.	However	6
9.	Since	5
10.	Therefore	3
11.	Whatsoever	2
12.	Yet	2
13.	Though	2
14.	Furthermore	1
15.	Thereby	1
16.	While	1
17.	Even though	1
	Total	516

In every language, transitions played an essential role in the organization of a text. Transitions worked as a bridge between sentences. In Greta Thunberg's Speech, transitional words such as 'and' were highly used when discussing the climate change campaign. Examples of transitional words could be seen below:

Transitional "and."

Excerpt 1

"I was told to turn off the lights to save energy **and** to recycle paper to save resources." (Speech 1)

The word "**and**" on the excerpt above was classified as transition markers referring to interactive resources and included on addition marks based on Martin

and Rose (2007: 116). The aim of the transition markers was, according to Hyland (2005), to help the listener understand the pragmatic relation within the discourse. The word **'and'** denotes how the speaker attempts to create a relation between two proportions. In this context, the word **and** connected the speaker's statement regarding the suggestion to turn off the lights to save energy and to recycle paper to save resources. In addition, the signaling of additive elements was performed, and that helps guide the listener through the transition markers to interpret the link between those ideas or the speaker's argument step. Hence, the speaker used the mark **"and."**

Transition "so."

Excerpt 2

"Today, we use 100 million barrels of oil every single day. There are no politics to change that. There are no rules to keep that oil in the ground. **So**, we cannot save the world by playing by the rules, because the rules have to be changed." (Speech 1).

The word **"so"** on the excerpt above is classified as transition markers referring to interactive resources, and include on consequence marks based on Martin and Rose (2007: 116). It refers to the interpretation which is drawn about a conclusion. This also explains how to draw the argument to a conclusion. In this case, this marker allowed the audience to understand the relationship between the arguments about the use of 100 million barrels oil per day and that there was no law that oil had to be kept in the field. Hence, the speaker explained to the listener that the rules had to be changed because they could not save the world if they played by the rules.

Excerpt 3

"And in the words of author Alex Stephan winning slowly is the same thing as losing. When it comes to the climate crisis, the longer we wait, the harder it will be to turn this around. **So**, let us not waste any longer, let us start acting." (Speech 6).

The marker "so" was listed in this datum as transition markers dealing with the interactive resources. This referred to the interpretation which was drawn regarding a conclusion. It also demonstrated how the statement was to be inferred. In this case, this marker allowed the listener to understand the connection between the sentence and Alex Stephan's sentence. He concluded that winning slowly was the same as losing. When it came to the climate crisis, the longer we wait, the harder it was to reverse this. Therefore, the speaker used the sign "so" to conclude and invite the listener to act now.

Transition "because."

Excerpt 4

"We know that most politicians do not want to talk to us. Good, we do not want to talk to them either. We want them to talk to the scientists instead. Listen to them, **because** we are just repeating what they are saying and have been saying for decades". (Speech 4).

The word "because" on the excerpt above was classified as transition markers referring to interactive resources and included addition marks based on Martin and Rose (2007: 116). The speaker used the word "because" to give more extensions upon the terms. It was used by the speaker to give a strong argument to the previous statement. In the previous statement, the speaker talked about her statement listening to the scientists instead of listening to the politicians. Thus, the

word 'because' in this context helped the speaker to strengthen her statement of why we had to listen to the scientists.

Transition "but."

Excerpt 5

"For about a year, I have constantly been talking about our rapidly declining carbon budgets over and over again. However, since that is still being ignored, I will just keep repeating it". (Speech 9)

The word **"but"** on the excerpt above was classified as transition markers referring to interactive resources, and included on comparison marks based on Martin and Rose (2007: 116). It functioned to provide a piece of information to interpret the pragmatic relation between two significant proportions. Furthermore, this marker was used to show a contrastive relation. In this case, the speaker tried to build a comparison, especially in the form of distinction, by applying the word **"but"** within the discourse. Also, the speaker used the word **"but"** to compare the statement about the city that firstly emerged and several cases that were recorded in another city.

2). Frame Markers

Frame markers dealt with the schematic structure elements that functioned to sequence, label, and moved the statement. It also aimed at establishing a clear dialog for readers or listeners. Therefore sequencing part of the text or organizing an argument inside the text was beneficial, and it was also used to represent additive relationships. In addition, frame markers might be used to identify the phases of the text. They also informed the purpose of the discourse. Finally, it was used to denote changes in the subject.

In this category, the researcher found 17 markers used in Greta Thunberg's speeches. All of the speeches uttered by Greta Thunberg were used in this category. The higher number used was four examples of frame markers applied in the speeches. Here were the analysis results of frame markers.

Table 3.3 Frame Markers

No.	Remarks	Total
1.	I want you to	4
2.	Suggest	2
3.	Focus on	2
4.	I think	1
5.	First	1
6.	Second	1
7.	Summarized	1
8.	Started	1
9.	My message	1
10.	I'm telling you	1
11.	Well	1
12.	Concluded	1
	Total	17

The researcher had just identified 17 or 1.1% of the interpersonal metadiscourse markers used in Greta Thunberg 's speech, and the category was interactive, and the type was frame markers. Examples of frame markers could be seen below.

Excerpt 6

“Our house is on fire. **I am here to say**; our house is on fire”. (Speech 3).

In interactive metadiscourse, the part of sentences on the above excerpt was defined as frame markers. The speaker tried to tell the listener what she was going to talk about in her speech by utilizing frame markers in this address. The

speaker specifically told the listener that the topic of her speech that day was about climate change. We knew it from the sentence our house was on fire, which meant our earth was dangerous right now. Furthermore, to introduce the topic, the speaker used the frame marker, "I am here to say."

Excerpt 7

"In just three weeks. We will enter a new decade, a decade that will define our future. Right now, we are desperate for any sign of hope. **Well**, I am telling you, there is hope". (Speech 9).

The word "well" on the excerpt above was classified as frame markers referring to interactive resources. According to Hyland (2005), frame markers were typically used to indicate the borders of discourse as well as the schematic of elements occurring within the context of discourses. In this case, frame markers were used to indicate the shift of the topic. It could be seen that the word "well" is a frame marker that indicated a change between the two discussions. Meanwhile, the speaker shown the indication between the information about facing the new decade, which was new hope. However, the world community was desperate, and no longer believed there was hope. However, the speaker used the frame marker to tell that the hope was still there.

3). Evidence

Evidences suggested the origins of textual knowledge came from outside the existing text (Hyland, 2004). This element was aimed at establishing the author's authorial command and leading understanding of the reader. It referred to

a reliable source and significant arguments rather than to the position of the author.

Table 3.4 Evidence Markers

No.	Remarks	Total
1.	Says	8
2.	According to...	6
3.	Reports	6
4.	Shows	4
5.	Stated	2
6.	Told	2
7.	Chapter	2
8.	Page	2
9.	Demonstrated	1
10.	In the words of...	1
11.	Quoting	1
	Total	35

Evidential is information taken from other sources. In the Greta Thunberg speeches, the researcher just found 35 or 2.3% in excerpts below.

Excerpt 8

“Yet, as the IPCC has recently **demonstrated**, aiming instead for 1.5°Celsius would significantly reduce the climate impacts”. (Speech 1)

The bold word in the excerpt above was categorized as an evidence marker in interactive metadiscourse. The bold word in the above excerpt was categorized as an evidence marker in interactive methods. As a result of this, the speaker wanted to provide the listeners with evidence that the IPCC had shown that what was delivered by a credible institution would reinforce the speaker's argument. In doing so, the speaker tried to convince the listeners of what the speaker explained in this topic.

Excerpt 9

“**According to the IPCC** (Intergovernmental Panel on Climate Change), we are less than 12 years away from not being able to undo our mistakes. In that time, unprecedented changes in all aspects of society need to have taken place, including a reduction of our CO₂ emissions by at least 50%”. (Speech 3)

In interactive metadiscourse, next excerpt was classified as evidential markers. The evidential marker was used to refer to the information source from other data. Using the phrase “**According to the IPCC,**” the speaker showed the listener that someone's authority supported her argument. It included supporting statements and evidence to reinforce the argumentation of the speakers. Using another IPCC report as evidence, the speaker might provide a clear stance on climate change.

Excerpt 10

"Since 1990, the United Kingdom has achieved a 37% reduction of its territorial CO₂ emissions, **according to the Global Carbon Project**. And that does sound very impressive. But these numbers do not include emissions from aviation, shipping, and those associated with imports and exports. If these numbers are included, the reduction is around 10% since 1990 – or an average of 0.4% a year, **according to Tyndall Manchester**". (Speech 5).

In interactive metadiscourse the next excerpt was classified as evidential markers. This mark was intended to represent an idea from another source and also to support the claims of the speakers. Using the Global Carbon Project and Tyndall Manchester source, the speaker guided the listener's interpretation of the subject, which was discussed by the speaker. The marker had also contributed to a

convincing goal. The use of this mark also supported the speaker's statement in this speech.

Excerpt 11

And **in the words of author** Alex Stephan winning slowly is the same thing as losing. When it comes to the climate crisis, the longer we wait, **the** harder it will be to turn this around. So, let us not waste any longer, let us start acting." (Speech 6).

In the above section, the marker as the author's words was identified as evidential, referring to the interactive resources. It functioned to represent another credible source and provides an understanding of the listener. This marker was used in this case, referred to as the statement suggested by the author that was Alex Stephan, who said winning slowly was the same thing as losing. The longer we waited, the easier it would turn things around when it came to the climate crisis.

Excerpt 12

"A lot of people, a lot of politicians, business leaders, journalists, say they don't agree with what we are saying. They say we children are exaggerating, that we are alarmists. To answer this, I would like to **refer to page 108, chapter 2** in the latest IPCC [Intergovernmental Panel on Climate Change] report." (Speech 7).

The bold words above was categorized as evidential markers in interactive metadiscourse. The speaker wanted to answer the question addressed to her regarding climate breakdown. Hence, the speaker used this marker to strengthen her arguments by referring to the IPCC report, which had been stated by in chapter two, page one hundred and eight.

Excerpt 13

“In chapter two, on page 108 in the SR 1.5 IPCC report that came out last year, it says that if we ought to have a 6% to 7% chance of limiting the global temperature rise to below 1.5 degrees Celcius.” (Speech 9).

The sentence in Excerpt 13 above was categorized as an evidential marker in interactive metadiscourse. The speaker used this marker to support her arguments by referring to paragraphs that have been discussed by the writer. This marker also led the listener to remember the argumentations of the speaker in the earlier discussion in some earlier paragraphs.

4). Code Glosses

Code glosses covered the additional details provided by the speaker through the elaboration and clarification of the proportional sense that has already been mentioned. It was used to determine whether or not the listener could grasp the speaker's intended sense. Therefore, it referred to the expectation of the speaker to know the knowledge base of the listener. There were only eight code glosses applied in the Greta Thunberg's speeches were shown below.

Table 3.5 Code Glosses

No.	Remarks	Total
1.	Such as...	4
2.	Are	2
3.	For example	1
4.	That is	1
	Total	8

Code glosses refer to the expectation of the speaker to know the knowledge base of the listeners. There were only 8 or 0.5% code glosses applied in the Greta Thunberg's speeches were shown in the excerpt below.

Excerpt 14

"And that is, so that people in poorer countries can have a chance to heighten their standard of living by building some of the infrastructures that we have already built, **such as** roads, schools, hospitals, clean drinking water, electricity, and so on." (Speech 1).

The word "**such as**" in the above quotation was classified as code glosses in an interactive meta-discourse. In this situation, the speaker had attempted to provide relevant details to the listeners. Hence, the speaker presented the audience with detailed information about the infrastructure. The speaker wanted to suggest that the Government's infrastructure was built to give developing people the ability to provide a standard of living by talking about infrastructure. The speaker then provided the listeners with examples of what the speaker had said in the previous statement. Hence the speaker was using this marker.

Excerpt 15

My name is Greta Thunberg, I am a climate activist from Sweden and today in this room there **are** also - if you can come up - Anuna, Adélaïde, Kyra, Gilles, Dries, Toon and Luisa. (Speech 4).

The following data is classified as code glosses in an interactive metadiscourse. In this situation, the speaker wanted to provide the audience with information on who should come forward to follow the speaker to the front of the stage. By giving examples of whom the millennial generation had joined in its campaign, the speaker was asked to ensure that the listeners had the intended meaning of the speaker on this topic.

b). Interactional Metadiscourse

1). Hedges

Hedges concerned the writer's decision to consider alternate viewpoints and points of view in order to withhold the undertaking. It referred to the speaker's attempt to stress the subjectivity of facts by claiming an opinion rather than a reality in order to open a conversation with listeners. Hence, hedges dealt with the speaker's claim, which was more probable than precise information. From 1.512 metadiscourse markers found, there were 94 hedges found in the Greta Thunberg's speeches.

Table 3.6 Hedges

No.	Remarks	Total
1.	Would	23
2.	Could	17
3.	Almost	11
4.	Maybe	7
5.	Likely	4
6.	Believe	3
7.	Possible	3
8.	Perhaps	3
9.	Seems	3
10.	Usually	3
11.	Assumed	2
12.	Probably	2
13.	Suggest	2
14.	Wouldn't	2
15.	Apparently	1
16.	Approximately	1
17.	Certain	1
18.	Doubt	1
19.	Essentially	1
20.	Might	1
21.	Possibility	1
22.	That amount	1
23.	Understood	1
	Total	94

In this speech, hedges were not used as often as other interactional metadiscourse. The researcher found 94 or 6.2% in the transcript of Greta Thunberg's Speeches. Using hedges depended on the context of the text, the value of the relationship, the relationship between the speaker and the listener. Depending on how persuasive the writer wanted to achieve, hedges could be written or uttered once or several times. From our point of view, Greta Thunberg's primary goal was to reassure and encourage her not to be so timid but to take the opportunity to share her opinions and seek to affirm the listeners. There were some excerpts of hedges explained below.

Excerpt 16

Nor does anyone ever mentioned the greenhouse gases already locked in the system. Nor that air pollution is hiding some warming; so that, when we stop burning fossil fuels, we already have an extra level of warming – **perhaps** as high as 0.5 to 1.1 °Celsius. (Speech 1).

In the datum above the word “**perhaps**” was categorized as hedges marker in interactional metadiscourse. In this speech, the speaker presented the topic of greenhouse gases. The previous sentence in this speech explained that rich countries in the world needed to reduce emissions of at least 15% every year. The subjectivity of the author, in this case, was followed by some information that indicated the speaker's opinion in the next sentence, explaining that the media and each of our leaders would not talk about anything else. However, they never even mentioned it (greenhouse gas). The use of these markers suggested the speaker's

decision about his point of view regarding additional heating levels - perhaps as high as 0.5 to 1.1 ° Celsius.

Excerpt 17

"You say you love your children above all else and yet you are stealing their future in front of their eyes. Until you start focusing on what needs to be done rather than what is politically **possible**, there is no hope." (Speech 2).

In the excerpt above, the word "**possible**" could be identified as a hedge that dealt with interactional resources. This marker was used to indicate the speaker's assumption of the particular phenomenon rather than certain information. In this context, the speaker wanted to show that his claim about the possibility of hopelessness for future generations. That was only the assumption of the speakers; maybe their future was brighter than in our era. Hence, the speaker showed the listeners her subjectivity regarding the possibility that would happen in the future.

Excerpt 18

"The year 2078, I will celebrate my 75th birthday. If I have children, **maybe** they will spend that day with me. **Maybe** they will ask me about you. **Maybe** they will ask why you didn't do anything while there still was time to act. You say you love your children above all else, and yet you're stealing their future in front of their very eyes. Until you start focusing on what needs to be done rather than what is politically **possible**, there is no hope." (Speech 2).

The word "**maybe**" be defined as a hedge based on the above datum, and referred to interactional resources. This marker was used, based on Hyland (2005), to signify the writer's intentions by underlining the speaker's subjectivity.

It allowed the speaker to express an opinion rather than a fact because it related to the speaker's reasoning, not specific knowledge. In this case, the speaker intended to express a point of view on what the child of the speaker would have asked herself when she was young, or in other words, in the future, it was regret from the speaker for not doing anything when she was young.

“**Possible**” terms may be defined as hedges linked to interactional resources. According to Hyland (2005), this marker is used to show the assumptions of the speaker regarding certain phenomena and not some information. In this context, the speaker wanted to show that her assumption that what would happen in 2078 was no hope for future generations. Therefore, the speaker shown his subjectivity regarding his view of the future because of the destruction of nature that was happening in the present.

Excerpt 19

People like me had everything we needed and more. Things our grandparents could not even dream of. We had everything we could ever wish for, and yet now, we may have nothing. Now we **probably** do not even have a future anymore. (Speech 5).

The word "**probably**" in the excerpt above was classified as hedges in the interactive metadiscourse. The aim was to show the possibility that had not yet been the fact. Therefore, the hedges markers used in that sentence enabled the speaker to decrease the responsibility she could face when the arguments were expressed. “**Probably**” was an alternative voice for the speaker in allowing her arguments to be supported. Of course, it was not able to support the previous point

mentioned by the speaker, even though afterward, she attempted to provide an example of the misery that will occur in future generations. Because the speaker speculated about a future generation that had nothing. The speaker simply summarized a statement that might help her potential argument and did not reinforce the supporting argumentation.

Excerpt 20

“The bad news, however, is that around the year 2030, if we continue with business as usual, we will likely be in a position where we may pass a number of tipping points. And then we **might** no longer be able to undo the irreversible climate breakdown.” (Speech 7).

The terms “**might**” be classified as hedges, with interactional resources, based on the bold word above. That show the speaker's decision to make an opinion based on their understanding and not by evidence. In this case, the speaker wanted to convey his decision if they continue to do business as usual around 2030, in fact in 2030, it had not yet happened, and the opinion of the speaker was only based on a current understanding or in other words, the speaker delivered a prediction.

Excerpt 21

"In the Paris agreement, we have only signed up for staying below 1.5 to 2 degrees of temperature rise. And that, of course, gives us a bigger remaining carbon dioxide budget. But the latest IPCC report shows that aiming instead for below 1.5 degrees would significantly reduce the climate impacts, and that would most **certainly** save countless human lives". (Speech 7).

In the excerpt above, the word "**most**" before "**certainly**" was categorized as attitude markers. The speaker expressed her attitude or feeling in a subjective statement, and in this context, the word "**most**" was intended to reinforce the speaker's statement. By doing so, the speaker demonstrated a comparative degree. The next word, "**certainly**" was categorized as hedges. The speaker used that marker to demonstrate the certainty of what she said. Boosters often worked to support an argument and made the listeners come to the same conclusion as the speaker's ideas. In this context, the speaker applied this marker to his confident and robust argument to express his idea about the IPCC report showed that aiming instead for below 1.5 degrees would significantly reduce the climate impacts. Then, the speaker showed her certainty by using this marker, in which the issue of saving many human lives.

2). Boosters

Boosters involved the aspect that, by claiming confidence, helped writers to establish a close dialogue. This indicated that the author wanted to narrow down the complicated position rather than expanded this. Thus, it expressed conviction and established a bond by closing the discussion by supplying the engagement with the content and unity with the receiver. Similarly, it was used to validate the points by claiming both an equivalent perception and similar to the assumption of the speaker. There were 92 boosters found in the Greta Thunberg's speeches. It was the second-highest markers that appeared in interactional metadiscourse markers after hedges.

Table 3.7 Boosters

No.	Remarks	Total
1.	Must	20
2.	Most	18
3.	Never	14
4.	Of course	9
5.	In fact	7
6.	Clearly	6
7.	Shows/showed	5
8.	Always	5
9.	Exactly	4
10.	Essential	2
11.	Actually	1
12.	Certainly	1
	Total	92

The researcher found 92 or 6.1% for booster and part of them will be discussed below.

Excerpt 22

“Nor does hardly anyone ever speak about the aspect of equity or climate justice, **clearly** stated everywhere in the Paris agreement, which is absolutely necessary to make it work on a global scale.” (Speech 1).

The same case existed in how emphatic the metadiscourse markers “**clearly**” used. The writer spoke clearly to illustrate and explain her previous statements about the equality of the climate justice aspect. The writer also used the marker “**clearly**” to show that what she said was a certainty.

Excerpt 23

"And I am sorry, but saying everything will be all right while continue doing nothing at all is just not hopeful to us. In fact, it is the opposite of hope. And yet this is **exactly** what you keep doing. You can't just sit around waiting for hope to come, you're acting like spoiled irresponsible children". (Speech 4).

The word “**exactly**” in the excerpt above was categorized as booster marker in interactional metadiscourse. That marker showed the speaker's position in the speech strongly. It also definitely conveyed the speaker's that the speaker, of course, we should not give up as if there was no hope. The speaker used this marker to indicate that you cannot just sit around, hoping for salvation to arrive, you were acting like spoiled disrespectful children. We had to move, and always have to hope.

3). Attitude Markers

Attitude markers are intended to suggest the author's effective attitude to propositions. This means that this item includes how the author applies the surprise, the compromise, the obligation, and so on. Attitude is conveyed mainly by verbs of attitude (agree, choose, etc.), adverbs of sentences (hopefully, sadly, etc.), and adjectives (logical, exceptional, acceptable, etc.). In this category, there were only 22 markers in a total of 1.512 metadiscourse markers used in the Greta Thunberg's speeches.

Table 3.8 Attitude Markers

No.	Remarks	Total
1.	Necessary	9
2.	Even	6
3.	The most important	3
4.	Choose	2
5.	Suggest	1
6.	Unfortunately	1
	Total	22

In this study, the researcher only found 22 or 1.4% of the attitude markers used in Greta Thunberg's speech. The attitude markers were explained below:

Excerpt 24

“And what is the point of learning facts in the school system, when **the most important** facts given by the finest science of that same school system clearly means nothing to our politicians and our society?.” (Speech 1).

In the extract above, there were two markers of attitude, “**most**” and “**most.**” Marker “**much**” meant an affective and emotional voice. The markers told the listeners that the speaker expressed her attitude or feeling in a subjective statement. By doing so, the speaker demonstrated a comparative degree. This was indicated by the word “**most**” in the speech. And the "important" marker used by the speaker to express her attitude to what she explained. Through this marker, the speaker wanted to express the significance in terms of context through her subjective argumentation.

Excerpt 25

“We are not fighting for our future, we are fighting for everyone's future. And if you think that we should be in school instead, then we **suggest that** you take our place in the streets striking from your work. Or better yet, join us so it can speed up the process.” (Speech 4).

The bold word above in interactional metadiscourse is known as the attitude marker. After concluding the speech's discussion, the speaker attempted to provide her subjective interpretation by using attitude marker on what the speaker observed. This marker also showed advice from the speaker that listeners would support her campaign to speed up the process.

Excerpt 26

“Four hundred twenty gigatons left of CO₂ to emit. And now that number is down to less than 360 gigatons. And please note that these figures are global and therefore do not say anything about the aspect of equity, clearly stated throughout the Paris agreement, which is absolutely **necessary** to make it work on a global scale.” (Speech 7).

The word “**necessary**” in the excerpt above was categorized as attitude markers in interactional metadiscourse. The word “**absolutely**” before the word “**necessary**” used by the speaker in order to reinforce the speaker's statement. i.e., it needed to be done. The speaker explicitly asked the listeners to note that what they needed to do should be the same as what the speaker had emphasized. Using that symbol, the speaker told listeners that it was essential to believe everything that she said was essential. Besides, the speaker talked a little sharply to the listeners to claim that it was necessary. Therefore, through her argumentation, she had the power to engage and convince the listeners that it was necessary to use the marker, which then made the speaker got a strong supporting argument.

4). Self-mentions

Self-mentions suggest the extent of author presence and participation in terms of pronouns and possessives for the first person. These markers, for instance; *I, my, me, mine, our, we*, and so on. Self-mention refers to explicit reference to the author(s). The researcher found 497 self-mentions in the Greta Thunberg's speeches. In her speech, the speaker used the words “**we**” (267) to encourage listeners to join in her climate change campaign. This was the highest

metadiscourse markers appeared in interactional metadiscourse markers used by the speaker in her speeches.

Table 3.9 Self-mentions

No.	Remarks	Total
1.	We	267
2.	I	98
3.	Our	66
4.	Us	33
5.	My	22
6.	Me	10
7.	Mine	1
	Total	497

Among these interactional resources, self-mentions were mostly used. Self-mentions revealed the speaker's self-assurance and helped her boost her audience's credibility. Where the speaker had to include new knowledge, self-mentions would prove their originality. On the other hand, since the speaker was the main part of a speech, self-mentions helped the speaker find accessible ways for the audience to understand the speech. The researcher analyzed the Greta Thunberg's speeches and discovers 497 or 33% of self-mentions.

Excerpt 27

“When **I** was about eight years old, **I** first heard about something called climate change or global warming.” (Speech 1).

The speaker used first-person pronouns in the sentence above. In interactional metadiscourse, it was classified as self-mention. The use of "I" demonstrated Self-mention markers in the sentence above. In this context, the speaker tried to give her personal experience to the listener to explain something

called climate change when she was a little girl. Then, the attitude of the speaker in using the self-mention marker showed the subjective.

Excerpt 28

“What happens next? In the year 2078, I will celebrate my 75th birthday. If I have children or grandchildren, maybe they will spend that day with **me**. Maybe they will ask **me** about you, the people who were around back in 2018”. (Speech 1).

The bold word above in interactional metadiscourse was known as the self-mention. It functioned as indicating the authorial identity of the discourse and was revealed by the first-person pronoun. In this case, by targeting the listener to look at the image that defined the situation faced by the speaker in 2078, the speaker used the word “me” to project herself to reflect a specific position.

Excerpt 29

“Yes, **we** are failing, but there is still time to turn everything around. **We** can still fix this. **We** still have everything in **our** own hands.” (Speech 3).

In interactional metadiscourse based on Hyland (2005), the section above was classified as self-mention. According to Hyland (2005), the explicit author's involvement indicated an author's identity that was contextually situated. In her address, the speaker used self-mention to show listeners the speaker's confidence in the improvements that she would create on earth, even though we had failed to care about this planet. However, she had been confident there was still time to repair it. The pronoun “**we**” in the sentence above indicated that the speaker was trying to establish relationships and, through her speech, welcoming all the listeners.

Excerpt 30

“**My** name is Greta Thunberg” (Speeches 2, 4, 5, and 6).

The speaker used the first-person pronoun in the sentence above. In interactional metadiscourse, it was classified as self-mention. The use of the “**My**” marker in the above sentence had been demonstrated. In this case, the speaker wanted to explain who she was and where she came from to the listeners and also showed the world that this was me the one and only Greta Thunberg from Sweden, most of the speeches she gave, always began with introducing his name and then followed by his origin.

Excerpt 31

“Some people have chosen not to come here today. Some people have chosen not to listen to **us**. And that is fine, we are after all, just children. You don't have to listen to **us**, but you do have to listen to the united science, the scientists. And that is all we ask, just unite behind the science!” (Speech 7).

In interactional metadiscourse based on Hyland (2005), the bold word above was classified as self-mention markers. It was used to indicate the presence of a speaker known by giving a first-person pronoun. In this situation, the speaker used the marker to demonstrate his involvement when making the point. It was one of exclusion that the speaker used to represent the personal projection in which the listener did not have to be included. However, it alerted the listener to the perspective of the speaker.

5). Engagement Markers

Engagement markers refer to an aspect that explicitly defines a connection with the listener to be part of the dialogue audience. By reflecting on the listener's interest, Hyland (2005) defines the two primary goals of the engagement markers. First, it recognizes the need for listener/reader expectations by addressing the listener/reader while arguing with listener/reader pronouns. Finally, it requires the listener/reader to be rhetorically placed, to be involved in the debate, and to direct the listener/reader to the desired interpretation. This category explicitly targets the listeners to bring them into the conversation by treating them as participants in an argument with listener pronouns, such as you, your, we, and so forth. It can also be noted by obligation modals that they should, must, have to, and so forth. It is the second-highest metadiscourse that appeared in interactional metadiscourse.

Table 3.10 Engagement Markers

No.	Remarks	Total
1.	You	167
2.	Your	19
3.	Have to	18
4.	We must	14
5.	Should	13
	Total	231

The researcher found 231 or 15.3% of the engagement markers. The engagement markers were explained below:

Excerpt 32

“You say you love **your** children above all else, and yet you are stealing their future in front of their very eyes.” (Speech 2).

The next excerpt above was categorized as the interactional metadiscourse engagement marker. This marker addressed the listener explicitly to include them as participants in the discourse. The “**your**” pronoun indicated that the listeners had taken part in this argument. The speaker then invited the listeners to be the participants in order to mold their claim on the subject, which addressed above all about loving their kids, but you stole their future.

Excerpt 33

“We all have a choice. We can create transformational action that will safeguard the living conditions for future generations. Or we can continue with our business as usual and fail. That is up to you and me. Some say we **should** not engage in activism. Instead, we **should** leave everything to our politicians and just vote for a change.” (Speech 3).

In interactional metadiscourse based on Hyland (2005), the bold word above was classified as engagement markers. It was intended to bring the listener into the conversation in order to provide, in particular, a critical way of thinking (Hyland, 2005). Within the preceding sentence, the speaker discussed the dilemma they faced right now. Change the world with transformational actions for the next generation or fail. Then, the speaker insisted on her statement by performing the modal, “**should**” to persuade the listener to move forward or we all fail. In this case, the speaker employed the word should ensure what the step needed to be done for the politicians.

Excerpt 34

“People always tell me and the other millions of school strikers that we **should** be proud of ourselves for what we have accomplished. But the only thing that we need to look at is the emission curve. And I’m sorry, but it’s still rising. That curve is the only thing we **should** look at. Every

time we make a decision we **should** ask ourselves; how will this decision affect that curve? We **should** no longer measure our wealth and success in the graph that shows economic growth.” (Speech 5).

The word “**should**” was identified as an engagement marker that refers to the interactional resources. It aimed to invite the listener into the conversation to be included in a particular point by way of thinking critically (Hyland, 2005). In the text, the writer assured listeners that they had to be proud of themselves, and then the speaker convinced listeners to look back at the curve. So basically, the use of “**should**” in context, was to invite listeners to enter the speaker's mind.

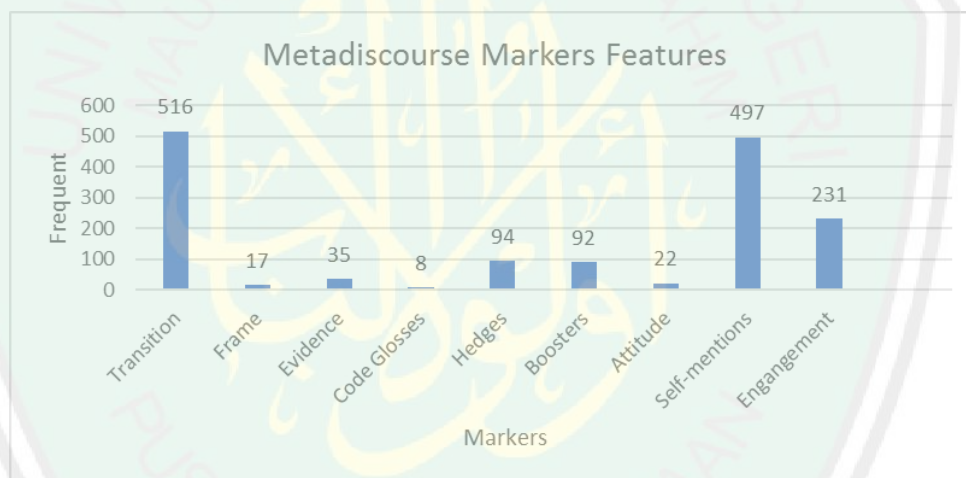
Excerpt 35

But that is not enough. We need a whole new way of thinking. The political system that you have created is all about competition. You cheat when you can, because all that matters is to win, to get power. That **must** come to an end, **we must** stop competing with each other, we need to cooperate and work together and to share the resources of the planet in a fair way. (Speech 4).

The bold word above was classified as engagement markers in the interactional metadiscourse based on Hyland (2005). The speaker used the word “**must**” to attract the listeners to the speech at crucial stages. Furthermore, the speaker added the subject “**we**” before the marker “**must.**” It aimed to involve the listeners as participants in the speech in the topic spoken by the speaker. In this speech, the speaker's position was to engage the reader using the duty “**must.**” The speaker also conveyed her advice to the listener to work together and share this planet's resources equally. It was caused the system was broken and had to be hanged.

2. The impact of metadiscourse markers that appear in Greta Thunberg's speeches.

Four sub-categories of interactive metadiscourse (transitions, frame markers, evidentials, and code glosses) and five sub-categories of interactional metadiscourse (hedges, boosters, attitude markers, self-mentions, and commitment markers) were found in the previous section. The frequency usage was different for each type. It meant there was a type of metadiscourse that frequently appeared in the speeches of Greta Thunberg. The chart below showed details of metadiscourse markers used by Greta Thunberg in her speeches.



Based on the chart above, the researcher found that two types of metadiscourse markers often appeared in the speeches delivered by Greta Thunberg. They were transition markers and self-mentions. The two types of metadiscourse in Greta Thunberg's speeches had a similar number of appliances. Transitions markers appeared 516 times, whereas self-mentions appeared 497 times. While the speaker rarely used engagement markers, hedges, and boosters in the middle position. The other four, attitude markers, evidentials, frame markers,

and code glosses, were rarely used by the speaker in her speeches. Moreover, the use of them was only to make the speeches coherent. The use of these various markers would have an impact on Greta Thunberg's speech. It would be explained below by the researcher.

The three most preferred forms of transition markers used by Greta Thunberg were almost alike. From the table, we could see that transition *and*, *or*, *but* with 33%, were highly used in the speeches. It indicated that transition was the most important conjunction that functioned to relate one sentence with other sentences. The speakers were also conscious that using transition markers to connect clauses and sentences would make their thoughts more cohesive towards their listeners. Hence, this affected the speeches of Greta Thunberg because, without transition markers between one utterance and other utterances, the listeners would be confused to understand the speaker.

The speaker would prefer to use more transition markers because this would make her speeches more coherent. Another metadiscourse type which was dominantly appeared in the Greta Thunberg's speeches was self-mentions. Self-mentions reflected the speaker's degree of involvement in terms of the occurrence of first-person pronouns and possessives. The speaker commonly used marker *we*, *I*, and, *our* in the speeches. The words “we” (267) referred to her and the listeners to encourage them to join the speaker’s campaign about climate change. In addition, the speaker invited the listener in the speech by involving the listener to do something and motivating them. For example, in excerpt 29, “Yes, *we are*

failing, but there is still time to turn everything around. We can still fix this. We still have everything in our own hands”.

While the marker "I" used by the speaker to tell the listeners about the speaker experiences and also marker "I" indicated to show her presence in the speeches. In addition, Hyland stated that the points that writers choose to metadiscoursally announce the discourse tended to be those where they could promote themselves and their individual contributions. This meant that speeches delivered by speakers tended to promote themselves as activists or influencers in their speeches. Meanwhile, the evidentials, attitude markers, frame markers, and code glosses were rarely used by the speaker in her speeches. Furthermore, the engagement marker was also frequently used by Greta Thunberg to attract the listener's attention to her speeches. While booster, hedges, and attitude markers were used to support her statements or idea.

Tan & Bee (2014) stated that evidentials are important linguistic elements used in written academic discourse. Evidential of credible source' work provides credibility to the speaker's speech. In contrast, evidential markers were rarely used by Greta Thunberg's speeches. Evidentials were only used as a reinforcement of the argument of the speaker when delivering a speech. Because the evidence implied a person's credibility, the credibility of her argument, and whether the speech she was delivering was worthy of being delivered. It indicated that the argument was personal from the speaker. It meant the speaker did not pay attention to her credibility

Furthermore, the use of engagement marker was also often used by Greta Thunberg in her speeches besides transition markers and self-mention. The use of engagement markers by the speaker indicated that the speaker wished to draw the attention of the listener to the speech, by involving them as participants in an argument with listener pronouns such as you, your, we. Modals of obligation such as should, must, have to, etc. might also be noted. In a speech that had been analyzed by the researcher above, the researcher gave an example “*we should* or *we must*” as in excerpt 33 and 34. Kuswoyo and Siregar (2019) also stated that the engagement marker was also frequently used to attract the audience's attention to the presentation.

However, the possibility of the low usage of attitude markers, as described by Tan and Bee (2014), that the potential explanations for using attitude markers might be that, as non-expert authors, they were not too optimistic in projecting their voices into their writings or too critical of the propositions forwarded. Code glosses offer valuable resources to clarify, briefly and extensively, the potentially ambiguous terms and concepts by defining, reformulating, and exemplifying. The impact if the speaker did not use the code of glosses would be ambiguous because the listener did not understand if the speaker did not explain the examples he explained the listeners would not understand. As in excerpt 14 and 15.

Unfortunately, the endophoric markers were not used in all speeches of Greta Thunberg. It seemed that there was no need for the speaker, Greta Thunberg, to refer to other parts of the text. The speaker might think that there

was no need to place endophoric markers in the speech because they only offered a brief point.

B. Discussion

This section explains the discussion on the findings which have been found by the researcher. The present study presents a discussion of data analysis results about types of metadiscourse markers based on the theory proposed by Hyland (2005). The present study highlights the types and the impact of metadiscourse markers used in Greta Thunberg's speeches. To clarify and answer the research questions, the discussion needed after the findings were presented. The study found 1.512 markers from nine speeches of Greta Thunberg.

Hyland (2005) divides the metadiscourse markers into two types: interactive and interactional metadiscourse markers. Further, from the theory that he explained, Hyland (2005) divides into ten sub-categories, five sub-categories of interactive metadiscourse markers: transition markers, frame markers, and endophoric markers evidential, and code glosses. Besides, five sub-categories of interactional metadiscourse markers are hedges, boosters, attitude markers, self-mention, and engagement markers.

In this study, four sub-categories of interactive metadiscourse (transitions, frame markers, evidentials, and code glosses) and five sub-categories of interactional metadiscourse (hedges, boosters, attitude markers, self-mentions, and commitment markers) were found in the previous section. While in the same study but different objects, as examined by Sari (2014), it was found in a speech

delivered by Michele Obama. The researcher found three sub-categories; transition markers, frame markers, and evidentials. Meanwhile, in interactional markers, the researcher found five sub-categories: hedges, booster, attitude markers, self-mentions, and engagement markers. Self-mention is dominant in the interactional category, so when Michelle Obama talked about her viewpoint, she stated to the audience who was the author for the audience.

Besides, Kuswoyo, & Siregar (2019) found that Steve Jobs used engagement markers that are dominantly used in interactional sub-categories. Meanwhile, transition markers were dominantly used in interactive sub-categories. It means that when Steve Jobs expressed his idea, he supported his point by using interpersonal metadiscourse markers and convinces the audience by developing a relationship with them. This was different from the results of the present study. In this present study, the researcher found that Greta Thunberg was more dominant in using Transition Markers, Self-mentions, and engagement markers. While the things used were evidentials, attitude markers, frame markers, and code glosses.

Another researcher's analysis in metadiscourse markers showed that all categories of interpersonal metadiscourse markers, namely hedges, markers of certainty, attributors, markers of attitude, and commentaries, were used in the speeches of Barack Obama's campaign. High frequency of the use of attitude markers and commentaries showed that Obama tried to build emotional links with his audience as his persuasive strategy in his campaign speeches. In this study, the researcher used the theory from Dafouz (2003). Meanwhile, this case was in

contrast with the theory of Hyland (2005). He examined the type of method markers into two main types, interactive and interactional methods. Whereas in the classification of metadiscourse markers by Dafouz (2003), there were only five types, hedges, certainty markers, attributors, attitude markers, and commentaries.

The second research question is the effect of metadiscourse markers in the speeches of the Greta Thunberg. Based on the results above, the researcher found that transitions and self-mentions are the most widely used metadiscourse markers. While engagement markers, hedges, and booster are the second mostly used by the speaker. Meanwhile, evidentials, frame markers, and, code-glosses are rarely used by the speaker.

The speaker used several transitions to make their speeches coherent, link one sentence or argument to other sentences or arguments, and organize their speaking well. Sari (2014) found that transitional and self-mentions are the highest percentage in the speech because of the function of relating a sentence with another sentence. When Michelle Obama talked about her opinion, she gave the audience a statement that became the audience's author. Tan and Bee (2014) stated that transition could be a basic linguistic component that has been taught to students in grammar and writing courses. Therefore, students are aware that the use of transition markers to link clauses and sentences would make their ideas more coherent to their readers.

In their journal, Hyland and Tse (2004: 170) state that the high use of transitions representing internal connections in the discourse is an important category of academic argument. It means the speaker concerns that the listener can recover their reasoning unambiguously. This also applied in speeches because speakers also use transition markers to make their speaking coherent, to relate one sentence or argument to other sentences or arguments, and to organize their speaking well. Of course, it affects a lot in the speech, if the speech without using a transition marker, what will happen is that the listener will have difficulty understanding what is delivered by the speaker. This was also conveyed by Kuswoyo and Siregar (2019) in their research, they also concluded that the use of transition markers to make a clear transition in every single part of his presentation.

Likewise, Hyland (2004: 145) also states that self-mentions often plays a much more prominent role in soft disciplines such as students of humanities and social sciences are frequently encouraged by departmental style guides and supervisors to show their own 'voice' and demonstrate a personal viewpoint, which in this case is education. Abdi (2010) argues that self-mention is used to project the writer linguistically from behind the written lines, presumably to remind readers that a colleague produces the lines. In other words, the speaker or writer wants to prove that this is me as a speaker, as the writer or speaker behind the writing that I made or the speech delivered by the speaker.

Furthermore, The use of engagement marker is also often used by Greta Thunberg in her speeches besides transition markers and self-mention. The use of

engagement markers by the speaker indicates that the speaker wishes to draw the attention of the listener to the speech by involving them as participants in the speech. Convinces the audience by developing a relationship with them, as stated by Kuswoyo & Siregar (2019). It is such an important marker when someone gives a speech.

Based on the data obtained, the Greta Thunberg hedges and boosters use it almost in balance (see Table 3.1) only slightly differently. Tan (2014) argued that good authors are more capable of balancing their use of hedges and boosters. Although few use evidence, markers of attitude, frame markers, and glosses of code are impacting the Greta Thunberg's speeches. Tan (2014, 32) stated that the low use of evidence reveals that the author was not yet fully aware of the importance of citing from a different source or previous studies. Additionally, the poor evidence has also been seen in Greta Thunberg's speeches. It means Greta, as the speaker, suggests that the speaker's statement is genuinely personal. This means that the speaker is not paying attention to its credibility. In addition, there was an equally low level of use of attitude markers. As non-expert authors, the potential explanations may be that they were not too confident in projecting their voice into their works, nor too critical of the forwarded propositions.

And the last, with the absence of endophoric markers in Greta Thunberg's speech that It seems that there is no need for the speaker to refer to other parts of the text. The speakers may think that there is no need to place endophoric markers in the speech because they only offer a brief point and the limit time.

CHAPTER IV

CONCLUSION AND SUGGESTION

This chapter discusses the research results and the researcher's suggestion for the study of the meta-discourse markers types of Greta Thunberg 's speech.

A. Conclusion

Based on the findings of the research questions mentioned above, there are many points to inform.

After analyzing the data, the researcher may infer that 1,512 interpersonal metadiscourse markers are comprising two types: interactive and interactional metadiscourse. Interactive metadiscourse is 576, and interactional metadiscourse is 936. Interactive metadiscourse types are transitional, frame markers, evidentials and code glosses. There are 516 transitional markers that have become the highest percentage of interactive meta-discourse because the transition is a combination that functions to relate one sentence to another sentence. Next is 17 frame markers and the function is to indicate the shift of the topic. The next is code glosses with a total of 35; the functions refer to the speaker's expectation of the listener's knowledge base. Moreover, the last 8 evidences is information taken from other sources.

Meanwhile, the types of interactional metadiscourse found in Greta Thunberg 's Speech are 94 hedges that guide the reader to consider the possibility. Next, the 92 booster is marginally different from the hedges; it suggests confidence or close conversation. There are 22 attitude markers with the function

that show supremacy, agreement, and soon. After that, it is found 497 self-mentions. Self-mentioning is the dominant interactional metadiscourse because when Greta Thunberg speaks of her opinion, she states the listener who becomes an author for the listeners. The last for the interactive group is the 231 interaction marker. The purpose is to fulfill the expectations of the listener by approaching them as a dialogue participant. Besides, the analysis showed that Greta Thunberg used transitions and self-mentions dominantly in her speeches. Furthermore, the engagement marker is also frequently used by Greta Thunberg to attract the listener's attention to her speeches. While booster, hedges, and attitude markers are used to support her statements or idea. In this research, the researcher not find an endophoric markers in the speeches of Greta Thunberg. It seems that there is no need for the speaker to refer to other parts of the text.

B. Suggestion

In this study, the researcher found that metadiscourse markers used in Gretha Thunberg's speeches are transition markers, frame markers, evidentials and code glosses. Meanwhile, in interactive metadiscourse markers are hedges, booster, attitude markers, self-mention, and engagement markers. However, the impact of metadiscourse markers that appear in the speeches.

Therefore, since this study is limited to the use of methods for markers in the oral context, especially in speeches, in this study, researchers have not found endophoric markers. The researchers suggest the future researchers could discover

all sub-categories of metadiscourse markers in Hyland's theory (2005). It may lead to new contributing findings in regards to metadiscourse markers.



REFERENCES

- Abdi, R., Rizi, M. T., & Tavakoli, M. (2010). The cooperative principle in discourse communities and genres: A framework for the use of metadiscourse. *Journal of Pragmatics*, 42(6), 1669–1679. DOI:10.1016/j.pragma.2009.11.001
- Beauvais, P. J. (1989). A Speech Act Theory of Metadiscourse. *Written Communication*, 6(1), 11–30. DOI:10.1177/0741088389006001002
- Crismore, A. (1983). Metadiscourse: What it is and how it is used in school and non-school social science texts. *Center for the Study of Reading Technical Report; no. 273*.
- Crismore, A., Markkanen, R., & Steffensen, M. S. (1993). Metadiscourse in Persuasive Writing: A Study of Texts Written by American and Finnish University Students. *Written Communication*, 10(1), 39–71. <https://doi.org/10.1177/0741088393010001002>
- Esmer, E. (2017). Interpersonal Metadiscourse Markers in Turkish Election Rally Speeches Delivered by Pro-Turkish and Pro-Kurdish Leaders. *Athens Journal of Social Sciences*, 4(4), 367–384. <https://doi.org/10.30958/ajss.4-4-2>
- Hyland, K. (2004). Disciplinary interactions: metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 133-151. doi:<http://dx.doi.org/10.1016/j.jslw.2004.02.001>

Hyland, K. (2004). Disciplinary interactions: metadiscourse in L2 postgraduate writing. *Journal of second language writing*, 133-151.

Hyland, K. (2005). *Metadiscourse: Exploring Interaction In Writing*. London, New York: Continuum.

Hyland, K., & Tse, P. (2004, June). Metadiscourse in Academic Writing: A Reappraisal, *Applied Linguistics*, 25, (2), 156-177. DOI: <https://doi.org/10.1093/applin/25.2.156>.

Hyland, K. (2015). In Tracy, K., Ilie, C., & Sandel, T. (Eds.). *The International Encyclopedia of Language and Social Interaction, 3 Volume Set*. Oxford: Wiley-Blackwell.

Kuswoyo, H., & Siregar, R. A. (2019). Interpersonal Metadiscourse Markers As Persuasive Strategies In Oral Business Presentation. *Lingua Cultura*, 13(4) 297-304. DOI: 10.21512/lc.v13i4.5882.

Martin, J. R., & Rose, D. (2007). *Working with discourse: Meaning beyond the clause*. London: Continuum.

Nasiri, S. (2012). Exploring the significant role of meta-discourse in academic writing for a discourse community by academic members. *International Journal of Research Studies in Education*, 2(1), 67-74. Reppen

Pooresfahani, A. F., & Khajavy, G. H. (2012). A Contrastive Study of Metadiscourse Elements in Research Articles Written by Iranian Applied Linguistics and Engineering Writers in English. *English Linguistics Research*, 88-98.

Sari, A. M. (2014). Interpersonal metadiscourse markers used in Michelle Obama's speech. *USiNus Repository*, 1-12.

Sukma, B. P. (2017). Interpersonal Metadiscourse Markers as Persuasive Strategies in Barack Obama's 2012 Campaign Speeches. *Aksara*, 283-292.

Tan, H & Bee, W. (2014). Metadiscourse Use in the Persuasive Writing of Malaysian Undergraduate Students. *English Language Teaching*. Canadian Center of Science and Education. Vol. 7, No. 7.

Vande Kopple, W. (1985). Some exploratory discourse on metadiscourse. *College Composition and Communication*, 36, 82-93. Retrieved from <http://www.jstor.org/stable/357609>

Williams, J. (2007). *Style: Ten lessons in clarity and grace* (9th ed.). New York: Pearson-Longman.

Woodward, A. (2020, January 4). *Business Insider*. Retrieved from [www.businessinsider.com: https://www.businessinsider.com/greta-thunberg-bio-climate-change-activist-2019-9?r=US&IR=T](https://www.businessinsider.com/greta-thunberg-bio-climate-change-activist-2019-9?r=US&IR=T)

CURRICULUM VITAE



Akhmad Akbar Wasis Wicaksono was born in Pasuruan, September 25, 1998. He graduated from SDN Gadingrejo 1 Pasuruan in 2010. He graduated from SMPN 5 Pasuruan in 2013. He graduated from SMAN 4 Pasuruan in 2016. He started his higher education in 2016 at the English Literature Department, Faculty of Humanities in Universitas Islam Negeri Maulana Malik Ibrahim Malang. Besides, along his undergraduate degree, he also has been working as an English tutor in *Lembaga Bimbingan Belajar* (LBB) INKA Group's course located in Pasuruan

APPENDIX

Speech 1: November 2018: TEDx in Stockholm

When I was about 8 years old, I first heard about something called ‘climate change’ or ‘global warming’. Apparently, that was something humans had created by our way of living. I was told to turn off the lights to save energy and to recycle paper to save resources.

I remember thinking that it was very strange that humans, who are an animal species among others, could be capable of changing the Earth’s climate. Because, if we were, and if it was really happening, we wouldn’t be talking about anything else. As soon as you turn on the TV, everything would be about that. Headlines, radio, newspapers: You would never read or hear about anything else. As if there was a world war going on, but no one ever talked about it. If burning fossil fuels was so bad that it threatened our very existence, how could we just continue like before? Why were there no restrictions? Why wasn’t it made illegal?

To me, that did not add up. It was too unreal.

So, when I was 11, I became ill, I fell into depression, I stopped talking, and I stopped eating. In two months, I lost about 10 kilos of weight. Later on, I was diagnosed with Asperger’s syndrome, OCD and selective mutism. This basically means, I only speak, when I think it is necessary.

Now is one of those moments.

For those of us, who are on the spectrum, almost everything is black or white. We aren’t very good at lying and we usually don’t enjoy participating in the social games that the rest of you seem so fond of. I think, in many ways, that we autistic are the normal ones and the rest of the people are pretty strange. Especially when it comes to the sustainability crisis: Where everyone keeps saying that climate change is an existential threat and the most important issue of all. And yet, they just carry on like before.

I don’t understand that. Because if the emissions have to stop, then we must stop the emissions. To me, that is black or white. There are no gray areas when it comes to survival. Either we go on as a civilization or we don’t.

We have to change.

Rich countries like Sweden need to start reducing emissions by at least 15% every year. And that is so that we can stay below a 2° warming target. Yet, as the IPCC has recently demonstrated, aiming instead for 1.5 °Celsius would significantly

reduce the climate impacts. But we can only imagine what that means for reducing emissions.

You would think the media and every one of our leaders would be talking about nothing else. But they never even mention it.

Nor does anyone ever mentioned the greenhouse gases already locked in the system. Nor that air pollution is hiding some warming; so that, when we stop burning fossil fuels, we already have an extra level of warming – perhaps as high as 0.5 to 1.1 °Celsius.

Furthermore, does hardly anyone speak about the fact that we are in the midst of the sixth mass extinction: With up to 200 species going extinct every single day. That the extinction rate is today between 1000 and 10 000 times higher than what is seen as normal.

Nor does hardly anyone ever speak about the aspect of equity or climate justice, clearly stated everywhere in the Paris agreement, which is absolutely necessary to make it work on a global scale. That means that rich countries need to get down to zero emissions within 6 to 12 years with today's emission speed. And that is so that people in poorer countries can have a chance to heighten their standard of living by building some of the infrastructures that we have already built, such as roads, schools, hospitals, clean drinking water, electricity, and so on. Because, how can we expect countries like India or Nigeria to care about the climate crisis if we, who already have everything, don't care even a second about it or our actual commitments to the Paris agreement?

So why are we not reducing our emissions? Why are they in fact still increasing? Are we knowingly causing a mass extinction? Are we evil?

No, of course, not. People keep doing what they do because the vast majority doesn't have a clue about the actual consequences for their everyday life. And they don't know that rapid change is required.

We all think we know and we all think everybody knows. But we don't.

Because, how could we? If there really was a crisis, and if this crisis was caused by our emissions, you would at least see some signs. Not just flooded cities. Tens of thousands of dead people and whole nations leveled to piles of torn down buildings. You would see some restrictions.

But no. And no one talks about it. There are no emergency meetings, no headlines, no breaking news. No one is acting as if we were in a crisis.

Even most climate scientists or green politicians keep on flying around the world, eating meat and dairy.

If I live to be 100, I will be alive in the year 2103. When you think about the future today, you don't think beyond the year 2050. By then I will, in the best case, not even have lived half of my life. What happens next? In the year 2078, I will celebrate my 75th birthday. If I have children or grandchildren, maybe they will spend that day with me. Maybe they will ask me about you, the people who were around back in 2018. Maybe they will ask why you didn't do anything while there still was time to act. What we do or don't do right now, will affect my entire life and the lives of my children and grandchildren. What we do or don't do right now, me and my generation can't undo in the future.

So, when school started in August of this year, I decided that this was enough. I set myself down on the ground outside the Swedish parliament. I school-striking for the climate.

Some people say that I should be in school instead. Some people say that I should study, to become a climate scientist so that I can solve the climate crisis.

But the climate crisis has already been solved. We already have all the facts and solutions. All we have to do is to wake up and change.

And why should I be studying for a future that soon will be no more, when no one is doing anything whatsoever to save that future? And what is the point of learning facts in the school system, when the most important facts given by the finest science of that same school system clearly means nothing to our politicians and our society?

Some people say that Sweden is just a small country and that it doesn't matter what we do. But I think that if a few children can get headlines all over the world just by not coming to school for a few weeks, imagine what we could all do together if we wanted to?

Now we're almost at the end of my talk and this is where people usually people usually start talking about hope. Solar panels, wind power, circular economy, and so on. But I'm not going to do that. We've had 30 years of pep talking and selling positive ideas. And I'm sorry but it doesn't work because if it would have, the emissions would have gone down by now. They haven't.

And yes, we do need hope. Of course, we do. But the one thing we need more than hope is action. Once we start to act, hope is everywhere. So, instead of looking for hope, look for action. Then and only then, hope will come today.

Today we use 100 million barrels of oil every single day. There are no politics to change that. There are no rules to keep that oil in the ground. So, we can't save the world by playing by the rules, because the rules have to be changed.

Everything needs to change and it has to start today.

Thank you.

Speech 2: Greta Thunberg addressed the COP24 plenary session December 12 2018

My name is Greta Thunberg. I am 15 years old and I'm from Sweden. I speak on behalf of Climate Justice Now.

Many people say that Sweden is just a small country and it doesn't matter what we do. But I've learned that you are never too small to make a difference and if a few children can get headlines all over the world just by not going to school then imagine what we could all do together if we really wanted to.

But to do that we have to speak clearly. No matter how uncomfortable that may be. You only speak of a green eternal economic growth because you are too scared of being unpopular. You only talk about moving forward with the same bad ideas that got us into this mess. Even when the only sensible thing to do is pull the emergency brake.

You are not mature enough to tell it like it is. Even that burden you leave to us children. But I don't care about being popular. I care about climate justice and the Living Planet. Our civilization is being sacrificed for the opportunity with a very small number of people to continue making enormous amounts of money. Our biosphere is being sacrificed so that rich people in countries like mine can live in luxury. It is the sufferings of the many which pay for the luxuries of the few.

The year 2078 I will celebrate my 75th birthday. If I have children maybe they will spend that day with me. Maybe they will ask me about you. Maybe they will ask why you didn't do anything while there still was time to act. You say you love your children above all else and yet you're stealing their future in front of their very eyes. Until you start focusing on what needs to be done rather than what is politically possible there is no hope.

We cannot solve a crisis without treating it as a crisis. We need to keep the fossil fuels in the ground and we need to focus on equity. And if solutions within this system are so impossible to find then maybe we should change the system itself. We have not come here to beg world leaders to care. You have ignored us in the past and you will ignore us again. We have run out of excuses and we are running out of time. We have come here to let you know that change is coming whether you like it or not. The real power belongs to the people!

Thank You!

Speech 3: World Economic Forum in Davos, Switzerland.

Our house is on fire. I am here to say, our house is on fire.

According to the IPCC (Intergovernmental Panel on Climate Change), we are less than 12 years away from not being able to undo our mistakes. In that time, unprecedented changes in all aspects of society need to have taken place, including a reduction of our CO₂ emissions by at least 50%.

And please note that those numbers do not include the aspect of equity, which is absolutely necessary to make the Paris agreement work on a global scale. Nor does it include tipping points or feedback loops like the extremely powerful methane gas released from the thawing Arctic permafrost.

At places like Davos, people like to tell success stories. But their financial success has come with an unthinkable price tag. And on climate change, we have to acknowledge we have failed. All political movements in their present form have done so, and the media has failed to create broad public awareness.

But *Homo sapiens* have not yet failed. Yes, we are failing, but there is still time to turn everything around. We can still fix this. We still have everything in our own hands. But unless we recognise the overall failures of our current systems, we most probably don't stand a chance.

We are facing a disaster of unspoken sufferings for enormous amounts of people. And now is not the time for speaking politely or focusing on what we can or cannot say. Now is the time to speak clearly.

Solving the climate crisis is the greatest and most complex challenge that *Homo sapiens* have ever faced. The main solution, however, is so simple that even a small child can understand it. We have to stop our emissions of greenhouse gases.

Either we do that or we don't.

You say nothing in life is black or white. But that is a lie. A very dangerous lie. Either we prevent 1.5C of warming or we don't. Either we avoid setting off that irreversible chain reaction beyond human control or we don't.

Either we choose to go on as a civilisation or we don't. That is as black or white as it gets. There are no grey areas when it comes to survival.

We all have a choice. We can create transformational action that will safeguard the living conditions for future generations. Or we can continue with our business as usual and fail.

That is up to you and me.

Some say we should not engage in activism. Instead we should leave everything to our politicians and just vote for a change instead. But what do we do when there is no political will? What do we do when the politics needed are nowhere in sight?

Here in Davos – just like everywhere else – everyone is talking about money. It seems money and growth are our only main concerns.

And since the climate crisis has never once been treated as a crisis, people are simply not aware of the full consequences on our everyday life. People are not aware that there is such a thing as a carbon budget, and just how incredibly small that remaining carbon budget is. That needs to change today.

No other current challenge can match the importance of establishing a wide, public awareness and understanding of our rapidly disappearing carbon budget, that should and must become our new global currency and the very heart of our future and present economics.

We are at a time in history where everyone with any insight of the climate crisis that threatens our civilisation – and the entire biosphere – must speak out in clear language, no matter how uncomfortable and unprofitable that may be.

We must change almost everything in our current societies. The bigger your carbon footprint, the bigger your moral duty. The bigger your platform, the bigger your responsibility.

Adults keep saying: “We owe it to the young people to give them hope.” But I don’t want your hope. I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. And then I want you to act.

I want you to act as you would in a crisis. I want you to act as if our house is on fire. Because it is.

Speech 4: European Economic and Social Committee.

My name is Greta Thunberg, I am a climate activist from Sweden and today in this room there are also - if you can come up - Anuna, Adélaïde, Kyra, Gilles, Dries, Toon and Luisa.

Tens of thousands of children or schools are striking for the climate on the streets of Brussels. Hundreds of thousands are doing the same all over the world. We are school striking because we have done our homework. And some of us are here today. People always tell us that they are so hopeful. They are hopeful that the young people are going to save the world, but we are not. There is simply not enough time to wait for us to grow up and become the ones in charge. Because by the year 2020 we need to have bended the emissions curve steep downward.

That is next year. We know that most politicians don't want to talk to us. Good, we don't want to talk to them either. We want them to talk to the scientists instead. Listen to them, because we are just repeating what they are saying and have been saying for decades. We want you to follow the Paris agreement and the IPCC reports. We don't have any other manifests or demands, you unite behind the science that is our demand. When many politicians talk about the school strike for the climate, they talk about almost anything except for the climate crisis.

Many people are trying to make the school strikes a question of whether we are promoting truancy or whether we should go back to school or not. They make up all sorts of conspiracies and call us puppets who cannot think for ourselves. They are desperately trying to remove the focus from the climate crisis and change the subject. They don't want to talk about it because they know they cannot win this fight. Because they know they haven't done their homework, but we have. Once you have done your homework you realize that we need new politics, we need new economics where everything is based on a rapidly declining and extremely limited remaining carbon budget.

But that is not enough. We need a whole new way of thinking. The political system that you have created is all about competition. You cheat when you can, because all that matters is to win, to get power. That must come to an end, we must stop competing with each other, we need to cooperate and work together and to share the resources of the planet in a fair way. We need to start living within the planetary boundaries, focus on equity and take a few steps back for the sake of all living species. We need to protect the biosphere, the air, the oceans, the soil, the forests.

This may sound very naive, but if you have done your homework then you know that we don't have any other choice. We need to focus every inch of our being on climate change, because if we fail to do so than all our achievements and progress have been for nothing and all that will remain of our political leaders' legacy will be the greatest failure of human history. And they will be remembered as the greatest villains of all time, because they have chosen not to listen and not to act. But this does not have to be. There is still time. According to the IPCC report we are about 11 years away from being in a position where we set off an irreversible chain reaction beyond human control.

To avoid that unprecedented changes in all aspects of society, [actions] need to have taken place within this coming decade, including a reduction of our CO₂ emissions by at least 50 percent by the year 2030. And please note that those numbers do not include the aspect of equity, which is absolutely necessary to make the Paris agreement work on a global scale, nor do they include tipping points or feedback loops like the extremely powerful methane gas released from the thawing Arctic permafrost. They do, however, include negative emission techniques on a huge planetary scale that is yet to be invented, and that many scientists fear will never be ready in time and will anyway be impossible to deliver at the scale assumed. We have been told that the EU intends to improve its emission reduction targets. In the new target, the EU is proposing to reduce its greenhouse gas emissions to 45 percent below 1990's level by 2030. Some people say that is good or that is ambitious. But this new target is still not enough to keep global warming below 1.5 degrees Celsius.

This target is not sufficient to protect the future for children growing up today. If the EU is to make its fair contribution to staying within the carbon budget for the two-degree limit, then it means a minimum of 80 percent reduction by 2030 and that includes aviation and shipping. So [it is] around twice as ambitious as the current proposal. The actions required are beyond manifestos or any party politics. Once again, they sweep their mess under the carpet for our generation to clean up and solve. Some people say that we are fighting for our future, but that is not true. We are not fighting for our future, we are fighting for everyone's future. And if you think that we should be in school instead, then we suggest that you take our place in the streets striking from your work. Or better yet, join us so it can speed up the process.

And I am sorry, but saying everything will be alright while continue doing nothing at all is just not hopeful to us. In fact, it's the opposite of hope. And yet this is exactly what you keep doing. You can't just sit around waiting for hope to come, you're acting like spoiled irresponsible children. You don't seem to

understand that hope is something you have to earn. And if you still say that we are wasting valuable lesson time then let me remind you that our political leaders have wasted decades through denial and inaction. And since our time is running out we have decided to take action. We have started to clean up your mess and we will not stop until we are done.

Speech 5: UK Parliament, England.

My name is Greta Thunberg. I am 16 years old. I come from Sweden. And I speak on behalf of future generations. I know many of you don't want to listen to us – you say we are just children. But we're only repeating the message of the united climate science.

Many of you appear concerned that we are wasting valuable lesson time, but I assure you we will go back to school the moment you start listening to science and give us a future. Is that really too much to ask?

In the year 2030 I will be 26 years old. My little sister Beata will be 23. Just like many of your own children or grandchildren. That is a great age, we have been told. When you have all of your life ahead of you. But I am not so sure it will be that great for us.

I was fortunate to be born in a time and place where everyone told us to dream big; I could become whatever I wanted to. I could live wherever I wanted to. People like me had everything we needed and more. Things our grandparents could not even dream of. We had everything we could ever wish for and yet now we may have nothing.

Now we probably don't even have a future any more.

Because that future was sold so that a small number of people could make unimaginable amounts of money. It was stolen from us every time you said that the sky was the limit, and that you only live once.

You lied to us. You gave us false hope. You told us that the future was something to look forward to. And the saddest thing is that most children are not even aware of the fate that awaits us. We will not understand it until it's too late. And yet we are the lucky ones. Those who will be affected the hardest are already suffering the consequences. But their voices are not heard.

Is my microphone on? Can you hear me?

Around the year 2030, 10 years 252 days and 10 hours away from now, we will be in a position where we set off an irreversible chain reaction beyond human control, that will most likely lead to the end of our civilisation as we know it. That is unless in that time, permanent and unprecedented changes in all aspects of society have taken place, including a reduction of CO2 emissions by at least 50%.

And please note that these calculations are depending on inventions that have not yet been invented at scale, inventions that are supposed to clear the atmosphere of astronomical amounts of carbon dioxide.

Furthermore, these calculations do not include unforeseen tipping points and feedback loops like the extremely powerful methane gas escaping from rapidly thawing arctic permafrost.

Nor do these scientific calculations include already locked-in warming hidden by toxic air pollution. Nor the aspect of equity – or climate justice – clearly stated throughout the Paris agreement, which is absolutely necessary to make it work on a global scale.

We must also bear in mind that these are just calculations. Estimations. That means that these “points of no return” may occur a bit sooner or later than 2030. No one can know for sure. We can, however, be certain that they will occur approximately in these timeframes, because these calculations are not opinions or wild guesses.

These projections are backed up by scientific facts, concluded by all nations through the IPCC. Nearly every single major national scientific body around the world unreservedly supports the work and findings of the IPCC.

Did you hear what I just said? Is my English OK? Is the microphone on? Because I’m beginning to wonder.

During the last six months I have travelled around Europe for hundreds of hours in trains, electric cars and buses, repeating these life-changing words over and over again. But no one seems to be talking about it, and nothing has changed. In fact, the emissions are still rising.

When I have been travelling around to speak in different countries, I am always offered help to write about the specific climate policies in specific countries. But that is not really necessary. Because the basic problem is the same everywhere. And the basic problem is that basically nothing is being done to halt – or even

slow – climate and ecological breakdown, despite all the beautiful words and promises.

The UK is, however, very special. Not only for its mind-blowing historical carbon debt, but also for its current, very creative, carbon accounting.

Since 1990 the UK has achieved a 37% reduction of its territorial CO2 emissions, according to the Global Carbon Project. And that does sound very impressive. But these numbers do not include emissions from aviation, shipping and those associated with imports and exports. If these numbers are included the reduction is around 10% since 1990 – or an average of 0.4% a year, according to Tyndall Manchester.

And the main reason for this reduction is not a consequence of climate policies, but rather a 2001 EU directive on air quality that essentially forced the UK to close down its very old and extremely dirty coal power plants and replace them with less dirty gas power stations. And switching from one disastrous energy source to a slightly less disastrous one will of course result in a lowering of emissions.

But perhaps the most dangerous misconception about the climate crisis is that we have to “lower” our emissions. Because that is far from enough. Our emissions have to stop if we are to stay below 1.5-2C of warming. The “lowering of emissions” is of course necessary but it is only the beginning of a fast process that must lead to a stop within a couple of decades, or less. And by “stop” I mean net zero – and then quickly on to negative figures. That rules out most of today’s politics.

The fact that we are speaking of “lowering” instead of “stopping” emissions is perhaps the greatest force behind the continuing business as usual. The UK’s active current support of new exploitation of fossil fuels – for example, the UK shale gas fracking industry, the expansion of its North Sea oil and gas fields, the expansion of airports as well as the planning permission for a brand new coal mine – is beyond absurd.

This ongoing irresponsible behaviour will no doubt be remembered in history as one of the greatest failures of humankind.

People always tell me and the other millions of school strikers that we should be proud of ourselves for what we have accomplished. But the only thing that we

need to look at is the emission curve. And I'm sorry, but it's still rising. That curve is the only thing we should look at.

Every time we make a decision we should ask ourselves; how will this decision affect that curve? We should no longer measure our wealth and success in the graph that shows economic growth, but in the curve that shows the emissions of greenhouse gases. We should no longer only ask: "Have we got enough money to go through with this?" but also: "Have we got enough of the carbon budget to spare to go through with this?" That should and must become the centre of our new currency.

Many people say that we don't have any solutions to the climate crisis. And they are right. Because how could we? How do you "solve" the greatest crisis that humanity has ever faced? How do you "solve" a war? How do you "solve" going to the moon for the first time? How do you "solve" inventing new inventions?

The climate crisis is both the easiest and the hardest issue we have ever faced. The easiest because we know what we must do. We must stop the emissions of greenhouse gases. The hardest because our current economics are still totally dependent on burning fossil fuels, and thereby destroying ecosystems in order to create everlasting economic growth.

"So, exactly how do we solve that?" you ask us – the schoolchildren striking for the climate.

And we say: "No one knows for sure. But we have to stop burning fossil fuels and restore nature and many other things that we may not have quite figured out yet."

Then you say: "That's not an answer!"

So we say: "We have to start treating the crisis like a crisis – and act even if we don't have all the solutions."

"That's still not an answer," you say.

Then we start talking about circular economy and rewilding nature and the need for a just transition. Then you don't understand what we are talking about.

We say that all those solutions needed are not known to anyone and therefore we must unite behind the science and find them together along the way. But you do

not listen to that. Because those answers are for solving a crisis that most of you don't even fully understand. Or don't want to understand.

You don't listen to the science because you are only interested in solutions that will enable you to carry on like before. Like now. And those answers don't exist any more. Because you did not act in time.

Avoiding climate breakdown will require cathedral thinking. We must lay the foundation while we may not know exactly how to build the ceiling.

Sometimes we just simply have to find a way. The moment we decide to fulfil something, we can do anything. And I'm sure that the moment we start behaving as if we were in an emergency, we can avoid climate and ecological catastrophe. Humans are very adaptable: we can still fix this. But the opportunity to do so will not last for long. We must start today. We have no more excuses.

We children are not sacrificing our education and our childhood for you to tell us what you consider is politically possible in the society that you have created. We have not taken to the streets for you to take selfies with us, and tell us that you really admire what we do.

We children are doing this to wake the adults up. We children are doing this for you to put your differences aside and start acting as you would in a crisis. We children are doing this because we want our hopes and dreams back.

I hope my microphone was on. I hope you could all hear me.

Speech 6: Greta Thunberg's Speech at the R20 World Summit in Vienna, Austria.

Thank you for inviting me and thank you for having me here and thank you everyone for coming

My name is Greta Thunberg, I am a climate activists from Sweden and for the last nine months I have been school striking for the climate every Friday in front of the Swedish parliament. We need to change the way we treat the climate crisis. We need to change the way we speak about the climate crisis and we need to call it what it is an emergency. I am certain that most of us in here today are generally aware of the situation. But, my number one experience during these last nine months is that people in general have no clue. Many of us know something is wrong that the planet is warming because of increased greenhouse gases. But, we

don't know the exact consequences of that. The vast majority know much less than we think and this should be no surprise. We have never been shown the graphs which show how much the co2 emissions need to be reduced for us to stay below the 1.5 degree limit. We have never been told the meaning of the aspect of equity in the Paris agreement and why it's so important. We have never been taught about feedback loops or tipping points or what a runaway greenhouse effect is. Most of us don't know almost any of the basic facts. Because how could we, we have not been told or more importantly we have never been told by the right people. We are Homo sapiens sapiens of the family who many died of the order primates of the class mammalian of the kingdom Animalia. We are a part of nature, we are social animals, we are naturally drawn to our leaders during the last months millions of children have been school striking for the climate's gaining lots of attention for the climate crisis. But, we children are not leaders, nor are the scientists unfortunately. But, many of you here today are: presidents, celebrities, politicians, CEOs, and journalists. People listen to you, they are influenced by you, and therefore you have an enormous responsibility and let's be honest this is a responsibility that most of you have failed to take.

You cannot rely on people reading between the lines or searching in the information themselves. To read through the latest IPCC report track the Keeling curve or keep tabs on the world's rapidly disappearing carbon budgets. You have to explain that was repeatedly no matter how uncomfortable or unprofitable that may be. And yes a transformed world will include lots of new benefits. But, you have to understand this is not primarily an opportunity to create new green jobs, new businesses, or green economic growth. This is above all an emergency and not just any emergency. This is the biggest crisis humanity has ever faced this is not something you can like on Facebook. When I first heard about the climates and ecological breakdown I actually didn't believe that this could be happening. Because how could it be how could we be facing an existential crisis that were threatened our very survival and yet that wasn't our first priority. If there really was a crisis this big then we would rarely talk about anything else as soon as you turn on the TV almost everything will be about that headlines radio newspapers. You would always never hear or read about anything else, and the politicians would surely have done what was needed by now, wouldn't they. They would hold crisis meetings all the time, declare climate emergencies everywhere, and spend all their waking hours handling the situation and informing the people what was going on. But, it never was like that, the climate crisis was just treated like any other issue, or even less than that. every time you heard a politician speak about this they never talked with urgency.

According to them there were always countless of new technologies and simple solutions that when put in place would solve everything. Politicians one second say climate change is very important it is the most important topic and we are going to do everything we can to stop it. And the next second they want to expand air portes, build new coal power plants, and motorways. And then they fly off in a private jet to attend the meeting on the other side of the world. That is not how you act in a crisis. And humans are social animals, we can't get away from that fact and as long as you the leaders act like everything is fine and you have things under control. Then as people we won't understand that we are in an emergency. You can't only keep talking about specific isolates and solutions to specific isolated problems. We need to see the full picture. If you say that we can so this crisis just by maybe increasing or lowering some taxes facing out coal in 10 or 15 years putting up solar panels on your building or manufacturing new more electrical cars. If you say that then people will think we can solve this crisis without anyone making a real effort and that is very dangerous. Because, specific isolated solutions are no longer enough and you know this we now need to change practically everything. We now need a whole new way of thinking. I know you are desperate for hope and solutions. But, the biggest source of hope and the easiest solution is right in front of you, and has been all along, and it is us people and the fact that we don't know. We humans are not stupid. We are not ruining the biosphere and future living conditions for all species because we are evil. We are simply not aware. But, once we understand once we realize the situation then we act, we change, humans are very adaptable. So instead of only being obsessed with finding solutions to a problem that most of us do not even know exists. You must also focus on informing us about the actual problem. We must acknowledge that we do not have all the solution now. We must admit that we do not have the situation under control and we must admit that we are losing this battle. We must stop playing with words and numbers because we no longer have time for that.

And in the words of author Alex Stephan winning slowly is the same thing as losing. When it comes to the climate crisis the longer we wait the harder it will be to turn this around. So, let us not waste any longer let's start acting. For too long the people in power have gotten away with basically not doing anything to stop the climate an ecological breakdown. They have gotten away with stealing or a future and selling it for profits. But, we young people are waking up and we promise we will not let you get away with it anymore.

Speech 7: France National Assembly.

Thank you all for coming here.

I have some good news and some bad news regarding the climate emergency. I will start with the good news.

The world, as a small number of people have been saying lately, will not end in 11 years.

The bad news, however, is that around the year 2030, if we continue with business as usual, we will likely be in a position where we may pass a number of tipping points. And then we might no longer be able to undo the irreversible climate breakdown.

A lot of people, a lot of politicians, business leaders, journalists, say they don't agree with what we are saying. They say we children are exaggerating, that we are alarmists. To answer this I would like to refer to page 108, chapter 2 in the latest IPCC [Intergovernmental Panel on Climate] report. There you will find all our "opinions" summarized, because there you find a remaining carbon dioxide budget. Right there it says that if we are to have a sixty-seven percent chance of limiting the global temperature rise to below 1.5 degrees, we had on January 1, 2018, 420 gigatons of carbon dioxide left in our CO₂ budget. And of course that number is much lower today. We emit about 42 gigatons of CO₂ every year.

At current emissions levels, that remaining budget is gone within roughly eight and a half years. These numbers are as real as it gets. Though a great number of scientists suggests that they are too generous, these are the ones that have been accepted by all nations through the IPCC.

And not once, not one single time have I heard any politician, journalist or business leader even mention these numbers. It is almost like you don't even know they exist, as if you haven't even read the latest IPCC reports on which the future of our civilization is depending.

Or maybe you are simply not mature enough to tell it like it is. Because even that burden you leave to us children. We become the bad guys who have to tell people these uncomfortable things, because no one else wants to or dares to. And just for quoting and acting on these numbers, these scientific facts, we receive unimaginable amounts of hate and threats. We are being mocked and lied about by elected officials, members of parliaments, business leaders, journalists. What I

really would like to ask all of those who question our so-called "opinions" or think that we are extreme: Do you have a different budget for at least a reasonable chance of staying below the 1.5 degrees of warming limit? Is there another intergovernmental panel on climate change? Is there a secret Paris agreement that we don't know about? One that not [does not include] the aspect of equity? Because these are the numbers that count, this is the current best available science. You can't simply make up your own facts just because you don't like what you hear.

There is no middle ground when it comes to the climate and ecological emergency. Of course you could argue that we should go for a more risky pathway, such as the alternative of 580 gigatons of CO₂ from January 1, 2018, which gives us a 50/50 percent chance of limiting the global temperature rise to below 1.5 degrees. That amount of carbon dioxide will run out in about 12 years of current business as usual. But why should we do that, why should we accept taking that risk, leaving the future living conditions for humankind to a 50/50 flip of a coin?

Four hundred twenty gigatons left of CO₂ to emit. And now that number is down to less than 360 gigatons. And please note that these figures are global and therefore do not say anything about the aspect of equity, clearly stated throughout the Paris agreement, which is absolutely necessary to make it work on a global scale. That means that richer countries need to get down to zero emissions faster, so the people in poorer parts of the world can heighten their standard of living by building some of the infrastructure that we have already built, such as roads, hospitals, electricity, schools and providing clean drinking water.

And because you have ignored these facts, because you and pretty much all of the media to this very minute, keep ignoring them, people do not know what is going on. If you respect the science, if you understand the science, then this is it. Four hundred twenty gigatons of CO₂ left to emit on January 1 to have a sixty-seven percent chance of staying below a 1.5 degrees of global temperature rise, according to the IPCC.

In the Paris agreement we have only signed up for staying below 1.5 to 2 degrees of temperature rise. And that of course gives us a bigger remaining carbon dioxide budget. But the latest IPCC report shows that aiming instead for below 1.5 degrees would significantly reduce the climate impacts, and that would most certainly save countless of human lives.

This is what it's all about, this is all that we are saying. But I will also tell you this: -You cannot solve the crisis without treating it as a crisis, without seeing the full picture. You cannot leave the responsibility to individuals, politicians, the market or other parts of the world to take. This has to include everything and everyone.

Once you realize how painfully small the size of our remaining carbon dioxide budget is, once you realize how fast it is disappearing, once you realize that basically nothing is being done about it and once you realize that almost no one is even aware of the fact that carbon dioxide budgets even exists, then tell me what exactly do you do? And how do we do it without sounding alarmist? That is the question we must ask ourselves, and the people in power.

The science is clear and all we children are doing is communicating and acting on that united science.

Now political leaders in some countries are starting to talk. They are starting to declare climate emergencies and announcing dates for so-called climate neutrality. And declaring a climate emergency is good. But only setting up these vague, distant dates and saying things which give the impression of that things are being done and that action is on the way, will most likely do more harm than good. Because of the changes required are still nowhere in sight. Not in France, not in the EU, nowhere. And I believe that the biggest danger is not our inaction. The real danger is when companies and politicians are making it look like real action is happening, when in fact almost nothing is being done, apart from clever accounting and creative PR.

The climate and ecological emergency is right here, right now. But it has only just begun, it will get worse. Four hundred twenty gigatons of CO₂ left to emit on January 1, 2018, to have a 67 percent chance of staying below a 1.5 degrees of global temperature rise. And now that figure is already down to less than 360 gigatons.

At current emissions levels that remaining budget is gone within roughly eight and a half years. In fact, since I started this speech the world has emitted about 800,000 tons of carbon dioxide. And if anyone still has excuses not to listen, not to act, not to care, I ask you once again: Is there another Intergovernmental Panel on Climate Change? Is there a secret Paris agreement that we don't know about? One that does not include the aspect of equity? Do you have a different budget for at least a reasonable chance of staying below 1.5 degrees of global temperature rise?

Some people have chosen not to come here today. Some people have chosen not to listen to us. And that is fine, we are after all just children. You don't have to listen to us, but you do have to listen to the united science, the scientists. And that is all we ask, just unite behind the science!

Speech 8: Greta Thunberg's Speech at Climate Action Summit in NYC

September 2019

"My message is that we'll be watching you."

"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. How dare you!

"You have stolen my dreams and my childhood with your empty words. And yet I'm one of the lucky ones. People are suffering. People are dying. Entire ecosystems are collapsing. 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.

"You say you hear us and that you understand the urgency. But no matter how sad and angry I am, I do not want to believe that. Because if you really understood the situation and still kept on failing to act, then you would be evil. And that I refuse to believe.

"The popular idea of cutting our emissions in half in 10 years only gives us a 50% chance of staying below 1.5 degrees [Celsius], and the risk of setting off irreversible chain reactions beyond human control.

"Fifty percent may be acceptable to you. But those numbers do not include tipping points, most feedback loops, additional warming hidden by toxic air pollution or the aspects of equity and climate justice. They also rely on my generation sucking hundreds of billions of tons of your CO₂ out of the air with technologies that barely exist.

"So a 50% risk is simply not acceptable to us — we who have to live with the consequences.

"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 CO2 left to emit back on Jan. 1st, 2018. Today that figure is already down to less than 350 gigatons.

"How dare you pretend that this can be solved with just 'business as usual' and some technical solutions? With today's emissions levels, that remaining CO2 budget will be entirely gone within less than 8 1/2 years.

"There will not be any solutions or plans presented in line with these figures here today, because these numbers are too uncomfortable. And you are still not mature enough to tell it like it is.

"You are failing us. But the young people are starting to understand your betrayal. The eyes of all future generations are upon you. And if you choose to fail us, I say: We will never forgive you.

"We will not let you get away with this. Right here, right now is where we draw the line. The world is waking up. And change is coming, whether you like it or not.

"Thank you."

Speech 9: December 11th, 2019: COP25 United Nations Climate Conference in Madrid, Spain.

Hi. A year and a half ago, I didn't speak to anyone unless I really had to, but then I found a reason to speak. Since then, I've given many speeches and learned that when you talk in public, you start with something personal or emotional to get everyone's attention. Say things like, our house is on fire, I wanted to panic or how dare you.

But today I will not do that because then those phrases are all that people focus on. They don't remember the facts, the very reason why I say those things in the first place, we no longer have time to leave out the science. For about a year I have been constantly talking about our rapidly declining carbon budgets over and over again. But since that is still being ignored, I will just keep repeating it.

In chapter two, on page 108 in the SR 1.5 IPCC report that came out last year, it says that if we ought to have a 6% to 7% chance of limiting the global temperature rise to below 1.5 degrees Celsius, we had on January 1, 2018, 420 gigatons of CO₂ left to emit in that budget. And of course that number is much lower today as we emit about 42 gigatons of CO₂ every year including land use.

With today's emissions levels, that remaining budget will be gone within about eight years. These numbers aren't anyone's opinions or political views. This is the current best available science. Though many scientists suggest these figures are too moderate. These are the ones that have been accepted through the IPCC, and please note that these figures are global and therefore do not say anything about the aspect of equity, which is absolutely essential to make the Paris Agreement to work on a global scale.

That means that richer countries need to do their fair share and get down to real zero emissions much faster and then help poorer countries do the same, so people in less fortunate parts of the world can raise their living standards. These numbers also don't include most feedback loops, nonlinear tipping points, or additional warming hidden by toxic air pollution.

Most models assume, however, that future generations will somehow be able to suck hundreds of billions of tons of CO₂ out of the air with technologies that do not exist in the scale required and maybe never will. The approximate 6% to 7% chance budget is the one with the highest odds given by the IPCC. And now we have less than 340 gigatons of CO₂ left to emit in that budget to share fairly.

Why is it so important to stay below 1.5 degrees? Because even at one degree people are dying from the climate crisis. Because that is what the United Nations calls for to avoid destabilizing the climates. So that we have the best possible chance to avoid setting off irreversible chain reactions such as melting glaciers, polar ice and thawing Arctic permafrost. Every fraction of a degree matters. So there it is, again. This is my message. This is what I want you to focus on.

So please tell me, how do you react to these numbers without feeling at least some level of panic? How do you respond to the fact that basically nothing is being done about this without feeling the slightest bit of anger? And how do you communicate this without sounding alarmist? I would really like to know. Since the Paris Agreement, global banks have invested 1.9 trillion U.S. dollars

in fossil fuels. One hundred companies are responsible for 71% of global emissions. The G20 countries account for almost 80% of total emissions. The richest 10% of the world's population produce half of our CO₂ emissions, while the poorest 50% account for just one tenth. We indeed have some work to do, but some more than others.

Recently, a handful of rich countries pledged to reduce their emissions of greenhouse gases by so-and-so many percent by this or that date or to become climate neutral or net zero in so-and-so many years. This may sound impressive at first glance, but even though the intentions may be good, this is not leadership. This is not leading. This is misleading because most of these pledges do not include aviation, shipping, and imported and exported goods and consumption. They do, however, include the possibility of countries to offset their emissions elsewhere.

These pledges don't include the immediate yearly reduction rates needed for wealthy countries, which is necessary to stay within the remaining tiny budget. Zero in 2050 means nothing, if high emission continues even for a few years, then the remaining budget will be gone. Without seeing the full picture, we will not solve this crisis. Finding holistic solutions is what the cup should be all about, but instead it seems to have turned into some kind of opportunity for countries to negotiate loopholes and to avoid raising their ambition.

Countries are finding clever ways around having to take real action. Like double counting emissions reductions and moving their emissions overseas and walking back on their promises to increase ambition or refusing to pay for solutions or loss of damage. This has to stop. What we need is real drastic emission cuts at the source, but of course just reducing emissions is not enough. Our greenhouse gas emissions has to stop. To stay below 1.5 degrees. We need to keep the carbon in the ground. Only setting up distant dates and saying things which give the impression of the action is underway will most likely do more harm than good because the changes required are still nowhere in site. The politics needed does not exist today despite what you might hear from world leaders. And I still believe that the biggest danger is not inaction. The real danger is when politicians and CEOs are making it look like real action is happening when in fact almost nothing is being done apart from clever accounting and creative PR.

I have been fortunate enough to be able to travel around the world. And my experience is that the lack of awareness is the same everywhere, not the least

amongst those elected to lead us. There is no sense of urgency whatsoever. Our leaders are not behaving as if we were in an emergency. In an emergency you change your behavior. If there is a child standing in the middle of the road and cars are coming at full speed, you don't look away because it's too uncomfortable. You immediately run out and rescue that child. And without that sense of urgency, how can we, the people understand that we are facing a real crisis. And if the people are not fully aware of what is going on, then they will not put pressure on the people in power to act. And without pressure from the people our leaders can get away with basically not doing anything, which is where we are now. And around and around it goes.

In just three weeks. We will enter a new decade, a decade that will define our future. Right now we are desperate for any sign of hope. Well, I'm telling you, there is hope. I have seen it, but it does not come from the governments or corporations. It comes from the people. The people who have been unaware, but are now starting to wake up. And once we become aware, we change. People can change. People are ready for change. And that is the hope because we have democracy and democracy is happening all the time. Not just on election day, but every second and every hour. It is public opinion that runs the free world. In fact, every great change throughout history has come from the people. We do not have to wait. We can start the change right now. We the people.

Thank you.