A TRANSITIVITY ANALYSIS OF GRETA THUNBERG’S 2019 CLIMATE ACTION SUMMIT SPEECH

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ABSTRACT
Climate change has been one of the most significant concerns for the United Nations. As a result, the United Nations held a summit in 2019, inviting several notable speakers in the field. One of them is a young teenager from Swedish, Greta Thunberg. Greta Thunberg is a prominent climate activist who delivered a speech at the United Nations Climate Action Summit 2019, which is about how people and the government need to limit global warming. Her address became viral and garnered attention from many media, and roused a massive youth-led climate rally. Thus, this study analyzed her speech as the object of the study and employed a descriptive qualitative method. The study scrutinized 54 clauses through transitivity analysis from Hallidayan Systemic Functional Grammar (SFG) to understand the processes in the address and its function. This current study has revealed that the speaker’s dominantly used material process (37%) to describe the damage to the environment done by people. The use of relational process (31.5%) describes climate change's effects on the world and her life. The mental process used in 16.7% of the data provokes guilt and responsibility, as she pointed the audience as the actors that cause climate change. The behavioural process (7.4%) shows that Thunberg will not stay quiet on climate crisis when her generation is the one who will suffer from it. Existential process (3.7%) is used to describe the existing problems, while verbal process (3.7%) is used in quoting the high-profile politician to prove that none of their promises have been fulfilled.

Keywords: Climate Action Summit 2019; Greta Thunberg; Transitivity Analysis; Verb

ABSTRAK
Perubahan iklim menjadi salah satu perhatian terbesar organisasi Perserikatan Bangsa-Bangsa. Pada 2019 Perserikatan Bangsa-Bangsa menggelar KTT dengan mengundang beberapa pembicara terkenal di bidangnya, salah satunya remaja asal Swedia, Greta Thunberg. Greta Thunberg terkenal sebagai seorang aktivis iklim yang menyampaikan pidato tentang bagaimana masyarakat dan pemerintah perlu mengambil tindakan untuk membatasi pemanasan global di United Nations Climate Action Summit 2019. Pidatonya menjadi viral dan menarik perhatian banyak media serta memicu demonstrasi iklim besar-besaran yang dipimpin oleh anak-anak muda. Studi ini menganalisis pidato Greta Thunberg dengan menggunakan metode deskriptif kualitatif. Studi ini meneliti 54 klausal melalui analisis transitivitas dari Hallidayan Systemic Functional Grammar (SFG) untuk memahami proses dan fungsinya. Penelitian ini menemukan bahwa pembicara dominan menggunakan proses materi (37%) untuk mendeskripsikan kerusakan lingkungan yang dilakukan oleh manusia. Penggunaan proses relasional (31.5%) menggambarkan pengaruh perubahan iklim terhadap dunia dan kehidupannya. Proses mental, yang digunakan di 16.7% data, memancing rasa bersalah dan tanggung jawab, saat ia menunjuk penonton sebagai aktor penyebab perubahan iklim. Proses perilaku (7.4%), menunjukkan bahwa Thunberg tidak akan tinggal diam menghadapi krisis iklim ketika generasinya yang akan menderita. Proses eksistensial (3.7%) digunakan untuk mendeskripsikan masalah yang ada, sedangkan proses verbal (3.7%) digunakan dalam mengutip politisi papan untuk membuktikan bahwa janji mereka tidak ada yang dipenuhi.
INTRODUCTION

Greta Thunberg is a prominent youth climate activist. Thunberg was then only 15 years old when she started a climate strike outside the Swedish Parliament in August 2018. This was the beginning of the global school strike for climate called Fridays for Future (‘Fridays for Future – How Greta started a global movement’, 2020). On Monday, September 23rd 2019, she spoke in front of the world leaders at the United Nation Climate Action Summit. Thunberg said about how people and the government need to take action to limit global warming. Despite being the youngest speaker, her speech became headlines in many media outlets, rousing a massive youth-led climate rally. The rally is said to be the most significant environmental protest ever happened. Following the massive media coverage, the Collins Dictionary's lexicographers even put the word climate strike as the word of the year. She is also chosen by Time magazine as 2019 Person of the Year (Alter, Haynes, & Worland, 2019). Nevertheless, it is reported that Thunberg rejects a prestigious environmental award and the prize money in the same year. She insists that her climate movement needs no more awards, but it needs more politicians and people in power to pay attention to the climate problem and to take action (‘Greta Thunberg: Why has she turned down an award? - CBBC Newsround’, 2019). As of this article is being written, Thunberg still consistently continues the weekly protest every Friday (Witt, 2020).

Systemic Functional Grammar is a theory devised by Halliday and Matthiessen (2014) to study a language's meaning based on their grammar. In Systemic Functional Grammar, the meaning is derived from three metafunctions; ideational, interpersonal, and textual. Each of them treats clauses in the text as representation, exchange, and message. Analysis employing Systemic Functional Grammar is not uncommon. Some researchers have used SFG to analyze a speech (Harwiyati & Siagianto, 2016; Zhao & Li, 2018; Zhu & Li, 2018), literary text (Darani, 2014; Nugraha & Mahdi, 2020), and analyze non-political speech (Haq, Indrayani, & Soemantri, 2020).

Zhao and Li (2018) conducted a transitivity analysis study on the inaugural speech of Donald Trump, the American president. The study was conducted to discover the political motivation and explore the profound social significance via transitivity. It is discovered that the material process is the process with the most appearance, followed by relational and mental processes. The material process is employed in transferring power to people, while the relational process is utilized in advocating U.S. interests in international contacts. The mental process is applied to recover the audience’s confidence and expectation for a better future.

An analysis of the transitivity system in The Lottery by Shirley Jackson was done by Nugraha and Mahdi (2020) to discover Mr. Summers's representation, the main character, from the types of processes in clauses that related to him. Through a descriptive qualitative research design, the study finds that the verbal process dominates the text to construct Mr. Summers through verbiage. The high number of the material process shows that he does activities in the domestic and physical domain, while the relational process is used to characterize explicitly. The mental and behavioural process is used to depict the character’s cognition and everyday activity.
Haq, Indrayani, and Soemantri (2020) employed Hallidayan Systemic Functional Grammar as the framework and J. R. Martin’s appraisal system to analyze the attitudinal meaning in Martin Luther King Jr’s speech. From the ninety clauses found in the text, the study finds that judgement is the most dominant, followed by appreciation and effect. The high number of judgements shows racial injustice’s reality to persuade people to reject the condition. Appreciation is used positively, while Affect is used negatively. The study finds that the speaker used mixed emotions in his speech. The negative emotions found in the address can be inferred as a refusal of the condition and can stimulate revenge.

This research on Thunberg’s speech applies transitivity analysis, which is a part of ideational metafunction in Systemic Functional Grammar (SFG). According to Eggins (2004), in the transitivity system, there are three aspects of the clause; the verbal group, the participant, and the circumstances. The transitivity process that this study focuses on is the verbal group, which is the grammatical system by which a mode of action or interaction is achieved (Halliday & Matthiessen, 2014). As construed by the transitivity system in the grammar, the different types of processes are divided into ‘outer’ and ‘inner’ experiences. The outer experience is an experience outside the world of consciousness, including perception, emotion, and imagination. The inner experience is experience which involves reaction and reflection from the outer experiences. The experiences about the world from ‘outer’ and ‘inner’ experiences are divided into six ideational processes; material, mental, behavioural, verbal, relational, and existential processes.

The high number of scholars that employ transitivity analysis proves that it is a powerful tool for speech analysis. However, to the best of the researchers’ knowledge, none of the previous studies has analyzed the transitivity process in this particular speech. It also provides a new outlook to transitivity analysis in analyzing a non-political speech by a teenage climate activist. This research aims to discover the transitivity process in Thunberg’s speech at the Climate Action Summit 2019 and its functions in the speech.

**METHOD**

This research employed a descriptive qualitative method to discover the distribution and function of ideational metafunction presented in Thunberg’s speech. This method describes a phenomenon and reveals the complexity through textual analysis and interpretation. Transitivity analysis, which is a part of Hallidayan Systemic Functional Grammar (2014), was used to analyze the clauses found in the speech. Transitivity analysis treats clause as experience, construing the human experience from inner and outer consciousness, thus being utilized as the tool to support this study’s aim. This research studied the ideational metafunction, which focused on the verbs of the clauses. The object of the study was the clauses taken from the transcription of Greta Thunberg’s speech at the United Nations 2019 Climate Action Summit, which was taken from https://www.npr.org/2019/09/23/763452863/transcript-greta-thunbergs-speech-at-the-u-n-climate-action-summit. The speech length was 495 words and consisted of 54 clauses, excluding the exclamatory and expression sentences. Transitivity analysis starts with the classification of different kinds of processes. Therefore, the study examined the text and categorized the verb based on the transitivity
process of the Hallidayan Systemic Functional Grammar, which consisted of six types of processes; material, mental, relational, verbal, behavioural, and existential process. The findings on the processes were interpreted to reveal the experience of the speaker.

**FINDINGS**

Analysis of the clause as representation deals with exploring transitivity patterns and involves the specification of the choice of a process and the associated participant roles in each clause. This study is going to focus on the choice of process-related in the clauses. The figures for the ranking and embedded clauses are shown in Table 1, which summarizes the results of the Transitivity analysis.

| Transitivity Process Type | Thunberg’s Speech |
|--------------------------|--------------------|
|                          | Frequency | Percentage |
| Material                 | 20        | 37%        |
| Relational               | 17        | 31.5%      |
| Mental                   | 9         | 16.7%      |
| Behavioural              | 4         | 7.4%       |
| Existential              | 2         | 3.7%       |
| Verbal                   | 2         | 3.7%       |
| Total                    | 54        | 100%       |

Thunberg’s speech consists of fifty-four clauses. Through transitivity analysis, the study finds that the material process dominates the data, occurring twenty times and represented through 37% of the data. The second-highest occurrence of seventeen times is the relational process, represented by 31.5% in the text. The mental process occurs nine times, presenting 16.7% of the data, while the behavioural process occurs four times out of fifty-four clauses, presented in 7.4% of the data. Both existential and verbal happens two times, and each is given in 3.7% of the data. According to Halliday, material, mental, and relational are the main types of processes in the English transitivity system. Similarly, in Thunberg’s speech, the processes with the highest number are material, relational, and mental processes, which proves that in her speech, she deals more with clauses with processes related to doing and happening, being and having, and sensing.

**DISCUSSION**

Among the six major types of process, the material process occurs the most with total numbers of twenty, and the proportion of the process to the total clauses is 37%. By using material clause, the speaker focuses more on the actors and action. Since material clauses construe a quantum of change in the flow of events as taking place through some energy input, they are considered the clauses of doing and happening. As material clauses discuss the verbs about doing and happening, the clauses cannot be separated from the actors. The material processes in the speech are described in the clauses below:

1. Yet you all **come** to us young people for hope.
2. You **have stolen** my dreams and my childhood with your empty words
(3) you **continue** to look away and come here saying that you're doing enough

Based on the clauses, most of the verbs' actors refer to the audience; however, sometimes it refers to the speaker. Thunberg assumed the audience as “you” and her side as us or we. By creating an apparent division between the audience and herself, Thunberg intends to show that the audience's role is mostly as the ones who make and let the climate crisis happen. Zhao and Li (2018) stated that material clauses state actual events, making the speech more objective and persuasive. Similarly, Thunberg used material clauses to convince, inform, and influence people about the climate crisis and its dangers to the Summit audience.

According to table 1, the relational type occurs seventeen times. The proportion of the process to the total clauses is 31.5%, making it the second-largest group after the material process. The fundamental properties of ‘relational’ clauses derive from the nature of a ‘being’ configuration. It concerns a sense of being, possessing, or becoming, which serves to characterize or to identify. The clause that is realized as a relational process gives information about the phenomena and the participant's quality. Thunberg demonstrates the changes through the relational process as in:

1. **We are** in the beginning of a mass extinction.
2. With today's emissions levels, that remaining CO2 budget will be entirely gone within less than 8 1/2 years.
3. The world **had** 420 gigatons of CO2 left.

According to Downing and Locke (2006), the relational process shows how a participant is characterized or identified. In the speech, it is seen that Thunberg shows how climate change has been affecting the world and her life. She identifies the climate crisis, such as the CO2 budget and the world’s condition, which will cause mass extinction. She also characterizes the audience as both the victims and perpetrators. The same as material processes, the relational process also offers the state of real events. Thus, being the two-most frequent processes in Thunberg's speech, both material and relational processes help shape the speech to be objective and persuasive at the same time.

The third-largest clause in the speech is the mental clause. “Mental” clauses are clauses of sensing. It occurs nine times (16.7%) in the speech. While ‘material’ clauses are concerned with our experience of the material world, ‘mental’ clauses are concerned with our experience of the world of our consciousness, such as thoughts, feelings, and perceptions. A ‘mental’ clause construes a quantum of change in the flow of events in our consciousness. The speech's mental clauses contain sensing verbs, such as; hear, understand, believe, refuse, pretend, want, and like.

1. I do not **want** to believe that
2. …you **understand** the urgency
3. …I **refuse** to believe

Mental processes are categorized into four types, such as perceptive, emotive, cognitive, and desiderative. The mental processes that are employed in the speech are desiderative (want, refuse), perceptive (hear), emotive (like), and cognitive (understand, believe, pretend). Thompson (2013) explained that cognitive mental processes are about deciding and understanding, desiderative ones are about “wanting”, perceptive mental processes are about sensing, while the emotive mental processes involve feelings. The speaker expressed her perception that the audience was taking climate change too
easily. She also wants to change the audience's perspective, who in her speech is considered ignorant of the changes. Using clauses with mental processes, she also provoked guilt and responsibility as she pointed the audience as the actor that caused climate change.

Furthermore, Table 1 shows four behavioural processes, and the proportion to the total clauses is 7.4%. This process places in the borderline of material and mental processes that represent the outer manifestations of inner workings, the acting out of consciousness, and physiological states. Like the name itself, behavioural process concerns how people behave, consisting of both physiological and psychological experience. Below is the clauses employing behavioural processes:

1. We'll be watching you.
2. And if you choose to fail us.
3. We will never forgive you.
4. The world is waking up.

According to the clauses found in the speech, it can be proved that in behavioural process, Thunberg as a speaker is conscious of her being and the people that she represents in this speech, which are the children and people in general. The verbs used in this behavioural process are mostly near mental. It means that as well as provoking the feeling of guilt and responsibility as she pointed the audience as the actor that causes climate change, it is assumed that she will not stay quiet about people not doing anything to change their lifestyle so that the carbon emission can decrease.

Existential clauses constitute a minor type of process and are not very common in a text in general, other than on folktales. That is why, in the data, there are only two existential clauses (3.7%). The existential clauses are clauses of existing and happening. They typically have the verb be. Existential clauses are on the borderline between relational and material. Despite resembling ‘relational’ clauses, the other verbs commonly occur are mainly different from either the ‘attributive’ or the ‘identifying’. The existential clauses in the data were represented by the verb be and live. Through an existential clause, the audience is informed of the current climate crisis and its causes.

Sharing the same amount of data as the existential, verbal process occurs twice in the data, and the proportion to the total clauses is 3.7%. The verbal process is placed in the borderline of mental and relational. However, unlike mental clauses, the verbal clause does not require a conscious participant. As it is seen in the clause “you say you hear us and that you understand the urgency”; the subject “you” is unidentified. Thunberg uses this clause to quote someone else that is assumed as the high-profile politician and the world leaders who say they care about climate change and want to change it. However, in this speech, Thunberg shows that none of the promises has been granted.

CONCLUSION

This research on Thunberg’s speech is applying transitivity process analysis and discovers that material processes dominate the text, represented by 37%. The relational processes occupy 31.5% of the text, followed by mental processes presented by 16.7%. Behavioural processes are represented through 7.4% of the text, followed by existential and verbal processes; both are represented by 3.7% of the data. The study finds that the transitivity processes are used to inform the audience of the climate crisis’s existing
problems, state the cause of climate change, and provoke the feeling of guilt and responsibility of climate crisis. The material process is employed to describe the damage to people's environment, while the use of relational process describes the effects of climate change on the world and her life. The mental process provokes guilt and responsibility, as she pointed the audience as the actor that causes climate change. The behavioural process shows that Thunberg will not stay quiet on climate crisis when her generation is the one who will suffer from it. The existential process is used to describe the existing problems, while verbal processes are used in quoting the high-profile politician to prove that none of their promises have been fulfilled.

This study undoubtedly has its limitation and still has much room for improvement. This research does not analyze the circumstantial participant of ideational metafunction, which might add more enlightenment in analyzing the text's transitivity. This research suggests that future researchers analyze the speech through other metafunctions in Hallidayan SFG, such as interpersonal and textual metafunctions.

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