

Exploring Transitivity in Speeches of President Joko Widodo Using UAM Corpus Tool

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Abstract

This research investigates the transitivity system as a part of systemic functional linguistics theory together with the UAM Corpus Tools 3.2, developed by Donnel (2008) in the presidential speeches of the President of the Republic of Indonesia, Joko Widodo (hereafter JW). It focuses on analyzing processes, participants, and circumstances. The research is a descriptive qualitative study. The speech transcripts of President Joko Widodo in 2015 and 2018 are stored in a text file (.txt) with UTF-8 encoding. The findings of this research showed that material process types were found more than other process types in 2015 and 2018. This indicates that, by using material clauses, JW strongly desires to emphasize real work or action work in his speech. In terms of the participants, Actor and Goal were the most dominant in 2015 and 2018. In terms of Circumstance, Location, Cause, and Manner were the most dominant in 2015 while in 2018, Cause, Manner, and Location were the most dominant. Location is again one of the most dominant circumstance features in the text. This can be considered as consistency in JW's speeches. On the other hand, the fact that JW utilizes the same elements from the speech from three years prior means that this might not be regarded as a breakthrough.

Keywords: UAM corpus tool, transitivity system, speech

1. Introduction

1.1 The Background of the Study

Speech can be done by anybody and expressed to anyone. This is a form of communication that is also sent from the sender to additional recipients. Consequently, it can be classified as a form of communication that is publicly accessible (Schmitt & Viala, 1982). One example of speech is a national address by a president. When the president addresses the nation, he is engaged in one-way communication. In formal situations, the speech is given by reading words written ahead of the event, like a presidential speech. Research by Zhang (2017) states that speakers have the skills to manipulate speech to persuade citizens to adopt and support relevant policies. The speech's significance is further evident from its broad influence on all facets of society (Darong, 2021). Several things make the speech of the President of the Republic of Indonesia, Joko Widodo, especially appealing to researchers from various fields of study. First, Presidents' speeches usually reveal special characteristics of persuasive discourse, since, as leaders of their countries, they hold particular influence (Luhukay, 2007: 52). Second, Joko Widodo is the number one person in Indonesia serving as the current president of the Republic of Indonesia. His speeches are always distinguished by transitivity. In general, his speeches deal with the material process. Third, this president is very interesting to study especially in terms of communication style or delivery of ideas as he comes from an entrepreneurial background and is a member of a national party. Last, studies such as this one using corpus linguistics are still rarely conducted, making it an important contribution to the field.

The fact that these speeches correspond to the years that President JW was in office at the start and at the end of his first terms as president serves as the foundation for the researcher's analysis. Although Jokowi started his term in office in October 2014, 2015 was his first year. As a result, research on his speech started this year and will continue in 2018. Based on the corpus instrument, the transitivity system in the texts of the state speeches made by the president of the Republic of Indonesia was investigated in this study. A term used in Systemic Functional Linguistics (hereafter SFL), which is founded on Halliday's theory (2004), is transitivity.

In linguistic research, presidential speeches are frequently examined by various researchers employing a systematic functional linguistics approach. Rosyid and Rizigien, (2015), Faura (2016), Harwiyati (2016), Nurfaedah (2017), Marpaung et.al. (2018), and Priyo et al. (2018). Research by Rosyid and Rizigien (2015) focuses on Joko Widodo's victory speech on the Pinishi ship on 22 July 2014, and Halliday's systematic functional linguistics focusing on three metafunctions based on the SFL approach to the text of JW Victory Speech. The transitivity system in Joko Widodo's inauguration speech as president of the Republic of Indonesia is examined by Faura (2015). Harwiyati (2016), investigates the transitivity process used by Jokowi in his speech. Nurfaedah (2017) looks at the text of the political speeches of Hatta Rajasa from the perspective of a systematic functional linguistics theory focused on Halliday's three metafunctions, and analyzes the

texts of the political speeches of Hatta Rajasa. Marpaung et al. (2018) focus on the transitivity processes used by Donald Trump in his speeches. Priyo et al. (2018) focus on the transitivity process (process, participant, and circumstantial), logical meaning, and context of the situation based on the theory of Systemic Functional Linguistics.

1.2 The Research Question

Based on previous research, several studies on transitivity theory have been carried out. However, those that use the corpus are still rarely conducted. Therefore, the researcher raises the question, What are the types of processes, participants, and circumstances in the presidential speeches of President Joko Widodo as analyzed by the UAM CorpusTool?

To answer the question, the researcher not only investigates the transitivity system as a part of SFL theory but also relates it to another method of study. Therefore, this paper aims to explore the transitivity system in the speeches of President Joko Widodo by conducting a transitivity analysis with the aid of UAM CorpusTool 3.2, unlike previous studies that are mainly based on intuitive knowledge. The transitivity system in the speeches of President Joko Widodo will be a key focus in this paper for demonstration of the analysis using UAM CorpusTool 3.2.

2. Literature Review

In the 1960s, M.A.K. Halliday established SFL theory in England, and his followers later took it to Australia. In the 1990s, the study of language analysis called discourse analysis in SFL advanced in different areas like phonology and grammar. Phonological analysis went beyond the restrictions of tone groups. The study of grammar in different languages and language groups has also included research on understanding the meaning of the words used in those languages (Martin, 2002). According to Eggins (2004), the SFL theory postulates that there are three basic meaning types that have developed in human language: textual meanings that use clauses as messages, interpersonal meanings that use clauses as exchanges, and ideational or experiential meanings that use clauses as representations. The ideational or experiential meaning is how we understand and perceive the world around us - what is happening, who is involved, and when, where, and how events occur. One of the most important grammar systems of it is called transitivity. In simple words, transitivity is a system of language responsible for organizing experiential meaning in the clause. It deals with how inner and outer experiences are realized through language. Transitivity in functional linguistics is better than formal linguistics for many reasons. This is because we believe that discourses are not just sentences, but they also include the context behind them. In this situation, the context is similar to a set of ways that language is used. Language metafunctions can be split into three categories, just like situational categories are also split into three they are discourse participant for interpersonal meaning, discourse field for ideational meaning, and discourse medium for textual meaning. Transitivity also facilitates the categorization of sentences into smaller forms as they are composed of processes (material, mental, relational, verbal, behavioral, and existential). Participants (actor, goal, behavior, senser, phenomenon, sayer, target, values, token, and existent, and circumstances (extent, location, manner, cause, environment, accompaniment, role, matter, and angle). See Figure 1 below.

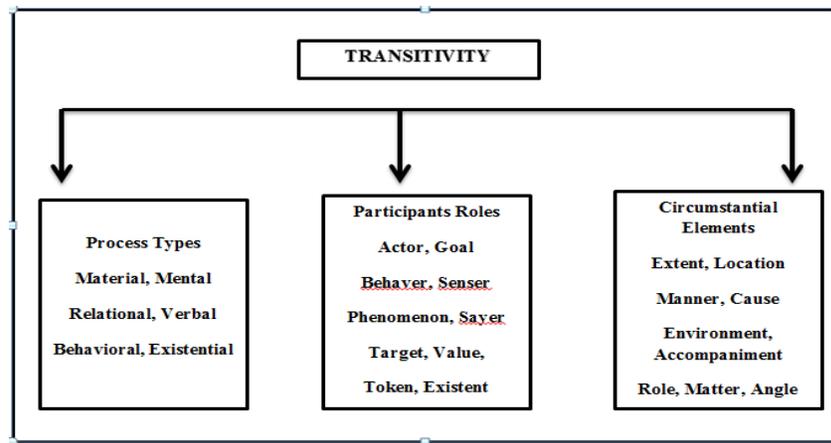


Figure 1. Transitivity System

The transitivity system includes six types of processes: material, mental, relational, verbal, behavioral, and existential.

According to Halliday (2014:224), the material process always involves just one participant who is the actor. If there is another participant it is the goal, not the participant. Thompson (2004) agrees with Halliday and says that every material process has an actor as the agent of the process. The target participants may be affected by the process. Furthermore, the Material Process is a way of doing something. This process is usually shown by verbs that describe both real and abstract actions. Generally, two participants are part of this process - the Actor and the Goal. The Actor usually indicates the subject, and the Goal indicates the object.

Mental clause, according to Halliday (2014:245), alludes to our conscious perception of reality. Mental phenomena like "perception" (see, look), "reaction" (like, please), and "cognition" (know, believe, convince) are expressed by it. Based on the number of participants, Mental Process differs from Material Process. The Mental Process requires the participation of two people. A human or other entity

possessing consciousness is required for one participant, referred to as a Senser, while the other participant is referred to as a Phenomenon. Action and Fact are the two categories of phenomena in mental processes. There is still a mental space dedicated to cognitive operations, and among the objects of cognition are abstract concepts known as phenomenon. Therefore, the first participant is logically called a Senser. For instance, *I remember my father and mother's advice* that the phenomenon is the object of cognition and the process is mental. Consequently, it seems sense to refer to the initial participant as a Senser.

According to Halliday (2014: 259), relational sentences are employed in order to identify and characterize objects. The participants in these sentences are identified as Attributive and Carrier. For instance, *The weather is humid*. The participant *humid* is referred to as Value (the definition), and the participant *weather* is named Token (the thing that is defined). *Joey is a boy*; the boy is Joey (Joey= Token; boy= Value) is another example. A relational process is a method of joining or associating two objects. This connection, which is known as ownership, may exist between the property's owner and it. An entity and its surroundings, such as a neighborhood, are said to be in an attributive relationship. This term also refers to a relationship between two entities. This is called as an identification relationship.

Information is exchanged with the help of verbal processes. Verbal processes are defined by Saragih (2010:8) as those that entail the transmission of information. Verbs like command, explain, ask, say, tell, talk, praise, boast, describe, and so forth are frequently utilized. Three participants are usually involved in the verbal process: the verbiage, the sayer, and the receiver. The sayer is in charge of the verbal process, but it's not always a live participant. The verbiage is the statement nominalized by the verbal process, and the receiver is the sign that the verbal process is aimed towards.

Behavioral processes include both physiological and psychological behaviors like breathing, dreaming, snoring, smiling, hiccupping, looking, watching, listening, and thinking (Gerot & Wignel, 1994). Halliday (2014:301) also notes that behavioral processes are usually intermediate. The most common examples are "Don't breathe." or "He's always playing." Behavers are participants in behavioral processes. If there is another participant in this process it is called a phenomenon. According to Eggins (2004), it is the only participant in most behavioral tests. Behavior expresses something that people do, and it usually does not involve another person. This obligatory participant is called the behavior and is usually a conscious being (like the senser of the mental process clause). Existential processes describe the fact that something exists or happens in life. Hancock (2005:240) states that existential process can be easily identified by the presence of "there" in the subject position. For example, *There hangs a painting*. Circumstances can be defined as the environment nature or location where the process takes place. The circumstance is outside the scope of the process. Therefore circumstance applies to all types of processes. According to Halliday (2014: 313) circumstance can be divided into nine different types: extent, location, manner, cause, environment, accompaniment, role, matter, and, angle.

3. Method

3.1 Type and Design of Research

The research method is a descriptive qualitative study. The objective is to investigate and elaborate on the types of processes, participants, and circumstances in the presidential speeches of President JW. To achieve this purpose, the researcher gathered qualitative data: transcriptions of two of President Joko Widodo's presidential speeches, retrieved from the internet. Those two data then are described qualitatively.

3.2 Data Used in This Study

Transcripts of President JW's speeches given in 2015 and 2018 were used as data sources for this research. His two online speech texts serve as research data. Consequently, the corpus tool uses and processes the texts from the two speeches. The researcher bases his research on the fact that these speeches represent the years that the JW president ruled the country at the beginning of his first term as president and at the end of his first term as president. Jokowi took office in his October 2014, but 2015 was his first year in office. Therefore, an investigation into his speech began this year and continues in 2018.

3.3 UAM CorpusTool 3.2

Annotating text and images is possible with UAM CorpusTool 3.2 (see Figure 2). Either manually annotate this document or use the program's semi-automated features. There are two different kinds of annotations that users can apply: segment coding, which lets users apply features to individual file segments, and document coding, which lets users apply features to the entire text at once (Donnell, 2008). In this paper, the transitivity system in Joko Widodo's presidential speech is examined using segment encoding. To begin annotating, a user must launch a project. A project's annotations for various features can be thought of as distinct layers within the project. At every level, annotations can be made manually or automatically. Transitivity analysis selects manual annotation. The user then needs to choose the annotation scheme that will be used for the analysis. Users can use UAM's built-in schemas for sentence grammar, transitivity, appraisal, rhetorical structure, error analysis, and more, or they can design their own schemas for a range of research applications. Halliday's transitivity system integration scheme is used in this study.



Figure 2. UAM Corpus Tool 3.2

3.4 Analysis Procedures

Step 1: To start a project for analysis, upload a text file to the program. For this study, the transcribed texts of JW Presidential speeches in 2015 and 2018 are shared. After including all the files in the project, we need to create a layer for the analysis of transitivity systems. Each text file has buttons for analyzing each layer.

Step 2: Click the layer's button to start annotating. A window similar to Figure 3 will appear.

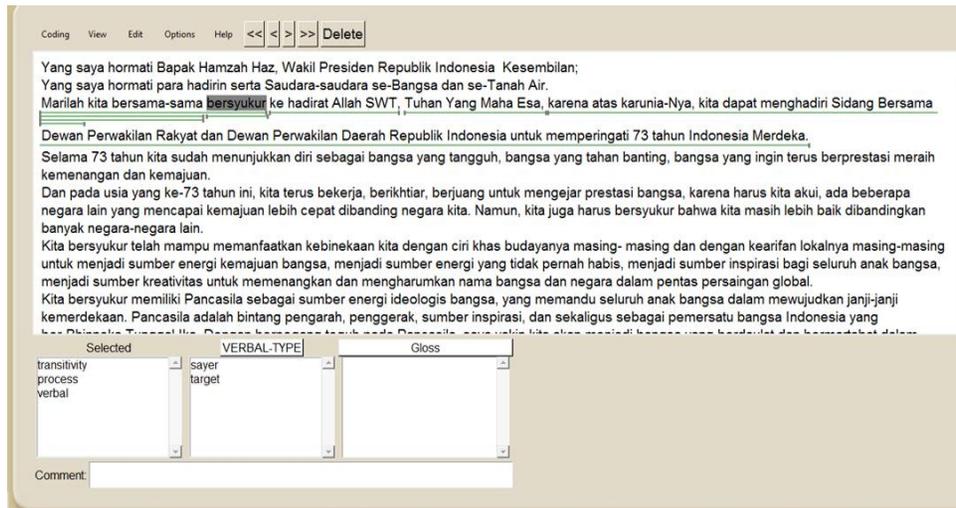


Figure 3. The code-document window

The Selected box shows features assigned to this layer. Figure 3 shows a layer of process annotations. The middle box contains different options for the selected segment, like "bersyukur". Double-clicking options in the central panel assign different characteristics to the segments. Continue clicking to reveal other features until the center box is empty, as shown in Figure 4.



Figure 4. Assigning features to the segment

Step 3: To examine the results in more detail after annotating and reviewing each file, click Statistics. According to the study type, UAM can present statistics in a table, graph, or network view, as Figure 5 demonstrates. The section after this one presents a statistical analysis.

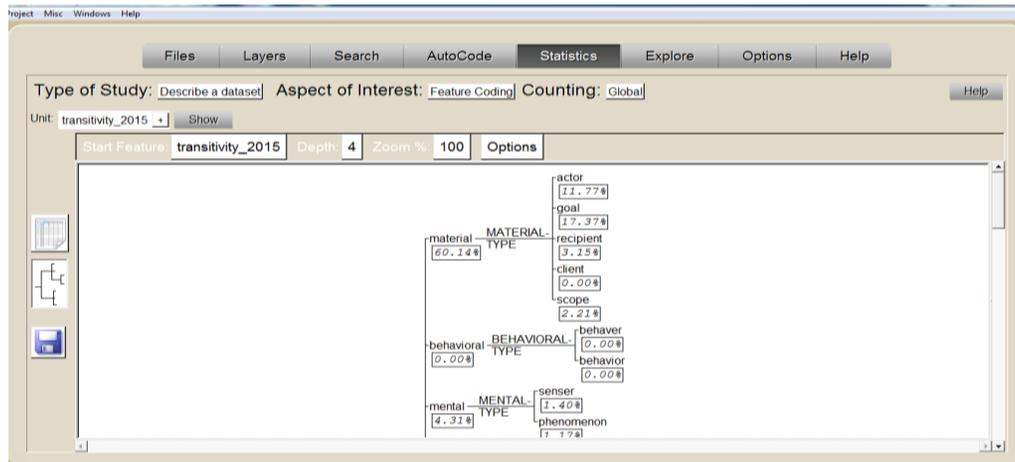


Figure 5. Network view of statistics of President JW's speech text

3.5 Data Analysis Technique

The information used in this study comes from President JW's speech texts, and it is intended to examine the patterns and roles of Participants, Processes, and Circumstances in his presidential speeches. The written records of President JW's addresses were gathered between 2015 and 2018. Transitivity analysis using a corpus tool involves the following procedures; President JW's speech texts are first tagged and then analyzed through the software. Next, the frequencies of process types are noted. Further, these are identified and categorized manually into each type of process. Following the categorization, the percentages are calculated. Finally, the segmentation of clauses is carried out and then the functions of participants and circumstances are assigned to these manually.

Further, in this study, the UAM Corpus Tool (Version 3.2) is used, which is a software program for lexical analysis. This corpus analysis tool, developed specifically by Donnel (2008) for the application of SFL in corpus studies, performs several functions, such as files, layers, search, auto code, statistics, etc. Data is saved in the UTF-8 encoded (.txt) format or as a text file after being processed by a corpus analysis tool.

Finally, the researcher re-examines the data in the data display by carefully evaluating and verifying the transitivity analysis. If the data is valid and verified, the researcher can conclude to answer the questions.

4. Findings and Discussion

In this section, findings and discussion of the transitivity analysis of transcriptions of President JW's speech text in 2015 and 2018 will be presented.

4.1 Findings

Analysis of the data reveals that the text of the JW President's speech text in 2015 is dominated by material processes. In addition to material processes, data also use relational, mental, verbal, and existential processes. Behavioral processes cannot be found in the data. Table 1 below summarizes the number of processes.

Table 1. Percentage of Transitivity Analysis in President JW's speech text in 2015

No	Processes	Number	Percentage
1	Material	516	60.14
2	Relational	155	18.07
3	Mental	37	4.31
4	Verbal	12	1.40
5	Existential	9	1.05
6	Behavioral	0	0
Total		729	84.97

As stated in Table 1 above, President JW tends to use the Material process type more than the other process types (60.14%). The Relational process ranks second with 18.07% and then the Mental process type with 4.31%. The three other types are: Verbal with 1.40%, Existential 1.05%, and Behavioral with 0%. It can be said that the Material process is the most dominant process found in the data analysis. The researcher found 516 occurrences of Material processes. This implies that, by using Material clauses, President JW strongly desires to emphasize real work or action work in his speech to produce something which is related to physical development or national development or which is related to human resources development. The second process mostly found is Relational processes. The researcher found 155 occurrences of Relational processes. President JW used Relational processes to mainly describe the relationship between ideas and results or really works. Relational processes are closely related to the connection or relationship with other groups. For example, the verbs *adalah*,

menjadi, and *memiliki* show the relationship between what is beyond us or President JW or within President JW, such as possession. Next, the researcher found 37 occurrences of Mental processes. President JW used Mental processes to encourage his audience to remember the program and policies the government has made for public importance. He also used Mental processes to remind his listeners of the message of former President Sukarno about state goals, which are not only for several years but forever. The fourth process mostly found is Verbal processes. There are 12 occurrences, which are used to show President JW’s statements regarding his policies, either the popular policies or the unpopular policies. Further, he also used Verbal processes to show his position and his power as the current president by calling for peace in the Middle East. There are also 9 Existential processes. They are used to emphasize that sensational issues exist and to show that there are consequences for people who easily accept or respond to the sensational issue. There are no Behavioral processes found in the text.

Table 2. Summary of the participants in President JW’s speech text in 2015

No	Participants	Number
1	Material:	
	Actor	101
	Goal	149
2	Mental:	
	Senser	12
	Phenomenon	10
3	Relational:	
	Token	5
	Value	7
	Carrier	6
4	Attribute	10
	Verbal:	
	Sayer	4
5	Verbiage	4
	Existential:	
	Existent	7

Table 2 above clearly depicts that the five processes bind their respective participants and label the participants based on the process that occurs. The participants that appeared the most were Actor (101) and Goal (149). The material process occurs in President JW’s speech text in 2015 as the participants as seen below,

- (1) Kita (Actor) juga dorong (Process: Material) pembangunan infrastruktur, ketahanan pangan, dan perlindungan sosial (Goal).
We (Actor) also push (Process: Material) infrastructure development, food security, and social protection (Goal)
- (2) Sejalan dengan nafas Nawacita, (Circ: Manner: Comparison) Pemerintah (Actor) saat ini (Circ: Loc: Time) terus (Circ: Extent: Frequency) mempercepat (Process: Material) pembangunan infrastruktur (Goal)
In line with Nawacita's breath, (Circ: Manner: Comparison) the government (Actor) at this time (Circ: Loc: Time) continues (Circ: Extent: Frequency) to accelerate (Process: Material) infrastructure development (Goal)

Table 3. Summary of circumstances in President JW’s speech text in 2015

No	Type of circumstance	Number
1	Location	32
2	Cause	29
3	Manner	25

Based on the findings of a transitivity analysis, all categories of circumstances are used in the speech text. The categories are Extent, Location, Manner, Cause, Contingency, Accompaniment, Role, Matter, and Angle. As stated in Table 3 above, the most dominants are Location (32 occurrences), Cause (29 occurrences), and Manner (25 occurrences). This means the Location that appears the most in the text indicates that President JW emphasizes the location or place in his speech. This is directly proportional to Jokowi's actions, which are to always travel to various regions in Indonesia to meet his people.

In the data, the examples of Circumstances location appear below,

- (1) Pemerintah (Actor) memberikan (Process: Material) akses bagi wartawan asing (Goal) untuk masuk dan meliput (Circ: Cause: Purpose) di Papua (Loc: Place)
The government (Actor) provides (Process: Material) access for foreign journalists (Goal) to enter and cover (Circ: Cause: Purpose) in Papua (Loc: Place)
- (2) Kita (Actor) bangun (Process: Material) jalan tol (Goal) di Sulawesi dan segera di Kalimantan dan Papua (Loc: Place).
We (Actor) build (Process: Material) toll roads (Goal) in Sulawesi and soon in Kalimantan and Papua (Loc: Place)

Table 4. Percentage of Transitivity Analysis in President JW’s speech text in 2018

No	Processes	Number	Percentage
1	Material	785	56.80
2	Relational	275	19.90
3	Mental	56	4.05
4	Verbal	6	0.43
5	Existential	23	1.66
6	Behavioral	0	0
Total		729	82.84

As stated in Table 4 above, President Joko Widodo tends to use the Material process type more than the other process types (56.80%). The Relational process ranks second with 19.90% and then the Mental process type with 4.05%. The three other types are: Verbal with 0.43%, Existential with 1.66%, and Behavioral with 0%. It can be said that the Material process is the most dominant process found in the data analysis. The researcher found 785 occurrences of Material processes. This implies that, by using Material clauses, President JW again wants to emphasize in his speech real work or action work like to produce something which is related to physical development or national development or which is related to human resources development. The second process mostly found is Relational processes. The researcher found 275 occurrences of Relational processes. President JW used Relational processes to mainly describe the relation between ideas and results or really works. Relational processes are closely related to the connection or relation with other groups. For example, the verbs *adalah*, *menjadi*, and *memiliki*. This shows the relation between what is beyond us or President JW or within President JW such as the possession. Next, the researcher found 56 occurrences of Mental processes. President JW used Mental processes to bring his audience to remember the program and policies the government has made for public importance. He also used Mental processes to remind his audience that the message of former President Sukarno about the state goal is not only for several years but forever. The fourth process mostly found is the Existential process. There are 23 occurrences, which are used to emphasize that sensational issues exist and to show that there are consequences for the people who are easy to accept or respond to the sensational issue. There are also 6 Verbal processes that are used to show President JW’s statements regarding his policies, either the popular policies or the unpopular policies. Further, he also used the Verbal process to show his position and his power as the current president by calling for peace in the Middle East. There are no Behavioral processes found in the text.

Table 5. Summary of the participants in President JW’s speech text in 2018

No	Participants	Number
1	Material:	
	Actor	171
2	Goal	215
	Mental:	
3	Senser	17
	Phenomenon	17
4	Relational:	
	Token	5
	Value	0
	Carrier	7
5	Attribute	30
	Verbal:	
	Sayer	2
6	Verbiage	2
	Existential:	
7	Existent	11

Table 5 above also clearly depicts that the five processes bind their respective participants and label the participants based on the process that occurs. The participants that appeared the most were Actor (171) and Goal (215). The material process occurs in President JW’s speech text in 2018 as the participants as seen below,

- (1) Pemerintah (Actor) mempercepat (Process: Material) pembangunan sumber daya manusia(Goal).
Government (Actor) accelerates (Process: Material) human resource development (Goal).
- (2) Kita (Actor) membangun (Process: Material) jalan trans Sumatera, trans Papua yang membuka kesempatan-kesempatan baru bagi rakyat (Goal).

We (Actor) build (Process: Material) the trans Sumatra, trans Papua roads which open up new opportunities for the people (Goal).

Table 6. Summary of circumstances in President JW’s speech text in 2018

No	Type of circumstance	Number
1	Cause	60
2	Manner	55
3	Location	50

Based on the results of the transitivity analysis of President JW’s speech text in 2018 above, the speech text uses all categories of circumstances as well. The categories are Extent, Location, Manner, Cause, Contingency, Accompaniment, Role, Matter, and Angle. As stated in Table 6 above, the most dominant are Cause (60 occurrences), Manner (55 occurrences), and Location (50 occurrences). Location is still one of the most dominant circumstance features in the text. This indicates that President JW is still consistent in approaching his people to meet them directly as it has become his characteristic to visit regions in Indonesia to meet his people even when he was a mayor of Surakarta and was a governor of Jakarta province.

In the data, the examples of Circumstances location appear below,

- (1) Selama empat tahun ini (Duration) infrastruktur (Goal) dibangun (Process: Material) secara massif dan merata (Quality) di seluruh peoloso tanah air (Loc: Place).

During these four years (Duration) infrastructure (Goal) was built (Process: Material) massively and evenly (Quality) in all corners of the country (Loc: Place).

- (2) Pemerintah (Actor) membuka (Process: Material) Balai Latihan Kerja (Goal) di berbagai Pondok Pesantren (Loc: Place) sebagai bagian peningkatan keahlian SDM Indonesia (Product).

The Government (Actor) opened (Process: Material) Vocational Training Centers (Goal) at various Islamic Boarding Schools (Loc: Place) as part of increasing the skills of Indonesian HR (Product).

4.2 Discussion

M.A.K Halliday (2004), a linguist, discourse analyst, as well as a theorist, provided the framework of the transitivity system which consists of process, participant, and circumstance.

It has been discovered that the text of President JW’s 2015 speech consists of 843 segments and 2659 words in segments. It has also been found that President JW tends to use the Material process type more than the other process types (60.14%). The Relational process ranks second with 18.07% and then the Mental process type with 4.31%. The three other types are: Verbal with 1.40%, Existential 1.05%, and Behavioral with 0%. It can be said that the Material process is the most dominant process found in the data analysis. The researcher found 516 occurrences of Material processes. This implies that, by using Material clauses, President JW strongly desires to emphasize real work or action work in his speech to produce something which is related to physical development or national development or which is related to human resources. An example of it is provided below.

Table 7. Example of Data (Material Process)

Kita (We)	Juga (also)	Dorong (push)	pembangunan infrastruktur, ketahanan pangan, dan perlindungan sosial (infrastructure development, food security, and social protection)
Participant I: Actor		Process: Material	Participant II: Goal

In the example clause in Table 7, dorong (push) refers to a process or action performed by an actor or participant I *kita* (we), and the clause indicates that an actor completes an action or activity. In addition, clauses share a structure, a process element introduced by a participant. In terms of circumstance, the most dominant are Location (32 occurrences), Cause (29 occurrences), and Manner (25 occurrences). The location appears the most in the text, meaning that the text indicates that President JW emphasizes the location or place in his speech. This is directly proportional to Jokowi’s actions, which are to always travel to regions in Indonesia to meet his people.

While in President JW’s speech text in 2018, it was found that its text consists of 1370 segments and 4387 words in segments. Further, President JW tends to use the Material process type more than the other process types (56.80%). The Relational process ranks second with 19.90% and then the Mental process type with 4.05%. The three other types are: Verbal with 0.43%, Existential with 1.66%, and Behavioral with 0%. It can be said that the material process is the most dominant process found in the data analysis. The researcher found 785 occurrences of Material processes. This implies that, by using material clauses, President JW again wants to emphasize in his speech real work or action work like to produce something which is related to physical development or national development or which is related to human resources development.

An example of it is provided below.

Table 8. Example of Data (Material Process)

Pemerintah (Government)	Mempercepat (accelerates)	pembangunan sumber daya manusia (human resources development)	sebagai prioritas utama pembangunan nasional (as a national development priority)
Participant I: Actor		Process: Material	Participant II: Goal
			Circumstance: Cause: Behalf

In the example clause found in Table 8, *mempercepat* (accelerate) refers to the process or action done by the Actor or Participant I *pemerintah* (government) - or the clause indicates the Actor completing an action or activity. Furthermore, the clause shares a structure, namely the element of the process brought on by a participant. In addition, the Material process describes activities or creations of which

realization has already taken place. Based on this, the government, in this case, President Jokowi, implicitly explains that he would accelerate the development of human resources and cause Indonesia to become one of the best countries in the world with good human resources.

The categories of circumstance are as follows: role, matter, angle, accompaniment, extent, location, manner, cause, and contingency. The most dominant are cause (60 occurrences), manner (55 occurrences), and location (50 occurrences). Location is still one of the most dominant circumstance features in the text. This indicates that President JW is still consistent in approaching his people to meet them directly as it has become characteristic of him to visit regions in Indonesia to meet his people even when he was a mayor in Surakarta and was a governor in the province of Jakarta.

The results of this study are consistent with those of Faura's (2015) study, which focused on the transitivity system and employed the same theory—Halliday's Systemic Functional Linguistics theory. The result of the data analysis showed that in 58 clauses, the Material process has the highest percentage because Joko Widodo has a high working performance and his priority is leading Indonesia. The Mental process has the lowest percentage because Joko Widodo did not give too many promises to the Indonesian people before he was elected as President. The Circumstance of Manner has the highest percentage because Joko Widodo wants to show how the action is progressing by giving solutions, while the lowest percentage is the Circumstance of Location. However, other research conducted by Harwiyati (2016) shows that the Relational process has the highest percentage, even though the previous research and the current research both use the same Systemic Functional Linguistics theory through a transitivity system. The results show that the most dominant process is the relational process, with 38.5%. Mental processes are second with 28.2%. The material processes appear as the third process with 17.9%. Fourth place is the verbal processes with 11.5%. Behavioral processes are fifth with 2.5% and existential processes are last with 1.3%.

5. Conclusion

In this article, it has been attempted to discover the transitivity system from a process perspective. In the text of President Jokowi's 2015 speech, material process types appear more frequently than other process types. In terms of Circumstance, the most dominant is Location (32 occurrences), Cause (29 occurrences), and Manner (25 occurrences), and in terms of the participant, the participants that appeared the most were Actor and Goal. While in 2018, in terms of process, Material process types occur more than the other process types. In terms of Circumstance, the most dominant are Cause (60 occurrences), Manner (55 occurrences), and Location (50 occurrences). Location is again one of the most dominant circumstance features in the text, - Again, in terms of Participants, the participants that appeared the most were also Actors and Goals. In previous studies, research on transitivity system discussed the material process has the highest percentage as has been done by (Faura, 2015), or what has been done by (Harwiyati, 2016). Further, the use of recent technology, namely the UAM Corpus Tool, is a breakthrough where a linguistic theory or Systemic Functional Linguistics theory is combined with computer analysis. In short, linguistic analysis based on SFL together with the UAM Corpus Tool represents an innovative method that can also be used to dissect political speech. However, the size of the data used in this study, especially in the transitivity examination using the UAM Corpus Tool, represents the spectrum of the transitivity system which is sufficient for transitivity testing in the UAM Corpus Tool as a tool, not as an approach. Larger amounts of data are needed for corpus studies as an approach.

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Authors contributions

T. Silvana Sinar was responsible for drafting the manuscript. Faido Marudut Pardamean Simanjuntak was responsible for data collection, and revising the manuscript. Eddy Setia was responsible for analysis. T. Thyryhaya Zein was responsible for study design. All authors have read, provided valuable advice, and approved the final manuscript.

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