TOPICALIZATION SHIFT IN THE BAHASA INDONESIA SUBTITLE OF STEPHEN HAWKING'S GENERAL LECTURE

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Abstract. One of the most important aspect that must be upheld in translation is readability for the audience of target language when watching a subtitled video. Due to a difference in culture and language systems, the translation may not exactly match the text or utterances of the source language word-for-word. One of the differences that are commonly found in subtitling is the difference of topicalization in English and Bahasa Indonesia. Departing from this problem, the aim of this research is to investigate the changes in topicalization from English to Bahasa Indonesia in subtitling. The method used descriptive-qualitative with a comparative approach. In addition, Observation and Literature Review techniques were used as primary and secondary data collection techniques. The case study for this research is a video of general lecture by Stephen Hawking. The results found that there are three texts that have different topicalization from their source language. These changes were made based on the guidelines of subtitling, which influenced the decision to change the topical element in the clause. In conclusion, topicalization is used to maintain and adapt the meaning contained in English and to keep the number of characters in each line from exceeding the limit on the number of characters. It is hoped that this research can be a reference for further research, as well as increase awareness that language shift is common in translation as a means to optimize the conveyance of meaning.

Keywords: Linguistics, Translation, Subtitling, Functional Grammar

1. Introduction

Due to the popularity of video streaming platforms as an effect of globalization and the pandemic, subtitles have become a staple for the film industry. The function of subtitling in general is to provide written representations of dialogues in films and television shows. In addition, it can also be in the form of written translations of foreign language conversations or written depictions of dialogues in the same language, with or without additional information

to complete the meaning [1]. However, it is not a commonly known fact that there are guidelines for creating a subtitle, ranging from technical matters such as font size or the placement of subtitle text, to content matters such as the limit on the maximum number of characters shown per duration. These rules have an influence on the final result of the subtitle text and could potentially raise questions for bilingual or multilingual speakers who are not familiar with the rules of subtitles and translation. For example, translators can change the topicalization of an utterance to maintain the character count and readability. In other instances, the shift can happen naturally due to cultural and language system such as the word boy to anak laki-laki (literally means "male-child", from Subject only to Adjective+Subject). Topicalization has a role in presenting the subject or the actor of a verb [2], so any changes could be easily noticed by the audience who understands both the language of the dialogue and the language of the subtitle. This phenomenon of topicalization change is commonly referred to as topicalization shift, and is part of the language shift phenomenon in translation.

There is multiple research that discusses language shifts. Bouchard discusses language shift in Forro to Portuguese and finds that ideology is an important factor driving language shift in Forro [3]. Mirvahedi also discussed language shift, where he examines the phenomenon of language shift in Malay families in Singapore [4]. In Wardana et al.'s research into the factors that triggered the language shift from Sumbawan to Bahasa Indonesia, he stated that ideology had a big influence as the trigger for language shift [5]. Jhon and Werhoru also researched the phenomenon of language shift. Their study case is the Indo-Chinese community in Jakarta, and they found that events, regulations, and geolocation influence language shifts in the community [6]. Other research regarding language shift was also carried out by Cohn and Abtahian, who examined language shift in "major" languages in Indonesia and stated that even the major languages are not "immune" to language shift [7]. In contrast to the previous studies, this study examines topicalization shift as a part of the language shift phenomenon in subtitling.

Based on the explanation and problem, this study aims to investigate the change of topicalization from English to Indonesian in the case of subtitles. The initial hypothesis is that topicalization can improve the readability in subtitling. The method used in this study is a qualitative method with a descriptive-comparative approach. It is hoped that this research can be a reference for further research, raise awareness that language shift is very common in translation to optimize the conveyance of meaning, as well as produce subtitles that have good readability for Indonesian viewers.

2. Method

To achieve the research objectives, a qualitative method was implemented through a descriptive-comparative approach. Therefore, this study is not limited to describing the analysis results only but also comparing the two results [8]. Primary data collection was carried out through observation techniques. The case study in this research is subtitle texts that have a different clause structure than the English transcript and speech, but this research is limited to differences in topicalization only. In addition, secondary data collection was carried out through a literature review by using the book "Systemic Functional Linguistics" by Halliday and Matthiesen as a reference in the main analysis technique of the study, namely on the subject of theme, rheme, and topicalization. On the subtitle side, the guidelines for subtitling refer to the book "Audiovisual Translation: Subtitling" by Jorge Díaz Cintas and Aline Remael. In addition, reviews of previous research articles are also used to gain insights regarding subtitling and functional linguistics.

This data source was chosen because in a text, the subject of the verb is one of the important elements in a clause. Any changes in the subject, either in the source language or in the translation, will modify the sentence as a whole and potentially modify the original meaning. These changes may also cause listeners who are familiar with source language audio and target language subtitles to question the differences. In this case, the main objective of a public lecture—to provide educative information to the audience—was not conveyed properly because of the distraction in the form of the difference in the subject. Especially in the educational context, where information should be conveyed effectively and easily understood by the audience.

The first stage in this research is data collection. It is done by looking at the recording of the case study and identifying the cases. These cases are then analyzed using the theory of theme and rheme, which refers to Halliday and Matthiesen's book; Introduction to Systemic Functional Linguistics. In addition, the subtitling elements of these cases were also analyzed based on the guidelines. After the analysis of the cases, the results were compared between the English transcripts and the Indonesian subtitles and conclusions were drawn from the results of the analysis and comparison.

3. Results and Discussion

After the data collection phase, it was found that there were three cases where the structure of the clause conveyance was different from the English transcript. The cases are shown in Table 1.

Table 1. Cases Found

No	Source Language	Target Language
1	If we extrapolate back, find they must have all been on top of each other about 15 billion years ago	*Jika kita menghitung mundur, kita akan menemukan bahwa kita semua saling bertindihan sekitar 15 miliar tahun lalu*
2	The universe can spontaneously create itself out of nothing	*Alam semesta dapat terjadi dengan tiba-tiba dari ketiadaan*
3	The alternative is that civilizations don't last very long, but destroy themselves	*Kemungkinan lain adalah peradaban itu tidak bertahan lama, dan hancur dengan sendirinya*

These three cases have in common that there is a topicalization shift, in which the conveyance of one meaning is carried out differently. Theme analysis for the first case can be seen in Tables 2 and 3, the second case in Table 4 and 5, and the third case in Table 6 and 7.

Several factors can contribute to differences in how meanings are delivered. Translators must adhere to guidelines for both spatial and temporal dimension when creating subtitles [9]. Furthermore, the translator must pay attention to specific client requests, such as using a period at the end of each utterance.

Below are the guidelines that regulates the spatial dimension in subtitling:
• Maximum number of lines and its position on the screen
• Font type and number of characters per line
• Usage of the number of lines

- Text alignment (align right, left, center, or justify)

On the other hand, temporal dimension regulates:
- Duration and appearance of subtitles
- Synchronization
- Multiple characters
- Scene changes
- Delay between subtitles
- The decision to use multiple lines
- Timestamp
- Reading time
- Six second rule
- DVD read speed

To maintain a good readability and comfort, Cintas and Remael also mention that there are guidelines in determining the number of characters in one line [9]. 1 second in a video has a total of 24 frames, while 1 foot has a maximum number of 16 frames and maximum number of 10 characters. To make it easier to understand, below is the principle for the conversion of seconds, feet, frames, and characters:
- 1 Second = 24 Frames
- 16 Frames = 1 Foot = 10 Max characters

In addition to the guidelines in subtitling, a translator has a mission to convey the same meaning and feeling from the source language to the target language. Various translation strategies can be implemented to meet this goal. Baker in Owji [10] states that there are at least eight strategies in translation, namely:
- Translation by a more general word
- Translation by a more neutral/ less expressive word
- Translation by cultural substitution
- Translation using a loan word or loan word plus explanation
- Translation by paraphrase using a related word
- Translation by paraphrase using unrelated words
- Translation by omission
- Translation by illustration

Table 2. Topicalization analysis of the first case in the English transcript

If	we	extrapolate back,	we	find	they	must have all been on top of each other about 15 billion years ago
Rheme	Topical Theme	Rheme				
			Topical Theme	Rheme		
					Topical Theme	Rheme

Table 3. Topicalization analysis of the first case in the Bahasa Indonesia subtitle

Jika	kita	menghitung mundur,	kita	akan menemukan bahwa	kita semua	saling bertindihan sekitar 15 miliar tahun lalu
Rheme	Topical Theme	Rheme				
			Topical Theme	Rheme		
					Topical Theme	Rheme

Table 4. Subtitle analysis of the first case

Audio Duration	Subtitle Duration	Subtitle Text
0:01:06.329-0:01:08.479 2.150 seconds	0:01:06.315-0:01:08.295 1.980 seconds 47 frames total 2 feet and 15 frames 29 characters max	Jika kita menghitung mundur, (28 characters)
0:00:03.586 seconds	0:00:03.975 seconds 95 frames total 6 feet 59 characters max	Kita akan menemukan bahwa kita semua saling bertindihan (55 characters)
0:00:02.601 seconds	0:00:01.962 seconds 47 frames total 3 feet 29 characters max	sekitar 15 miliar tahun lalu (29 characters)

Table 2 and 3 show that topical with the word "they" changes to topical with the word "kita" (we) in the subtitles. In this clause, the word "kita" and "they" refer to humans and galaxies in the universe, respectively. This point is made clear in the previous three sentences, which state that all galaxies are stacked on top of one another. On the subtitle side, this subtitle has no problem as it adheres to the word count rule and the duration of subtitle also in accordance to the audio duration

The translator used the "Translation by a More General Word" strategy. In this case, the translator must pay attention to the readability of the text so that the topicalization is maintained in the form of the word "kita" (we). This is because the point of view is shifted from "we" which is a first-person view, to "they" which is a third-person view. This means the reader has to adjust to a new point of view, and it could affect the flow of information and readability. In terms of idea, the original "they" exclusively refers to the galaxies in which there are human

beings, while "we" which also refers to galaxies and mankind, but in a more inclusive impression. This was done to shorten the information and maintain the first-person view. This shortening also has another effect, where the use of the word "we" has the added impression that the audience is also more involved in the phenomenon, making it have the potential to have more emotional effects on the audience [11].

Table 5. Topicalization analysis of the second case in the English transcript

The	universe	can spontaneously create	itself	out of nothing
Structural	Topical	Rheme		
Theme				
			Topical	Rheme
			Theme	

Table 6. Topicalization analysis of the first case in Bahasa Indonesia subtitle

Alam semesta	*dapat terjadi dengan tiba-tiba dari ketiadaan*
Topical	Rheme
Theme	

Table 7. Subtitle analysis of the second case

Durasi Audio	Durasi Takarir	Takarir
0:00:03.928 seconds	0:00:03.960 seconds 95 frames total 6 feet 59 characters max	Alam semesta dapat terjadi dengan tiba-tiba dari ketiadaan (58 characters)

In Table 4 and 5, topicalization shift occurs when the Universe acts as an actor in the utterance but appears as the "goal" of creation. The literal idea of the clause is that the Universe can create the Universe itself without needing anything whatsoever. However, there is no object unit in the subtitle text. The ability of the Universe to create itself is changed to "happens suddenly". Thus, the subtitle reads that the Universe is a spontaneous phenomenon as a by-product of an event, but the element of what or who created the universe is not shown explicitly.

In the second case, the 'Translation by a More General Word' strategy is used in the translation of the clause. This is due to the ellipsis of "Itself" (the Universe), which results in the difference of structure between the Source Language and the Target Language, from SVOA to SVA. The simplification of the clause "create itself out of nothing" to "happen suddenly out of nothing" can also be investigated as a technique for controlling the flow of information and readers. In terms of subtitles, the second case meets the word limit per the duration of the subtitle, indicating that the translation strategy was successful in summarizing the message conveyed so that it could be delivered in that time frame.

Table 8. Topical analysis of the third case on the English transcript

The	alternative	is that	civilizations	don't last very long, but	destroy themselves
Structural Topical Theme		Rheme			
			Topical Theme	Rheme	

Table 9. Topical analysis of the third case on the Bahasa Indonesia subtitles

Kemungkinan lain	*adalah*	*peradaban*	*itu tidak bertahan lama, dan*	*hancur dengan sendirinya*
Topical Theme	Rheme			
		Topical Theme	Rheme	

Table 10. Subtitle analysis of the third case

Audio Duration	Subtitle Duration	Subtitle Text
0:00:03.928 seconds	0:00:03.586 detik 167 frames total 10 feet and 7 frames 104 characters max	*Alam semesta dapat terjadi dengan tiba-tiba dari ketiadaan* (58 characters)
0:00:02.253 seconds	0:00:00.972 detik 23 frames total 1 foot and 7 frames 14 characters max	*dan hancur dengan sendirinya* (28 characters)

In the third case, the missing element appears in the "*hancur dengan sendirinya*" phrase, where it was "destroys themselves" in the Source language. The phrase "*hancur dengan sendirinya*" means "naturally perish," so there is no intention or prediction that the "civilization" will destroy itself. On the other hand, "destroy themselves" in the transcript means "to self-destruct," implying that there is an intention or, at the very least, that the 'civilization' itself will bring about its demise.

In terms of subtitles, the first clause meets the character limit based on the duration that the subtitle appears, but the second text does not. Subtitling guidelines state that one foot of a video can only contain 10 characters. Furthermore, it is also stated that the appearance of the subtitle text has a minimum duration of one second [9], whereas the second clause of the subtitle case is less than one second, albeit by a few milliseconds. The subtitle for the second clause can be fixed by increasing the duration to match the duration of the audio.

In this case, the translator employs the "Translation by a More General Word" strategy once again by shortening the clause "destroy themselves" to "self-destruct." This simplification, like the reasoning in the second case, can be attributed to maintaining readability by accelerating the flow of information.

4. Conclusion

In conclusion, topicalization shift improves the readability of Bahasa Indonesia subtitles on Stephen Hawking's general lecture. Translators can employ a variety of strategies in creating subtitles in order to maintain readability in the Target Language, as well as adherence to translation rules. As a result, the translation in the Target Language text would not always be exactly the same word-for-word as the translation in the Source Language text, and this is fine as long as the meaning conveyed in the Source Language is maintained. It is hoped that this research can serve as a reference for future research, as well as raise awareness of the fact that Language Shift is common in translation in order to optimize meaning conveyance.

Acknowledgement

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