

A Grammatical Error Analysis Produced by Google Translate

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Abstract. Grammar has an important role to build a communication process, it is used to make a clear statement about the time of a verb occurs. This research is aimed to find out grammatical errors in terms of tense, active, and passive voice abstracts in translation of abstracts from Indonesian language to English produced by Google Translate. Descriptive qualitative method was used as the research method in this research. The population of this study was twenty abstracts that were taken from the University of Bengkulu's Repository. The instruments that was used to collect the data were documentations and checklists. Keshavarz's (1999) theory was applied to analyze the data. From the data analysis it was found that tense was the most dominant error produced by Google Translate. Meanwhile, the active and passive voices error were rarely found. It can be inferred that as a tool, Google Translate cannot identify the tense of the sentences being translated. This is possible because tenses are closely related to the context of which the time a verb in a sentence happens, which can only be analyzed and understood by humans.

Keywords: google translate; grammatical errors; translation

A. INTRODUCTION

It cannot be disputed that in this globalization era, translation is a basic need of communication in basically everywhere (Venuti, 2013). As Swarniti (2019) said, one way of understanding languages in the world is through translation. With such importance, it puts great burden in translators' shoulder (Baer, 2015). Being of the most important member of the "Google family", Google Translate is arguably the easiest and the most accessible tools to help users meet their translation need (Medvedev, 2106). Google Translate is a statistic based translation-tool, which

means the system calculates probabilities of various translation of a phrase being correct, rather than aiming for word-for-word translation (Groves & Mundt, 2015).

Not only by general public, but also as Sitorus (2020) stated, Google Translate has become very popular among academics because it can facilitate the translation process, for example from English text into Indonesia language. Medvedev (2016) mentioned some advantages of Google Translate such as free access, instant and quick result, and it is also being provided in many languages. Groves & Mundt (2015) also stated that one of the biggest appeal of Google Translate is that it is a free web-based translation tool which available on mobile while providing various languages to translate. This clearly shows why Google Translates is in great demand nowadays.

However, many of the advantages offered by Google Translate are also accompanied by some drawbacks. It is undeniable that the quality of the translation is considered far from perfect. This may also be due to the fact that there are many things that must be considered in the translation process, such as the different forms of phrases (Juliarta, 2021) and nominal suffixes (Ade, Maisarah, & Erniyati, 2022) in the source language compared to the target language. As a machine, Google Translate could not possibly work the same way as human translation does. If even a human could not possibly understand the intention of the original author (Kroeger, 2022) a machine such as Google Translate must be worse. Google Translate also could not possibly strive for a good translation result, which are clarity, accuracy, naturalness, and acceptability (Barnwell, 2020). Meanwhile, according to Medvedev (2016), Google Translate cannot handle long sentences. Furthermore, Santoso (2010) stated that it is unable to translate idioms or figurative languages (as cited in Chandra and Yuyun, 2018).

While Patil & Davies (2014) said that some of Google Translate's results are just completely wrong.

Consequently, an error analysis is recommended to be done to evaluate the quality of Google Translate's result, which often called as Machine Translation or MT. Error analysis is very important to understand the mistake and improve upon it (Richard, 2019). According to Keshavarz's (1999), there were seven types of errors that can be analysed from a translation work. These are lexicosemantic, tense, errors in the use of groups of verbs, incorrect use of prepositions, errors in distribution, word order errors, and active and passive voices.

There were various text genres that have been studied for its translation's error, such as narrative text, descriptive text, and recount text abstract. While abstract is a brief summary of a scientific paper that contains important information for readers. As mentioned by Sujarwati & Hamidah (2022) abstracts of academic writings have an important role to attract the attention of readers. By reading the abstract, the readers can decide whether or not to continue reading the whole pages of the articles. Gambescia (2013) also stated that the abstract becomes a prominent part of academic writing such as a thesis. Meanwhile, in writing the thesis abstract, students at the University of Bengkulu are obligated to provide it in both English and Indonesia language. However as not all students are proficient enough to translate their own abstract to English, they look for an alternative, such as using Google Translate.

There are several previous studies regarding this field of research. Alasta and Sujarwati (2021) conducted research that aimed to investigate the lexical errors in translating "*Putri Serindang Bulan*" produced by Google Translate. This study found that the highest lexical error in translating "*Putri Serindang Bulan*" to English was incorrect word while the least lexical error was unknown word.

Furthermore, Dayama (2015), analyzed types of errors in the English translation of Indonesian folklore. The result of the analysis showed that there were four types of errors found in the English translation of Indonesian folklore produced by Google Translate. The frequent occurrences of errors were incorrect words which appeared 209 times, followed by missing words which appeared 139 times, word order appeared 34 times, and the last one was unknown words which appeared only 4 times. According to Dayama (2015), concluded that Google Translate is still not able to translate Indonesian folklore into English because it produces many translation errors, especially related to word selection which is very important in translation activities. Based on some previous researches, it can be seen that they are mostly focus on texts such as folklore, descriptive text, narrative, etc. However, this study focuses on Indonesia language to English abstracts translation errors in terms of tense, active, and passive voice.

B. RESEARCH METHOD

Descriptive qualitative was used as the research design of this study. Ary, Jacobs, Sorensen, Irvine, & Walker (2019) in their book stated that the main trait of qualitative research is the method it used to collect the data, and also the means to analyze it. Also, they continued by mentioning Lincoln & Guba (1985), that human is highly involved in the research because qualitative in heart, studies about humans. Their experience and situation.

The main focus of this study is to analyze the grammatical errors which were produced in translating Indonesian-English abstracts by Google Translate. A co-rater was also asked to enhance the accuracy of the findings and to convince the readers. The aim was to see whether the results of the co-rater analysis are in accordance with the results conducted by the researcher.

The population of this research was the abstract of various articles taken from the University of Bengkulu Repository, 20 of which were chosen as the sample. Conversely, the source of the data was the result of the sample abstract's translation by Google Translate. Meanwhile, checklists were used as an instrument to put, classify, identify and analyze the data.

To analyse the data, the researchers use some steps as follow; the first step was to translate the abstracts with Google Translate; then the result was analyzed for whether or not it produced a grammatical error; then the researchers classified the findings into their respective types of translation errors; In the last step, the frequency of different types of translation errors found in five abstracts produced by Google translate was calculated. As a guideline for the analysis, Keshavarz's (1999) theory of error analysis was used. According to Keshavarz, there were six types of error analysis. These are lexicosemantic, tense, preposition, word order, distribution, and use of verb groups, active and passive voice. However, the study only focuses on tense, active, and passive voice.

C. FINDINGS AND DISCUSSION

Result

Based on the data found, the most frequent types of translation errors are summarized in Table 1.

No	Types of grammatical error	Frequency	Percentage (%)
1.	Tense	48	80%
2.	Active voice and passive voice	12	20%
	Total	60	100%

Table 1 showed the grammatical error found in Indonesian-English abstracts translated by Google Translate. It can be seen that tense error was the most

frequent grammatical error found with 48 data (80%) while active and passive voice error only occurred within 12 data (20%). A detailed explanation of grammatical mistakes in the translation Indonesian-English abstracts can be seen in the following explanations.

Tense

This type of grammatical error was the most frequent error found in Indonesian-English abstracts translated by Google Translate. It was shown in the table that the number of translation errors of tense appeared 48 times (80%) in Indonesian-English abstracts translation. An example of grammatical error in terms of tense can be seen below:

Extract 1

Source language: *Metode penelitian yang di gunakan adalah metode kualitatif deskriptif analisis.*

Target language: *The research method uses descriptive qualitative analysis method. Article 3*

Extract 1 of grammatical error in terms of tense was taken from the sampled abstracts. As pointed out above, in writing abstracts the use of past tense is the type of tense that is most widely used. However, in Indonesian language, there is no tense. This is a problem because in English, tense has a substantial role in emphasizing the order of an event. The verb “uses” in the example of Google translate text should have been “used” due to the fact the research method had been carried out in the past.

Extract 2

Source Language: *Metode yang digunakan di penelitian ini adalah quasi eksperiment.*

Target Language: *The method used in this research is quasi-experimental. Article 2*

Extract 2 is another example of grammatical error in terms of tense. In writing abstracts, the use of past tense is the type of tense that is most frequently used. However, in Indonesian language, there is no tense but in English, tense has a

substantial role in emphasizing the order of an event. The verb “is” in the example of Google translate text should have been “was” because the research method had been carried out in the past.

Extract 3

Source language: *Populasi dalam penelitian ini semua siswa kelas XII SMK Negeri 2 Kota Bengkulu yang berjumlah 374 siswa.*

Target language: *The population in this study **are** all students of class XII SMK Negeri 2 Bengkulu City, totaling 374 students. Article 4*

Extract 3 is another example of another grammatical errors in terms of tense. In writing abstracts, the use of past tense is the type of tense that is most frequently used. However, in Indonesian language, there is no tense but in English, tense has a substantial role in emphasizing the order of an event. The verb “are” in the example of Google translate text should had been “were”.

Active and Passive Voice

This type of grammatical error was the most frequent error found in Indonesian-English abstracts translated by Google Translate. Table 1 showed that the number of translation errors of the active and passive voice appeared 12 times (20%) in Indonesian language-English abstracts translation. An example of grammatical error in terms of active and passive voice can be seen below:

Extract 4

Source language: *Kemudian hasil wawancara tersebut disesuaikan dengan teori dan observasi untuk menjadi suatu draft model yang akan divalidasi oleh ahli.*

Target language: *Then the results of the interviews were adjusted with the theory and the observations to become a draft model that **will validate** by experts.*

Extract 4 of grammatical errors in terms of active and passive voice was taken from one of the abstracts. Based on the sentence above, it can be seen that Google Translate translated the source text in a form of active voice while the sentence structure of the source text was in the form of passive voice. The words “will validate” in the example above should have been “would be validated” because

this sentence was a passive voice and must use the third version of verb “validate” and must add the auxiliary verb "be" and “will” should change to "would".

Extract 5

Source language: *Studi pustaka digunakan untuk mengumpulkan data*

Target language: *A library research used to collect the data. Article 3*

Extract 5 is another example of grammatical errors in terms of active and passive voice. Based on the sentence of the target language above, it can be seen that Google Translate translated the source text in a form of active voice while the sentence structure of the source text was in the form of passive voice. The words “used” in the example above should have been “was used”. Therefore, the auxiliary verb "was" must be added before the verb “used”.

Extract 6

Source language: *Angket digunakan untuk mengetahui hubungan persepsi siswa terhadap layanan konseling perorangan dengan minat belajar siswa.*

Target language: *Questionnaires was used to determine the relationship between students' perceptions of individual counseling services and students' interest in learning. Article 5*

Extract 6 of grammatical errors in terms of active and passive voice was taken from of the sample abstracts. Based on the sentence of the target language above, it can be seen that “was” in the example above should have been “were”.

Inter-Rater Reliability

In this research, to ensure the accuracy of findings, a co-rater was asked. The co-rater was asked to analyze two abstracts which were chosen randomly by the researcher. Abstracts 3 and 5 were chosen as the sample of the study. The following is the difference in the results of the flouting maxim between the researcher and the co-rater.

Table 2. The result of Grammatical Error between Researcher and Co-Rater

Types of grammatical error	Number of grammatical errors		Score
	Researcher	Co-Rater	
Tense	6	6	1
Active and passive voice	2	2	1
Average		1	

Table 2 shows that there was no significant difference between the researcher and co-rater in the analysis of grammatical errors in Indonesian language-English abstracts translated by Google translate. Based on the table, the average result was 1. From the data and the explanation above, it can be concluded that the researcher's analysis and the co-rater are similar.

Discussion

The findings showed that out of two different types of grammatical errors, the types of grammatical errors found in Indonesian-English abstract translation by Google translate were tense, and active and passive voice error. Tense is the most dominant error in Indonesian language-English abstract translation by Google translate. Then, the active and passive voice became the second most dominant in Indonesian-English abstracts translated by Google Translate.

Furthermore, these findings are also in line with the result coming out from Qamariah, Wahyuni & Meliana (2020) who found that the most frequent grammatical error found in student's writing at the second-grade students of SMK-SMTI Banda Aceh were grammatical errors in using verbs and tenses. According to Qamariah, Wahyuni & Meliana (2020), the errors were caused due to the fact that the students had not mastered the formula for using the tenses.

The translation error in the data analysis results in the Indonesian language to English abstract translation is probably caused by the inability of the machine, in this case, Google Translate to understand the context of the source text as a whole. The use of errors is caused by the inability of Google Translate in this context in

the abstract the tense used is present tense and past tense. In the data, Google Translate only translates the source language without knowing the time specifications of the source language. Therefore, it can be concluded that the grammatical errors in the tense, active and passive voice found in the data analysis results are caused by the inability of Google Translate in determining the proper grammar used in the target text.

D. CONCLUSION AND SUGGESTION

Conclusion

Based on the research findings and discussion, several conclusions can be drawn as follows: out of the two types of grammatical errors in Indonesian-English abstract translation by Google translate, tense became the most dominant. The result of the analysis shows that there are 60 grammatical errors, namely tense and active and passive voice obtained from Indonesian-English abstracts by Google translate. The most common errors found were tense with 48 data, (80%), and the last one is the active and passive voice with 12 data (20%). It can be inferred that as a tool, Google Translate can not identify the tense of the sentences being translated. This is possible because tenses are closely related to the context of the sentence itself that can only be analyzed and understood by humans.

Suggestion

Based on the limitation of the study, which is focused on the grammatical error in terms of tense, active, and passive voice in Indonesian-English abstract by Google translate. It is suggested that further studies analyze other objects such as novels, textbooks, newspapers, songs, etc. It is important to know whether the results of this study are the same or not if the objects used are different.

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