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Suitability and Accuracy of Memsource in Translating Articles Dealing with Indonesian Cultural Words

Herlina Jasa Putri Harahap
Universitas Negeri Medan, Indonesia
Herlinajasaputri@unimed.ac.id

Abstract

Official news relating to the state of Germany is published by the government of the Federal Republic of Germany in German, as in the news containing the German state's political issues posted on the Deutscher Bundestag's official website. Because the readers come from various countries including Indonesia and not all readers are proficient in understanding German texts, the use of Google Translate is an alternative solution to overcome these limitations. This study aimed to test the reliability of the GT translation machine based on Memsource's level of suitability. This study also analyzes and describes various forms of inaccuracies that appear in translating German-language political articles into Indonesian, so that GT users will pay more attention to matters related to the development of their usage performance. The data are eight articles on German political issues containing 338 sentences obtained from the official website of the state news website of Germany, namely the Deutscher Bundestag (https://www.bundestag.de). The results showed that the quality of GT translation is generally in the 2nd level of suitability category (85-95) which means that the translation results are almost the same as human translation but still need some editing from experts. It found that there are 237 lexico-semantic errors, and it dominates the types of errors found in the translation results. This implies that GT generally needs to improve in terms of determining the appropriate lexical properties to translate text from the Source Language into the Target Language, such as in choosing one word that best fits the meaning of the text from several available word translation options. The most common morpho-syntactic errors (75 errors) are errors in translating single morphemes that are translated with plural morphemes or vice versa.

Keywords
Suitability in translation; inaccuracy in translation; Memsource; Deutscher Bundestag; article dealing with cultural words

I. Introduction

Translation is an activity that has an important role in advancing global civilization. Larson states that translating is an activity of meaning from the source language into the target language without any distortion of meaning (1998: 3-4). According to him, the results of a good translation will look different from the translation, but like the original text in the target language. Visualization of Larson's opinion can be seen in the following figure:

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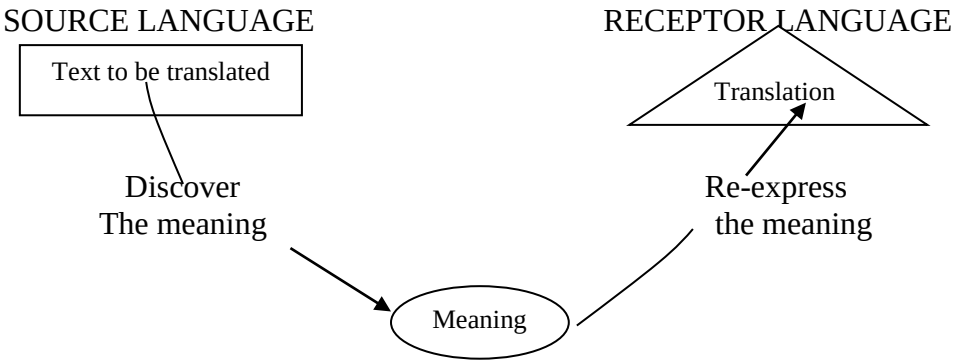

Figure 1. *Visualization of Larson's opinion on the translation process*

The figure above illustrates the importance of considering the equivalence aspect in translation activities. In addition, the process of translating text in this modern era has been greatly facilitated by the existence of advanced technology, namely a technology that can be used to speed up and save translators' time in the translation process. This technology is commonly known as machine translation (Translation Machine). Machine translation (MT) is growing rapidly worldwide, especially in Canada, Japan, the United States, some European countries, and Asia. Wilks (2009: 115) states that MT is a computational task that falls within the corridor of Artificial Intelligence (AI). This artificial intelligence allows machines to translate from one language to another automatically.

However, the translation results produced by MT will be different from those produced by professional translators who said by Lehmann and Stachowitz (1971: 72) that high quality in MT translation results may be obtained when the text to be translated is a text that can be easily understood and have the right meaning in the translation mechanism. This implies that the translation results produced by machine translation depend on the input data entered into it, for example, input in the form of words in German. The input data in the form of the word will be recognized by its representation semantically by the machine, which will then bring up a logically acceptable translation representation (Wilks, 2009: 34). In addition to the quality of the source text, the type of machine translation used is an important determinant of the quality of the translation results.

Turovsky (2016) in the Google blog, mentions that GT is a program that was just introduced to the public in 2006, then in 2016 GT has been able to at least 103 languages around the world. According to Butler (2011), GT has proven to be the strongest and most accurate engine compared to all the translation engines that have ever existed. With the various advantages of GT, the question is, will GT also be able to if given the challenge of translating German articles on the official website of the Deutscher Bundestag on an international scale accurately, especially on articles that discusses political issues in Germany?

In this 21st century, political issues in Germany cannot escape the media talk, be it print, broadcast, internet, or word of mouth. In addition, until this century, the country has still been touted as an important country with more power in the European international political arena. The country also has a great influence in decision-making for the European Union, so that anything that happens in that country will be covered, reported, and seen globally, including political news which is always a hot issue in various media.

However, the political theme (in general) is a theme that only some people like. Some people are interested in politics but most of the others don't even want to interact with politics, one of the reasons mentioned by Matthew Flinders via Rutter (2014) is

because the word 'politics' is considered a dirty word by the public. From that, to encourage public interest to follow and be involved in overseeing the course of the world of politics, especially in government politics, many political articles appear in the headlines or become readings placed on the first page of the news. Political news is often used as a headline in the broadcast media, apart from a lot of new information, controversial things, but also because it contains things that raise public suspicions. Articles focusing on the world of politics in Germany are officially posted on the Deustcher Bundestag website: https://www.bundestag.de.

Deutscher Bundestag website: https://www.bundestag.de is the official website of the government of the Federal Republic of Germany and is very popular with the German public for accessing all credible government-related information. The official website of the Deutscher Bundestag contains information about the world of politics in Germany, as well as economic, health, and social issues and provides information related to parliament. The official website is available in 2 languages, namely German and English. The official website of the Deutscher Bundestag also opens a space for the German public to petition the government without a minimum age limit, this is by what is mandated by Grundgesetz (basic law) article 17. The German federal parliament based in Berlin organised the official website by providing accurate, original and credible news. In the hands of the German federal parliament, publications on the Deutscher Bundestag website are focused on discussing the political field, namely reporting on the workings of the parliament, president, chancellor and matters relating to the German government.

Furthermore, Deutscher Bundestag readers come from various countries worldwide, including Indonesia. Considering that all news, including about German politics published on the official website of the Deutscher Bundestag, is not published in Indonesian, most Indonesian readers need to translate the article into Indonesian to make it easier to understand the content of the news they are reading. Considering that only some readers of the Deutscher Bundestag website from Indonesia are proficient and can understand German texts well, therefore the use of Google Translate has an important role in helping readers of the Deutscher Bundestag website to translate the news texts from German into English Indonesian easily and quickly.

Translating in general is an activity of restructuring the source language, rearranging it so that it is generally accepted in the target language. Catford (1965: 26) defines translation as replacing or diverting text material from the source language with equivalent textual material in the target language. Looking for an equivalent word or expression to bridge the message in the SL into the SL becomes the focus in the process of translating . Furthermore, Larson (1998: 519) states that the process of translating begins with ST, which is analyzed for its semantic structure, then restructures the semantic structure from the source language into a semantic structure that is in accordance with the target language. This step will make the translation result commensurate and easily understood by the original target text reader.

The definition of translation above in general applies not only to translations produced by humans (human translation), but also to translations carried out by machines. The practical purpose of machine translation, according to Wilks (2009) is to implement a program that can convert text input (spoken and written) from the source language into text output equivalent to the target language. This machine translation operates automatically so it has the potential for high translation speed when compared to conventional-based translation.

The quality of translation is a priority in any discussion about translation. Good translation quality becomes a primary target, whether in translation activities or results. Then on what criteria so that a translation result can be said to have good quality?

Newmark (1991: 111) states that a good translation is one that is made as accurate as possible. As for accuracy, various views ask questions about the benchmark to determine it. However, what is agreed is the benchmark based on the ST (Source Text) where the translation results agree to be understood as an accurate reproduction (message) of ST (Neubert & Shreve, 1992: 19).

On the other hand, Schaffner (1998) states that translation scholars, in his observation, prefer the term appropriateness or accuracy to all functional aspects of language rather than simply saying that a translation is 'good'. Thus, getting the appropriate translation results takes an evaluation process and effort for post-editing the translation results.

In translating, one must judge about the results of the translation itself, namely a translation with good quality. As for the way to see whether the translation is of good quality, a translator must conduct a test or evaluation of the translation results. By evaluating and assessing the translation results, the translator can find weaknesses or shortcomings outside the translation results. This will help translators in the post-editing process to produce better-translated works.

Larson (1998: 533) suggests, there are several ways to test or show the translation results, namely: (1) comparison with the source text, (2) back-translation into the source language, (3) checking understanding, (4) testing naturalness and readability, and (5) consistency check. Larson (1998: 54) also reveals that there are three important things in the evaluation of translation, namely accuracy, clarity, and naturalness. Accuracy relates to the communication of the same meaning between SL and SL. The accuracy of the results of this translation greatly affects the meaning, word for word, from one paragraph to another; a fatal error in the accuracy of a translation can damage the understanding of the meaning of a paragraph or a unit larger than that.

Then, clarity is related to the reader, namely whether the reader can understand the translation clearly? The results of the translation should contain the message's contents in the target text quickly and make it easy to understand the meaning of the text in the source text. Furthermore, naturalness is related to the form of the translated text, is the resulting translation easy to read by readers in the target language and has natural grammar and style in the recipient's language? Even though a translated sentence can be clearly understood and contain the same meaning as the meaning intended in the source language, it can be that the language of delivery of the translated result is not natural. Such as the arrangement of words that are less common, monotonous when read, or the combination of words used that looks strange when read. Naturalness is like making the translated text like the original text in the target language.

Quality assessment of translation results has several functions, one of which is mentioned by Thelen (2008), namely to increase public appreciation of a translation result. He also said that the main problem that became a topic in assessing the quality of translation results was quality standards, comparisons and qualifications of quality (2008: 412). From this, the activity of evaluating a translation is important to determine the quality of the translation. In addition, this activity can also measure the quality of machine translation if the translation process uses machine translation as a translation tool.

Lauscher (2000: 150) distinguishes the assessment of translation results into two, namely the equivalence-based approach and the functional approach. Meanwhile, in this study, the translation quality analysis was carried out using an equivalence-based approach. Vinay and Darbelnet (1995: 342) state that equivalence is replicating the situation contained in the ST in the same way as the situation generated in the ST by using (totally) different words. In this sense, equivalence becomes ideal when a translator deals with a translated text.

Equality or equivalence has many terms in its mention. In Thesaurus.com it is stated that the word equivalent has several synonyms in its pronunciation, such as match, synonym, alikeness, equality, interchangeable, likeness, and several other terms. Of the several equivalent terms that have been mentioned, Indonesians also have different words to describe equivalent terms, such as equality, suitability, equality, and others. Sutrisno (2019: 71-73), for example, explains the concept of accuracy by using the term compatibility and in another sentence, he uses the term equivalence.

On the other hand, the term equivalence is closely related to the criteria determined to assess the translation equivalence. Like Larson (1988: 529) who states that there are three criteria to display the equality of the translated text with the original text, namely accuracy, clarity, and naturalness. In addition, Munday also has criteria to assess a translation result, which is based on (1) accuracy in transferring information, (2) accuracy in word choice, terminology, and registers, (3) cohesion, coherence, and arrangement, and (4) accuracy in technical aspects. From several descriptions of the criteria from these experts, one can call equivalence with the word accuracy or other terms related to the determination criteria. In this study, the author uses the term "accuracy" to express the compatibility of the results of the Google Translate translation in translating news articles about German politics on the official website of the Deutscher Bundestag.

To determine the suitability of the results of Google Translate's translation of news texts about German political issues on the official website of the Deutscher Bundestag in this study, the researcher used the Memsource suitability assessment. Assessment of the level of suitability of the translation results in this study will also provide an insight into how developed the level of accuracy obtained for GT performance in 2021, as a translation engine. With this level of suitability assessment, the post-editing results of the translated text produced by GT can be ensured to be of better quality.

Memsource is a company engaged in translation services. It has an MTQE feature or machine translation quality estimation that translators can use to see the quality score of machine translation results before entering post-editing activities. This quality score from Memsource can help improve post-editing efficiency and be used to review the quality of machine translation for specific texts. As in this study, which aims to test the reliability of Google Translate, the compliance score from Memsource is used to see the level of suitability in the translation results.

The instrument for suitability numbers translated from Memsource which has been adapted into the Indonesian version can be seen in Sutrisno (2019: 71) as follows:

Table 1. Suitability Level of Memsource

Suitability Level/Rate		Description
First level	Suitability Value 96-100	The translation results are identical to human translations carried out by translation experts.
Second level	Suitability Value 85-95	The translation results are close to perfect but require a little editing by a translation expert.
Third level	Suitability Value 71-84	The result of the translation requires correction of the words used, and must be edited by a translation expert.
Fourth level	Suitability Value 51-70	The result of the translation requires correction of the wording and grammar used, and must be edited by a translation expert.
Fifth level	Suitability Value 00-50	The translation results are still far away and need to be consistent with the source language.

In addition to discussing the level of suitability in the translation results, this study also examines the types of inaccuracies contained in the results of Google Translate's translation of news about German politics on the official Deutscher Bundestag website.

Several theories discuss the classification of types of inaccuracies in automatic translation results. One of them is Vilar (2006) which classifies inaccuracies in translation into five categories: missing words, word order, wrong words, unknown words, and punctuation marks. In addition, there are WER and PER algorithm errors, including inflectional errors, reordering mistakes, missing words, extra words, and wrong lexical choices. Both theories have similarities, such as errors that can be used to analyze word-level standards and both focus on errors based on linguistic information only. Besides that, unlike other theories that have been mentioned, the error theory proposed by Keshavarz has several advantages, namely this theory describes the types of errors in the translation results in more detail in its classification.

Keshavarz (2012: 89-106) broadly divides the classification of errors or inaccuracies into two, namely linguistic-based errors and process-based errors. Basic linguistics is divided into four sub-categories of error types: orthographic, phonological, lexic-semantic, and syntactic-morphological errors. Each sub-category mentioned has a breakdown of its types depending on the classification made by Keshavarz. The process-based errors are related to omissions, additions, substitutions, and permutations. The classification can be seen briefly in the following figure:

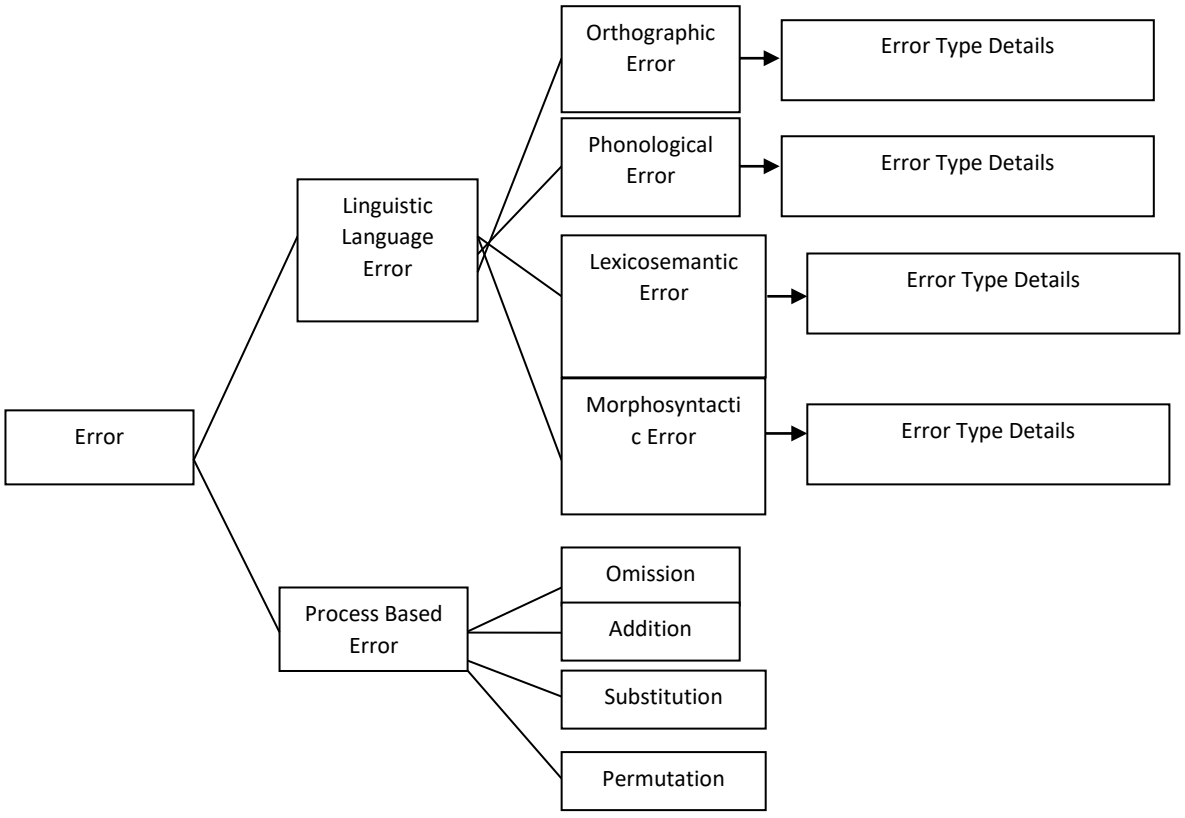

Figure 2. *Keshavarz Error Classification*

In this study, researchers will use two linguistic-based error classifications from Keshavarz to analyze data in sentences from the GT translation. The two error

classifications are lexicosemantic error classification and syntactic-morphological (morpho-syntactic) error classification.

Briefly, the concept of lexic-semantic and syntactic-morphological error analysis from Keshavarz can be seen from the following table:

Table 2. Lexico-Semantic and Syntactic-Morphological Error Category Models Based on Keshavarz

Number	Error Category	Abbreviation/Type	Description
1	Lexico-Semantic Error	- WWC (wrong word choices) - DWC (different word choices) - EM (errors in meaning) - C (collocations)	- Error in word choice - Differences in word choice - Mistake of meaning - Collocation error
2	Morpho-Syntactic Error	- S/P (singular/plural) - PS (parts of speech) - T (tenses) - WST (wrong sequence of tenses) - WWO (wrong word order) - AV/PV (active/passive voice) - MA (misplacement of adverbs) - EUP (error in the use of prepositions) - A (article) - CS (conditional sentences) - DN (double negation)	- Change singular/plural forms - Selection of parts of speech (verb, noun, adverb, etc.) - Error in using tenses - Wrong sequence of tenses - Word order error - Error using active voice and passive voice - Incorrect adverb placement - Misuse of prepositions (omitting, wasting, diction selection) - Error in using the article - Error arranging conditional sentences - Double negation

This paper is a research in applied linguistics in the field of translation which is carried out to provide a deeper understanding of an existing and growing language phenomenon, especially those related to the rapid pace of machine translation technology. This study discusses the degree of correspondence and the types of inaccuracies found in the results of Google Translate's translation of news articles dealing with German political themes on the official Deutscher Bundestag website: https://www.bundestag.de. Thus, the specific objectives to be achieved in this research are:

1. Describe the level of suitability produced by Google Translate's translation of articles on German politics on the official Deutscher Bundestag website: https://www.bundestag.de.
2. Analyzing the inaccuracies contained in the results of the Google Translate translation of the news articles about German politics on the official website of the Deutscher Bundestag: https://www.bundestag.de.

This study also seeks input from GT providers so that future GT users will get better translation results and avoid similar errors.

II. Research Methods

This comparative descriptive study aims to describe the level of suitability and the types of errors found in the results of the Google Translate translation in translating news texts about German politics on the official website of the Deutscher Bundestag. The complete research method will be described as follows:

2.1 Data and Data Sources

The data in this study are in the form of sentences. The sentence in question is a group of words that express an idea in the form of a statement, question, instruction or exclamation that is written in capital letters on the first word and ends with a dot after the last word is mentioned (dictionary.cambridge.org). These sentences are sentences in German taken from 8 (eight) news articles covering German political issues on the official Deutscher Bundestag website: https://www.bundestag.de and their translations in Indonesian which are translated using Google Translate.

Deutscher Bundestag website: https://www.bundestag.de is the official website of the government of the Federal Republic of Germany and is very popular with the German public for accessing all credible government-related information. The official website of the Deutscher Bundestag contains information about the world of politics in Germany, as well as economic, health, and social issues and provides information related to parliament. The official website is available in 2 languages, namely German and English. The official website of the Deutscher Bundestag also opens a space for the German public to petition the government without a minimum age limit, this is by what is mandated by Grundgesetz (basic law) article 17. The German federal parliament based in Berlin organised the official website by providing accurate, original and credible news. In the hands of the German federal parliament, publications on the Deutscher Bundestag website are focused on discussing the political field, namely reporting on the workings of the parliament, president, chancellor and matters relating to the German government. This raises the assumption that the language used in publishing articles on the official website of the Deutscher Bundestag is good language and acceptable to the people who read the website worldwide. Therefore, articles from the Deutscher Bundestag are suitable for testing the reliability of Google Translate's translation engine. The eight news articles taken as the object of this research are news articles with the title:

(1) Anhörung zur Produktion und Beschaffung von Impfstoffen.
(2) Experten rügen Umgang der Regierung mit den Corona-Folgen
(3) Pro und Contra Rechtsanspruch auf Ganztagsbetreuung für Grundschüler
(4) Johann Wadephul zur IPU-Tagung: Nicht alle stehen auf unserer Seite
(5) Anhörung zu Long-Covid-Behandlungszentren
(6) Anhörung zur nderung des Staatsangehörigkeitsgesetzes
(7) Neue Stiftung soll deutsche Demokratiegeschichte sichtbar machen
(8) Wahlvorschläge der AfD zu neun Gremien

Three of the eight articles above talk about the coronavirus, which has been an epidemic since it first appeared in Wuhan (China) at the end of 2019. The news was contained in the political topic of the Deutscher Bundestag website (not in the subject of health or otherwise) because of the outbreak comes at a time when Frank-Walter's presidency is coming to an end (2017-2021) and Germany is in preparation for the next presidential election. On the one hand, the existence of the coronavirus is considered a 'disaster', which cuts down the space for Frank-Walter's politics. On the other hand, some parties take advantage of the COVID-19 emergency as an opportunity to 'show' the names of several parties to the public. The eight articles above have a total of 338 sentences. The author argues that the data in the form of 338 sentences from the eight news articles have met the standards of sufficient, acceptable, and adequate to be used as objects in the study.

2.2 Data Analysis

In data analysis, the author uses the appropriateness instrument from Memsource to determine the degree of correspondence of the GT translation results on texts related to German political issues on the official website of the Deutscher Bundestag. Then, to

explain and describe the errors in the translation, the writer uses Keshavarz's lexic-semantic and morpho-syntactic error analysis categories.

The data analyzed are in the form of 338 sentences from 8 political news articles published on the official website of the Deutscher Bundestag. The steps taken by the author in conducting data analysis are:

1. Provide numbering and code on each data to facilitate the author's data analysis.
2. Calculate the average value of the assessment of the level of suitability given by 12 raters on the results of Google Translate translations.
3. We are analyzing the results of the assessment of 12 raters on the level of suitability of the results of the Google Translate translation of news articles on German political issues on the official website of the Deutscher Bundestag.
4. Describe the results of the assessment of 12 raters on the level of suitability of the results of the Google Translate translation in news articles about German politics on the official website of the Deutscher Bundestag.
5. Analyzing the translated data based on Keshavarz's lexico-semantic and morpho-syntactic error categorization.
6. Classifying data based on Keshayarz's lexico-semantic and morpho-syntactic error categorization.
7. Describe an analysis of the errors found in the results of the Google Translate translation of news articles about German politics on the official website of the Deutscher Bundestag.
8. Draw conclusions

The data on the suitability of the results obtained from the assessment of each evaluator are then calculated, so as to get an accurate average value; from these results it is then explained how the level of suitability along with the shortcomings and advantages in the GT translation results that have the potential to intervene in the acquisition of scores. The assessment uses an instrument from Memsource with five levels of assessment measured from 00-50 for translation results that tend to be inconsistent with the source language to 100, which means that the translation results are identical and resemble the results of translations carried out by translation experts. The average score from the results of 12 raters is then interpreted based on the presentation scores obtained.

After that, the writer analyzes the GT translation errors using the translation error category proposed by Keshavarz. Furthermore, the authors classify the frequency of existing errors according to the Keshavarz classification. After the classification, the error is then presented based on the classification, the author then describes the results of the classification and explains the results of the analysis by only taking some of the data that according to the author can represent the research findings.

III. Results and Discussion

Based on the suitability assessment category from Memsource, this study notes that the accuracy produced by Google Translate in translating eight articles on the political theme of the Federal Republic of Germany in the Deutscher Bundestag is on average 86,11. The acquisition of these numbers can be seen in the table below:

Table 3. The suitability level of translation results by Google Translate on articles dealing with the political theme of the Federal Republic of Germany in the Deutscher Bundestag

Number	Article	Accuracy
1	Anhörung zur Produktion und Beschaffung von Impfstoffen	85,86
2	Experten rügen Umgang der Regierung mit den Corona-Folgen	85,23

3	Pro und Contra Rechtsanspruch auf Ganztagsbetreuung für Grundschüler	87,32
4	Johann Wadephul zur IPU-Tagung: Nicht alle stehen auf unserer Seite	84,56
5	Anhörung zu Long-Covid-Behandlungszentren	85,90
6	Anhörung zur nderung des Staatsangehörigkeitsgesetzes	88,43
7	Neue Stiftung soll deutsche Demokratiegeschichte sichtbar machen	87,20
8	Wahlvorschläge der AfD zu neun Gremien	84,37
Average		86,11

The average number of all data in the table above indicates that the quality of GT translation is generally in the 2nd level of suitability category (85-95). The translation results are almost the same as human translation but still need expert editing. This also implies that the quality of GT is good enough to be used in translating German-language international news articles into Indonesian. The description of the suitability number in the GT translation results in this study is divided into four categories of suitability assessment results, namely the level of suitability 96-100, level of suitability 85-95, level of suitability 71-84, and level of suitability 51-70. Meanwhile, in this study, the results of the GT translation were not found which were included in the 0-50 level of suitability. Briefly, the findings of this study can be seen in the following table:

Table 4. Percentage of conformity figures on Google Translate translation results on articles on the political theme of the Federal Republic of Germany in the Deutscher Bundestag.

Suitability Level	Number of sentences	Percentage
Suitability Value 96-100	37	10,94%
Suitability Value 85-95	183	54,15%
Suitability Value 71-84	98	28,99%
Suitability Value 51-70	20	5,92%
Suitability Value 00-50	0	0%
Amount	338	100%

From the table above, it can be seen that the highest number of occurrences of suitability are in the second category, namely the level of suitability 85-95, while the lowest number is zero occurrence, namely in the category of the fifth level of suitability (00-50).

After researching the types of inaccuracies that appear in the GT translation results, it was found that 180 out of 338 sentences entered into GT contained linguistic-based errors in the lexico-semantic and morpho-syntactic categories, and another 158 sentences did not contain errors in both categories. On the other hand, the writer finds several (more than one) errors that appear in one sentence so that in the description, one sentence can be included in several categories of inaccuracies depending on their occurrence. A brief description can be seen in the following table:

Table 5. The frequency of occurrence of inaccuracies in the lexico-semantic and morpho-syntactic categories

Number	Inaccuracy Type Category	Inaccuracy Occurrence Frequency	Percentage
1	Lexico-semantic Error	237	76%
2	Morpho-syntactic Error	75	24%
Amount		312	100%

From the table above, lexico-semantic errors dominate the errors found in the translation results. This implies that GT generally needs to improve in terms of determining the appropriate lexical properties to translate text from the Source Language into the Target Language, such as in choosing one word that best fits the meaning of the text from several available word translation options. The following are the results of the error categorization the authors found, along with their descriptions.

Iexico-semantic errors are related to the semantic properties of linguistic parts in sentences. The types of lexico-semantic mistakes that appear in the results of Google Translate's translation of the political-themed text of the Federal Republic of Germany in the Deutscher Bundestag are, first, errors in word choice, differences in word choice, errors in meaning, and errors in the use of collocations. The types of errors and their frequency of occurrence can be seen more quickly in the table below:

Table 6. The frequency of lexico-semantic errors in the results of Google Translate's translation of articles on the political theme of the Federal Republic of Germany in the Deutscher Bundestag

Number	Types of lexico-semantic errors	Error frequency	Percentage
1	Errors in word choice	145	61,5%
2	Differences in word choice	61	25,8%
3	Errors in meaning	22	8,9%
4	Errors in the use of collocations	9	3,8%
Number of errors found		237	100%

From the table, it can be seen that errors in word choice are the errors that appear the most in the GT translation results in news articles about politics in Germany in the Deutscher Bundestag, which are 145 times or 61.5% of the total errors that appear in the lexico-semantic category. This shows that GT needs help in determining the most appropriate word translation for a word, phrase, or clause in the target language. The lexico-semantic type errors that appear at least are errors in the use of collocations, which only occur nine times.

Morpho-syntactic category errors are errors that fall in the morphology and syntax categories. Morphology is concerned with morphemes and the arrangement of word forms. The syntax is related to the arrangement of word patterns, including the elements of the subject, predicate, object, and description that form a complete sentence. The errors in the morpho-syntactic category in the results of Google Translate's translation of articles about politics in the Federal Republic of Germany in the daily news of the Deutscher Bundestag are as follows:

Table 7. The frequency of morpho-syntactic errors in the results of Google Translate's translations in articles with the theme of the Federal Republic's politics in Germany in the Deutscher Bundestag

Number	Types of Morpho-syntactic Error	Error frequency	Percentage
1	Error translating singular/plural morphemes	23	29,7%
2	Part of speech selection error	8	10,8%
3	Wrong use of tenses	1	1,3%
4	Word order error	19	25,7%
5	Misuse of passive voice and active voice	4	5,4%
6	Adverb misplacement	5	6,8%
7	. Incorrect use of prepositions	10	13,5%
8	Trouble using definite and indefinite articles	5	6,8%
Number of errors found		75	100%

From the table above, it can be seen that most occurrences of morpho-syntactic errors are errors in the translation of single morphemes, which are translated with plural morphemes or vice versa, with a percentage of 29.7%. An error followed this in the word order that appeared 19 times. The errors that occur the least are errors in the tense or verb form (in German) to indicate the time of an event. The error in the tense appears only once in the 338 data entered in the GT.

IV. Conclusion

Based on the research that the author has done, the results of this study indicate that Google Translate, as a Neural Machine Translation generation translation machine, has been able to translate sentences with a good level of accuracy. From the assessment carried out by 12 raters, the appropriateness score obtained for 338 German sentence data entered into GT for translation into Indonesian is 86.1. This figure is included in the category of second-level translation results (suitability level 85-95) based on the suitability score from Memsource. This implies that the translation results of GT are close to perfect and only need a little editing from translation experts. However, GT as an automatic translation machine with duty-free service cannot replace or match the accuracy of human translation results. Google Translate still needs to improve with still finding errors in the translation results it produces, such as errors in terms of lexico-semantic and morpho-syntactic found in this study. The author has described that 180 out of 338 sentences translated with GT contain errors based on morpho-syntactic and lexic-semantic categories. Moreover, in several sentences, it was found that each sentence had more than one error. From there, it can be said that, there are, things that GT as a machine cannot penetrate in understanding the meaning of a language.

The orientation of this research is on the translation results, namely the level of suitability and the types of inaccuracies contained in the translation results of the world's most widely used machine translation, namely Google Translate. By using any themed text from the same source or other than the official Deutscher Bundestag website, further researchers can continue to observe the development and progress of the performance of the GT. In addition, GT users worldwide know that everyone can contribute to improving the quality of GT by inputting suggestions for improving the translation results in the section provided by Google Translate.

References

Catford, J.C. (1965). A Linguistic Theory of Translation. Oxford University Press: Oxford.

Google Translate. https://translate.google.com/

Keshavarz, Mohammad Hossein. (2012). Contrastive Analysis & Error Analysis. Tehran: Rahnama Press.

Larson, Mildred L. (1998). Meaning-based translation: a guide to cross-language equivalence. University Press of America: New York.

Lauscher, S. (2000). Translation Quality Assessment: Where Can Theory and Practice Meet?. The Translator Studies is Istercultural Communication Evaluation and Translation, 6(2), 149-168.

Lehmann W and Stachowitz R. (eds.). (1971). Feasibility Study on Fully Automatic High-Quality Translation. Technical report: University of Texas.

Neubert, Albrecht dan Gregory M. Shreve. (1992). Translation as Text. Amsterdam: John Benjamin Publishing Company.

Newmark, Peter. (1988). A Textbook of Translation. Prentice Hall: London.

Schaffner. Christina. (1998). Translation and Quality Current Issues in Language and Society. Frankfrut Lodge: Multilingual Maters.

Sutrisno, Adi. (2019). Performa Neural Machine Translation: Mesin Penerjemah Generasi Baru Google Translate. Yogyakarta: AG Publisher.

The Deustcher Bundestag. https://www.bundestag.de

Thesaurus.com. Equivalence. Retrieved Juni 18, 2021, from https://www.thesaurus.com/browscloquivalence

Thelen, Marcel. (2008). Translation Quality Assessment Or Quality Management & Quality Control OF Translation?. Translation and Meaning, 8(1), 411-424.

Turovsky, Barak. (2016, November 15). Found in translation: More accurate, fluent sentences in Google Translate. Retrieved Juni 20, 2021, from https://blog.google/products/translate/found-translation-more-accurate-fluent-sentences-google-translate/

Turovsky. Barak. (2016, April 28). Ten years of Google Translate. Retrieved Juni 18, 2021, from https://blog.google/products/translate/ten-years-of-google-translate/

Vilar, D., Xu, J., Luis Fernando, D. H, & Ney, H. (2006). Error Analysis of Statistical Machine Translation Output. Proceedings of the Fifth International Conference on Language Resources and Evaluation, May 2006, 697-702.

Vinay, J.P. dan J. Darbelnet. (1995). Comparative Sylistics of French and English: a Methodology for Translation. Philadelphia: John Benjamins.

Wilks, Yorick. (2009). Machine Translation: Its scope and limits. Springer: USA.