ENGLISH-INDONESIAN GOOGLE TRANSLATE RESULT IN J.K. ROWLING'S HARRY POTTER AND THE ORDER OF THE PHOENIX: ANALYSIS OF NON-EQUIVALENCE PROBLEM

Oleh: Alfian

Fakultas Ilmu Komputer, Universitas Esa Unggul, Jakarta alfian@esaunggul.ac.id

Abstract

This study was aimed at analysing the non-equivalence problem encountered while translating the Harry Potter novel using Google Translate. Two software (AntConc and AntPconc) are used to cluster the most top ten-word class (Adjective, Noun, Verb, and Adverb) shown in the novel. AntConc was used to create a Wordlist to find the frequency of the words in the English text, while AntPConc was used to select the two text files (English and Indonesian version) to be checked as parallel texts. This present study concluded that Google translate has been able to translate and provide good suggestion translation to the top ten list of Noun, Adjective, Verb, and adverb. However, several non-equivalence in the word and above-word levels are still found. The equivalence problem appears in multiple lines of verbs, adjectives, and adverbs from those top lists. Several translation approaches must be utilized in the post-editing process to provide a more natural translation output.

Keywords: Google Translate, Machine Translation, Equivalence problem.

1. INTRODUCTION

Google Translate affects professional translators in the language service sector and everyone who uses it as a translation tool. Online public access to a free, rapid, and somewhat accurate translation process is undeniably a significant advancement in translation technology. However, there is no direct comparison when comparing translation quality and accuracy utilizing Google Translate to an experienced human translator. Google Translate works by using the frequency of word pairings between two languages as a database for translations. Although this works effectively in some circumstances, it frequently means that a translation cannot be placed in the proper context without the assistance of a person. Vries (2018) found that Google Translate is a useful tool for comparative researchers when using the model of the bag-of-word text.

Although technology can help inform L2 learning, it cannot perfectly duplicate natural language output, at least not yet. The question thus becomes not whether teachers can prohibit students from using such tools but how to assist students to recognize that positive growth toward better competency and ethical use of technology is crucial 21st-century abilities. (Ducar& Schocket, 2018).

A study conducted by Rensburg et al. (2012) demonstrated that a customer would not have to spend much time editing translation products by a professional translator. Google Translate translations needed significant quality improvement. The PowerPoint presentations produced the best results of the six text kinds translated by Google Translate. Nonetheless, the quality was below average, and the texts would require substantial post-editing to fulfill their role.

However, concerning the pedagogical implication, a study conducted by Tuzcu (2021) revealed that implementing machine translation in writing activities as a pre-editing tool increases the creativity in the written products of low-proficient EFL learners. The crucial question that needed to answer was whether or not Google translation results fit all levels of equivalence, as Mona Baker proposed (Baker, 2018).

Equivalence is one of the methods used in Translation. In translation equivalence, Catford (1965) defines Translation as the substitution of textual content in one language (S.L.) with similar textual content in other languages (T.L.). It is used to strike a balance in two languages that will be translated. Duplicating the closest natural equivalent of the source language message in the receptor language, first in terms of meaning and subsequently in terms of style, is what Translation entails (Nida & Taber, 1982).

Regarding the equivalence, Baker (2018) classifies the equivalence into five levels: equivalence at a word level, above-word level, grammatical equivalence, textual equivalence, and pragmatic equivalence. Concerning grammatical equivalence, five aspects must be considered. They are number, person, gender, tense and aspect, and voice. While for textual equivalence, it deals with the equivalence of thematic structure, information structure, and cohesion.

Baker (2018) provides several techniques for tackling non-equivalence from the word level to the practical level, recognizing that equivalence is assessed during Translation. Here are some approaches to detecting word-level equivalency. Translation by a more general word (superordinate), Translation by a more neutral / less expressive word, Translation by cultural substitution, Translation by a loan word or loan word plus explanation, Translation by paraphrasing unrelated words, Translation by omission, and Translation by illustration are just a few examples.

Given the above context, this present article focused on the process and the non-equivalence problem encountered while translating the Harry Potter novel using Google Translate. Two software (AntConc and AntPconc) are used to cluster the most top ten-word class (Adjective, Noun, Verb, and Adverb) shown in the novel. AntConc was used to create a Wordlist to find the frequency of the words in the English text, while AntPConc was used to select the two text files (English and Indonesian version) to be checked as parallel texts.

2. RESEARCH METHOD

In this study, a descriptive qualitative technique is used. Numbers and statistics support it since the goal is to examine the incidence of equivalence from the top ten Nouns, Adjectives, Verbs, and Adverbs. Chapters 2,3,7,8,9 are utilized as the primary data to be processed subsequently using AntConc and AntPconc. AntConc's word list tool was used to count all the words in the corpus and show them in an ordered list. It can be used to quickly find which words are the most frequent in a corpus. Feature of the collocate tool was used to show the collocates of a search term to be later used to investigate non-sequential patterns in language. The collocates can be arranged by frequency, frequency on the left or right side of the search phrase, or the beginning or end of the word. They can also be sorted by the value of a statistical measure calculated by comparing the search word to the collocate. Having listed the most frequent Noun, Adjective, Verb, and Adverb, the next step was using AntPconc to check the English and Indonesian versions of Google Translate to be checked as parallel texts and later to be analyzed based on the level of equivalence..

3. RESEARCH FINDINGS

This part will show the ten highest frequencies of Noun, Adjective, Verb, and Adverb from Chapters 2,3,7,8,9 clustered using AntConc. These ten highest frequencies are considered from the rank and frequency and from the feature of concordance and collocate in AntConc to ensure that the lists are well distributed in chapters 2,3,7,8,9.

Tabel 1 Top ten lists of Verb.			
Rank	Frequency	Words	
9	415	said	
41	99	have	
78	59	looked	
117	42	think	
128	39	see	
131	37	come	
132	37	go	
141	33	turned	
142	32	felt	
154	29	heard	

After getting the above data, each word from the lists was analyzed using AntPconc as a parallel text to check its equivalence level. The verb "said" has 415 occurrences. Having analyzed the level of equivalence using AntPconc, it is found that postedited is not needed since, in general, the word "said" is translated to "kata," "katanya," "mengatakan," "berkata" that has met all level of equivalence. The word "have" has 99 occurrences, and having checked the parallel text, it is found that the word "have" is translated to "memiliki, "apakah," "telah," which has met all levels of equivalence. The word 'looked' has 59 occurrences, and it is translated to 'melihat'', 'mental, 'tampak,' 'terlihat,' 'memandang' that has met all levels of equivalence. The word think has 42 occurrences and needs several post edits. It is translated to 'rasa', 'pikir', 'berpikir', 'menganggap', 'menurut', 'mengira'. The word "see" has 39 occurrences, and having checked the parallel text, it is found that Google Translate did not translate those 39 occurrences to Indonesia. The word "come" has 37 occurrences, and it is translated to "datang." The word "go" has 37 occurrences. It is translated to "pergi" and needs post edit. The word "turned" has 33 occurrences, and it is translated to "berbalik," "menoleh," "berbelok." For the word "turned," Google Translate cannot translate several lines so that it remains in the English version. The word "felt" has 32 occurrences, and it is translated to "merasa," "merasakan," "rasa." No post edit is needed for the word "felt." The word "heard" has 29 occurrences, and it is translated to "dengar," "mendengar," and post-edit is not needed. Based on the top ten verbs shown in chapters 2,3,7,8,9, it can be concluded that Google translate has been able to translate the verbs well despite several lines in the list of verbs that still need to be post-edited. Below is the highlight of verbs that need to be post-edited since they did not meet a level of equivalence:

Tabel 2 Equivalence Problem - Verb				
LINE	SL	TL	Problem	
33	'You know, I don't think	Kau tahu, aku tidak	Above-word level	
	violet's really my colour,'	berpikir ungu benar-	equivalence	
	she said pen-sivey,	benar warnaku,' katanya		
	tugging at a lock of spiky	dengan pena sambil		
	hair.	menarik-narik seikat		
		rambut runcing.		
1	YOU HEARD YOUR	KAU DENGAR BIBIMU,	Word level	
	AUNT, NOW GO UP TO	SEKARANG NAIK KE	equivalence	
	BED!	TIDUR!		

In line 33, Google Translate has not translated the phrase "I don't think violet's really my colour" to meet above word level equivalence since G.T. still translated word for word. It needs to be post edited and suggested to be translated to "Saya rasa ungubukanwarnakesukaansaya". It has something to do with a fixed expression. In line 1, Google translated can still not translate the word "go" with its collocation "up." Its Translation can be changed to "kau dengarbibimu, sekarangbergegastidur!" Google translate has been good enough in translating the top ten verbs and had suggested good Translation to those verbs. Despite post-editing in several lines, in general, Google Translate has met a level of equivalence. More importantly, collocation has been well transferred to the target language.

Tabel 3 Top ten lists of Noun.

Rank	Frequency	Words	
134	36	kitchen	
143	32	hand	
146	31	witch	
151	30	room	
168	26	wizard	
172	25	moment	
176	23	hair	
192	21	le tte r	
200	20	air	
204	20	front	

From table 3, the word "kitchen" has 36 occurrences, translated to "dapur." From those 36 occurrences, post edit is not needed since all meanings have met all levels of equivalence. For the word "kitchen," line 6 until 10 is not translated to Indonesian. The word "hand" with 32 occurrences is translated to "tangan," and post-edit is unnecessary. The word "witch" with 31 occurrences is translated as "penvihir," and post-edit is unnecessary. In the parallel text, it is found that only 9 of 31 occurrences are translated to Indonesian. The word "room" with 30 occurrences is translated to "ruangan," "kamar." In the parallel text, it is found that only 13 of 30 occurrences are translated to Indonesian. The word "wizard" with 26 occurrences is translated to "penyihir." In the parallel text, it is found that only 12 of 26 occurrences are translated to Indonesian. The word "moment" with 25 occurrences, is translated to "saatini", "sejenak", "beberapasaat". In the parallel text, it is found that only 10 of 25 occurrences are translated. The word "hair" with 23 occurrences is translated to "rambut." In the parallel text, it is found that only 9 of 23 occurrences are translated to Indonesian. The word "letter" with 21 occurrences is translated to "surat." In the parallel text, only 15 of 23

occurrences are translated to Indonesian. The word "air" with 20 occurrences is translated to "udara." In the parallel text, it is found that only 12 of 20 occurrences are translated to Indonesian. The word "front" with 20 occurrences is translated to "depan" "di depan." In the parallel text, it is found that only 11 of 20 occurrences are translated to Indonesia. From the top ten lists of nouns taken from chapters 2,3,7,8,9, it can be concluded that Google translated has been good in translating those nouns to Indonesia since all those lists of nouns together with their concordances had met all levels of equivalence. Post edit is not needed as well to all lists of nouns.

Tabel 4					
Гор	ten	lists	of	Adjective	

Rank	Frequency	Words
47	79	back
155	29	magical
267	15	cold
276	15	small
304	13	dead
306	13	golden
344	11	empty
384	10	light
439	9	underage
480	8	pale

From the top ten lists of Adjectives, the word "back" with 79 occurrences is translated to "kembali," "di belakang." In the parallel text, it is found that only 45 of 79 occurrences are translated to Indonesian. The word "magical" with 29 occurrences is translated to "Ajaib." In the parallel text, it is found that only 9 of 29 occurrences are translated to Indonesian. The word "cold" with 15 occurrences is translated to "dingin." In the parallel text, it is found that only 6 of 15 occurrences are translated to Indonesian. The word "small" with 15 occurrences is translated to "kecil." In the parallel text, it is found that only 9 of 15 occurrences are translated to Indonesian. The word "dead" with 13 occurrences is translated to "mati." From the parallel text, it is found that only 7 of 13 occurrences are translated to Indonesian. The word "golden" with 13 occurrences is translated to "emas." From the parallel text, it is found that only 1 of 13 occurrences is translated to Indonesian. The word "empty" with 11 occurrences is translated to "kosong." In the parallel text, it is found that only 5 of 11 occurrences are translated to Indonesian, and it is also found that line 11 needs post edit. The word "light" with 10 occurrences is translated to "lampu," "cahava."

From the parallel text, it is found that 7 of 10 occurrences are translated to Indonesian, and post-edit is not needed. The word "underage" with 9 occurrences is translated to "di bawahumur." From the parallel text, it is found that only 4 of 9 occurrences are translated to Indonesian, and post-edit is not needed. The word "pale" with 8 occurrences is translated to "pucat." From the parallel text, it is

353

358

found that 4 of 8 occurrences are translated to Indonesian, and post-edit is not needed. From these top ten adjectives, it is found that only one post edit is needed, as described below:

Tabel 5 Equivalence Problem - Adjectives						
LINE	LINE SL TL Problem					
11	'Why isn't he all empty,	'Kalau begitu, kenapa dia	Above-word level			
	then?	tidak kosong?	equivalence			

Line 11 needs to be post-edited since it did not meet the above-word level equivalence. The word "empty" for this context should be translated to "lenyap" or "menghilang" since it is embedded with the previous context. The previous context can be tracked using the feature "concordance view." It can be concluded that from these top ten lists of Adjectives, Google translate has been able to give a good suggestion translation, and more importantly, only one Adjective that needs to be post edited. In other words, the level of equivalence has been met regarding the top ten Translation of adjectives.

Top ten ists of Auverb			
Rank	Frequency	Words	
57	70	very	
59	66	just	
66	64	over	
79	59	well	
187	21	away	
193	21	once	
220	19	really	
236	17	along	

11 11 loudly

quietly

Tabel 6 Top ten lists of Adverb

The word "very" with 70 occurrences is translated to "sangat" and post-edit is not needed. From the parallel text, it is found that only 27 of 70 occurrences are translated to Indonesian. The word "just" with 66 occurrences is translated to "hanya" "saja." From the parallel text, it is found that only 29 of 66 occurrences are translated to Indonesian, and line 39 needs to be post-edited. The word "over" with 64 occurrences is translated to "berakhir," but Google translate has translated them based on the collocation so that postediting is not needed. From the parallel text, it is found that only 39 of 64 occurrences are translated to Indonesia. The word "well" with 59 occurrences is translated to "baik" Sometimes, Google Translate does not translate it if it is detected only as an exclamation. The word "away" with 21 occurrences is translated to "jauh." However, in general, G.T. has been able to detect the word "away" together with its collocation, such as "turning away" "slid away" that has been translated correctly to the target language. So, post edit is not needed. The word "once" with 21 occurrences is translated to "seketika." But G.T. has been able to translate to "langsung" when embedded with the collocation "at once." From the parallel text, it has been found that only 9 of 21 occurrences are translated to Indonesian, and post-edit is not needed. The word "really" with 19 occurrences is translated to

"sangat" "benar-benar." From the parallel text, it is found that only 6 of 19 occurrences are translated to Indonesia, and post-edit is not needed. The word "along" with 17 occurrences is translated with its collocation, and G.T. has translated it to preposition. From the parallel text, it is found that only 5 of 17 occurrences are translated to Indonesian, and post edited is not needed. The word "loudly" with 11 occurrences is translated to "Keras," "keras-keras," from the parallel text, it is found that only 4 of 11 occurrences are translated to Indonesian and post-edit is not needed. The word "quietly" with 11 occurrences is translated to "pelan," "diam-diam." From the parallel text, it is found that only 4 of 11 occurrences are translated to Indonesian, and post-edit is not needed.

Tabel 7 Equivalence Problem - Adverb						
LINE	LINE SL TL Problem					
39	It's just lucky I put Mr. Tibbies on the case!	Hanya beruntung saya menempatkan Mr Tibbies pada kasus ini!	Above-word level equivalence			

From line 39, the phrase "It's just lucky" is translated using word-for-word Translation so that it doesn't meet above-word level equivalence. It concerned fixing expression. It is suggested to translate it to "Beruntungsekali" or "Kebetulansekali." It can be concluded that from these top ten adverbs, G.T. has been able to give a good suggestion of translation result so that ambiguity can be avoided. It can be seen from the data that only one post-edit is needed in these top ten adverbs.

4. DISCUSSION

Discussions need to be shown as the main purpose of this study is trying to contrast the G.T. result to the level of equivalence. This section will focus on the distribution of concordance Nouns, Adjective, Verb, and adverbs.

From the ten top lists of verbs, showing only two post edits are needed, it can be concluded that G.T. has given good suggestion Translation to the top ten lists of verbs. Regarding the level of equivalence, G.T. has not met word level and above-word level equivalence since from the data, line 33 of the word "think" needs to be post edited, and line 1 of the word "go" needs to be post-edited as well. In general, G.T. had given good suggestions regarding the top ten list of verbs, and the percentage equivalence from the concordance distribution is 80%. It is different from the study conducted by Afshin (2016), asserting that Google Translate cannot translate verb tenses from English to Persian, and the translated paragraphs are too long. Furthermore, most grammatical mistakes occurred in the Translation of aspects, passives, and compounds in that order. Thus, it is worth conducting more research regarding verb error translation of Google Translate to different settings and texts.

From the top ten lists of Nouns, no post-edited is needed for those lists. It can be concluded that G.T. has been good in translating nouns to Indonesia, and more importantly, it has met all levels of equivalence. The percentage equivalence from the concordance distribution of Nouns is 100% without error. It is different from the study conducted by Normasanti (2010), revealing that Google Translate cannot give correct Translation on English noun phrases into Indonesian. It also becomes worth contrasting to the next research since this result is in 2010, when the G.T. algorithm may not advance as in 2021.

From the top ten list of Adjectives, it needs only one post edit. It deals with the above-word level equivalence of the word "empty." The percentage equivalence from the concordance distribution of Adjective is 90%. It means that G.T. has been able to translate the most top ten list of adjectives in a good and natural way. It is in line with the study conducted by Oraki (2015), revealing that Google Translate translates simple, comparative, and superlative adjectives fairly accurately and naturally, while it fails to distinguish adjectives of similarity and, thus, translates them quite inaccurately.

The top ten Adverb lists need one post edited related to the above-word level equivalence for the word "just." The percentage equivalence from the concordance distribution of Adjective is 90%. It means that G.T. has been able to translate the most top ten list of adjectives in a good and natural way. More importantly, G.T. has been able to translate the top list of adverbs together with its collocation in a natural way. It differs from the study conducted by Karjo et al. (2019), revealing that G.T. still needs improvement in translating collocation.

Pedagogical Implications

Since several findings on the efficacy of Google Translate were still open space for discussing whether educators might use it as a tool in teaching Translation. This section will discuss several key pedagogical issues of using Google Translate in the Translation course.

First, instructors throughout the upper elementary, secondary, and postsecondary spectrum will need to understand how students utilize translation technologies and educate them on responsibly encouraging, rather than hindering, their development toward more complex language ability. Furthermore, instructors in the twenty-first century must engage students in an open, honest conversation about the moral consequences of such activities. If we want to learn a language, then using translation technology without comprehending it is harmful. Thus, instructors have to help learners communicate and autonomously seek to further their proficiency rather than simply complete an assigned task (Ducar & Schocket, 2018).

Second, it is believed that as the Google database expands, the grammatical quality of the Translation will improve (Groves & Mundt, 2015). Learners must understand that even when words appear to transfer directly from one language to another, the cultural concepts, goods, practices,

attitudes, and values transmitted are not always the same. Instructors must adjust their approach to assessment in the same way they adapt their learning assignments and objectives.

Third, according to the findings, users experience various lexical, structural, and pragmatic problems, which have a detrimental influence on the dependability of the translations. Educators and translation instructors must consider the problems of machine translation systems in the context of literature. In addition, software developers must handle the issues users and students encounter during the translation process (Omar & Gomaa, 2020).

Teachers must keep some critical factors in mind to ensure that classroom pedagogies aid students in achieving competency rather than leading them to rely on M.T. They must (1) assess their knowledge of available and emerging tools, (2) directly teach learners how to use appropriate technology responsibly, (3) reconsider their beliefs about students' use of supportive technologies, (4) become familiar with their institution's academic honesty policies, and (5) decide how they intend to act and react when such policies are violated, all while providing engaging and motivating instruction and assignments (Ducar & Schocket, 2018).

5. CONCLUSION

Regarding the top ten lists of Noun, Adjective, Verb, and adverb and their relationship to the level of equivalence, it can be concluded that Google translate has been able to translate and provide good suggestion translation to the top ten list of Noun, Adjective, Verb, and adverb. However, several non-equivalence in the word and above-word levels are still found. The equivalence problem appears in multiple lines of verbs, adjectives, and adverbs from those top lists. Several translation approaches must be utilized in the post-editing process to provide a more natural translation output. More crucially, G.T. has used the fixed expression so that intended readers will not encounter uncertainty.

It is also found that the translation activity using Google Translate together with AntConc and AntPconc to be well integrated into the classroom activities since it has a potential feature to bring about corpora-based research to the translation activities. However, besides its positive side, a crucial issue is found. It is found that AntConc and AntPconc did not translate several lines from chapters 7,8,9, and it needs to be solved as it will affect the interpretation of the data.

6. REFERENCES

- Baker, M. (2018). In other words: A coursebook on Translation. In Development (Vol. 134, Issue 4).
- Catford, J. C. (1965). A Linguistic Theory of Translation. Walton Street: Oxford University Press.

- Ducar, C., & Schocket, D. H. (2018). Machine translation and the L2 classroom: Pedagogical solutions for making peace with Google translate. Foreign Language Annals, 51(4), 779–795. https://doi.org/10.1111/flan.12366
- Groves, M., & Mundt, K. (2015). Friend or foe? Google translate in language for academic purposes. English for Specific Purposes, 37, 112–121.

https://doi.org/10.1016/j.esp.2014.09.001

- Karjo, C. H., & Metta, E. (2019). The Translation of Lexical Collocations in Undergraduate Students' Theses' Abstract: Students Versus Google Translate. Lingua Cultura, 13(4), 289. https://doi.org/10.21512/lc.v13i4.6067
- Larson M.L. 1984. Meaning–Based Translation: a guide to cross-cultural equivalence. London: University Press of America.
- Newmark, P. (1988) A textbook of Translation. Prentice-Hall International.
- Nida, E. A., and Charles. R. Taber. 1974. The Theory and Practice of Translation. Leiden: J. E. Brili.
- Omar, A., & Gomaa, Y. A. (2020). The machine translation of literature: Implications for translation pedagogy. International Journal of Emerging Technologies in Learning, 15(11), 228–235.

https://doi.org/10.3991/IJET.V15I11.13275

- Oraki, A. (2015). Chabahar Maritime University On the Translation Quality of Google Translate: With a Concentration on Adjectives 1 AbouzarOraki. Iranian Journal of English for Academic Purposes IJEAP, 1(4), 62–73.
- Tuzcu, A. (2021). The Impact of Google Translate on Creativity in Writing Activities. Language Education & Technology, 1(1), 40–52.
- van Rensburg, A., Snyman, C., &Lotz, S. (2012). Applying Google Translate in a higher education environment: Translation products assessed. Southern African Linguistics and Applied Language Studies, 30(4), 511–524. https://doi.org/10.2989/16073614.2012.750824
- Vries, de E. (2018). No Longer Lost inTranslation: Evidence that Google Translate Works for Comparative Bag-of-Words Text Application. 26, 417–430. https://doi.org/10.1017/pan.2018.26