

Research Article

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**The Equivalence Problems Produced by Machine Translation on A
Literary Text: A Study on The Indonesian Translation of *Harry
Potter: The Order of Phoenix***

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Abstract

Google Translate (GT) is a machine translator (MT) this is powered by neural machine technology (NMT) which can produce generally fluent textual translation in more than 100 languages with 60% accuracy. Studies have been done to measure GT ability in translating texts and the quality of its translation products. The results showed that GT's products are generally satisfying but they have inadequacies at some level of translation aspects. This study aims at finding the problems of equivalence that resulted from the process translating a *Harry Potter* novel, a literary work that is rich with cultural words and complex sentences, using GT from the English language into the Indonesian language. Using a descriptive qualitative method, the current study examines the problem of equivalence based on Mona Baker's theory to categorize the translation errors found in the GT output text. This study showed that literary texts are still problematic for GT in terms of words that two languages do not share and sentences that contain several points of view. This paper suggest that GT has to update its database of Indonesian lexicons and any MT output has to go post-editing process in order to ensure its readability and naturalness to its target readers. The implication of this study emphasizes the need to concentrate on translation training programs in the post-editing work.

Keywords: machine translation, Google Translate, Harry Potter, translation, literary translation

1. Introduction

Hutchins defines machine translation (MT) as the process of applying computers to translate text from one language to another by a computer without human involvement [1]. The objective of MT is to produce a meaningful and fluent translated text in a target language (TL) by maintaining the ideas or meaning in the source text (ST), similar to human translation. At the same time, Papachimonas and Yvon conclude that MT is the result of long collaborative and interdisciplinary works of computer scientists, linguists, and professional translators who toil to design and develop computer software that can automatically translate a text from a source language (SL) into an equivalent text in TL [2], [3], [4]. For the most part, MT works by parsing all the elements—syntax, morphology, semantics—of a text in the SL, and, in order to translate the text satisfactorily, it will refer to a different set of grammatical,

semantic and vocabulary rules from TL. Pioneered in the 1950s, MT is recognized by the general public as automated translation, automatic, or instant translation [5], [2]. Initially, MT technology was built as rule-based language software and it gradually evolved into statistical machine translation (SMT) [6], [7], [8]. In 2000, deep learning technology changed MT into neural machine translation (NMT) and this increases MT's efficiency and reduces machine translation errors to 60% as reported by Quoc and Schuster [9], [10]. Currently, NMT has been utilized in various commercial MT systems such as Google Translate, Microsoft Translate, and DeepL. Though MT works toward producing meaningful and fluent text in TL, MT's products are not free from inaccuracies at the word, textual, semantic, pragmatic, and many other levels regardless of the types of text in the SL. It has granted that the neural technology has improved the quality of MT, but that artificial technology has not helped MT to fully comprehend the meaning or the context of what it is translating [11].

Numerous studies have investigated the quality of MT in translating a text from Indonesian to English and vice versa in academic, literary, and religious texts. A diachronic study was done by Tirtayasa and Setiajid to compare the quality of GT in translating a literary text by comparing a text that was translated in 2017 and in 2019 [12]. Their study showed evidence that the translation errors that appeared in 2017 were not found in 2019. Another finding from that study also showed that the performance of Google's MT in 2019 was steadier when it dealt with Indonesian texts of various structures. The study concluded that GT has made progress in refining its translation technology. In 2020, a study was conducted to analyze the types of errors that MT produced when translating a literary short story [13]. Based on Mossop's revision parameters, Amilia and Yuwono found that MT has an inherent problem in producing a high-accuracy translation. The other error types were smoothness, mechanics, completeness, idioms, and sub-languages. The errors were caused by diction when MT transferred a text from SL into TL. When tested in translating Indonesian children's story into the French language, Sajarwa, Rohmah, and Bellat discovered that GT has yet to be successful in translating Indonesian cultural words into French [14]. Similar findings were discovered by Putra in his study about the output product of GT in translating seven Balinese folktales from Indonesia into English [15].

Regarding translating academic text, a survey with a group of university academics—students and teachers—revealed that the academics perceived the output product of GT at an acceptable level [16]. This qualitative descriptive research investigated the users' perception of the acceptability and readability of MT translation of twenty sentences taken randomly from articles written by Indonesian scholars. Regarding text readability, Winniharty, Syihabuddin, and Sudana reported that both the students and the teachers agreed that the text produced by MT was understandable.

The current study aims to evaluate the output of Google Translate (based on NMT) in translating seven chapters, selected randomly, of *Harry Potter: The Order of Phoenix* by J. K. Rowling [17] from English into Indonesian. Using Mona Baker's equivalence problems in translation [18], this study investigated the equivalence problems produced by GNMT as a result of translation errors. To limit the scope of data analysis, this study examines the types of equivalence problems found in the output text of GNMT and does not discuss the number of errors produced by the MT. After that, this study will discuss the pedagogical implications of this study in the training program for a professional translator concerning how to harness MT in a translation task.

Harry Potter novel was chosen as the subject of this research because the literary text, as suggested by Toral and Way, is thought to be challenging for MT [19], and literary texts often contain rare words, unique proper nouns, and sophisticated technical language [20]. *Harry Potter* series have been particularly difficult to be translated because the novels contain English words and British cultural references that do not have equivalence in non-English languages. Consequently, Budi recommends the translators to make their own assumptions in translating Rowling's intentions into the target languages and their corresponding cultures [21], [22].

2. Methods

This research used a descriptive qualitative method to analyze the problems of equivalence found in the translation of *Harry Potter: The Order of Phoenix* [17] using a machine translation called Google Translate. The MT of choice for this research was Google Translate (GT) because GT has millions of daily active users and supports 103 languages, based on Turovsky data [23]. The *Harry Potter* novel has ten chapters but the data for this study were taken randomly from the seven chapters of the Harry Potter novel. The findings were categorized into the seven problems of translation equivalence defined by Mona Baker [18].

For data collection, the seven chapters selected randomly from the English edition of the *Harry Potter* novel were put into seven separate Google Doc files. After that, the documents were translated into Indonesian using the built-in Google Translate feature inside Google Doc. From seven chapters in the English language, Google Translate produced seven chapters in the Indonesian language. In total, fourteen chapters of were used as the source of data analysis in this research. To make the process of data analysis efficient, the Indonesian and English texts were processed, chapter by chapter, using LF Aligner, an app created by Farkas [24], to make translation memories and spreadsheet tables from the source text (English) and their translations (Indonesian). LF Aligner works by pairing sentences taken from two different text documents. The purpose of making translation memories in this research was to assist in the search for the translation of words, phrases, clauses, terms, or sentences, making the data finding efficient. Moreover, this software is commonly used in the study of textual translation as have been done by Štromajerová, Baisa, and Blahuš [25], Doval [26], and Barkarson and Steingrímsson [27]. By analysing the paired sentences in the source text (English) and the target text (Indonesian), it was expected to find the translation errors and equivalence problems in MT's translation product in the Harry Potter novel translation.

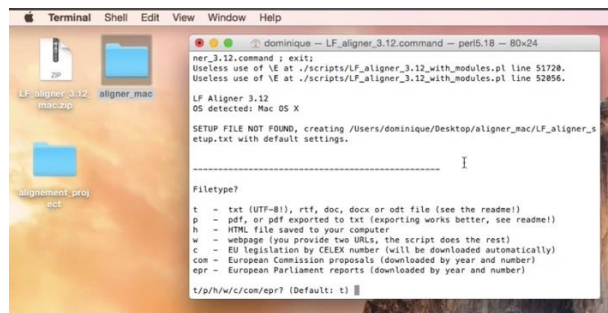


Photo 1. LF Aligner at work (Mac version)

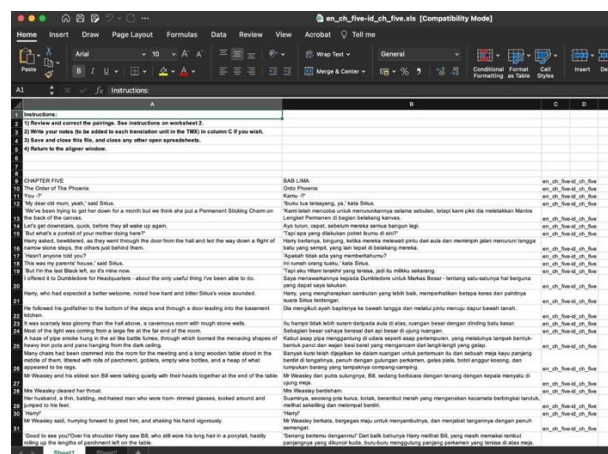


Photo 2. Output text alignment in spreadsheet format (Ms Excel) produced by LF Aligner

The translated chapters were analysed using Mona Baker's theory of translation equivalence problems [18]. The theory of translation equivalence comprises of seven levels and they are:

1. word level equivalence
2. above word level equivalence
3. grammatical equivalence
4. textual equivalence
5. pragmatic equivalence
6. semiotic equivalence
7. beyond equivalence

Using the translation memories produced by LF Aligner, each chapter' segment was analysed to find translation errors produced by GT. Later, the errors were categorized into the seven equivalence problems that Baker has defined. After that, translation strategies were suggested in post-editing the GT output for the purpose of increasing the readability and the naturalness of the translated text.

3. Findings & Discussion

The comparison of the Indonesian translation of the selected chapters which GT has translated displayed many problems of equivalence when compared to the original chapters in the English language. Further analysis of the translation errors indicated that the errors resulted from GT's inability to find the appropriate Indonesian equivalent words, structure, or form for the English texts in the *Harry Potter* novel. Using Baker's theory of translation problems of equivalence, the problems of equivalence produced by GT belong to five categories: word level, above word level, grammatical, textual, and pragmatic equivalence.

3.1 Equivalence problems in translation

3.1.1 Word level problem of equivalence

The first case of the problem of this level occurs to the word *wand*. MT always translated *wand* as *tongkat* in Indonesia. For example, this is a segment taken from the chapter eight:

SL: 'Excellent,' said Dumbledore briskly, springing to his feet, pulling out his *wand* and causing the two chintz armchairs to vanish

TL: 'Bagus,' kata Dumbledore cepat, melompat berdiri, mencabut *tongkatnya* dan menyebabkan kedua kursi berlengan chintz menghilang.

Although the English dictionary defines *wand* generally as a long, thin stick or rod, *wand* also has a second definition which is, "a stick or rod thought to have magic properties, held by a magician and used in casting spells or performing tricks". Besides *wand*, the word *stick* also means *tongkat* in the Indonesian language. GT probably just used the general definition of *wand* when MT translated in their act of casting spells or performing tricks, *wand* should be translated as *tongkat sihir*. To retain the original meaning in the novel, post-editing should be applied to this case of translation error. Mona Baker suggests the strategy of translation by paraphrasing using an unrelated word. Adding the word *sihir* to *tongkat* creates a compound noun that has similar definition to the word in the SL.

The next equivalence case appears in chapter nine of the *Harry Potter* novel. This time the word *phoenix*. Phoenix is a mythical bird that lived for five or six centuries in the Arabian desert and it is defined, "after this time burning itself on a funeral pyre and rising from the ashes with renewed youth to live through another cycle" [28]. The translation problem for the word *phoenix* appeared in this sample.

SL: 'It's Headquarters to the Order of the *Phoenix*, isn't it?'

TL: 'Itu Markas Besar Orde *Phoenix*, bukan?'

MT did not translate the word *phoenix* into Indonesian because of the vocabulary deficiency in Google's database of the current Indonesian's lexicons. Although phoenix is a mythical bird, in other words a cultural word, from outside Indonesia, the word *phoenix* itself has been adopted into Indonesian lexicons as *burung foniks* by Kamus Besar Bahasa Indonesia [29]. So, to help keep the translation inline with the current situation in the Indonesian lexicons, post-editing is needed for this translation case. The best strategy is applying paraphrasing technique using a related word. The segment of TL can be improved into this version, 'Itu Markas Besar Ordo *Burung Foniks*, bukan?'

The next case of equivalence at word level appears in all chapters that MT translated. The word *said* is always translated as *kata*. Though the translation is often appropriate in many contexts, the word *kata* can be contextually inappropriate at some of the readers. An example of that inappropriateness can be seen in this data.

SL: 'Fred, what are you doing?' said Mrs Weasley sharply.

TL: 'Fred, apa yang kamu lakukan?' kata Mrs Weasley tajam.

In that segment, the utterance takes the form of a question and the context of the utterance is that Mrs. Weasley is questioning Fred. However, Indonesian readers will find the word *kata* strange because Mrs. Weasley utterance is not a statement but it is a question. To increase the naturalness of the translation and to make the utterance contextual to the situation, a post-editing is needed by applying the translation strategy of a related word. Using KBBI Daring, the word *tanya* is more appropriate as an equivalence of the word *said*. Besides, the word *tanya* is contextual too with the situation in which the utterance appear.

Another equivalence problem that MT encountered in this translation project is translating specific words that are related to colour. A good example of this problem is evident in the segment taken from chapter eight.

SL: Fudge turned a slightly deeper shade of *puce*.

TL: Fudge *mengubah warna puce yang sedikit lebih dalam*.

The word *puce* is not translated from SL into TL because that word has no equivalence in the Indonesian lexical collection. Oxford dictionary defines *puce* as dark red or purple-brown color. The word *puce* in the context refers to the color of Fudge's face who is having an argument in a court hearing. To make this segment readable and comprehensible to Indonesian readers, it is suggested to improve the translation of *puce* by using the strategy of paraphrasing by omission. Using the definition of an English dictionary, it is better to omit the word *puce* and translate its definition into Indonesian phrases. The recommended revision is available as follows, "Wajah Fudge menjadi *memerah*".

3.1.2 Above word level problem of equivalence

Idioms are always problematic whenever MT tries to translate it into a target language because not every language has idioms in its lexicons [18]. In chapter eight of the Harry Potter novel, MT often produced a literal translation of English phrasal verbs whose equivalence are not available in the Indonesian language. This segment is an example of such case.

SL: 'Are you ready?' he *called down* the row.

TL: 'Apakah kamu siap?' dia *memanggil* barisan.

Although the phrasal verb *call down* means 'cause someone to appear.' [30] the word *memanggil*, GT's suggestion for the Indonesian translation, is not contextual in this segment because the utterance takes the form of a question and *memanggil* does not contain the act of asking a question. The definition

of *memanggil* or *panggil* (KBBI Daring) is requesting someone to come close, invite, or mention. None of these definitions are appropriate to justify the choice of *memanggil* in the above segment. To make the translated text become natural and more readable in the target language, the phrase *called down* should be paraphrased with an unrelated word that can keep the utterance contextual in the post-editing session. The best word for this case is *bertanya kepada*.

TL: “Apakah kamu siap?’ dia *bertanya kepada* barisan.

Besides idioms, MT has a problem with translating English collocations into Indonesian. One collocation which was not appropriately translated in a segment is taken from the chapter nine.

SL: ‘Well, of course, they couldn’t have *found you guilty*, not on the evidence, but even so, I can’t pretend I wasn’t -’But Mr Weasley broke off, because the courtroom door had just opened again.

TL: Yah, tentu saja, mereka tidak bisa *menemukanmu bersalah*, tidak berdasarkan bukti, tapi meski begitu, aku tidak bisa berpura-pura tidak --’Tapi Mr Weasley berhenti, karena pintu ruang sidang baru saja dibuka lagi.

The phrase *found someone guilty* means that a person is guilty as determined by the court of law [31]. This collocation is a common register in the court room, but MT did not have the Indonesian equivalence for that word in its corpus. So, in the translation process, MT focused its translation effort on the word *found*. Looking at the context of the conversation, the appropriate Indonesian translation for *found you guilty* should be *menyatakanmu bersalah* because this phrase has similar meaning to the phrase in the SL. The strategy for this post-editing translation is paraphrase using unrelated words.

The segment below was one last finding of the equivalence problem at above word level.

SL: Harry said nothing. The *hearing’s* on my floor, in Amelia Bones’s office.

TL: Harry tidak berkata apa-apa. *Sidangnya* ada di lantaiku, di kantor Amelia Bones.

The word *sidang* is the translation made by MT for the word *hearing*. The problem with this Indonesian word is that *sidang* has a general meaning, a meeting to discuss something, according to KBBI Daring [29]. In contrast, the word *hearing* carries a more specific meaning, an act of listening to evidence in a court of law or before an official (Oxford Dictionary). A post-editing was applied to achieve accuracy in translation and used the translation strategy of paraphrasing using unrelated words. It is suggested to translate *hearing* into *sidang dengar pendapat*.

3.1.3 Grammatical problem of equivalence

In chapter eight of the Harry Potter novel, the word *wizard* and *witch* appeared multiple times, but MT always translate both words as *penyihir* in Indonesia. For example:

SL: Some of the *wizards* and *witches* around her were muttering again; a few nodded, but others were frowning and shaking their heads.

TL: Beberapa *penyihir* dan *penyihir* di sekitarnya bergumam lagi; beberapa mengangguk, tetapi yang lain mengerutkan kening dan menggelengkan kepala.

The word *wizard* and *witch* appeared side by side because each word semantically carries gender meaning. New Oxford American Dictionary [30] defines *witch* as ‘a person thought to have magic powers, especially evil ones, popularly depicted as a woman wearing a black cloak and pointed hat and flying on a broomstick’. On the other side, the word *wizard* is defined as ‘a man who has magical powers, especially in legends and fairy tales’. In the TL, there is no gender distinction for the word *penyihir*. Kamus Besar Bahasa Indonesia (KBBI) defines *penyihir* as ‘a person who bewitch’. So, in Indonesian

language, a *penyihir* can be a man or a woman. If the TL text produced by MT is kept, the readers will ask why the word *penyihir* appears twice without apparent reason.

Since the author of Harry Potter uses *witch* and *wizard* to refer to two gender group of people with magical powers, there is a need in post-editing to improve the Indonesian translation of MT. The best strategy for this case is translation by paraphrasing using unrelated words. The word *witch* should be translated into *wanita penyihir* and the word *wizard* should be translated into *pria penyihir*. Adding the word *pria* or *wanita* to the word *penyihir* will create a compound noun and provide clarity on gender reference as reflected by the word *witch* and *wizard*. This post-editing strategy will maintain the gender information from SL into TL and this strategy will avoid creating uncertainty in the readers' minds.

Another equivalence problem at grammatical level is found in chapter six when the word *you* is translated as *anda* by MT. The sample text is available here.

SL: Trust me, *you* don't want to wake up and find him prowling around your room.

TL: Percayalah, *Anda* tidak ingin bangun dan menemukannya berkeliaran di sekitar kamar *Anda*.

The word *anda* is too formal in this context because that pronoun appears in a conversation between close friends. This flaw of comprehending the context of Indonesian pronouns appeared too when GT translated “kau” into French and it resulted in the word “vous” [14]. Sajarwa et al inferred that GT failed to see the context of “kau” which is an informal pronoun to refer to someone who has close relationship to the speaker. To make the translation sounds more natural, it is suggested to replace the word *anda* with *kamu* by applying the translation strategy of paraphrase using a related word. The revision will go like this, ‘Percayalah, *kamu* tidak ingin bangun dan menemukannya berkeliaran di sekitar kamarmu.’ This is a case of making the translated text culturally appropriate because the word *anda* is a formal pronoun which is used in a conversation between a person from a low position and a person from a high position.

One problem often found in MT's translation product on the selected chapters of Harry Potter novel is the problem of translating plural nouns. A good example of that is found in this translated segment.

SL: ‘Have either of you been attacked by *Dementors* this summer?’

TL: ‘Apakah salah satu dari kalian pernah diserang oleh *Dementor* musim panas ini?’

In the source language, the word *dementors* take the form of a plural noun, meaning there are more than one dementor. In the TL, the translation of *dementors* is just *dementor*. This case confirms the finding from Pratiwi’s study that MT has problems in translating plural forms into appropriate equivalence in the Indonesian language [32]. To retain similar meaning from SL, it is suggested to apply the translation strategy of paraphrase using a related word. *Dementors* can be translated as *dementor-dementor*. So, the final result will be like this.

TL: Apakah salah satu dari kalian pernah diserang oleh *dementor-dementor* di musim panas ini?’

3.1.4 Textual problem of equivalence

Many sentences in the Harry Potter novel takes the form of a compound-complex sentence and this becomes a problem for MT in translating the text from the SL and retains the cohesion of information in the TL. The following segment is a good example of the case being discussed here.

SL: ‘I had gone out to buy cat food from *the corner shop at the end* of Wisteria Walk, around about nine o'clock, on the evening of the second of August,’ gabbled Mrs Figg at once, as though she had *learned what she was saying by heart*, ‘when I heard a disturbance down the alleyway between Magnolia Crescent and Wisteria Walk.’

TL: ‘Saya pergi keluar untuk membeli makanan kucing dari *toko pojok di ujung* Wisteria Walk, sekitar pukul sembilan malam, tanggal dua Agustus,’

celoteh Mrs Figg segera, seolah-olah dia *telah mempelajari apa yang dia pelajari. berkata dalam hati*, 'ketika aku mendengar gangguan di gang antara Magnolia Crescent dan Wisteria Walk.'

The original sentence in the SL is a combination of complex sentence with a dangling modifier in the middle of it. The problem with MT translation is that it cannot not maintain sentence cohesion in the TL and that is evident in the unnaturalness of the phrase *toko pojok di ujung jalan* and *telah mempelajari apa yang dia pelajari. berkata dalam hati*. The phrase *toko pojok di ujung jalan* is a direct translation of *the corner shop at the end*. The word *pelajari* appeared after the phrase *dia mempelajari* which will create confusion in the readers' minds. This evidence corroborates Sutrisno's finding that GT grappled with translating English sentences with multiple points of view into the Indonesian language [33]. If a human translator translates the segment in case, the focus of the translation process would be in maintaining the essential information found in the sentence and the translation product does not have to take the same sentence structure. For this case, it is suggested to use the translation strategy of paraphrasing and omission. The result is as follows.

TL: 'Saya pergi keluar untuk membeli makanan kucing dari *toko di ujung Wisteria Walk*, sekitar pukul sembilan malam, tanggal dua Agustus,' celoteh Ibu Figg cepat, seolah-olah *dia telah hafal apa yang ia katakan*, 'ketika aku mendengar keributan di gang antara Magnolia Crescent dan Wisteria Walk.'

The next equivalence problem at textual level was found in this following segment.

SL: Mum says get up, *your breakfast is in the kitchen and then she needs you in the drawing room, there are loads more Doxys than she thought and she's found a nest of dead Puffskeins under the sofa*

TL: Mum bilang bangun, *sarapanmu ada di dapur dan kemudian dia membutuhkanmu di ruang tamu, ada lebih banyak Doxy daripada yang dia kira dan dia menemukan sarang Puffskein mati di bawah sofa.*

The sentence from SL takes the form of a complex sentence with dangling construction and appositive. This created a problem for MT in guessing the right translation of that text because the machine must decide the core the information in the sentence and the additional information. The translation product in the TL is difficult to comprehend because there is no clear subject reference and there is no clear indication of the main clause and the sub-clause. The text in the TL indicated that MT is probably programmed to translate a text from SL and into TL using the same syntactic format without considering a text's readability and naturalness. To improve the translation, it is suggested to apply the strategy of omission and paraphrase using unrelated words. The post-editing yields the following result.

TL: Ibu memintamu untuk segera bangun dan sarapan di dapur. Setelah makan, *dia memintamu untuk ke ruang tamu karena dia menemukan Doxy yang jumlahnya lebih banyak daripada yang dia kira. Dia juga menemukan sarang bangkai Puffskein di bawah sofa.*

3.1.5 Pragmatic problem of equivalence

One case of pragmatic problem of word equivalence was found in the following segment.

SL: How she got to be a prefect when she's thicker than a *concussed troll*...

TL: Bagaimana dia bisa menjadi prefek ketika dia lebih tebal dari *troll yang gegar otak*...

The phrase *concussed troll* in the SL was translated into *troll yang gegar otak* by MT because the machine used literal translation and it did not catch the true meaning behind that phrase in the SL. The phrase *concussed troll* is a mocking term for one of Ron's school mates. Therefore, that phrase should not be translated as it is because there is no equivalence for it at word level. The translation should

target the implied meaning of concussed troll. For this case, the right translation strategy is paraphrase using unrelated word. The end result will be, 'Bagaimana dia bisa menjadi ketua kelas *padahal dia tidak lebih pintar dari yang lain.*'

The next case of equivalence problem at pragmatic level is when a word that is supposed to appear in the sentence does not appear and it forces the MT to produce it in the TL. This segment is an example of that.

SL: 'There are no Dementors outside Ministry control!' snapped Fudge, *who had turned brick red.*

TL: 'Tidak ada Dementor di luar kendali Kementerian!' bentak Fudge, *yang telah berubah menjadi merah bata.*

To a common person, the phrase *yang telah berubah menjadi merah bata* will look strange because it does not clearly reference what turns into brick red. The question will be whether Fudge's face or Fudge's body that turn into brick red. To improve clarity of reference, the text in TL needed post-editing using the strategy of paraphrasing an unrelated word. The context showed that Fudge is angry. When a person is angry, his or her face will become red.

TL: : 'Tidak ada Dementor di luar kendali Kementerian!' bentak Fudge, *yang wajahnya telah menjadi merah bata*

In chapter six, a case of figurative speech is also a problem for MT in finding words equivalence because a figurative speech always contains implicit message that lies between the lines. This case is apparent in the following segment.

SL: It's unplottable, so Muggles could never come and call - as if they'd ever have wanted to - and now Dumbledore's added his protection, *you'd be hard put to find a safer house anywhere.*

TL: Itu tidak dapat diplot, jadi Muggle tidak akan pernah bisa datang dan menelepon - seolah-olah mereka pernah menginginkannya - dan sekarang Dumbledore menambahkan perlindungannya, *Anda akan sulit menemukan rumah yang lebih aman di mana pun.*

MT had difficulty to catch the implicit message in *hard put to find a safer house anywhere* and its difficulty is evident the TL text. The clause *Anda akan sulit menemukan rumah yang lebih aman di mana pun* sounds unnatural in the part *yang lebih aman di manapun*. To make the TL text sounds natural, a post-editing is needed and the strategy is paraphrasing by omission and using unrelated words. The end result is as follows.

TL: Hal itu tidak termasuk dalam pembagian jadi Muggle tidak akan pernah bisa berkunjung dan menelepon - seolah-olah mereka pernah menginginkannya - dan sekarang Dumbledore menambahkan perlindungannya, *Kamu akan sulit menemukan tempat yang lebih aman daripada rumah ini.*

5. Conclusions

Based on the findings discussed above, the current study concluded that GT is generally capable of producing meaningful texts from one language to another regardless of the complexity of the text in the source language and this affirms previous studies about the overall quality of GT after the implementation of neural technology in its software [9], [32], [34]. On the whole, the product of GT is meaningful and relatively acceptable. However, the text is not accurate enough to catch the surface or the underlying message in the source language as found in the *Harry Potter* novel. In addition, it has problem in finding the equivalence of a cultural word from the source language into the target language [11]. Moreover, GT struggles when it encounters complex sentence that contains multiple point of views

[33]. As long as GT has not improved its inherent deficits, we should treat any product of machine translation with a critical mind unless the product has received post-editing treatment by a translator.

It is important to remember that translating a literary work requires a translator to possess the linguistic knowledge and cultural understanding of both the source and the target language [22], [34] because a machine translator lacks that knowledge since the machine is not designed to learn about cultural norms. A review of equivalence problems in the translation errors found in the *Harry Potter* novel using MT reveals that it still produces translation errors at the word level, above word level, grammatical level, textual level, and pragmatic level. For equivalence problems at word and above word level, GT should improve by continuously synchronizing its Indonesian lexicon database to KBBI Daring's database. To address those equivalence problems, the texts of the TL had to undergo a post-editing process that targets the inappropriateness of word choice or sentence construction.

Another insight from the current study supports the notion that MT technology has not been able to replace human translator. Nonetheless, it is impossible to deny the benefits of using MT technology in assisting professional translators in making their jobs efficient [7], [36], [37], [38], [39]. With reference to the findings of this study, four issues arise in relation to how MT should be perceived in the context of professional translation training program in the digital age.

1. MT has to be positioned as a tool for accelerating the translation process, but MT is not yet a tool that can produce an accurate translation product. A lesson about harnessing MT in a translation process should be a part of a translator training course because MT has a proven and developing technology to improve a translator's working efficiency.
2. Since accuracy is not the focus of MT at the moment, a translator needs training in post-editing the translation product of MT [36]. The training focuses on learning the applications that assist the post-editing process, such as utilizing post-editing applications, online dictionaries, and AI-assisted writing applications.
3. Literary texts such as *Harry Potter* novel series often contain made-up words that do not have equivalence in any human language. So, it is suggested that translators be trained to use Wiki Fandom available on internet to find the best equivalence for fictional words. Also, Pym proposes a translator training program should encourage the trainees to build the habit of consulting their peers and collaborating with area experts in the case of dealing with cultural words or compound complex sentences [36].
4. The post-editing on MT products showed that revising translation errors requires a translator to do many paraphrasing works from word to sentence levels. So, a training program for a translator needs more time allocation in doing paraphrasing exercises toward equivalence problems at the word, grammar, textual, and pragmatic levels. The end goal of such training is, the words of Harto, Hamied, Musthafa, and Setyarini, to build students' sensitivity on the structure and the communicative function of a language [40].

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