GOOGLE TRANSLATE'S PERFORMANCE IN TRANSLATING A SHORT STORY FROM INDONESIAN INTO ENGLISH

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ABSTRACT

This study is aimed to assess the performance of Google Translate (GT) in translating a short story from Indonesian into English. A short story entitled "Babi Milik Sukro Bunting" by Putu Supartika was the object of this study. Documentation method was applied in collecting the data, meanwhile descriptive qualitative method was applied in analyzing the data. The theory applied in assessing the performance of GT was the error classification proposed by Vilar (2006) and supported by Newmark V diagram (1988). With regard to the analysis, all errors were found except incorrect form. Incorrect words and missing words were the dominant errors, meanwhile unknown word and word order were the minor errors found the data. The output of GT was mostly source language emphasis. Moreover, one sentence could have more than one error. In the case of incorrect word, the errors were mostly caused by polysemy, homonymy, and idiom. On the other hand, the missing of content word, article and determiner were the cause of the missing of word error. Another errors were also found in the data, such as wrong translation of pronoun "dia" and suffix –nya to encode possessiveness.

Keywords: Machine translation, error classification, short story

ABSTRAK

Penelitian ini bertujuan untuk menilai kinerja Google Translate (GT) dalam menerjemahkan sebuah cerita pendek. Objek penelitian ini adalah cerita pendek yang berjudul "Babi Milik Sukro Bunting" dikarang oleh Putu Supartika. Metode dokumentasi digunakan untuk mengumpulkan data, sedangkan metode deskriptif kualitatif digunakan untuk menganalisa data. Teori yang digunakan untuk menilai kinerja GT dalam penelitian ini dikemukakan oleh Vilar (2006) tentang klasifikasi kesalahan dan didukung oleh diagram V yang dikemukakan oleh Newmark (1988). Hasil penelitian menunjukkan bahwa semua kesalahan ditemukan kecuali incorrect form. Incorrect word dan missing word adalah kesalahan yang mendominasi, sedangkan unknown word dan word order adalah kesalahan yang sedikit ditemukan pada data. Hasil terjemahan oleh GT sebagain besar menyesuaikan bentuk bahasa sumber. Selain itu, satu kalimat bisa memiliki lebih dari satu kesalahan. Terjemahan kata yang salah biasanya disebabkan oleh polisemi, homonim, dan idiom. Di sisi lain, hilangnya kata inti, article dan determiner merupakan penyebab kesalahan pada kategori missing word. Kesalahan lain juga ditemukan pada data, seperti terjemahan yang salah dari kata ganti "dia" dan suffix –nya yang menunjukkan kepemilikan.

Kata Kunci: Mesin penerjemahan, klasifikasi kesalahan, cerita pendek

I. INTRODUCTION

Translation is the super ordinate term for converting the meaning of any utterance of any source language to the target language (Newmark, 1988: 32). Manual translation requires only human translator to

do the process of the transferring meaning, however it can also be done automatically by Machine Translation (MT). Nowadays, the translation by MT becomes popular because the speed and its free access, although the users cannot fully rely on the output. Generally, the limitations of MT are

in understanding the context of the text and also in translating i.e. homonym, polysemy, idiom, and collocation. It is because the machine does not have social and culture knowledge like human does. Furthermore, the segment length is also a challenge for the machine translation. In order to minimize the error found in the translation output, the system is gradually updated by the developers. Google Translate is having its own translation community from all around the world to translate various segments from phrase level to complex sentence. The result of those human translators who join in the translation community will be trained in the system in order to improve the accuracy and readability of the output.

The accuracy of the output of the machine translation depends on the amount of the parallel corpora that is trained in the system. Machine works with word not with language, therefore it is hard for the machine to understand the whole text at one time translation because it can merely focus on a sentence in the case of neural machine translation (NMT). The other types of machine's system such as word based and phrase based are harder to understand the context of the text since they do not look at the neighboring words before producing the output. NMT is the latest innovation of MT system which is applied in GT. It does not through the re-ordering process like phrase based MT, however it translates the whole chunk at once without the re-ordering process. In conducting this study, the theory of error classification proposed by Vilar (2006) was applied. There are five big classes of error, namely; missing word, word order, incorrect word, unknown word, and punctuation. In order to limit the analysis, the punctuation error was not analyzed in this study.

Research about Machine Translation is very important in order to track down the development of it. A research about translation from English into Swedish conducted by Ahrenberg (2018) about the comparison of translation output by GT and Human Translator (HT) found out that human tends to translate longer than the machine. The output of HT was longer both in terms of number of words and number of characters. In term of Indonesian - English language pair, few researches have been conducted. Both Ariany (2017) were assessing (2018)Adiputra the performance of Google Translate and Bing Translation. Both of them found out that the most frequent error found in the output of was mistranslation although one was assessing English -Indonesian and the other was assessing Indonesian - English language pair. Another research about error analysis in Machine Translation was conducted by Laksana and Putri (2018). They assessed the performance of Youtube auto translate. Their study was the biggest reference for this present study in the application of theories and the method of analyzing the data. The difference of their study and the present study was the data source. They used many text types, such us science, technology, and physic. On the other hand, this study was focused on one type which was literary text.

Different text types could influence the performance of the output of the MT. However, wrong lexical choice or mistranslation concept were still the most frequent error produced by it despite of the text types. It is usually because of the artistic function in the case of literary text. Artistic function can be the style in writing; the structure of the sentence and also the diction in the SL. The use of figurative language is also challenging for MT since it is related to

culture. In addition, another major challenge faced by MT is in overcoming ambiguity, i.e. homonymy and polysemy. It is because MT relied on literal translation without sufficiently taking into account words' context. Therefore, the developers need to update the system regularly to be more reliable.

The revolution of the MT system assist the users in need of fast translation who expect for a good quality translation. Apart from the sophistication, users cannot fully relied on the MT output since it still has limitation as explained in the previous paragraph. This study was conducted to assess the performance of Google Translate (GT) in order to find out the error production of the MT. Finally, this study is hoped to be one of many references and guidelines for the users and the developers to track down the MT development, particularly when translating from Indonesian into English language pair.

II. RESEARCH METHOD

The data source of this study was a literary text. It was a short story entitled "Babi Milik Sukro Bunting". This short story was written by Putu Supartika and published in the 9th Ubud Writer and Reader Festival 2019 (URWF). This short story was chosen because some reasons. Since the short story is about social life, it uses collocation. It also has culture terms. Moreover, the choice of diction and the use of figurative language to improve the artistic function of it were also the other reasons.

Documentation method and note taking technique were applied in collecting the data. First, the short story was translated by using Google Translate from Indonesian into English language pair. Since Google Translate's limit is up to 5000 including

letters, punctuations, and space for one time translation, the short story was translated part by part according to the system limitation. The time when translating the short story was also mentioned in order to prevent misunderstanding on the output. It is because GT's system is gradually updated in order to improve its accuracy, therefore when translating the same text in the future, the output could be different. The short story "Babi Milik Sukro Bunting" was translated on March 17th, 2020. Second, in order to mark the error, the data were bold typed. Third, the data were shrunk down in order to limit the analysis to prevent the wide range analysis.

The method applied in analyzing the data of this study was qualitative and the data were analyzed descriptively. Wiersma (1991:85) stated that data analysis in qualitative research is a process of categorization, description, and synthesis. There are three ways in assessing the MT performance, namely; manual, automatic, and the combination of both of them. The types of error in this study were classified manually. Manual method also has some categorizations as explained by Popovic (2011), such as strict, flexible, and free. This study, particularly, applied flexible method. stated that syntactically correct differences in word order, substitutions by correct alternative synonyms, and expressions are not considered as errors in flexible method. In classifying the error, the short story was checked by using Vilar (2006) error classification and Newmark V diagram (1988) was used to support the analysis. In order to limit the analysis, the last type of error; punctuation was not assessed in this study. According to Vilar (2006), the current MT represent only minor disturbances for languages without fixed punctuation rules.

Popovic (2018) stated that the obvious method for error analysis is to look into the translation output, mark each erroneous word, and assign a corresponding error tag to it. The goal of error analysis is to obtain an error profile for a translation output, a distribution of error over the defined error classes. Therefore, the errors produced by Google Translate was marked in bold and grouped into its suitable category. The data were put in different table based on the category of error in order to make the classification clearer. Furthermore, by putting the data in the table, the pattern of error can be seen clearly. Since the short story are bilingual, the translation by Human Translator (HT) or the book version was used as reference to help to validate the error.

III. DISCUSSIONS

In this part, the classification of error found in the short story entitled "Babi Milik Sukro Bunting" was descriptively analyzed. Vilar (2006) types of error classification was applied in assessing the data. In addition, Newmark V diagram (1988) was applied to support the analysis. It is used to analyze whether the translation is source language emphasis or target language emphasis. In addition, this study will also identify whether the error is a single error or

multiple error. Followings are some example of errors found in the output of Google Translate (GT) in translating the short story from Indonesian into English.

3.1 Unknown word

According to Vilar (2006), unknown word can also become a source of error when the machine left the word in the source language (SL) untranslated in its output. One reason is because the word has never been trained in the system of Google Translate, therefore the word is undetected. Another reason is because the word is a new word in a language or it is a culture term. This is a minor error found in the output of GT.

Language and culture are two bounded nation identities, therefore it is a challenge for MT to produce an accurate translation output. The developers need to train hundreds culture term of source language with each of the pairs in target language. In fact, there are some culture terms that do not have equivalence in target language, hence the translators usually use borrowing procedure in translating the culture terms. There are two types of unknown word classified by Vilar (2006).namely: unknown stem and unknown form. Following is the example of the unknown form error:

No	SL	TL by GT	Types of error	Translation suggestion
SL/ P2/ L1	Pertama, ia gagahi babi itu tujuh purnama yang lalu saat ia tak bisa lagi menahan birahinya.	seven full months ago	- Unknown	First, he raped the pig seven months ago when he could no longer hold his lust.

In the sentence above, the word *gagahi* in SL was left untranslated in the output of Google Translate. According to KBBI V,

the word gagah or menggagahi means menguasai dengan kekerasan (memaksa) or memerkosa. In the target language, the meaning is close to the word "rape". According to Oxford Dictionary, the word "rape" means force somebody to have sex when they do not want to, by threating them or using violence. In the short story, the doer tied the pig's mouth and leg before he did his action. Therefore, it was an act of violence. The meaning of the word "gagah" was also close to "sexual abuse", however based on the context of situation "rape" was the closest meaning. This word is a homonym, the other "gagah" in SL means "dashing" or "handsome". Homonym is a word that has a similar spelling but it has different meaning.

It can also be seen that the homonym in SL "bulan" was translated wrongly in TL. From the data above, the system of Google Translate fails to differentiate the intended meaning of the SL word bulan based on the context in the sentence. The SL word bulan in Indonesian has two different meanings. The first is moon and the second is month. Here, the intended meaning of the word bulan is moon. Based on Vilar (2006), this classified error into wrong disambiguation which is part of incorrect word type.

The unknown stem and the incorrect disambiguation were not the only errors found in the sentence above. Another error produced by GT was the missing of suffix nya. The suffix -nya in SL "birahinya" was not shown in the translation of GT. The suffix -nvain the data indicates possessiveness. It shows a relationship of belonging between one thing and another. From all of the errors found in the sentence. it could be concluded that GT performed multiple errors, however the errors did not relate to each other. According to Newmark V diagram (1988), the translation by GT was a source language emphasis. Therefore, the readability was low in the TL.

The least post editing of the sentence above is "first he raped the pig seven full moons ago when he could no longer hold his lust". In order to make the translation more into the target language emphasis, the translation suggestion is "first he raped the pig seven months ago when he could no longer hold his lust". Seven full moons equal seven months. One month could have twice full moons however it is rarely happened. Following is another unknown word error found in the data:

No	SL	TL by GT	Types of error	Translation
				suggestion
SL/	Tumben kau datang	Tumben you came	Unknown	How odd that
P28/	ke sini langsung marah-	here immediately to	word	you came here
L1	marah!"	get angry!"	- Unknown	suddenly to get
			stem	angry at me!"

According to Suryawinata (2003), there is no concept of SL "tumben" in English. According to him, this word gives a feeling of surprise because the thing that

happens is unusual. Based on the context given in the short story, the SL was translated into "... How odd that you came here suddenly to get angry at me!".

3.2 Missing Word

Vilar (2006) stated that a missing word error is produced when some words in the generated sentence are missing. This error is divided into another two sub types, namely; the missing of content word and the missing of filler word. When the appearance of essential word for expressing the meaning

of the sentence is dismissed, it is categorized as the missing of content word. On the other hand, the missing of filler word is when the dismissal of the word is only necessary in order to form a grammatically correct sentence. The occurrence of this error was high in the output of GT. Following is the example of the missing of content word error:

No	SL	TL by GT	Types of	Translation
			error	Suggestion
SL	Terbersit sedikit	There was a slight	Missing	There was a slight
/P4	keinginan untuk datang	desire to come to the	word	desire to come to the
/L4	ke kompleks pelacuran	prostitution complex	- Missing	prostitution complex at
	yang ada dipinggiran	at the edge of the	content	the edge of the village,
	desa, yang sering	village, which was	word	which was often
	dibicarakan orang-	often discussed by		discussed by the
	orang di warung tuak	people in the		people at Simpreg's
	Simpreg walaupun ia	Simpreg warung		palm wine stall
	tak tahu di mana lokasi	although he did not		although he did not
	persisnya.	know the exact		know the exact
		location.		location.

As seen in the table above, the translation of the bold typed word *tuak* in SL did not appear in the output of the TL that was produced by GT. It was categorized as the missing of content word error. *Tuak* is a popular alcoholic drink in Bali and it is known as palm wine widely. The disappearance of the word *tuak* in TL distorted the meaning of the sentence because the intended meaning was undelivered successfully. On the other words, the missing word gave less information to the target reader.

Another error was also found in the output of GT. The word warung in SL was left untranslated. According to KBBI V, warung is a place to buy food, drink, groceries, etc. The meaning of the word warung is close to TL word "shop" and "stall". However based on the lexical

meaning, the word "stall" was more suitable for the given context. According to Oxford Dictionary, the word "stall" means a table or small shop with an open front that people sell things from, especially at a market. Particularly in Bali, Warung Tuak can be built anywhere according to the owner's desire, for instance; in front of the owner's house, in the market, and other empty spaces that are allowed to build the warung tuak. In Bali, a traditional warung tuak is normally having an open front just like a stall. However nowadays, this place could have either open or close front. Hence, the word warung to refer warung tuak in the SL can be translated into "stall" in TL.

It can also be seen that the possessive marker ('s) to mark the belonging of the warung did not appear in the output of GT. Therefore, it was categorized as missing

filler word error, especially the missing of possessive marker. Another missing of filler word was also caused by the disappearance of the article "the" in the sentence. From all of the errors found in the output of GT, it can be concluded that the sentence has multiple errors. As the result, the output of GT distorted the intended meaning of the sentence. One factor influencing the error performance in TL was the source language

3.3 Incorrect Word

Vilar (2006) divided the incorrect word error into five types, namely; sense, incorrect form, extra word, style, and idiom. In general, incorrect word happens when the system is unable to find the correct translation of a given word. The occurrence of this error was also high in output of GT.

emphasis. In addition, the complexity of the sentence was also a challenge for GT. The translation suggestion of the sentence is "There was a slight desire to come to the prostitution complex at the edge of the village, which was often discussed by the people at Simpreg's palm wine stall although he did not know the exact location".

3.3.1 Style

One of the five types of incorrect word error is style. Style concerns on a bad choice of word when translating a sentence, however the meaning is preserved, although it cannot be considered completely correct (Vilar 2006). Following is the example of error in style:

No	SL	TL by GT	Type of error	Translation
				Suggestion
SL/	Tetangganya pasti akan	His neighbors would	Incorrect	His neighbors
P24/	marah, mengutuknya,	surely be angry,	word	would surely be
L5	lalu bisa saja ia akan	curse him, then he	- Style	angry, curse him,
	diusir dari desanya	might be driven out		then he might be
	setelah sebelumnya	of his village after		driven out of his
	dipaksa untuk			village after being
	membersihkan desa	the village with a big		forced to purify
	dengan upacara yang	ceremony.		the village with a
	besar.			big ceremony.

The translation of the word "membersihkan" in SL into "clean" in TL was categorized into error in style which was part of incorrect word. Based on the data, the word "clean" was not suitable for the translation of the word "membersihkan" in the given context. According to KBBI V membersihkan means to get rid of something by washing, mopping, rubbing, etc. The cleaning process in the sentence above is having a wider scope. It is the process of purification in order to make the environment spiritually clean.

In certain area, the society believes that if a person violates a certain norm related to a certain believe, the environment of this person is spiritually dirty. Sukro, the main character in the short story, molested the pig because he could not hold his lust after watching the blue film. This is the norm that is violated by him, therefore the environment was not holy anymore. As the consequence, in a certain religion, the ceremony should be held in order to purify if the environment. Moreover, environment is left without the purification

ceremony, there could be something bad happened. For instance, the doer or the people whom living in the dirty area will be affected by the outbreak of disease.

From the error found in the data, it could be concluded that GT has performed a single error. It is not caused by another error and does not cause another error to occur. It could also be seen that the output of the GT was source language emphasis. It

3.3.2 **Idiom**

Idiom concerns on idiomatic translations that the system does not know and tries to translate as normal text. Normally these expressions cannot be

was because the target language was following the lexical meaning of the source language. Based on the given context, the word *membersihkan* should be translated into TL word "purify". The translation suggestion for the sentence above is "His neighbors would surely be angry, curse him, then he might be driven out of his village after being forced to purify the village with a big ceremony".

translated in this way, which causes some additional errors in the translation (Vilar, 2006). Following is the example of error in translating idiom:

NO	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	Dan di zaman yang	And in these difficult	Incorrect	And in this difficult
P4/	serba sulit ini, ia yakin	times, he was sure it	Word	time, he was sure it
L9	tak mungkin dan tak	would be impossible	-Idiom	would be
	akan ada pelacur yang	and there would be no		impossible and there
	mau menyerahkan	prostitutes who would surrender themselves		would be no
	dirinya secara cuma-	for free for him to		prostitutes who would
	cuma untuk ia garap.	work on.		surrender themselves
		WUI K UII.		to him for free sex.

As seen in the table above, the SL word "garap" was translated into TL "to work on". It was considered as idiom because the word could not be translated literally into the TL2. According to KBBI V, the lexical meaning of the word "garap" is "kerja" (to work). Therefore, if Google translates it into the closest meaning, it won't work for idiom because the intended meaning is different. As the result, the response of the TL reader toward the translation can be different compared with the response of the SL reader toward the source text.

Translating idiom is a big challenge for GT because it requires deep training in order to be able to translate it correctly. According to Nida (1964), the best translation does not sound like translation. Therefore, the similar response is very important in translation. It means "the relationship between receptor and message should be substantially the same as that which existed between the original receptors and the message" (Nida,1964, p.159). If the responses are similar then the translation can be said adequate.

Since the culture between two languages are different, there are some ways in translating idiom. It can be translated into idiom in TL if it has the same concept behind it or the same intended meaning. The other way is to translate it into non idiom in order to make the translation natural and to

avoid meaning distortion. In relation to the sentence above, the intended meaning of it is the doer thought that it will be impossible for a prostitute to give a free sex.

As seen in the output of GT, the intended meaning was not fully delivered, therefore TL reader response toward the translation would be different compared with the SL reader response toward the SL. The TL reader might understand it because of the given context, however the

3.3.3 Sense

Sense is part of incorrect word error. It has two sub types; wrong lexical choice is when the system chooses an incorrect translation and incorrect disambiguation is when the system was not able to

translation of the word "garap" into the proposition phrase "to work on" did not suitable for the given context. Hence, the translation suggestion is "And in this difficult time, he was sure it would be impossible and there would be no prostitutes who would surrender themselves to him for free sex". It can be concluded that the error found in the data was a single word error and the output of GT is source language emphasis.

disambiguate the correct meaning of a source word in a given context, although the distinction between them is certainly fuzzy (Vilar 2006). Following is the example of incorrect disambiguation:

NO	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	Babi itu melawan, tapi	The pig resisted, but	Incorrect Word	The pig resisted,
P6/	tenaga perjaka tua	this old virgin	-incorrect	but the old bachelor
L6	ini lumayan kuat	power was strong	disambiguation	was still quite
	hingga babi itu	enough that the pig		strong, so the pig
	bertekuk lutut.	bent its knees.		was surrendered to
				his will.

As seen in the table above, the phrase "perjaka tua" in SL was translated into "old virgin" in TL. According to KBBI V, perjaka means laki-laki yang belum berumah tangga; bujang (a man who has not married yet; single). Meanwhile according to Oxford Dictionary "virgin" means a person who has never had sex. It is usually associated to the women only. Based on the given context, the word "virgin" in TL was not a suitable translation of the word "perjaka" in SL. Thus, it was classified into incorrect disambiguation. In order to deliver the intended meaning successfully, the word "perjaka tua" should be translated into its closest meaning in TL. It is the word "bachelor". According to Oxford Dictionary, bachelor means unmarried man.

Apart from that, there was another error found in the output of GT. The phrase "bertekuk lutut" was translated into "bent its knees" which was categorized as an error in translating idiom. The phrase in SL could not be translated literally because it distorted the intended meaning of the sentence. In reality, there is no pig that can bend its knees. Therefore, this idiom means that the pig is surrendered.

From the errors found in the output of GT, it can be concluded that GT produced multiple errors, however each error does not influence the occurrence of the other.

According to Newmark V diagram (1988), the output of GT was source language emphasis. It could be seen from the pattern of error that was found in the data. The

translation suggestion is "The pig resisted, but the old bachelor was still quite strong, so the pig was surrendered to his will.

3.3.4 Extra Word

This error is a minor error found in the translation of the short story. This error happens when there is an extra word which is actually not needed in the sentence. Following is the example of extra word:

No	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	Hanya saja ketika	It's just that when	Extra Word	It's just when Sukro
P10/	Sukro mendekatinya,	Sukro approached		approached it, the
L1	babi itu selalu	him, the pig was		pig was always
	ketakutan dan	always scared and		scared and hiding
	bersembunyi di	hiding behind a		behind the mango
	belakang pohon	mango tree.		tree.
	mangga.			

The bold typed word "that" in the output of GT was classified into extra word error. It was because the appearance of the word in TL was not needed. It happened when the output of GT was source language emphasis. As the result, it was causing grammatical error in TL. Apart from that, there was also another error found in the output of GT. In SL, suffix -nya in the word "mengikutinya" refers to the pig. However, it was translated into "him" by GT which

was causing error in the transfer of meaning. In order to generate the correct sentence, the suffix -nya should be translated into "it". From the errors found in the sentence above, GT produced multiple errors, however each error did not influence the occurrence of the other. The translation suggestion is "It's just when Sukro approached it, the pig was always scared and hiding behind the mango tree". Following is another extra word found in the data:

No	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	"Maksudmu apa ini?	"What do you mean	Extra Word	"What do you
P27/	Tumben kau datang ke			mean? How odd
L1	sini langsung marah-	Tumben, you came		that you come here
	marah!"	here immediately to		suddenly to only
		get angry!"		brag at me!"

The bold typed interrogative sentence was classified into extra word error. It can be seen in the table above,

although the SL was in short segment. GT still could not translate it correctly. It might be because of technical error occurred when

translating the text. There was also found untranslated word in the output of GT that

was further explained in the untranslated word category in the previous section.

3.4 Word Order

This is also a minor error found in the output of Google Translate in translating the short story. There are two levels of word order error, namely; word and phrase levels. Both of the levels are differentiated by the local and long ranges. If the word order error is classified into local range, it means the word/phrase can be moved within the same syntactic chunk to generate the correct sentence. In contrast, when it is classified into long range, it means that the word/phrase should be moved to another syntactic chunk. Following is the example of long range phrase level word order error:

NO	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	Babi itu menguik	The pig squealed	Word order	At first, the pig
P6/	kencang awalnya,	loudly at first,	-Phrase level	squealed loudly,
L4			-Long range	

As seen in the table above, the word "awalnya" was translated into preposition phrase "at first" in the output of GT. There was no problem with the translation, however the place of the preposition phrase was incorrect. It was because the output of GT follows the sentence structure of the SL.

According to Newmark V diagram (1988), the output of GT was source language emphasis. In order to make it into target language emphasis, the preposition phrase should be moved to the beginning of the sentence. The translation suggestion is "At first, the pig squealed loudly...".

3.5 Technical Errors Found in the Data

There are also some technical errors found in the output of Google Translate. Those error such as wrong translation of pronoun "ia" or "dia", wrong translation of suffix *-nya* to encode possessiveness,

inconsistency in translating a certain word, and translation of proper noun. Those errors were often produced by GT in translating the short story. Followings are the examples:

NO	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	dan seperti tak	and as if she didn't	wrong	and as if he didn't
P6/	ingin kehilangan	want to lose the	translation of	want to miss the
L1	kesempatan, ia berlari	opportunity, she ran	pronoun	opportunity, he ran
	ke dapur dan	to the kitchen and		to the kitchen and
	mengambil makanan	took pig food.		took the pig food.
	babi.			

As seen in the table above, the dependent clause "..dan seperti tak ingin

kehilangan kesempatan" did not have subject or the doer in SL. On the other hand,

the TL should have the subject or the doer in order to refer the activity that has been done based on the context. Therefore, there was an addition of pronoun "she" in the output of GT. Since the target language is English, the pronoun "dia" has several counterpart which are he, she, or it. In SL, pronoun "dia" can be used to refer both male and female. However in TL, the pronouns are specific to the genre. In addition, for non-human being, either animate or inanimate, is referred to "it". The wrong translation of the pronoun distorted

the meaning of the sentence, because the intended message was undelivered. It is no wonder that MT often produces error in translating the pronoun as seen in the example above. The pronoun "she" in the output of GT should be translated into "he". It refers to Sukro, the old bachelor. Another error was also found, such as style and the missing of article. Similarly, the translation of suffix -nya to encode possessiveness is often translated wrongly. Following is the example:

NO	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	Babi itu ia beri makan,	He fed the pig, and	wrong	He fed the pig, and
P6/	dan ketika sedang	while he was	translation of	while it was
L3	menikmati	enjoying his food,	suffix -nya	enjoying its food,
	makanannya, Sukro	Sukro trapped the		Sukro tied the pig's
	menjerat mulut babi itu	pig's mouth with a		mouth with a
	dengan tali jemuran.	clothesline.		clothesline.

The bold word in SL "makanannya" was translated into "his food" in TL. Suffix –nya in the sentence above was indicating possessiveness. It means that the food was the pig's. Therefore, the translation of the word "makanannya" is "its food" in TL. The occurrence of the error was because GT cannot relate to the whole context of the text. Similar to the previous error, the addition of pronoun "he" was also incorrectly translated by GT. It should be "it" because it refers to the pig. Another

error was also found in the data, it was incorrect disambiguation. Those errors distorted the meaning of the sentence because the intended meaning was undelivered.

This problem should be a big challenge for GT developers in order to be able to improve its output in the future. Based on the finding in the data, there are also inconsistency in translating the word, followings are the example:

NO	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	mengikat mulut	tied the pig's	Incorrect	tied the pig's
P12/	babi, mengikat kaki	mouth, tied the pig's	word	mouth and leg then
L5	babi, lalu	leg, and then	-wrong	raped it.
	menggagahinya.	scratched it.	lexical choice	

SL/	ia berharap	he hoped to find	Incorrect	he hoped to find
P17/	mendapatkan cara lain	another way to kill	word	another way to kill
L1	untuk bisa membunuh	the lust without	-wrong	his lust without
	birahinya tanpa harus	having to beat the	lexical choice	having to rape the
	menggagahi babi	female pig again.		female pig again.
	betina itu lagi.			
SL/	Karena Mangkoklah	Because the bowl is	Incorrect	Because of Mangkok
P25/	yang membuat dirinya	what makes him	word	he raped the pig.
L2	menggagahi babi itu.	crush the pig.	-wrong	
			lexical choice	

The SL "menggagahi" was translated differently in every sentences in the table above. It was translated into "stratched", "to beat", and "crush". All of the three translations of the word "gagah" in the output of GT was incorrect. It was because those words did not deliver the intended meaning of the sentences. In the unknown word section, the word "gagahi" was also

left untranslated in TL. It was said inconsistency in translating the word because there was no influence of textual meaning or there was no use of idiom. The closest meaning of the word "gagah" in the three sentences above was the word "rape". Another error was also found in the output of GT, it was the translation of proper noun. Following is the example:

NO	SL	TL by GT	Type of Error	Translation
				Suggestion
SL/	Mangkok tertawa	Bowl laughing so	Translation of	Mangkok was
P9/	terpingkal-pingkal.	hard.	proper noun	laughing so hard.
L2				
SL/	Jika ia keluar dan	If he comes out and	Translation of	If he went out and
P9/	kebetulan melihat atau	happens to see or	proper noun	accidentally met
L3	bertemu Mangkok, ia	meet a bowl, he will		Mangkok, he will
	akan selalu menghindar.	always avoid.		always avoid him.

The proper noun "Mangkok" in SL was translated into "Bowl" in TL. Mangkok was the name of another character in the short story. Most of the sentences were translated correctly without translating the proper noun, however in some sentences the proper noun were translated as in the

examples above. The position of the proper noun in SL was not influencing the error. Apart from that, the missing of auxiliary verb was also produced by GT in the data. Hopefully, GT can fix this problem in the future.

IV. CONCLUSION

Based on the analysis above, all of the error categorizations proposed by Vilar (2006) were found in the data, except the incorrect form. The cause of the errors was mostly because the TL followed the sentence structure of the SL. According to Newmark V diagram (1988), it was called source language emphasis. From the analysis, it was also found that one sentence could have more than one error, however each error in the same sentence did not influence the occurrence of the other. The errors found in the sentences were dominated by the incorrect word and missing word. The system of GT was hard

to disambiguate the meaning of a word, especially when it was homonym, polysemy, and idiom. In the case of missing word, missing of content word, article and determiner were often occurred in the output of GT. In addition, the inconsistency of the tenses were also found in the result of the translation. Since it is a machine, the result sometimes was not a target language oriented. It was mostly because the SL was translated literally into the TL. In the future, it is hoped that the output of GT can be more accurate and readable. Therefore, it can be more reliable.

BIBLIOGRAPHY

- Adiputra, Muhamad F. 2018. Error Analysis in the Performance of Google Translate and Bing Translator in Translating Children's Story Book *Pancoran Pangeran (thesis)*. Sanata Dharma University.
- Ahrenberg, Lars. 2018. Comparing Machine Translation and HumanTranslation: A Case Study. DOI: 10.26615/978-954-452-042-7 003.
- Ariany, sandra. 2017. "Bing Translator's and Google Translate's Performance in Translating English Literary Text and Academic Texts into Indonesian" (thesis). Sanata Dharma University.
- Laksana, N., and Putri, S. 2018. "An Error Types Analysis on YouTube Indonesian-English Auto-Translation in Kok Bisa? Channel". *Journal of Language and Literature*. Vol. 18 No. 1.
- Newmark, P. 1988. A Textbook of Translation. London: Prentice Hall International.
- Nida, Eugene A. 1964. Toward a science of translating. Leiden: E. J. Brill.
- Popovic, M. 2018. Error classification and analysis for machine translation quality assessment. In: Moorkens. J., Castilho, S., Gaspari, F., Doherty, S., editors. *Translation Quality Assessment from Principles to Practice*. Vol. 1. Cham: Springer. p. 129-158.
- Popovic, M., and Ney, H. 2011. "Towards Automatic Error Analysis of Machine Translation Output". *Computational Linguistics*. Vol. 37, No. 4. P. 657-688, ISSN: 0891-2017 E-ISSN: 1530-9312.
- Suryawinata, Z., and Hariyanto, S. 2003. *Translation: Bahasan Teori dan Penuntun Praktis Menerjemahkan*. Yogyakarta: Kanisius.
- Vilar, D., D'Haro, L.F., & Ney, H. 2006. Error Analysis of Statistical Machine Translation Output. International Conference on Language Resources and Evaluation. p. 697-702. Retrieved from http://www-i6.informatik.rwth-aachen.de on November 8th, 2019
- Wiersma, William. 1991. Research Methods in Education: An Introduction, Boston:Allyn and Bacon.