

The Translatability of Emotive Language through Google Translate Machine

Thalia Qaulan Tsaqila¹, Untung Waluyo², Henny Soepriyanti²

¹Postgraduate English Education Department, Faculty of Teacher Training and Education, Mataram University

²Graduate School, Mataram University

*Email: thaliaqaulan@gmail.com

Abstract - Despite Google Translate's outstanding improvement over the last several years, the machine presumptively continued to produce inaccurate outputs when translating emotive language. Unfortunately, however, studies on the actual quality of GT's translation of emotive language were highly scarce—and even more so for Indonesian-English translation. To tackle this matter, this study was conducted. Aiming at discovering GT's accuracy in its translations of emotive language and describing how GT's inaccurate translations of the emotive language deviated from the supposed equivalence, this study adopted the concurrent embedded strategy of mixed method. It sampled a total of 240 English and Indonesian emotive sentences (taken from novels) and put them through human perceptual and error evaluation to obtain GT's accuracy rate. The results of the analysis eventually report that GT's accuracy rate for the English translations of Indonesian emotive language was 60.60%, while its accuracy rate for the Indonesian translations of English emotive language was 74.34%. Moreover, it was discovered that GT produced linguistic and stylistic errors in their translations of emotive language. Such errors include lexical, syntactical, and semantic errors, as well as omission of style and style preferences errors. Therefore, it was finally concluded that while GT can be a helpful tool, it should not be relied upon too much as it still has limitations on the extent to which it can account for cultural nuances and context-specific elements accurately.

Keywords: *Google Translate, Machine Translation, Emotive Language, Translation Quality*

INTRODUCTION

With the ever-improving technological advancements occurring all around the world, people are increasingly becoming dependent on automation and machine-work every day. One form of this dependency is reliance on the use of machineries in accomplishing jobs. The same is true for translation work. Presently, many people seem not to require the work of translator as a machine translation tool has gradually replaced human's position in translating documents into a variety of world languages. Such machine translation tool is Google Translate.

Google Translate is a web-based (Al-Marroof et al., 2020; Habeeb, 2020; Yanisky-Ravid & Martens, 2019) machine translation tool that uses algorithms and computer

programming to automatically translate text from one language to another. It is free to use, can be easily accessed (Chompurach, 2021), and is equipped with a number of sophisticated features and friendly user interface. Supporting the translation of a total of 133 languages spoken across the globe (Caswell, 2022), it is regarded by many people as the most popular and widely used online translation tool (Ducar & Schocket, 2018; Kane, 2021; ElShickh, 2012, in Soisuwan et al., 2022). It has over 500 million users and works on translating more than 100 billion for words per day (Turovsky, 2016).

First launched and introduced to the public as one of the of-late (at that point in time) projects of Google Research in 2006, in the era of the fourth generation of

computers which work on the basis of microprocessor (Rahmat, 2019; Razak, 1981), Google Translate works on the basis of artificial intelligence today. By virtue of this, its translation work has also greatly improved over the years. In one internet article (Fairman, 2022), Google Translate is claimed to have reached 90% accuracy. Such claim is reinforced by several different studies conducted over the last few years, such as Jackson et al. (2019), Khoong et al. (2019), and Taira et al. (2021). Firstly, in their study which attempted at examining the extent to which native speakers of different language agree to Google Translate's output, Jackson et al. (2019) discovered that the percentages of native speakers' agreement to Google Translate's output ranges from 85% to 97%. As such, it was then established that Google Translate can be a useful tool for translating articles for the purpose of abstracting data. In addition, the study conducted by Khoong et al. (2019) which aimed at analysing Google Translate's performance in translating Spanish-Chinese Emergency Department Discharge Instruction, concluded that the translation tool managed to accurately translate over 81% of the sentences inputted in its system. Correspondingly, Taira et al. (2021) also specifies that Google Translate has reached over 80% accuracy—85% to be exact.

Indeed, given the technological advancements for artificial intelligence, computers, internet and Google itself, Google Translate is progressively becoming better and more reliable for translating most languages each day. Such condition, however, does not apply for all types of language. Google Translate, for one, seems to remain incompetent in translating emotive language (i.e., the language that is uttered intending to express or arouse emotional reactions of other people—the subject or the listener (Cuddon, 1998, in Fadhil, 2021); language that conveys emotions, attitudes,

and feelings) which is commonly used in poetry, novels, and other forms of literature and takes the form of idiomatic expressions, metaphors, imagery, and other figures of speech.

For instance, upon being assigned to translate an English idiomatic expression “give him an inch and he'll take a mile” to Indonesian, Google Translate produced the phrase “beri dia satu inci dan dia akan mengambil satu mil” as output. As can be seen, the translation tool managed to produce a grammatically correct translation of the English idiomatic expressions in Indonesian; it has conveyed the denotative meaning (i.e., the literal meaning) of the phrase perfectly. However, given the expression in actuality refers to a situation whereby someone who has given a concession or a favour then becomes greedy and tries to take even more advantage from the giver of the favour and not to a situation whereby someone is measuring and taking lands just like what is suggested by the translation provided by Google Translate, the machine translation tool has indubitably failed to provide the actual equivalence of such expression in Indonesian. Interestingly enough, Google Translate proceeds to making the same mistakes when translating the Indonesian equivalence for such phrase, that is, the phrase ‘dikasih hati minta jantung’. In such case, instead of ‘give him an inch and he'll take a mile’, the phrase ‘give a heart ask for a heart’ was produced as the output.

Correspondingly, several previous studies also agree with the current claim that Google Translate isn't very accurate when used to translate emotive language. These are the studies conducted by Large (2019) and Zajdel (2020). The study by Large (2019), which focuses on the translatability of Shakespeare's work, concluded that though Google Translate is able to translate the scripts to English, the results of the

translation work is far from ideal (to take Large's (2019) own words, "Google can translate Shakespeare now, just not very well"). Similarly, Zajdel (2020), who attempted at analysing the translatability of metaphors in the literary work *The Picture of Doran Gray* to Spanish, Portuguese and Polish using Google Translate, also discovered that Google Translate exhibits lower accuracy when used to translate longer metaphors compared to human translators. In addition, it also has a higher degree of reliance on literal translation when translating the metaphors—the same phenomenon that can be observed in the translation of the idiomatic expression 'give him an inch and he'll take a mile' as well as 'dikasih hati minta jantung' above.

Considering the results of Google Translate's work for the idiom 'give him an inch and he'll take a mile' as well as the results from previous studies provided above, it seemed that there indeed was a problem in Google Translate's ability to translate emotive language. Such problem, therefore, called for a further study. Unfortunately, however, such studies were highly scarce—and even more so for Indonesian-English translation. Given such lack of studies, the researcher thus considered it necessary to discuss this issue in this thesis. Based on the elaboration above, the researcher hence attempted to explore the translatability of emotive language through Google Translate for Indonesian-English language pair. More specifically, Given the rationale stated above, this study was fixated on unravelling the answers for the following questions:

1. How accurate is Google Translate in providing the translation for emotive language?
2. How does Google Translate's inaccurate translation of the emotive language deviate from its supposed equivalence?

RESEARCH METHODS

To provide the best answer to the two research questions set, this study adopted descriptive research design and the concurrent embedded strategy of mixed method (primary method: qualitative; secondary method: quantitative). The data in questions included a range of text samples of Indonesian and English emotive language or expressions taken from 48 different novels (14 Indonesian and 34 English). Then, following Farreús et al. (2012), this study analyzed the data using multiple evaluation method, namely: (1) perceptual evaluation; and (2) error evaluation. In perceptual evaluation, two human evaluators were asked to compare the translated texts with the original texts and rate how accurate the translations were in terms of the message and meaning conveyed on a scale of 1 to 5 (1 being highly inaccurate and 5 being highly accurate). Following up the data obtained from the human evaluators, quantitative statistical data analysis was conducted to identify patterns and trends in the data, and, in turn, to draw a conclusion. Later on, the data from the evaluation were then used to determine the overall accuracy of the overall data. Meanwhile, the error evaluation involved exploration of the Indonesian-English parallel pair data to identify recurring patterns of deviation or underlying problems that caused the inaccurate translations. Here, the error evaluation was conducted qualitatively, following Creswell's (2009) stages for qualitative data analysis.

RESULTS AND DISCUSSION

For the purpose of unravelling the translatability of emotive language through Google Translation machine, this study sampled a total of 240 emotive sentences from 48 different novels. These data consist of 134 Indonesian emotive sentences, and

106 English emotive sentences. They were varied in length, with the shortest one encompassing as few as 2 words and the longest one extending up to 41 (Indonesian samples) to 49 words (English samples). For this reason, the data were sorted into 3 different groups: (1) short (2-8 words for Indonesian, 2-10 for English), (2) medium (9-16 words for Indonesian, 11-20 for English) and long (>16 words for Indonesian, >21 for English). In addition to the length, the data were also categorized based on the specific types of expressions they contain. As regards, the findings were broadly grouped into 4 categories, namely, (1) figurative language, (2) idiomatic expression, (3) proverbs, and (4) literal language.

Results

Perceptual Evaluation

Indonesian to English Translation

The ratings obtained from the two human evaluators in the perceptual evaluation for Indonesian to English translation are as follows:

Table 1. The Result of Perceptual Evaluation for Indonesian-English Translation

	Frequency	Percent
Highly Accurate	23	17.2
Accurate	37	27.6
Quite Accurate	26	19.4
Inaccurate	17	12.7
Highly Inaccurate	31	23.1
Total	134	100.0

As clearly shown in Table 1 above, 23 out of the 134 sampled sentences were marked as Highly Accurate by the evaluators. This number was considerably high, although it was not as high as the number of sentences that was marked as Accurate. Encompassing 37 sentences or roughly 27.6% of the data, the category Accurate showed up most frequently, though it was closely followed by the category Highly Inaccurate with 31

sentences (23.1%). All in all, with as many as 26 (19.4%) sentences marked Quite Accurate, and 17 (12.7%) Inaccurate, there were no striking differences between the number of sentences under the categories denoting accuracies and inaccuracies (highly accurate and accurate vs inaccurate and highly inaccurate) (though the total numbers certainly still vary). Eventually, it can be concluded that the overall accuracy for GT's translation for the Indonesian emotive text samples is 60.60%.

Subsequently, after the overall data had been considered for a general classification, the data were examined once more to see if the samples grouped under different categories show the same tendency for (in)accuracies. As recalled, the data were grouped based on sentence length and the specific type of expressions each sentences contain. Hence, the data were considered in relation to these categories. The results of the analysis are showcased in Table 2 and 3 below:

Table 2. The Result of Perceptual Evaluation for Indonesian-English Translation based on Sentence Length

Accuracy		Sentence Length			Total
		Long	Medium	Short	
Accuracy	Highly Accurate	4	4	15	23
	Accurate	15	16	6	37
	Quite Accurate	16	8	2	26
	Inaccurate	5	6	6	17
	Highly Inaccurate	2	13	16	31
Total		42	47	45	134

Surprisingly enough, GT's translations for most of the longer sentences showcased considerably high accuracies. This can be seen from the number of sentences that were marked as Highly Accurate, Accurate, and Quite Accurate, that is, 4, 15, and 16 sentences respectively. In contrast, the inaccuracy level for the longer samples were surprisingly quite low, with only 5 and 2 sentences marked as Inaccurate and Highly Inaccurate respectively. As for the medium-length samples, it appears that the numbers of medium-length sentences that were grouped under the two categories denoting

accuracies and inaccuracies were quite balanced—though it should be noted that the Highly Inaccurate ones far outweighed the Highly Accurate ones. Finally, it is also interesting to note that even though many of the samples with the fewest words—short sentences—were marked as Highly Accurate (the group has the highest number of Highly Accurate translations), it is also the group of samples with the most Highly Inaccurate translations.

All in all, the data suggest that sentence length doesn't have significant effects on the accuracy of GT's translations for Indonesian to English translations.

Table 3. The Result of Perceptual Evaluation for Indonesian-English Translation based on Types/Categories of Expressions

Accuracy	Category	Category			Proverb	Total
		Figurative Language	Idiomatic Expression	Literal Language		
Highly Accurate		10	4	9	0	23
Accurate		24	2	11	0	37
Quite Accurate		22	2	2	0	26
Inaccurate		8	2	3	4	17
Highly Inaccurate		4	9	3	15	31
Total		68	19	28	19	134

Most of GT's translations for both figurative and literal language have considerably high accuracy (10, 24, and 22 sentences marked as Highly Accurate, Accurate, and Quite Accurate respectively for Figurative Language; 9, 11, and 2 sentences for Literal Language). Unfortunately, however, the same is not true for the other two categories. As apparent from the table, all proverbs were either marked as Inaccurate or Highly Inaccurate, and while some of the sentences containing idiomatic expressions were marked as either Highly Accurate or Inaccurate, most of the sentences still fall under the category Highly Inaccurate. Such data hence suggested that some types of expressions, that is, proverb, and idiomatic expressions, have lower level of accuracies compared the others.

Indonesian to English Translation

The ratings obtained from the two human evaluators in the perceptual evaluation for

English to Indonesian translation are as follows

Table 4. The Result of Perceptual Evaluation for English-Indonesian Translation

		Frequency	Percent
Valid	Highly Accurate	37	34.9
	Accurate	39	36.8
	Quite Accurate	8	7.5
	Inaccurate	7	6.6
	Highly Inaccurate	15	14.2
	Total	106	100.0

Different from the case of Indonesian-to-English translations priorly discussed, there is a striking difference between the numbers of sentences that are categorized as accurate and inaccurate in English to Indonesian translations. As suggested by Table 4, more than 70% of the English samples are marked as either Accurate or Highly Accurate. With 37 and 39 sentences respectively, the total number of Highly Accurate and Accurate samples each doubled the number of Highly Inaccurate samples, quadrupled Quite Accurate samples, and quintupled Inaccurate samples.

Though consisting of different number of samples, by means of percentages (Indonesian: highly accurate = 17.2%; accurate = 27.6%; quite accurate = 19.4%; inaccurate = 12.7%; highly inaccurate = 23.1%. English: highly accurate = 34.9%; accurate = 36.8%; quite accurate = 7.5%; inaccurate = 6.6%; highly inaccurate = 14.2%), it is quite obvious that the overall accuracy for GT's translation for the English emotive text samples will be higher than that of the Indonesian emotive text samples. With more than half of the samples grouped under accurate categories, the overall accuracy for GT's translation for the English emotive text samples is 74.34%. This suggests that the quality of GT's English-Indonesian translation is higher than that of Indonesian-English.

Moreover, in terms of the quality of GT's output in relation to sentence length, Google

Translate once again demonstrates considerably high accuracies in translating long sentences. As evident from Table 5 below, more than 80% of the long samples' translations are marked as accurate, leaving none marked under Highly Inaccurate category. The same is not true for medium-length and short sentences, however, as GT had produced 7 and 8 Highly Inaccurate translations for both categories respectively. Interestingly enough, just like the case with Indonesian-English translations, the short samples also obtained the most Highly Inaccurate translations. Although, to be fair, the quality of translations for the medium-length samples seems to be the worst, as the samples exhibit almost the same case of Highly Inaccurate translations as the short samples, albeit having the fewest number of sentences among the three categories (30 as opposed to 37 and 39).

Nevertheless, the customary belief that longer sentences will automatically result in inaccurate translations seems to be overruled.

Table 5. The Result of Perceptual Evaluation for English-Indonesian Translation based on Sentence Length

Accuracy		Sentence Length			Total
		Long	Medium	Short	
	Highly Accurate	9	11	17	37
	Accurate	23	8	8	39
	Quite Accurate	3	2	3	8
	Inaccurate	2	2	3	7
	Highly Inaccurate	0	7	8	15
Total		37	30	39	106

Finally, it is time to consider GT's (in)accuracies as regards the types or categories of expressions each English emotive sample exhibits. Following a similar trend as the Indonesian-English translations, proverbs become the one category of expressions with the most highly inaccurate translations, followed by idiomatic expressions and figurative language consecutively. Literal language, as usual, has the fewest number of highly inaccurate translations of all categories—zero, as is seen in Table 6 below:

Table 6. The Result of Perceptual Evaluation for English-Indonesian Translation based on Types/ Categories of Expressions

Accuracy		Category				Total
		Figurative Language	Idiomatic Expression	Literal Language	Proverb	
	Highly Accurate	19	5	12	1	37
	Accurate	25	1	11	2	39
	Quite Accurate	4	1	1	2	8
	Inaccurate	4	1	2	0	7
	Highly Inaccurate	2	5	0	8	15
Total		54	13	26	13	106

Error Evaluation

From error examination, it was discovered that generally, there are two types of errors that cause inaccuracies in GT's translation outputs, that is, linguistic, and stylistic errors. Those two types of errors, however, can be further broken down into several sub types or categories. Table 7 below summarizes all types of errors found in GT's translations of the emotive sentence samples:

Table 7. Types of errors found in GT's emotive language translations

Types of errors	
1.	Linguistic
a.	Lexical
	1) Unknown words
	2) Omitted words
	3) Additional words
	4) No equivalence
	5) Wrong word forms
	6) Uncommon lexical item co-occurrence
b.	Syntactical
	1) Incorrect structure
	2) Incorrect compound sentences
c.	Semantic
	1) Wrong meaning: conceptual vs connotative
	2) Wrong meaning: conceptual vs affective
	3) Wrong homonymy and polysemy
	4) Wrong synonyms
	5) Wrong referents
2.	Stylistic errors
a.	Omission of style
b.	Style preferences

Further discussion on each type and their sub-types is provided below.

1. Linguistic Errors

The category Linguistic Errors is an umbrella term used to cover all translation mistakes or inaccuracies that stem from deviations from the rules of the target language. More specifically, however, the linguistic errors found in GT's translations

of Indonesian and English emotive sentences can be grouped into three sub-types, namely: a) lexical errors; b) syntactical errors; c) semantic errors.

a. Lexical errors

The sub-type Lexical Errors includes all mistakes or inaccuracies appertaining to words and the use of words. This includes untranslated source words in the target texts, deletion of source words which might or might not result in major shift in meanings, insertion of words that weren't a part of the source texts, the use of words that are not equivalent to the source words, incorrect choice of word forms, as well as incorrectly translated co-occurring lexical items.

1) Unknown words

Unknown words in translations refer to the untranslated words that are somehow preserved in the target text. Some instances of this type of errors are as follows:

- [1] ST: **Ronggeng** itu tak akan menghentikan tangis karena binatang jantan lainnya akan segera datang menyingkap kelambu dan mendengus. (IETS12)
TT: The **Ronggeng** wouldn't stop crying because another male animal would soon come to open the mosquito net and snort.

2) Omitted words

The type of errors that is omitted words refers to errors that are caused by deletion of some source words in the target text or translation. Such deletion might or might not result in major shift in meanings. An instance of this error can be seen in sample [2]:

- [2] ST: Hari yang sangat mengesankan karena batinku **ternista** luar biasa (IETS12)
TT: It was a very memorable day because my heart was amazing

3) Additional words

Lexical errors that are caused by additional words occur when a word that was not included in the source text suddenly makes

an appearance in the target text for no apparent reasons.

- [3] ST: Semua sukar atas diriku, hatta mati sekalipun..... (IETS14)
TT: Everything is difficult for me, even if **you** die.....

4) No equivalence

The term no equivalence simply means that a word or expression in the source text has little to no correspondence whatsoever with its supposed translations. (Un)surprisingly, however, this type of error occurs quite often in GT-generated translations. An instance of this phenomenon can be seen below:

- [4] ST: Dan aku ini, siswa H.B.S., haruskan merangkak di hadapannya dan **mengangkat sembah** pada setiap titik kalimatku sendiri untuk orang yang sama sekali tidak kukenal ? (IETS4)
TT: And I, an H.B.S. student, have to crawl in front of him and **raise my eyebrows** at every point of my own sentence to a complete stranger?

5) Wrong word forms

Wrong word form error occurs when the translation incorporates the wrong form of a correct concept in the target text, causing a slight meaning shift. An example of this error can be seen below:

- [5] ST: Uh, benar-benar aku biangkeladi **memalukan** (IETS4)
TT: Uh, I really am the culprit **of embarrassment**

6) Uncommon lexical item co-occurrence

The errors that are grouped under uncommon lexical item co-occurrence include the extension of idiom and commonly established expressions. An example of such error can be seen in sentence [6]:

[6] ST: As soon as I sufficiently recovered my senses to comprehend the **terrific predicament in which I stood or rather hung**, I exerted all the power of my lungs to make that predicament known to the aeronaut overhead. (EETS19)

TT: Segera setelah kesadaranku cukup pulih untuk memahami **keadaan sulit yang kualami ketika aku berdiri atau tergantung**, aku mengerahkan seluruh kekuatan paru-paruku untuk membuat keadaan sulit itu diketahui oleh aeronaut di atas.

b. Syntactical errors

Errors included under syntactical errors are those that involve violation to the target language's rules for well-formed structure and sentences. Syntactical errors found in this study's emotive samples can be divided into two groups, namely:

1) Incorrect structure

As the name of the category suggests, errors that are classified under this category includes sentence structure and word order errors. An example of this error can be seen in sentence [7]

[7] ST: Pasti dia lebih cantik dan menarik daripada **bidadarinya Jaka Tarub** dalam dongengan Babad Tanah Jawi. (IETS4)

TT: Surely she is more beautiful and attractive than **the angel Jaka Tarub** in the story of Babad Tanah Jawi.

2) Incorrect compound sentences

This category brought together errors that are related to the mistranslation of compound sentences. In general, the errors include wrongly-grouped constituents and missing words in constituents. For example, see sentence [8]:

[8] ST: Dadaku sesak karena rindu dan marah, aku naiki sadel sepeda, **sudah tak tahan ingin berlalu dari neraka ini**. (IETS10)

TT: My chest is tight with longing and anger, I get on my bicycle saddle, **I can't bear to leave this hell**.

c. Semantic errors

A semantic error is any type of error or mistake that emerges from the (mis)interpretation of meaning in translations. Generally encompassing incorrect choice of meanings, semantic errors found in GT's emotive sentence translations include: 1) wrong meaning: conceptual vs connotative; 2) wrong meaning: conceptual vs affective; 3) wrong homonymy and polysemy; 4) wrong synonyms; and 5) wrong referents.

1) Wrong meaning: conceptual vs connotative

The first type of error appertaining to the selection of meaning occurs when an expression that was uttered in emphasis of its connotative meaning, was received for its conceptual meaning. In other words, such error occurs when a source text that is filled with connotative meaning, was literally translated.

As this is a common error that occurs in the translation of idioms and proverbs, this type of error becomes the most frequently found error in GT's translation of emotive sentences sampled for this study. Some instances of this error are provided below:

[9] ST: Dia itu kemenakan raja kita. **Tiba di perut dikempiskannya, tiba di mata dipejamkannya**. (IETS13)

TT: He is the nephew of our king. **Arriving at the stomach, he closed it, arrived at the eyes he closed**.

[10] ST: Ia merasa **makan buah simalakama** (IETS9)

TT: He felt **eating simalakama fruit**

2) Wrong meaning: conceptual vs affective

The second type of error appertaining to the selection of meaning occurs when an expression that was heavily affective was received for its mere conceptual meaning. This error usually occurs to vocatives such as those specified below:

- [11] ST: Jangan engkau bersusah hati menempuh maut, **adinda**. (IETS14)
 TT: Don't be sad about death, **sister**.
- [12] ST: Manusia sampah! (IETS4)
 TT: Garbage man!

3) Wrong homonymy and polysemy

The third type of error appertaining to the selection of meaning occurs when the meaning of homonymous and polysemous words was mistaken for one another. An instance of this error can be seen in sentence [13]:

- [13] ST: **Bulan** mana pula sedang kau rindukan? (IETS4)
 TT: What **month** are you missing?

4) Wrong synonyms

The fourth type of error appertaining to the selection of meaning occurs when synonymous words are used in place of the others.

- [14] ST: Ibarat meniti sebuah **titian** panjang dan berbahaya, aku hanya bisa menceriterakannya kembali, mengulas serta merekamnya setelah aku sampai di seberang. (IETS12)
 TT: It's like walking on a long and dangerous **catwalk**, I can only retell it, review and record it after I get to the other side.

5) Wrong referents

The last sub-category of semantic error is called 'wrong referent' as it wrongly connects or denotes a word (i.e., pronoun) to a wrong referent. This occurs in sentence [15] below:

- [15] ST: Jika sekiranya surat yang datang dari keluarga Hayati dahulu seakan-akan letusan selaras bedil ke **dadanya**, maka adalah surat dari Khadijah, yang mengaku sahabat Hayati ini, laksana sebuah bom yang meletus ditentang **kepalanya**. (IETS14)
 TT: If the letter that came from Hayati's family before seemed as if a gunshot had exploded into **her** chest, then the letter from Khadijah, who claimed to be Hayati's friend, was like a bomb exploding against **her** head.

2. Stylistic Errors

In general, stylistic errors found in this study can be grouped into two categories, namely: a) omission of style; and b) style preferences.

a. Omission of style

An omission of style error occurs when the target text had failed to follow the same style of writing as the source text. Some instances of this error can be seen in sentence [16] below:

- [16] ST: Tetapi kalau cinta telah mendalam, walaupun bagaimana tebalnya perasaan sebagai laki-laki, badan meremuk juga laksana ayam kena penyakit menular. (IETS14)
 TT: But if love has deepened, no matter how thick the feelings are as a man, the body is also crushed like a chicken that has an infectious disease.

b. Style preferences

An error of style preferences occurs when a source text that is figurative in nature was mistranslated because Google Translate favoured translating a sentence literally instead of figuratively. These errors can be seen in sentence [17] and [18] which contain figurative language metaphor [17] and rhetorical questions [18] below:

- [17] ST: Oliver Barrett III was a walking, sometimes talking Mount Rushmore. (EETS12)
 TT: Oliver Barrett III sedang berjalan-jalan, terkadang berbicara di Gunung Rushmore.
- [18] ST: Setelah segenap daun kehidupanku kau regas, segenap pucuk pengharapanku kau patahkan, kau minta maaf? (IETS14)
 TT: After you crushed all the leaves of my life, you broke all my hopes, do you apologize?

Discussion

As mentioned previously, the objective of this study is to evaluate how accurate Google Translate (GT) Machine translates emotive language and how much the translation deviates from its intended equivalent. In order to attain this objective, 240 Indonesian and English emotive sentences served as the

sample for the study. Such numbers of samples were then divided into 4 different categories based on the types of expressions they contain, namely: (1) figurative language, (2) idiomatic expression, (3) proverbs, and (4) literal language. Of the four categories, figurative language stood out in terms of numbers. The number of the sentences that fall under the category of figurative language (122 sentences) quadrupled the number of sentences under the categories of idiomatic expressions and proverbs (32 sentences each), and doubled the number of sentences under literal language category (54 sentences).

All in all, this finding demonstrated that figurative language is more prevalent in literary novels when conveying sentiments and emotions. Such prevalence, however, isn't random, but might stem from the fact that figurative language is a useful means by which feelings and emotions—especially those of greater intensity—can be conveyed very well (Delfino & Manca, 2007; Fainsilber & Ortony, 1987; Gibbs Jr. et al., 2002). As attested by Fainsilber & Ortony (1987) and also Gibbs Jr. et al. (2002), figurative language has an ability to convey feelings and subtle nuances of meaning that is difficult to be expressed through literal language. It has the ability to capture the many diverse components of emotions such as cognition as well as affective, physiological, and behavioural response (Lee, 2018). That makes such language especially useful in expressing one's emotions and, in turn, evoking or arousing emotional reactions of other people. Therefore, it is no wonder that such language can be so prevalent in literary novels as such works are purposely designed so as to fit the same agenda.

As regards the accuracy rate, as recalled, the analysis revealed a remarkable disparity between the number of English-Indonesian

and Indonesian-English translations with accurate and inaccurate sentences. The aggregate translation accuracy of GT for Indonesian emotional text samples was 60.60%. Meanwhile, the aggregate translation accuracy of GT for English emotional text samples was 74.34%. This finding therefore suggests that English-Indonesian translation was of greater quality than Indonesian-English translation.

Not in the same vein, a study conducted by Sutrisno (2020) on GT's accuracy rate for English-Indonesian language pair obtained an accuracy rate of 60.39% for both Indonesian to English and English to Indonesian translations. Such finding, albeit reflecting the current study's Indonesian to English translation accuracy rate (60.39% and 60.60%), does not agree with our finding in terms of the aggregate translation accuracy for English to Indonesian translation. Such can be seen from the 14% difference between the two ratings (60.39% and 74.34%). Fortunately, however, such accuracy rate was not that far different from that concluded from the study conducted by Sumiati et al. (2022). Taking English procedural and narrative text as samples, such study concluded that the accuracy rate for English to Indonesian translation were 79.57% and 86% for both texts respectively. Here, a difference by 12% was most likely attributed to the different level of complexity between Sumiati et al. (2022) and this study's set of samples.

On a separate yet related note, as also previously mentioned, the study discovered that GT's translation errors included linguistic and stylistic errors. For linguistic errors, GT had mistakably produced: (1) lexical errors (consist of: (a) untranslated words; (b) deletion of source words; (c) insertion of words not part of the source texts; (d) uncorrelated equivalence; (e) incorrect choice of word forms, and (f)

uncommon lexical item co-occurrence); (2) syntactical errors (consist of: (a) incorrect structure; and (b) incorrect compound sentences); and (3) semantic errors (consist of: (a) unaccounted connotative meaning; (b) unaccounted affective meaning; (c) wrong homonymy and polysemy; (d) wrong synonyms; (e) wrong referents). Meanwhile, stylistic errors only consist of two categories, namely: (1) omission of style; and (2) style preferences.

Some of the errors found in the current study's translation of Indonesian and English emotive language correspond to those found in studies conducted by Putri & Ardi (2015) and Sholikhah & Indah (2021) on GT's translations of Indonesian folklore and cultural text respectively. With respect to Putri & Ardi (2015), the same errors include omitted words, incorrect structure, wrong word forms, additional words, stylistic error, unknown words, wrong meaning (conceptual vs connotative) error. As for Sholikhah & Indah (2021), the same errors encompass lexical (referred to as formal errors) and semantic errors: incorrect structure, omitted words, additional words, wrong meaning errors (superonym, hyponym, and synonyms). Here, what is interesting to note is that, despite the different GT algorithms that were at play during Putri & Ardi's 2015 study and the researcher's current study (from 2006 to 2016, GT's algorithm was based on statistical learning techniques. Such algorithm was replaced by Recurrent Neural Network algorithm in 2016), GT continues to make the same errors—though the number of frequencies for each error had undoubtedly decreased over the last couple of years.

Finally, with respect to the accuracy of each type of expressions, as recalled, the finding suggests that out of the four categories of emotive language sampled, proverbial

language expressions were the most inaccurately translated, followed by idiomatic expression (for Indonesian to English translations, all sampled proverbs fall under inaccurate and highly inaccurate, while for English to Indonesian translations, more than half of the sampled proverbs fell under these two categories). Meanwhile, the category with the fewest severely inaccurate translations was literal language and figurative language respectively.

In the findings, such inaccuracies in the translations of proverbs and idiomatic expressions were attributed to Google Translate's inability to account for meaning other than the conceptual one: the connotative meaning. Connotative meanings, according to Leech (1981, p.12) refers to "the communicative value an expression has by virtue of what it refers to, over and above its purely conceptual meaning". They are—to put it into Leech's (1981) own term—'relatively unstable'. They vary across culture, historical period, and between individuals, and they are also open-ended in nature: indeterminate. As such, any expressions containing connotative meaning must be deeply understood before it could be correctly interpreted and converted to the target language. This is something that Google Translate has yet to—and will most likely never—be able to do.

As regards GT's inability to account for connotative meaning, the findings of this study therefore align with those of Jinrui & Jianguo (2020). Much in the same vein—though focusing on Chinese-English language pair—Jinrui & Jianguo (2020) also discovered that even though Google Translate can perfectly generate the literal meaning of idiomatic expressions, it can, at best, only roughly convey the connotative meaning of the idioms. Nevertheless still,

most of the time, it cannot even slightly convey any such meaning.

In summary, the overall findings imply that GT-generated translation may not always capture cultural nuances and context-specific elements accurately when translating source texts. Eventually, this may result in misinterpretations or meaning loss in the translated text (Guo, 2016; Nord, 2005; Suhono et al., 2020). Moreover, Google Translate Machine cannot accurately translate figurative and literal language, such as profanity, vocatives, euphemism, hyperbole, imagery, metaphor, personification, rhetorical questions, and simile due to the absence of human innate ability to adapt to cultural contexts (Tomasello, 1999). The linguistic devices in human often rely heavily on cultural references and context to accurately capture their intended meaning. Additionally, the findings confirm that Google Translate Machine experiences difficulties and inaccuracies to deal with idiomatic expressions and cultural nuances that are unique to specific human languages. The implication for this is that human translators are still necessary to ensure accurate and culturally appropriate translations. Machine translation systems may be able to provide a basic understanding of the text, but they often lack the ability to fully grasp the subtleties and nuances of language. Human translators, on the other hand, possess the cultural knowledge and linguistic expertise needed to accurately convey the intended meaning of a text in a way that resonates with the target audience. Therefore, while machine translation can be a helpful tool, it should not be relied upon too much.

CONCLUSION

As regards the two research questions set, two main conclusions can be taken, namely:

1. The aggregate translation accuracy of Google Translate was 60.60% for Indonesian emotional text samples and 74.34% for English emotional text samples. As such the overall quality of GT's translation of Indonesian and English emotive language is classified as Quite Accurate.
2. Google Translate's inaccurate translation of the emotive language deviate from its supposed equivalence linguistically—lexically, semantically, syntactically—and stylistically. Moreover, Google Translate Machine Translation may not always capture cultural nuances and context-specific elements accurately when translating source texts.

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