

Machine translations for translating metaphor

Farahita Mufidah Artanti¹. Rahayu Purbasari².

¹State University of Jakarta
Jalan Rawamangun Muka, Jakarta Timur, Indonesia

²State University of Jakarta
Jalan Rawamangun Muka, Jakarta Timur, Indonesia

ABSTRACT

This study identifies and compares the translation procedures used by Google Translate, U-Dictionary, and Kamus Inggris (Kamusku) in translating metaphors found in Edgar Allan Poe's short stories, namely Hop Frog, A Descent into The Maelstrom and The Fall of the House of Usher. The most common procedure used by all three translation tools is reproducing the same essence in the target language. Google Translate is the most varied in its approach, while Kamus Inggris frequently deletes metaphors. The study highlights the strengths and weaknesses of each tool in handling metaphor translation. Out of 40 metaphors, Google translate used the procedure for 21 times, U-Dictionary used it for 19 times, and Kamus Inggris (Kamusku) used it for 20 times. Lastly, translating metaphor as simile along with its sense is not used by the three machine translations.

Keywords: Translation Procedure, Metaphor, Newmark, Edgar Allan Poe

INTRODUCTION

Machine translation was popular ever since it was invented for military use. Suhono et al (2020) describe machine translation as “a machine system that responds to produce meaning to other meaning unaided scholar assistance”. Machine translation gives many benefits especially for university students (Kelly and Hou, 2021 from Lee (2020) and Tsai (2019)). Machine translation has been developed for around 70 years (Wang et al, 2021). Through that long evolution machine translation provide convenience to every bilingual or even trilingual people. It operates a system that could translate vocabularies in source language (SL) to target language (TL) instantly. In Indonesia, there are three renown machine translations in their own type and specialties. Those are Google Translate, U-Dictionary, and Kamus Inggris (Kamusku).

Google translate has been on the internet as a machine translation since 2006. It begins its operation by using SMT (statistical machine translation) until 2016 when it changed into the neural machine translation. Google translate possess 103 language selection in their software and translated over 140 billion words per day (Constantine, 2019). Google translate nowadays also detects a particular word or phrases from certain language in the form of text or photos (Farahsani et al, 2021). Google Translate is quite capable of translating scholar items, however it is still does not considered

perfect (Halimah, 2018). In terms of word and phrase accuracy rate, Farahsani et al (2021) elaborate that, Google translate is much better translating word with percentages as 70.73% accuracy for words while the phrase only reached 46.37%. Also, research by Suhono et al (2018) state that Google Translate is having a hard time in performing equivalence translation for word, the equivalence in question is the matter of singular and plural word. They also state Google translate face a problem using word for word translation, random word order, agree, agreement the word order in a phrase, grammatical equivalence. Aside from its flaws there are also researchers that elaborate its promising ability since Google Translate could provide more accuracy and speed in translating collocations, phrases, and technical words (Herlina et al, 2019) (Josefsson, 2011). In addition, Tsai (2019) also state students who used Google translate has more lexical density than the one who translating manually.

As for U-Dictionary, U-dictionary was found by Youdao in Hongkong at 24th March 2016. It is started at online dictionary for about 30 languages availability. Because it is an App-based dictionary, the developers meant to increase the download rate by including some of the interesting features which are English article platform, camera to translate, English lesson from lock screen and English game to play. The study that circulating around U-Dictionary usually also involving Google Translate as comparison, this prove that both machine translation often seen as competitors. Sipayung et al (2021) study on translation technique used by Google Translate and U-Dictionary shows U-dictionary uses the translation technique more than Google translate, it used literal, amplification, reduction, variation and linguistics amplification translation techniques, transposition, and adaptation. In which they also state U-Dictionary sometimes ignore the context of the whole text. Another study done by Zheng (2015) also elaborating U-Dictionary competency, he said U-dictionary have a poor ability on choosing the correct lexicon however the syntax was considerably moderately correct.

Different with the other two, Kamus Inggris (Kamusku) dominant user are mostly in Indonesia, since the App is made in Indonesia and named using Indonesian. Nugraha (2021) performed a study which covers the strength and weakness of Kamus Inggris (Kamusku), the result shows, Kamus Inggris (Kamusku) has not accurately applying the grammatical order of the text and it also encountering some problems in translating complex sentences. Also, Kamus Inggris (Kamusku) has a problem in technical action. To add more, since Kamus Inggris (Kamusku) started off as a word and phrase based offline dictionary, Kamus Inggris (KI) needs to be online when translating sentences. Not many writers considering Kamus Inggris (Kamusku) as their subject of research even though it was originally made from Indonesia and quite famous in the student's circle since they only need to translate word per word for English subject at school.

Based on the research done circulating the three-machine translation which are Google Translate, U-Dictionary, and Kamus Inggris (Kamusku), the corpora that the writers used mainly other type of text but literary text. The news text, expository text, a research abstract is relatively using direct language to inform their readers. Meanwhile this research would be conducted in a literary text. As we know literary text often contains an allegory as well as metaphor in order to bring out the sense of poetry in the narrative.

Metaphor translation poses unique challenges due to the cultural and contextual nuances involved. Accurate translation of metaphors is essential for maintaining the integrity of literary texts. The word metaphor was developed from Greek language, it is a combination of two words, 'meta' and 'pherein' which have a literal meaning of 'exceeding' and 'carrying' (Duan, 2013). Hence the practical definition of metaphor that delivered by Della Thompson (2000) is "A figure of speech in which a word or expression normally used of one kind of object, action, etc. is extended to another". Metaphor in early studies development era, was treated as both veneration and suspicion. Based on the theory of an empiricist, Thomas Hobbes, metaphor was considered as a vandal of language but also a decoration for language. One of the theories which the writer purpose to analyses the translated metaphor is Newmark's translation procedure as it was the most suitable tools to analyses metaphor. Karshenas and Odudari (2016) states that Newmark was one of many translations theorist who believed in transability of metaphor, as we know metaphor were found many in literary text. Newmark wrote a specific chapter in translating a metaphor. He explained the purpose utilization of a metaphor:

"The purpose of metaphor is basically twofold: its referential purpose is to describe a mental process or state, a concept, a person, an object, a quality or an action more comprehensively and concisely than is possible in literal or physical language; its pragmatic purpose, which is simultaneous, is to appeal to the senses, to interest, to clarify 'graphically', to please, to delight, to surprise. The first purpose is cognitive, the second aesthetic". (Newmark, 1988)

Newmark slightly broad definition of metaphor, in his book he elaborates several kinds unit of language that could be considered as metaphor. Those are, figurative expression, personification of abstract word, applied word or collocation which used indirect language, an idiom, an allegory, a proverb, an imaginative text, a words that denote resemblance, and a comparison which was the general metaphor that most people know (Newmark, 1988).

Newmark (1988) already giving the specific theory on the metaphor translation procedure along with the categories of metaphor and had been simplified by Manipuspika (2018). He proposed seven metaphor translation procedure, those are

reproducing the same essence in the TL, replacing SL image with a standard TL image, translating metaphor by simile, translating metaphor as simile along with its sense, converting the metaphor into sense, deleting the metaphor, and combining the same metaphor along with its sense. A study regarding the metaphor translation using Newmark's translation procedure were conducted by Mata and Tangkiengsirisin (2018). They analysed the novel *Percy Jackson & the Olympians: The Lightning Thief* (2005) and its Thai-version or the language which the two researcher from. The result of this research is that the most used translation procedure for metaphor is reproducing the same essence in the TL. Interestingly, out of seven translation procedure for metaphor, only three were frequently used those are translating metaphor by simile, translating metaphor as simile along with its sense, and deleting the metaphor. Another study was conducted by Mokarram and Bashar (2021) on applying the metaphor translation procedure on the original metaphor found in Shakespeare's *Macbeth*. They involving the translation worked by several translator. An original metaphor is a metaphor that is originally made by the author of SL, it consists of the expression of the author upon his/her personality, believes, which probably many since Shakespeare is a very famous author. The result found that each of the translator give relatively different translation of the original metaphor based on their own comprehension. And as for the translation procedure for the original metaphor, the most used procedure is reproducing the same essence in the TL, the researcher said it is to still be maintaining the SL context while conveying the message to the reader. In addition, another study was performed by Simanjuntak (2017). The corpus of the research was *The Sky is Falling* wrote by Sydney Sheldon along with the Indonesian translated version *Langit Runtuh* worked by Hidayat Saleh. In the conclusion, Simanjuntak (2017) emphasizes that reproducing the same image of metaphor from SL to TL was the most used metaphor translation method because it delivers the message of the metaphor while still using the context from SL, he also claimed that it was the best method.

The definition of metaphor which proposed by Newmark is matched with Edgar Allan Poe's style of writing. His work is known to be very poetic and has many figurative language including metaphors. Simović (2014) elaborate, which derived from Silverman (1994), "the compactness of the Poe's short story "made possible both high excitement in the reader and maximum artistic control by the writer". Edgar Allan Poe's writing not only artistically pleasing and poetic but also contain allegory of society because his writing also fuels some of philosophical thinker, such as Jean-Francois Lyotard, Maurice Blanchot, Jean-Paul Sartre and many more (Risdianto, 2014). The short stories which the writer used in this research are 'Hop Frog', 'A Descent into The Maelstrom', and 'The Fall of the House of The Usher'.

LITERATURE REVIEW

There are seven types of translation procedure for metaphor which proposed by Newmark, and simplified by Manipuspika (2018), those are:

1. Reproducing the same essence in the TL (used when the metaphor was generally plausible and known, also easily understood by the reader)
2. Replacing SL image with a standard TL image (used when the TL has compatible cultural reference)
3. Translating metaphor by simile (it could lose the element of figurative as it would be more explicit in the TL)
4. Translating metaphor as simile along with its sense (this procedure strikes a balance between communicative and semantic translations, addressing both layman and expert readers (Manipuspika, 2018))
5. Converting the metaphor into sense (using high frequency vocabulary which resulted in emotionless metaphor)
6. Deleting the metaphor (used when it is redundant)
7. Combining the same metaphor along with its sense (adding a sequence of explanation to the metaphor).

The image on these procedure means *“the picture conjured up by the metaphor”* and sense means *“the literal meaning of the metaphor; the resemblance or the semantic area overlapping object and image”* (Newmark 1988).

RESEARCH METHOD

This research would be using the qualitative-descriptive method as the main purpose of this study and analyze which in line with the principle of qualitative methodology. As what Kothari (2004) elaborate in his book, qualitative methodology used to investigate a phenomenon, in which the phenomenon in question is metaphor translation procedure used by the three machine translations namely Google translate, U-dictionary and Kamus Inggris (Kamusku) in translating a metaphor on found passages in Edgar Allan Poe’s short stories. While descriptive research method defined by Mishra and Alok (2017) as *“Descriptive research consists of survey and fact-finding investigation of different kinds. The main purpose of descriptive research is explanation of the set of circumstances as it is present as such”*. Which means the writer required collect a data before making an analytical conclusion. The identification is undergone by using the metaphor translation procedure proposed by Newmark as it was the most suitable procedure for metaphors.

The data source would be collected from short stories in English and has the Indonesian translated version that translated by human. The title selection of the short

stories which would be analyzed are “Hop Frog” which published in 1849 by Frederick Gleason, “A Descent into The Maelstrom” which published 1841 in Graham’s June Issue, and “The Fall of the House of Usher” which published 1839 in Burton’s Gentleman Magazine. And the Indonesian versions of those short stories are translated by Maggie Tiojakin and are published in 2022 by Gramedia under the short story’s compilation entitled ‘Kisah-Kisah Tengah Malam’. The metaphors identified in the selected short stories were categorized according to Newmark’s procedures. The accuracy and effectiveness of each machine translation tool were then evaluated based on these categories.

FINDINGS AND DISCUSSION (TIMES NEW ROMAN, 12, CAPITAL, BOLD)

FINDINGS

A. Google Translate

Table 1: Utilized Translation Procedure by Google Translate

No.	Translation Procedure	Total of Utilization
1.	reproducing the same essence in the TL	21
2	converting the metaphor into sense	5
3	deleting the metaphor	7
4	combining the same metaphor along with its sense	1
5	translating metaphor by simile	1
6	replacing SL image with a standard TL image	5

B. U-Dictionary

Table 2: Utilized Translation Procedure by U-Dictionary

No.	Translation Procedure	Total of Utilization
1.	reproducing the same essence in the TL	19
2	converting the metaphor into sense,	3
3	deleting the metaphor	11
4	combining the same metaphor along with its sense	2
5	replacing SL image with a standard TL image.	5

C. Kamus Inggris (Kamusku)

Table 3: Utilized Translation Procedure by Kamus Inggris (Kamusku)

No.	Translation Procedure	Total of Utilization
1.	reproducing the same essence in the TL	20
2	converting the metaphor into sense	3
3	deleting the metaphor	14
4	replacing SL image with a standard TL image.	3

DISCUSSION

There are five comparison results from the identified translation procedure of metaphor found in Edgar Allan Poe’s short stories. First, all of the machine translations have the prominent similarity in the most utilized translation procedure which is reproducing the same essence in the TL, since most translation of the metaphors are literally translated which resulted in new metaphor in the TL language and can be still considered metaphor. One of the examples of when the three machine translations utilize this particular procedure in the same metaphor:

Table 4: Example 1

<ST. A Descent into The Maelstrom>	<TT. A Descent into The Maelstrom >
The boat appeared to be hanging, as if by magic, midway down, upon the interior surface of a funnel vast in circumference, prodigious in depth,...	<p>a. Perahu itu tampak tergantung, seolah-olah dengan sihir, di tengah jalan, di atas permukaan bagian dalam sebuah corong yang luas kelilingnya, kedalamannya luar biasa, ...(Google Translate)</p> <p>b. Perahu tampak seperti tergantung, seolah-olah dengan sihir, pertengahan ke bawah, di permukaan bagian dalam corong besar di lingkaran, luar biasa dalam kedalaman, ...(U-Dictionary)</p> <p>c. Perahu itu tampaknya bergelantung, seolah-olah dengan sihir, di tengah jalan, di permukaan bagian dalam corong yang luas, luar biasa secara mendalam,...(Kamus Inggris (Kamusku))</p>

In 'A Descent into The Maelstrom,' the metaphor 'The boat appeared to be hanging as if by magic' was translated similarly by all three tools, demonstrating their common approach of reproducing the same essence. This metaphor was found during the scene where the fisherman and his brother already struggling for their live inside the whirlpool. This metaphor is referring to the whirlpool because the shape of the funnel is similar with the shape of the whirlpool. The machine translations use the same translation for this metaphor which is *corong* and it is the literal translation of funnel. Hence all of the machine translations are using reproducing the same essence in the TL. The resemblance of whirlpool and funnel is not very common in Indonesian metaphors.

Second, as we can see from the table in the finding section, Google Translate is the most variative machine translation in terms of utilizing the translation procedure. Compared to U-Dictionary, Google translate use translating by simile in one of the metaphors. And Google Translate and U-Dictionary compared to Kamus Inggris (Kamusku), they utilize the procedure combining the same metaphor along with its sense.

Third, there are an abundance usage of the procedure deleting the metaphor by Kamus Inggris (Kamusku) and it makes it the second most utilized procedure by this machine translation. The original rule of using this procedure is when the metaphor is redundant, however, Kamus Inggris (Kamusku) use this procedure due to inability to translate properly into TL which means it is sometimes doesn't follow Indonesian grammatical rule or it is just simply nonsensical. Here is the example:

Table 5: Example 2

<p><ST. The Fall of The House of Usher>A cadaverousness of complexion; an eye large, liquid, and luminous beyond comparison; lips somewhat thin and very pallid but of a surpassingly beautiful curve; a nose of a delicate Hebrew model,</p>	<p><TT. The Fall of The House of Usher > Sebuah kebijaksanaan dari kulit yang rumit; mata besar, cair, dan bercahaya di luar perbandingan; bibir agak tipis dan sangat pucat tetapi dari kurva yang melampaui yang sangat indah; hidung model Ibrani yang halus, (Kamus Inggris)</p>
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This metaphor came out when the narrator or the protagonist was trying to describe the physical appearance of Roderick Usher. The meaning behind the metaphor was actually quite simple, it means that Roderick's skin was very pale unlike a living human, or sometimes it is called cadaver. Kamus Inggris (Kamusku) missed the

context of the word ‘cadaverousness’ and complexion which resulted in a strange translation for the passage.

U-Dictionary also utilize the procedure deleting the metaphor most after reproducing the same essence in the TL, but it was slightly better than Kamus Inggris (Kamusku) because it recognizes the context of word choosing, but unable to present the equal translation of the metaphor. Here is the example from the same metaphor:

Table 6: Example 3

<p><ST. The Fall of The House of Usher >A cadaverousness of complexion; an eye large, liquid, and luminous beyond comparison; lips somewhat thin and very pallid but of a surpassingly beautiful curve; a nose of a delicate Hebrew model,</p>	<p><TT. The Fall of The House of Usher > Sebuah cadaverousness kulit; Mata yang besar, cair, dan sangat berkilau; Bibir agak tipis dan sangat pucat tetapi dari kurva yang indah dan menakjubkan; Sebuah hidung model ibrani halus, (U-Dictionary)</p>
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As we can see here, U-Dictionary understands what is being talked about even though it is only a limited passage, but couldn’t find the correct word to equally translate ‘cadaverousness’ in Indonesian. Hence, it made Google Translate has the most word bank and advanced algorithm to understand the context and chose the suitable translation for metaphor in Indonesian out of all three machine translations.

Fourth, the averagely less usage of the procedure replacing SL image with a standard TL image by all of the machine translations explains that even though they have the advancement of understand the context of the metaphor, they couldn’t find the appropriate metaphor which commonly used in Indonesian to translate the English version. This might be because the usage of metaphor in general conversation of people implicate a cognitive process since the metaphor is formed by culture and in order to understand the concept and phenomenon of the metaphor, translator needs to understand the cultural from the SL and TL through cognitive process (Lei & Yi, 2020).

Lastly, there is one translation procedure for metaphor which did not used by the three machine translations, it is translating metaphor as simile along with its sense. It is understandable since they (especially U-Dictionary and Kamus Inggris (Kamusku) use very little of the simplified version of this procedure which is translating metaphor by simile. Incorporating the sense of metaphor is definitely need a human cognitive process hence, it is not surprising at all that this procedure is neglected.

CONCLUSION

Machine translation was popular ever since it was invented for military use. Suhono et al (2020) describe machine translation as “a machine system that responds to produce meaning to other meaning unaided scholar assistance”. In Indonesia, there are three renown machine translations in their own type and specialties. Those are Google Translate, U-Dictionary, and Kamus Inggris (Kamusku). The study underscores the need for improved algorithms in machine translation tools to handle the complexity of metaphor translation, highlighting areas for future research and development. This research meant to identify the translation procedure used by Google Translate, U-Dictionary, Kamus Inggris (Kamusku) in translating metaphor found in Edgar Allan Poe’s three short stories entitled Hop Frog, A Descent into The Maelstrom and The Fall of the House of Usher and later comparing it.

The result shows Google Translate uses 21 reproducing the same essence in the TL, 5 converting the metaphor into sense, 7 deleting the metaphor, 1 combining the same metaphor along with its sense, 1 translating metaphor by simile, 5 replacing SL image with a standard TL image. While U-Dictionary uses 19 reproducing the same essence in the TL, 5 replacing SL image with a standard TL image, 3 converting the metaphor into sense, 11 deleting the metaphor, 2 combining the same metaphor along with its sense. The, for Kamus Inggris (Kamusku), 20 reproducing the same essence in the TL, 3 converting the metaphor into sense, 14 deleting the metaphor, 3 replacing SL image with a standard TL image.

There are five results of comparison of translation procedure used by Google Translate, U-Dictionary, and Kamus Inggris (Kamusku) in translating metaphor found in Edgar Allan Poe’s short stories. Those are, all of the machine translations have the prominent similarity in the most utilized translation procedure which is reproducing the same essence in the TL, Google Translate is the most variative machine translation in terms of utilizing the translation procedure, an abundance usage of the procedure deleting the metaphor by Kamus Inggris (Kamusku) and U-Dictionary, the averagely less usage of the procedure replacing SL image with a standard TL image by all of the machine translations, and translating metaphor as simile along with its sense is not used by the three machine translations.

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