THE BARRIERS OF TRANSLATING FIGURATIVE LANGUAGE BY APPLICATING MACHINE TRANSLATION

Hani Rahman¹, Abdul Rahmat ² ¹University of Indraprasta PGRI Jakarta ²Universitas Negeri Gorontalo <u>hanir91@gmail.com abdulrahmat@ung.ac.id</u>

INTRODUCTION

Acceleration of technology has given impacts of changing in all aspects of life especially communication and interaction globally. Across the globe, migration, travel, business and international education are facilitating face to face intercultural contact. As we become increasingly interconnected, the demand for individuals who can communicate effectively and appropriately especially the usage of foreign languages with people who have a different cultural/linguistic background becomes ever more pressing.

Meanwhile, this acceleration of technology and the ability of communication in foreign languages especially English do not go hand in hand, most of people in Indonesia are still unable to communicate English effectively. To fix this problem, technology provides machine translations such as Google Translate as an essential role to provide translation services to many professionals who come from different fields moreover in education field, most of students also use this machine to help finishing their tasks for translating English.

In the process of translation, the translator is not only taking into account a number of important aspects including those related to the target language culture, but also the translator should use the choice of proper translation strategies. The use of translation strategies will assist the translator in determining structure of words, phrases, clauses and sentences of translation. In addition, the translator will also be helpful in determining the most appropriate equivalent in the target language.

A Figurative language is one of difficult translating process. Many kinds of figurative language categories, one of them is idioms. Almost students know English idioms as belongs to figurative language, just remembering the words without knowing how to interpret the meaning of those by using some translation strategies. Figurative language becomes difficult in translating process because of containing collective words that have different interpretation and meaning. There is no universal criterion for determining the accuracy of translating figurative languages in relation to the original, and there is no criterion that is equally applicable in all cases.

Different translators differ in style, each translator has his own individual style that distinguishes him from others. The quality of translation in the translation depends on the ability to correctly determine the relationship between the style of writing and the idea of the work, as well as the author's worldview, knowledge of language features, and knowledge of intercultural communication. In this paper, the question arises to know:

- 1. Can a machine translation become a substitute translator to produce a good result of translating figurative language?
- 2. How much effective machine translations help students to translate English figurative languages?
- 3. What kind of barriers face in literal translation of figurative words process by using this machine?

translation of a text should be faithful to the original text. It should respect the main characteristics of the original text, the tone and style, the details of the ideas as well as its overall structure.

LITERATURE REVIEW A. Process of Translation

Translation is as a competitive concept between two main academic disciplines including anthropology/ethnography and cultural/postcolonial studies (Conway in Anh, 2012). Translation is a procedure when an original text, often called "the source text is replaced by another text in different language, often called "the target language" (Juliane, 2018). The idea of 'difference' not only related to two languages involved in acts of translation, it also related to the two cultures in which these languages are embedded (Katan in Juliane, 2018).

The ultimate goal of translation is to obtain a quality of translation equivalent to that of a human being. People agree that this is highly challenging and also hard to formalize, since the quality of a translation is related to the nature and Complexity of the text to be translated. In translation, there are several stages that must be passed by translatorcommonly called the translation process. The following is a process of translation picture:



The process of translation has three steps (Nida and Taher in Adji, 2018 p.9-10), it can be described as follows.: (1) analysis, in analysis a translator explores the meaning and grammatical relationship of source language; (2) transfer, the transfer of the meaning of which is in the mind of the translator from the source language into the target language; (3) restructuring, the meaning that has been transferred is restructured in order to make the final message fully acceptable in target language.

B. Figurative Language Definition and Categories

Figurative language is employed in performing arts as a medium of expressing thoughts, feelings and ideas implicitly rather than explicitly. (Sharndama & Suleiman in Ratih, 2018). Moreover, Fadaee (2011) stated also that figurative language is a way of saying something different from the literal meaning in order to give a sense of beauty and emphasis on the importance of what is conveyed. It means that it involves any use of language where the intended meaning differs from the actual literal meaning of the words themselves. In other words, figurative language is used to make text language more aesthetic and more interesting. Figurative languages have 10 common categories in use: Simile, Metaphor, Personification, Onomatopoeia,

Oxymoron, Hyperbole, Litotes, Idiom, Alliteration, Allusion, Synecdoche. The focus of figurative language is explained in this paper is idioms.

C. Idiom Definition and Categories

An idiom is a phrase that cannot be translated by the actual meaning but refers to the allegorical meaning commonly used. It has an essential role in everyday verbal communication (Morid et al., 2021). However, it may be the hardest thing to learn English Foreign Language as the same idioms have different figurative meanings in every country or even culture. As Fitriani (2020) argued the fact that English is a foreign language may cause a number of issues, such as the disparity between English and Indonesian laws. Sometimes, same idiom had by different countries has different meaning for each.

Idioms can also be inferred as an expressive communication of a society that is naturally influenced by cultural and social things. The general issue that psycholinguists are interested in is how idioms are represented and analyzed in the mind. According to constraint-based methods to figurative language processing, publications may give support in favor of either literal or nonliteral readings of a figurative expression. Fernando (1996) stated that Idioms can be classified into threes sub-classes, they are:

1. A Pure Idiom

a type of conventionalized, non-literal multiword expression whose meaning cannot be understood by adding up the meaning of words that make up the phrase. For instance:

SL : whatever you do, don't spill the beans!

TL : Apapun yang kamu lakukan, jangan sebarkan rahasia tersebut!

2. A semi-pure idiom

A pure idiom has at least one literal element and one with a non-literal meaning. For instance:

SL : Don't worry I will *foot* the bill

TL : Jangan khawatir aku yang akan membayar

3. Literal idioms

Literal idioms are semantically less complex than the other two, therefore is easier to understand even if one is not familiar with these expressions. For instance:

SL : I love you from *the bottom of my heart*

TL : aku mencintaimu dari lubuk hati paling dalam

D. Strategies of Idiom Translation

In providing ideal translation, some translators face difficulties on translating idioms. Baker (2007: 68-71) summarized the difficulties involved in translating idioms, such as: an idiom or fixed expression may have no equivalent in the target language, an idiom or fixed expression may have a similar counterpart in the target language, but its context of use may be different; they may have different connotations or not be pragmatically transferable. an idiom may be used in the source language in both its literal and idiomatic senses at the same time and this play on idiom may not be successfully reproduced in the target language, and the convention regarding idioms in written discourse, the contexts in which they can be used and their frequency of use may be different in the source language and target language. Therefore, Baker proposed four idiom translation strategies (2007: 72-78)., they are:

1. Using an Idioms of Similar Meaning and Form

This strategy is to translate idioms by using an idiom very similar in its form and meaning to the source language idiom. It must express roughly the same meaning and be of equivalent lexical items. For the example: SL: Jeff has such a *big head* and thinks he's in charge of everything.

TL: Jeff sangat *besar kepala* dan berpikir bisa mengatur segalanya.

The idiom *big head* which means "someone who believes that they are very clever or very good at an activity and who thinks that other people should admire them" translated into *"besar kepala"* because both of target language and source language has the same structure.

2. Using an Idioms of Similar Meaning but Dissimilar Form

Idiom or fixed expression in the target language which has a meaning similar to that of the source idiom or expression, but which consists of different lexical items. For the example:

SL: The children is *playing cat and mouse* in the house.

TL: Anak-anak sedang bermain petak umpet di dalam rumah.

The idiom *playing cat and dog* which means alternate between kinds of behavior when dealing with someone, often in matters of pursuit, can be translated into *bermain petak umpet*. Even *playing cat and dog* has dissimilar form with *petak umpet*, they have exactly the same meaning with the source language.

3. Translation by Paraphrase

This is the most common way of translating idioms when a match cannot be found in the target language because of differences in stylistic preferences of the source and target languages. For example:

SL: The old man is kicking the bucket.

TL: Kakek itu meninggal dunia.

The idiom 'kick the bucket' which means 'die'. If translated using literal translation means 'menendang ember'. So, it paraphrased into 'meninggal dunia' which more acceptable in the target language than translated literally.

4. Translation by Omission

Omission is allowed only in some cases: first, when there is no close equivalent in the target language; secondly, when it is difficult to paraphrase; finally, an idiom may be omitted for stylistic reasons. For example: SL: He might get up the juice to kiss me. (to build up the courage) TL: Dia mungkin akan mencium saya.

The idiom 'get up the juice' which mean has no close equivalent in target language. It also difficult to paraphrase. So, this idiom can be translated by omission into dia mungkin akan mencium saya.

5. Equivalence in Translation

Translation equivalence occurs when source language and target language texts or items are related to the same relevant features of situation substance.

E. Machine Translation Definition and Mechanism

Machine translation is one of the earliest and most fascinating areas of natural language processing. The primary objective is to eliminate language barriers

by developing a machine translation system that can translate one human language to another (Abdul, 2022). The idea of machine translation can be traced back to the era when the computers came into existence. The term 'machine translation' (MT) refers to computerized systems responsible for the production of translations with or without human assistance (Jhon, 1995:431). It excludes computer-based translation tools which support translators by providing access to on-line dictionaries, remote terminology databanks, transmission and reception of texts, etc.

The ideal goal of MT systems to produce high-quality translation, direct output (oral) or indirect output (written). In practice, the output is usually revised (post-edited). Post-editing is the norm, but in certain circumstances MT output may be unedited or only lightly revised. Translation result from MT so far does not differ from the output of most human translators which is normally revised by a second translator before dissemination.

The system be designed to deal with direct conversation or texts limited to the sublanguage (vocabulary and grammar) of a particular subject field. Alternatively, input texts may be written in a controlled language, which restricts the range of vocabulary, and avoids homonymy and polysemy and complex sentence structures. It also requires input texts to be marked (pre-edited) with indicators of prefixes, suffixes, word divisions, phrase and clause boundaries, or of different grammatical. The system itself may refer problems of ambiguity and selection to human operators (usually translators) for resolution during the processes of translation itself, in an interactive mode.

F. The Basic Types of Machine Translation Design

In overall system design, there have been three basic types:

1. Direct Translation

The first (and historically oldest) type is generally referred to as the 'direct translation' approach: The Machine Translation (MT) system is designed in all details specifically for one particular pair of languages, for instance, Russian as the language of the original texts, the source language, and English as the language of the translated texts, the target language. Translation is direct from the source language (SL) text to the target language (TL) text; the basic assumption is that the vocabulary and syntax of SL texts need not be analyzed any more than strictly necessary for the resolution of ambiguities, the correct identification of TL expressions and the specification of TL word order; in other words, SL analysis is oriented specifically to one particular TL. Typically, systems consist of a large bilingual dictionary and a single monolithic program for analyzing and generating texts; such 'direct translation' systems are necessarily bilingual and unidirectional.

2. Interlingua approach

The second basic design strategy of Machine Translation is the interlingua approach, which assumes that it is possible to convert Source Language texts into representations common to more than one language. From such interlingual representations texts are generated into other languages.

A common argument for the interlingua approach is economy of effort in a multilingual environment. Translation from and into certain languages requires bilingual 'direct translation' systems; but with translation via an interlingua programs are needed. With more than three languages, the interlingua approach is claimed to be more economic. Nevertheless, the complexity of the interlingua itself is greatly increased. Interlinguas may be based on an artificial language, such as a set of semantic primitives presumed common to many or all languages, or a 'universal' language-independent vocabulary.

3. Transfer Approach

The third basic strategy of Machine translation is the less ambitious transfer approach. Transfer systems consist typically of three types of dictionaries (Source Language dictionary contains detailed morphological, grammatical and semantic information, similar Target Language dictionary, and a bilingual dictionary relating base Source Language forms and base Target Language forms), and various grammars. Many MT systems exhibit clearly separated components involving different levels of linguistic description: morphology, syntax, semantics. In transfer systems, the transfer component may also have separate programs dealing with lexical transfer (selection of vocabulary equivalents) and with structural transfer (transformation into TL-appropriate structures).

Analysis may be divided into morphological analysis (identification of word endings, word compounds), syntactic analysis (identification of phrase structures, dependency, subordination, etc.), semantic analysis (resolution of lexical and structural ambiguities); synthesis may likewise pass through semantic synthesis (selection of appropriate compatible lexical and structural forms), syntactic synthesis (generation of required phrase and sentence structures), and morphological synthesis (generation of correct word forms) (Jhon, 1995 : 432).

The direct translation approach was typical of the "first generation" of MT systems. The indirect approach of interlingua and transfer based systems is often seen to characterize the "second generation" of MT system types. Both are based essentially on the specification of rules (for morphology, syntax, lexical selection, semantic analysis, and generation).. The differences between direct and indirect, transfer and interlingua, rulebased, knowledge-based and corpusbased are becoming less useful for the categorization of systems. Transfer systems incorporate interlingual features (for certain areas of vocabulary and syntax); interlingua systems include transfer components; rule-based systems make increasing use of probabilistic data and stochastic methods; statisticsand example-based systems include traditional rule-based grammatical categories and features; and so forth. These recent developments underline what has always been true, namely that MT research and MT systems adopt a variety of methodologies in order to tackle the full range of language phenomena, complexities of terminology and structure, misspellings, 'ungrammatical' sentences, neologisms, etc. The development of an operational MT system is necessarily a long-term 'engineering' task applying techniques which are well known, reliable and well tested.

METHOD

The design of this research is a literature review. Literature review is research that examines or critically reviews the knowledge, ideas, or findings contained in the academic-oriented literature, and formulates its theoretical and methodological contributions to certain topics (Creswell, 2010). It involves researching, reading, analyzing, evaluating, and summarizing scholarly literature (typically journals and articles) about a specific topic. The results of a literature review may be an entire report or article or may be part of a article, thesis, dissertation, or grant proposal. A literature

review helps the author learn about the history and nature of their topic, and identify research gaps and problems.

DISCUSSION

A known challenge in translation is that in different domains, words have different translations and meaning is expressed in different styles. Hence, a crucial step in developing machine translation systems targeted at a specific use case is domain adaptation. Conventional wisdom states that neural machine translation models perform particularly poorly on rare words, (Luong et al., 2015; Sennrich et al., 2016b; Arthur et al., 2016) due in part to the smaller vocabularies used by Machine Translation systems.

Machine translation was created to replace the role of humans as translators, it seems that people in various fields are in great demand recently. However, several research results show that the sophistication of machine translation has not completely replaced the human role as a reliable translator. Translation process is a highly complex activity that requires many aspects of linguistics particularly, such as linguistics, values, culture, social mentality, etc.

The ability of machine translation has been quite good in helping the process of translating a certain language from one source language to one target language. Even more now machine translation can translate one source language to multi target languages. However, the sophistication of machine translation still has some drawbacks in the process of translating figurative languages.

Figurative language is often used in communication and is part of the wealth of language. Figurative language plays a role in providing beautiful and meaningful expressions in communication, as well as providing its own uniqueness to express ideas, moods, admiration, anger, and all reactions felt by a speaker. Figurative Language is an expression in the form of words that are implicitly desired so that it is more difficult to understand the meaning they contain.

There are four main reasons of using figurative language. First, figurative language affords readers imaginative pleasure of literary works. Second, it is a way of bringing additional imagery into verse, making the abstract concrete, making literary works more sensuous. The third, figurative is a way of adding emotional intensity to otherwise merely informative statements and conveying attitudes along with information. And the last, it is a way of saying much in brief compass (Perrine, 1982, as cited in Harya, 2016). In this paper, the analysis of barriers of translating figurative languages are explained through several approaches. This is argued by the following statements:

- 1. The machine translation mechanism is based on a systematical algorithm which has an impact on the generalization of the meaning of a word or sentence. In the direct translation approach, the literal word-for-word translation process might be able to give the right meaning so that this is quite effective according to the meaning in the English dictionary. For example, the word 'big body' means 'big body', where the results of translation through machine translation have conformity in the real sense. Another example like as 'as white as snow', the color of snow is white and appropriate with the people's perspective and visualization of the object in real life.
- 2. The second approach, the Lingua translation approach, in machine translation is still not able to produce translation of figurative languages, especially idioms. Of great importance in the process of linguistic and cultural analysis is a thorough study of the linguistic units of foreign languages selected for work in the field of translation. It is also necessary to understand and study the

mentality of the people in the language of the original text. Mastering lexical, grammatical, and stylistic techniques on the spot in accordance with the norms of translation improves the quality of translation.

The words denoting color for example, reflect the cultural traditions of each nation. Taking into account the red color, it is a symbol of danger in the USA, aristocracy in France, life and creativity in India, anger in Japan, and happiness in China. Interestingly, the symbolic representation of flowers can also mean several from a linguacultural point of view. For example, in Russian, the symbolism of yellow comes from the color of the sun, on the one hand, as a symbol of eternity, and on the other as a hint of illness. Based on such circumstances, the concept of color includes both socio-cultural and emotional factors.

In Rowling's novel Harry Potter and the Secret Chamber, the phrase salmonpink is used to indicate the color of clothing when depicting the jacket of one of the characters. We can see the source text and one of the variants of its translation: She was already wearing a Salmon-Pink cocktail dress. An Evening plate of light salmon was already beating on her. with a literal translation into Russian, a very rude and disproportionate phrase would have turned out. Because none of the languages have exactly the same color. Therefore, the phrase denoting color, when translated grammatically turns into another fragment of the sentence.

3. The last approach is the transfer system approach. Many machine translation systems exhibit clearly separated components involving different levels of linguistic description: morphology, syntax, semantics. In transfer systems, the transfer component may also have separate programs dealing with lexical transfer (selection of vocabulary equivalents) and with structural transfer (transformation into target language appropriate structures).

Translation of idioms sentences consisting of several words, and then changing the form of parts of speech (verbs or adjectives) will affect the translation results. For example, 'Best thing since sliced bread' will have a different translation result. The word 'sliced' in machine translation is sometimes read as a past tense form of the verb so that it will cause problems in the translation process. Some words that have undergone changes with the addition of suffixes will result in translation errors due to the limited ability of machine translation to process the level of linguistics.

CONCLUSION

Technology has provided machine translation to support translation process in communication directly or written. The application of this machine gives more benefits to make a communication effectively. Machine translation system is still increased to be more advanced so that it can substitute a human as a translator. Meanwhile, there are some barriers of translating process especially in translating figurative language by using machine translations. The first thing to be attended is the human brain system is totally different with machine translation system, machine translation is dominated by logarithm and statistical system so that give an impact on the generalization of the meaning of a word or sentence.

On the other hand, human brain has their uniqueness because a brain system and capability are influenced by the environment. Machine translation can assist us to translate words to words generally, but human brain translates a word or language based on their sense, values, ideology, and culture where they live. The main things that make some barriers in translating figurative language is the transfer system approach. Many machine translation systems exhibit clearly separated components involving different levels of linguistic description: morphology, syntax, semantics. In transfer systems, the transfer component may also have separate programs dealing with lexical transfer (selection of vocabulary equivalents) and with structural transfer (transformation into target language appropriate structures). Some words that have undergone changes with the addition of suffixes will result in translation errors due to the limited ability of machine translation to process the level of linguistics. machine translation are influenced by linguacultural aspects, mostly psychology and linguistics.

REFERENCE

- 1. Association for Computing Machinery.2022. Improving Machine Translation Systems via Isotopic Replacement. ICSE '22, May 21–29, 2022, Pittsburgh, PA, USA. https://doi.org/10.1145/3510003.3510206
- 2. Baker, Mona, Eds. 2001. Encyclopedia of Translation Studies. London: Routledge print.
- 3. Creswell, J. W. 2010. Research Design: Qualitative, Quantitative, mixed method approaches, 3th, Translation of Ahmad Fawaid. Yogyakarta : Learning Library
- 4. Conway, K. (2012). A conceptual and empirical approach to cultural translation. Translation Studies, 5(3), 264-279.
- 5. Fachrizal, Aji. 2018. The Translation Strategy of Idiomatic Expression in English-Indonesian Subtitle of the Infiltrator Movie. Thesis
- 6. Fadaee, E. (2011). Symbols, Metaphors and Similes in Literature: A Case Study of –Animal Farm. Journal of English and Literature, 2(2), 19–27. https://doi.org/10.1093/jncimonographs/lgh018
- 7. Fernando, Chitra. 1996. Idiom and Idiomicity. Oxford: University Press. E-Book
- 8. Fitriani, E. (2020). Errors found on the English translation sentences of the third-year students of English at Ikip Budi Utomo. Journey: Journal of English Language and Pedagogy, 3(1), 36-45.
- 9. Harya, T. D. 2016. An analysis of Figurative Language Used in Colehos's Novel Entitled-Al-Chemist. Premise Journal,3 (2), 45-63
- 10. Hutchins, W. Jhon. 1995. Machine Translation: A Brief History. Concise history of the language sciences: from the Sumerians to the cognitivists. Edited by E.F.K.Koerner and R.E.Asher. Oxford: Pergamon Press, 1995. Pages 431-445
- 11. Oktaviani, Ratih. 2018. The Choice of Larson's Translation Strategies and Resulted Quality of Indonesia. English Language Education Postgraduate Semarang State University. Thesis
- 12. Philipp koehn, Rebecca Knowles. 2017. six Challenges for Neural Machine Translation. https://doi.org/10.48550/arXiv.1706.03872
- 13. Morid, M., Bachar, N., & Sabourin, L. (2021). Capturing the Multidetermined Nature of Idiom Processing Using ERPs. Canadian
- 14. Rustamov Ilkhom Tursunovich. 2022. Linguistic and Cultural Aspects of Literary Translation and Translation Skills. British Journal of Global Ecology and Sustainable Development Volume-10, Nov., 2022 ISSN (E): 2754-9291
- 15. Ratih Oktaviani. 2018. The Choice of Larson's Translation Strategies and The Resulted Quality of Indonesian Translation of Hyperboles in Oliver & Chester's The Shrunken Head. Thesis. English Language Education Postgraduate Semarang State University.
- 16. Syed Abdul Basit Andrabi, and Abdul Wahid. 2022. Machine Translation System Using Deep Learning for English to Urdu. Volume 2022 | Article
- 17. ID 7873012 | https://doi.org/10.1155/2022/7873012

- 18. Thierry Poibeau. 2017. Machine Translation. Cambridge, Massachusetts: The MIT Press
- 19. Verna Dankers, Christopher G. Lucas, and Ivan Titov. 2022. Can Transformer be Too Compositional? Analyzing Idiom Processing in Neural Machine Translation. https://doi.org/10.48550/arXiv.2205.15301