Machine Translation: Source-Oriented and Target-Oriented Approaches

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ABSTRACT

Machine translation has become one of the important features in social media especially on Instagram. This case study investigates the English-Indonesian translations of sentences as the caption on Instagram, as well as analyses the source-oriented and target-oriented translations shown by the target language structures and styles. The frequency of occurrence is also calculated in order to analyze the different parts of sentences that are translated by applying source-oriented and target-oriented approaches. The data were collected from an Instagram account that has a long caption consisting twenty-nine sentences and also one phrase in English and their translations in Indonesian. The data were classified into the language expressions types and then analyzed based on the source-oriented and target-oriented translation approaches (Toury, 1980, 2012). The results show that there are three types of language expressions, they are common expressions, idiom, and phrasal verbs. In terms of the frequency of occurrence, 62% of all parts of sentences are translated based on the target-oriented approach. It reveals that the TL is good enough for the target readers to understand the messages and meanings of the original language. The common expressions are the most frequent parts of sentences that are translated based on the target-oriented approach. Idiom and phrasal verbs do not represent the analyzed data to draw the conclusion as there are only one idiom and four phrasal verbs out of twenty-six data (19%) found.

1. Introduction

Translation is an additional feature that has been provided on Instagram since 2016 (McCormick, 2016). The translation feature on Instagram is certainly added to meet users' needs. Instagram users are from different countries who speak different languages. The captions that users add as descriptions of photos or videos they post can be in short phrases or sentences, and long descriptions in several paragraphs. The long caption is usually added to explain the current issues in terms of politics, economics, social and even someone's stories about motivation.

The translation feature on Instagram is usually available in the languages that users set in their gadget or in the language where a user’s country is detected by Instagram. The translation feature that can be used simply by clicking "see translation" is placed under the caption. However, there is also an inactive translation feature which means that no translation in the target language is available after clicking on the translation feature. This could be due to the users having set the disable mode of the translation feature for certain reasons.

Translation is defined as “the replacement of textual material in one language by equivalent textual material in another language” (Catford, 1965: 20), “a craft consisting in the attempt to replace a written message and/or statement in one language by the same message and/or statement in another language” (Newmark, 1981: 7), "reproducing in the receptor language the closest natural equivalent of the source language message, first in terms of meaning, and secondly in terms of style" (Nida and Taber, 1982). From the definitions, the translated source is a written text or language that has been transcribed, therefore, the translation results are in written form. What is translated is not only words, but the messages that authors of the source language want to convey. The sentence structures in the source language (SL) and the target language (TL) are not completely the same, therefore, the sentence structures in the source language should not always be maintained and reused in the target language if later the translation results become awkward and unacceptable in the target language, as stated by Nida and Taber that the translation results are equivalent that are close to the meaning in the source language and natural ones in the target language.
Human versus machine translation produce translations that are certainly different because the system in computer programs has weaknesses such as not being able to understand culture, not being able to relate words to their context, not being able to translate into all languages, and not being able to read language styles (Sitsanis, 2018; Rahman, 2020). Translation feature on Instagram is the kind of machine translation in which if the target text is produced automatically there is no human intervention in the process. Human intervention may be employed before the system is ready to operate such as the input of dictionaries, grammar, linguistics of languages, and/or after having the results as to update the input for better results. Irfan (2017) states that Machine Translation aims to provide a system that can translate a source language text into a target language, and translation results express the same meaning as in source language. It is different from a human-aided machine translation (with pre-editing of the SL and/or post-editing of the TL) and a machine-aided human translation (such as a trans tool) that involve humans in the process of translation (Hutchins, 1995).

There are two kinds of machine translation: Rule-Based Machine Translation (RBMT) and Corpus-Based Machine Translation (CBMT). RBMT refers to a machine translation system that is based on the source and target languages’ linguistic information and is generally taken from dictionaries and grammars of the main semantic, morphological, and syntactic rules of each language. By the sentences input in source languages, this system generates the output target languages. This kind of machine translation has three approaches including the direct, transfer-based and interlingua approaches (Okpor, 2014:160-161). In CBMT, a bilingual parallel corpus is used to get knowledge for the next incoming translation. Raw data found in parallel corpora in texts and their translations are used for obtaining translation knowledge. Statistical and example-based machine translation approaches are the subcategories of CMBT (Okpor, 2014: 162). The combination between the two kinds is called the Hybrid Machine Translation Approach.

Instagram machine translation results have been analyzed in terms of the types of lexical error produced (Susanti, 2018). Incorrect and missing words are the most frequent errors found in the Indonesian translations of ten English captions of an Instagram account. It also shows that the translation machine cannot represent the original language. It is because so many errors resulted from Instagram machine translation. Terminology error, syntax error, and literalness error are the other types of errors produced by the Instagram machine translation in translating parts of English sentences into Indonesian (Larasati et al., 2019). Borrowing and literal translation procedures in the English-Indonesian translation of phrasal verbs are not appropriate because they cannot be comprehended literally and from the borrowed terms (Rahman, 2017; Widiastuti, 2021). The previous research emphasized on the errors of the translation produced by the Instagram automatic machine translation from English into Indonesian. There arises a question whether the machine cannot translate all sentences well.

This is a case study that investigates the English-Indonesian translations of sentences’ parts as the caption on an Instagram post, as well as analyses the source-oriented and target-oriented approaches shown by the target language structures and styles. The frequency of occurrence is also calculated in order to analyze why there are different distributions of parts of sentences that are translated by applying source-oriented and target-oriented approaches.

2. Method

The data obtained for this study are sentences in a caption posted in 2021 from an Instagram account (@lewishowes). There are 29 sentences and 1 noun phrase. This data provides the facts that the Instagram machine translation feature has been able to show the translation from English to other languages including Indonesian. The Indonesian translation can be shown in a few seconds because the mobile phone number is registered using the Indonesian code.

The data were collected by identifying parts of sentences in the source language showing the source-oriented and target-oriented approaches, such as the common expressions, idioms, and phrasal verbs. Other issues like the structure of SL and TL, borrowing terms, zero translation, loss of information are also described in order to reveal the results of how the Instagram translation machine works.

A mixed-methods approach is applied in the analysis. It is started by an initial qualitative phase followed by a quantitative phase. "The first sequence has the advantage of allowing the researcher to explore data qualitatively and to follow this exploration up with a more focused quantitative analysis of the topic or sub-topic, while the alternative of commencing with a quantitative phase has the potential advantage of exposing some trends that can then be further probed via qualitative data" (Saldanha & O’Brien, 2013: 23).
The collected data were classified based on the translation orientation and analyzed qualitatively referring to Toury’s translation orientation (Toury, 1980, 2012). A source-oriented translation approach is aimed at reproducing SL forms and structures in the TL. This strategy does not always work due to differences between language structures. A target-oriented translation approach applies adaptations of the SL text to the structures and cultural context of the TL. Based on Toury’s approaches, Ponomavera (2021) added that the features of source-oriented approach involve literal translation, foreignization, and show that the hidden meanings stay implicit in the TL. On the other hand, the features of the target-oriented approach involve natural translation, domestication, easy to understand meanings and does not have the shades of foreign culture in TL.

The percentages of classifications of the source-oriented and target-oriented approaches are presented in charts as the quantitative analysis. The results are then explained descriptively to reveal which approach is dominantly applied for which parts of sentences.

3. Result and Discussion

This part is divided into two sections reporting the sentences with the source-oriented translations and the target-oriented translations and their analysis. The first is categorized into three subsections, and the second has two subsections as what has been found. The data were presented in both SL and TL with the cardinal number, for example data 1 is written (1) and number of sentences based on the sentence order in the caption (S…) written at the end of the SL sentence. The part of each sentence that is analyzed is shown with underline.

3.1. Source-oriented translation

This subsection shows the literal translations of the parts of SL sentences into the TL. The SL common expressions, idiom and phrasal verbs in English are translated literally. The literal translations as well as the use of SL structure in the TL indicate that the translations are oriented to the SL styles and forms. There are seven English common expressions, one idiom, and two phrasal verbs literally translated into the TL.

a. Common expressions translated literally

The SL common expressions are translated literally, and in this case, the foreignization is shown in terms of meaning and forms. The parts of sentences showing the orientation of the SL are in the form of clauses, prepositions, a nominal phrase, and to-infinitive verb. The following SL sentences and their translations show the context where parts of the sentences are with the source language orientation. Sentences (1-7) show the literal translations of the English common expressions into Indonesian.

(1) SL: What is it that the most successful people in the world do to become who they are? (S-1)

   TL: Apa yang dilakukan orang-orang paling sukses di dunia untuk menjadi siapa mereka?

   The expression ‘who they are’ is translated literally into ‘siapa mereka’. Actually, it does not ask who people are, however, it refers to how certain people become successful as what they have achieved or to show their current successful condition. The literal translation shows the source language orientation because the TL does not show the exact meaning of the SL expression.

(2) SL: They dream and they act upon that dream. (S-2)

   TL: Mereka bermimpi dan mereka bertindak di atas mimpi itu.

   The preposition ‘upon’ has various dictionary meanings and it should be understood based on the context of the clause where it is used. The following phrase of that preposition in the SL is ‘that dream’. The meaning that is conveyed is someone does something based on the dream s/he has had. The translation in Indonesian is ‘di atas’ which is the literal translation of the SL preposition. In the TL culture, it is not usual to say ‘di atas mimpi’, because ‘mimpi’ (dream) is an abstract thing. The translation is better with the use of ‘berdasarkan’ (based on).

(3) SL: Now, why do some people achieve their dreams and others live an average life? (S-4)

   TL: Sekarang, mengapa beberapa orang mencapai impian mereka dan yang lain menjalani hidup rata-rata?

   The literal translation of the phrase ‘live an average life’ is ‘menjalani hidup rata-rata’, however, based on the context, in the TL culture, the common expression used is ‘menjalani hidup biasa saja’. The literal translation is less common in the TL culture.
(4) SL: Most successful athletes, celebrities, authors, presidents, and CEOs are the most criticized people in the world.
   (S-11)
   TL: Paling sukses atlet, selebriti, penulis, presiden, dan CEO adalah orang yang paling banyak dikritik di dunia.

   The noun phrase structure in English ‘most successful athletes’ is determiner + adjective + noun. This structure is retained in the TL. There should be a structure shift in TL, that is noun + determiner + adjective. The use of the SL structure in the TL makes the translation not suitable in terms of the meaning.

(5) SL: Because when you do that, you are one step closer to success and achieving the dreams you were born to live.
   (S-25)
   TL: Karena ketika Anda melakukan itu, Anda selangkah lebih dekat dengan kesuksesan dan mereaih impian yang Anda lahirkan untuk hidup.

   The expression ‘born to live’ means ‘to be who you are’ or ‘to be true to yourself’. It sounds awkward when translated literally into the TL, that is ‘Anda lahirkan untuk hidup’ which means someone was born to be alive. In the TL culture, it is closer in meaning to ‘yang Anda inginkan’.

(6) SL: We only get one life to live.
   (S-26)
   TL: Kita hanya punya satu kehidupan untuk hidup.

   The SL expression ‘life to live’ means a chance for humans to live. The word ‘life’ is translated literally into ‘kehidupan’, and it sounds like the source language culture is retained in the TL. In the target culture, the common expression used for ‘chance of life’ is ‘kesempatan untuk hidup’.

(7) SL: We only get one legacy to be remembered by.
   (S-27)
   TL: Kita hanya mendapatkan satu warisan untuk dikenang oleh.

   The preposition ‘by’ in the SL is used after the passive form ‘to be remembered’. It can be the by-phrase that is not completed. In the TL it is translated into the preposition ‘oleh’ which shows the sentence does not have complete information. The preposition is better not to be translated into the TL to make the meaning of the sentence show the complete thought.

b. Idiom and phrasal verbs translated literally

   Idioms and phrasal verbs do not always have the equivalences in other languages. An English idiom and two phrasal verbs are translated literally into Indonesian by the Instagram machine translation. The literal meanings are not natural in the TL. Besides, they have a different understanding of the original language. Sentence (8) contains the English Idiom, and sentences (9-10) are the English phrasal verbs with their translations.

(8) SL: I slept on my sister’s couch for over a year and a half, living off three credit cards while I was trying to get on my feet and couldn’t afford my own apartment.
   (S-20)
   TL: Saya tidur di sofa saudara perempuan saya selama lebih dari satu setengah tahun, hidup dari tiga kartu kredit sementara saya mencoba untuk mendapatkan kaki saya dan tidak mampu membeli apartemen saya sendiri.

   The English idiom ‘to get on my feet’ means someone who wants to get back to normal financial status. It is translated word-for-word into Indonesian. It has a different meaning with what the actual message that wanted to be delivered. In this case, the source language orientation is shown.

(9) SL: You can let your fear of not being loved by everyone hold you back or you can use your fears to drive your forward.
   (S-15)
   TL: Anda dapat membiarkan rasa takut Anda tidak dicintai oleh semua orang menahan Anda atau Anda dapat menggunakan rasa takut Anda untuk mendorong Anda ke depan.

   The phrasal verb ‘drive you forward’, based on the context, means to continue doing something in the future. It is literally translated into ‘mendorong Anda ke depan’ that means to push someone forward. In the TL culture the verb ‘melanjkah ke depan’ or ‘terus maju’ is closer in meaning with the SL.
(10)  SL: When will you decide to step your life up and move towards your fears, discomfort and pain? (S-24)
TL: Kapan anda akan memutuskan untuk melangkah hidup Anda dan bergerak menuju ketakutan, ketidaknyamanan dan kesakitan Anda?

In data (10), there is a phrasal verb ‘to step your life up’ that is translated literally and ‘move towards …’. The phrasal verb ‘step up’ means to improve an achievement in life. In the TL it becomes ‘untuk melangkah hidup anda’ in which the TL verb ‘melangkah’ (step) is not accepted in its culture when it is followed by the noun ‘hidup’ (life). The alternative translation can be ‘mencapai pencapaian hidup anda’. The SL phrasal verb does not have the equivalence in the TL in the same form, so that the SL should be described in the TL style.

The second phrasal verb ‘move toward’ has the meaning to face the fear and not hide/run from it. Its translation is ‘bergerak menuju ketakutan’ which means move to (be close to) the fear. The literal translation is not suitable in the TL culture. The alternative translation that is close in meaning with the SL is ‘menghadapi ketakutan’ (to face/handle the fear).

3.2. Target-oriented translation

Compared to the number of sentences translated based on the source-oriented approach, there is more data that is translated with the target-oriented approach.

a. Common expressions

(11)  SL: The fear of failure (S-5)
TL: Takut akan kegagalan

The noun phrase ‘the fear of failure’ is a common expression that means someone who is afraid of making a mistake. The translation ‘takut akan kegagalan’ shows the equivalent meaning with the SL. The word ‘kegagalan’ is chosen instead of ‘kesalahan’, because based on the context, making a mistake will make someone fail.

(12)  SL: Yes, most people are afraid to fail. (S-6)
TL: Ya, kebanyakan orang takut gagal.

The expression ‘afraid to fail’ with a preposition ‘to’ in the middle, is translated into ‘takut gagal’. The preposition is not translated into the TL, and it means that the SL structure is not used in the TL in order to make the translation natural.

(13)  SL: I've got a secret for you. (S-8)
TL: Aku punya rahasia untukmu.

Sentence (13) is a simple sentence with a present perfect form ‘I've got’ and the article ‘a’ before the noun ‘secret’. The structure of the present perfect form in the SL is translated without emphasizing the tense in the TL. It is because the TL does not have the same style as the SL. The article ‘a’ is not translated into the TL even though it has the equivalence that is ‘sebuah’. It is considered natural and accepted in the TL with the omission of the article, since it does not change its meaning.

(14)  SL: People are going to criticize you no matter what you do. (S-9)
TL: Orang-orang akan mengkritik Anda, tidak peduli apa pun yang anda lakukan.

The SL expression ‘no matter what’ is added with the word ‘pun’ in the TL, thus making it sound like the original language in the TL. The preposition ‘pun’ in this case is the collocation of the SL expression which means ‘not even anything.

(15)  SL: So many people have an opinion about why they aren't good enough and why they can do it better. (S-12)
TL: Begitu banyak orang yang memiliki pendapat tentang mengapa mereka tidak cukup baik dan mengapa mereka bisa melakukan lebih baik.
The underlined relative clauses in the SL are translated literally, however, using the TL structures. The meanings can be understood in the TL, and refers to the information of asking what someone cannot do well and what someone can perform in a better way.

(16) SL: What is your dream and what are you going to do about it today? (S-29)
    TL: Apa impianmu dan apa yang akan kau lakukan hari ini?

    The preposition and pronoun ‘about it’ are not translated into the TL. The pronoun refers to the ‘dream’ that has been mentioned in the first clause in the SL. Even Though, the two words are not translated, the message is well understood in the TL. It conversely sound not natural if they are translated. The Instagram translation machine has successfully recognised the context.

(17) SL: If you are trying to get everyone to love you, stop trying because it’s never going to happen. (S-14)
    TL: Jika anda mencoba membuat semua orang mencintaimu, berhentilah mencoba karena itu tidak akan pernah terjadi.

    The simple present tense form ‘to be + verb-ing’ is used in the SL ‘are trying to’ and the simple future tense form ‘to be + going to’ is used in ‘is never going to’ (with the adverb of frequency ‘never’ after the to be). The translations show the target language orientation, that ‘are trying’ is equivalent to ‘mencoba’ and ‘is never going to’ is equivalent to ‘tidak akan pernah terjadi’.

(18) SL: That is what the most successful people on the planet do. (S-16)
    TL: Itulah yang dilakukan orang-orang paling sukses di planet ini.

    The relative clause with ‘what’ in the SL is not translated into the TL into ‘apa’, but instead the linking word ‘yang’ is added. It clearly shows that the machine translation can detect the TL style.

(19) SL: They continue striving forward even when they are fearful. (S-17)
    TL: Mereka terus berusaha maju bahkan ketika mereka merasa takut.

    ‘Fearful’ is an adjective that means someone is frightened. The translation is a phrase ‘merasa takut’. ‘Merasa’ refers to feeling, and ‘takut’ is the equivalence of fear. The TL term ‘merasa’ in this context is added to indicate that people are frightened by something, so that they have the ‘feeling’ of fear.

(20) SL: Will it be hard? Yes. (S-18)
    TL: Akankah sulit? Ya, benar.

(21) SL: Will there be sacrifices? Yes. (S-19)
    TL: Akankah ada pengorbanan? Ya benar.

(22) SL: How will you be remembered? (S-28)
    TL: Bagaimana Anda akan diingat?

    There are three interrogative sentences (data 20-22) in the simple future tense. Data (20) is with the adjective ‘hard’, data (21) with the existential word ‘there’ and data (22) is in the passive form in the source language. ‘Will it be hard’ is translated using the TL style without showing the translations of ‘it’ (the subject) and ‘be’, therefore, it is familiar in the TL. In this case, the TL question word ‘akan-kah’ is the short form of ‘apakah akan’ that can be detected by the Instagram machine translation. The SL ‘there’ is translated into ‘adja’ in the TL, and the position is after the question word ‘akan-kah’. Both data (20) and (21) are the yes-no question. Data (22) is the wh- question, and the question word ‘how’ is translated into ‘bagaimana’ without the addition of the short form -kah as the the other two question words. The future-tense word ‘will’ before the subject is translated into ‘akan’ which is its equivalent and is placed after the subject. All the translations show the TL-orientation.

(23) SL: I wasn’t smart. (S-21)
    TL: Aku tidak pintar.

(24) SL: Share in the comments below! (S-30)
TL: Bagikan di komentar di bawah ini!

The SL negative type of simple sentence (data 23) shows the equivalent meaning in the TL. The sentence order between the SL and TL are the same, that is Subject + Predicate + Object.

The last data of the common expression is the imperative type of simple sentence. All the SL words have the equivalences in Indonesian, even though there exists a unit shift from the SL to TL, as well as the omission of the translation of the definite article ‘the’ which is considered acceptable in the TL in this case. The unit shift is when the word ‘below’ is translated into a phrase containing three words ‘di bawah ini’. The target-oriented approach is applied in the translation.

b. Phrasal verbs

(25) SL: So you might as well go after your dreams. (S-10)
TL: Jadi anda mungkin juga akan mengejar impian Anda.

(26) SL: You can live your dreams and make them a reality, or you can only dream and allow your fears to hold you down. (S-23)
TL: Kamu bisa menjalani mimpimu dan menjadikannya kenyataan, atau kamu hanya bisa bermimpi dan membiarkan ketakutanmu menahanmu.

The phrasal verbs ‘go after’ and ‘hold down’ are successfully translated into the TL without applying word-for-word translation. ‘Go after’ means to chase, the TL term used is ‘mengejar’ and ‘hold down’ means to stop, the TL term chosen is ‘menahan’, both the translations are the closest in meaning with the SL terms.

The rest four data are not classified into the source-oriented and target-oriented approach due to three reasons. The first is the incorrect translation as in sentence (S-3), the word ‘achievers’ that means the person who achieves something is translated incorrectly into ‘pencapaian’ which means achievement. Another data that shows the error is the passive verb from ‘not being accepted’ (S-7) that means someone condition not being accepted by other people, is translated into ‘tidak terima’ that shows the active form with the base verb in Indonesian. Sentence (S-13) shows an SL borrowed term used in the phrase, ‘on the flip side’ and its translation is ‘di sisi flip’. The last data, sentence number 22 (S-22) contains the SL clause ‘…but I dreamed big and I took massive actions everyday...’ and its translation ‘tetapi saya bermimpi besar setiap hari’. ‘I took massive action’ is not translated into the TL. All the four data are considered having errors and not suitable for classification and analysis. Those data are categorized into errors performed in the Instagram machine translation. The diagrams below show the percentage of source-oriented and target-oriented approaches excluding the errors found.

![Diagram](image)

Figure 1. The Percentage of Source-oriented and Target-oriented Approaches Performed by the Instagram Machine Translation

From the twenty-six data classified and analyzed, the target-oriented approach (62%) is more frequently applied by the Instagram machine translation in translating parts of sentences from English into Indonesian. In this case, it reveals that the results of the machine translation provided are understandable by the Indonesian Instagram users. It indeed helps the users who are not fluent in English to get information and understand the messages in their national
language, that is Indonesian. Furthermore, it is necessary to see what parts of sentences that are translated using the source-oriented and target-oriented approaches. The information can be seen from Diagram 2.

![Diagram 2: The Percentage of Common Expressions, Idiom, and Phrasal Verbs Translated Based on the Source and Target Languages Approaches](image)

Diagram 2 indicates that there are three types of data, in this case parts of sentences showing the different orientation of translation. Common expressions are the most frequently found. The target-oriented approach is twice (54%) applied than the source-oriented approach (27%). Idiom is only found to be translated based on the target-oriented approach. Phrasal verbs have equal frequency of the application of the two approaches. It demonstrates that the common expressions can be comprehended naturally in the target language. However, the data found for idiom and phrasal verbs are not sufficient to draw a conclusion whether the Instagram machine translation is able to translate many of them with the orientation of target language culture.

4. Conclusion

Parts of sentences that are translated referring to the source-oriented and target-oriented approaches include the common expressions, idiom, and phrasal verbs. There are twenty-one SL common expressions in which seven of them are translated with the source language orientation, and fourteen are the target-oriented translations. There is only one idiom found and it is translated with the SL orientation. Two phrasal verbs are translated based on the source-oriented approach, and the other two are based on the target-oriented approach.

In terms of the frequency of occurrence, 62% of all parts of sentences are translated based on the target-oriented approach. It reveals that the TL is good enough for the target readers to understand the messages and meanings of the original language. The common expressions are the most frequent parts of sentences that are translated based on the target-oriented approach. Idiom and phrasal verbs do not represent the analyzed data to draw the conclusion as there are only one idiom and four phrasal verbs out of twenty-six data (19%) found.

References


