Translation Comparison on Manual Product and Machine Translation

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Abstracts: This paper is aimed at describing the comparison of translation products. The products of translation are from bilingual user manual guidance and translation machine. User manual guidance for a product is commonly written in two languages, Indonesian and English. A product user manual guidance is mostly written in English and it must be supplied in Indonesian language for avoid misinterpretation of guidance. The English version is then compared with the result of translation machine. Those two versions of English are totally different since it is assumed that the user manual guidance of a product is written by human. While, the translation machine is non-human tool that applies artificial intelligence to translate other languages. It is interesting to compare the product of translation with different background of translator. The data source was taken from bilingual user manual product and translation machine. The data for this paper was in the level of words and phrases, but it was in the level of sentence to avoid misunderstanding of context. Method of documentation was applied during the data collection. It was supported with technique of reading attentively, note taking, and qualifying the data. The similar technique was also used when dealing with translation machine. Meanwhile descriptive qualitative was applied in analyzing data. Findings show that several words and phrases are applied differently in the user manual product and translation machine. Certain lexical choices are used differently in terms of general or specific understanding in the manual product and translation machine. There is also phenomena of additional information for the result of translation machine. It is also occurred in for phrases. Phrases are applied differently in the user manual product and the translation machine. Even the words and phrases are applied differently, however, the meaning is considered to be the same with the Indonesian version.

Keywords: *translation, comparison, bilingual manual product, translation machine*

INTRODUCTION

In recent day, the machine translation is important issue in digital era. The digital era enables everyone to have access to use some platform providers or services for many services. One of services is machine translation. The machine translation provides some benefits for the users. The benefits are namely reducing time, effort, and certainly cost for translating. Providing machine translation platform for free is possible for everyone to access it. It is also possible for them to learn other languages or even for those who are professional in translation expertise. The machine translation also offers solution for limitation of human resource in translation. The limitation can be solved with the use of machine translation to translate large number of documents in a very quick time. It is certainly that machine translation also has its weakness and limitation.

Discussing on translation, it can not avoid that there are specific contexts to determine the result of translation. The specific contexts are namely the context of culture and communication. Both are important in determining the result of translation. Especially when it is discussing on translation of specific terms such as cultural term or others. Specific term in a text should be treated differently when it deals with other languages. It is because language is a unique in community and it is part of culture. As representation of culture, each language represents actually each culture in the world. Its uniqueness is quite different with other languages uniqueness. Talking on the culture of a language, it turns to be the basic problem of machine translation.

As creation of human, machine translation has limitation. The limitation comes as the result of availability of corpus of languages in their data. It certainly needs time to provide a large number of lexical choices in a language for machine translation. The limitation becomes focus of developer of machine translation. If it is related to procedure of cognitive like human, the machine translation has limitation in understanding linguistic elements in source language (SL) and target language (TL). Those elements of linguistic are words, phrases, morphology,

syntax, pragmatic, and others. Moreover, another element such as stylistic or language style has become a consideration. More specific, consideration on culture and specific features of language is also the main focus of a translator.

Main consideration of machine translation is cognitive. Cognitive aspect is basic element that differentiate between machine translation and human. It also affects the result of translation between both. The understanding on words, phrases, semantic, syntaxis, pragmatic, or other elements in linguistic by human turns as more relevant and equivalent to the SL and TL. Meanwhile, machine translation depends on its ability of artificial intelligence and it also has a development. The development comes when machine translation previously is only able to translate in the level of words or phrases. It changes now since it applies the corpus of language to translate from SL into TL. I can be concluded that nowadays machine translation almost has an ability like human cognitive. It is especially when the machine deals with translation of words in general understanding perspective. Understanding the machine translation is as same as to understand the language itself. Generally, each language has special features and characteristics. Those special features and characteristics are the most challenging in development of machine translation. Moreover, it is the development of the limitation of machine comparing with human ability and cognitive system. Zakir and Nagoor (2017) has described some challenging aspects faced by the machine translation in its development. The aspects proposed by Zakir and Nagoor are the problems of machine translation when it deals with translation from English to Urdu language. Determining the complexity of both languages, they described detailed aspects on machine translation when it translates from a language to other languages. Those aspects are words, phrases, syntax, and semantic.

Zakir and Nagoor (2017) simply defined on limitation of machine translation of *Google* to differentiate a word. They used the word *book* in different context of Urdu language. It is for example *please book my ticket tomorrow* and *please buty that book form me*. The machine translation only recognized the use of *book* as a noun in both contexts. Within the context, it can be seen that the first sentence does not have relation to *book* as a noun. The cases are similar with the translation of Indonesian into English. It needs certain lexical choice to express specific idea. In Indonesian language, for example, the word *besar* can be translated into various lexical choices in English such as *big, huge, large, enormous*, and *great*. It is then certainly the context of sentence or communication that decides which lexical choices are the correct one.

The context of sentence or communication has important in deciding the use of words. For human, it can be easily determined which words are fitted for certain condition. However, machine translation seems to be failure in analyzing the context of sentence or communication. Human is able to analyze the logical message, while machine has problem in understanding it. Zakir and Nagoor (2017) mentioned two examples of sentence with *the pen is in the box* and *the box is in the pen*. They further explained that before those sentences, there must be kind of context in proceeding. The proceeding context can determine human to express its idea. Unfortunately, the machine translation does not able to do the similar thing. The relation between sentences or context is known as discourse analysis. The discourse analysis leads everyone to recognize the context and find the meaning of the messages. Zakir and Nagoor (2017) emphasized that machine translation needs to work hard to 'remember' the context of certain sentences. Even it seems to be impossible, but for the future generation of machine translation, it seems to be visible.

RESEARCH METHOD

The data source of this paper was taken from bilingual manual home product. It was then the Indonesian version was translated with machine translation. The machine translation was *Google*. The data was in the level of complete sentence and it was presented with two results of translation. The method of collecting data was documentation. While the techniques applied in collecting data were translating, reading attentively, note taking, selecting, and finally classifying the data. The selected data was then presented in Indonesian language as SL and two results of translation, namely from manual product and machine translation, as TL. The method of analyzing data was descriptive qualitative. The selected data was analyzed descriptively with supported by studies related to translation and machine translation.

FINDINGS AND DISCUSSION

In this section, there are three data of comparison presented as findings and discussion. Those three consist of two data of comparison of word and one data of comparison phrase. Each data is presented in Indonesian language as the source language (SL) and two target languages (TL) in English. Those two represent of data taken

from book of manual product and machine translation. The data is presented in sequence and with bold type for the word or phrase that is taken as data.

Data 1 and data 2 are the comparison of word given by the manual product (MaP) and the machine translation (MeT). In general, those two data present the model of general and specific lexical choices. The general and specific meanings are taken from the Oxford dictionary. For example, data 1 has the SL word of *peralatan*. The word *peralatan* is translated differently in TL. In MaP, the word *appliance* is used and in MeT is the word of *equipment*.

data 1

SL	:	**Peralatan** ini tidak boleh disuplai dengan perangkat switch eksternal, seperti penghitung waktu, atau dihubungkan dengan sirkuit yang secara berkala dinyalakan/dimatikan oleh perangkat.
TL (MaP)	:	The **appliance** must not be supplied through an external switching device, such as timer, or connected to a circuit that is regularly switched on and off by utility.
TL (MeT)	:	This **equipment** must not be supplied by an external switch device, such as a timer, or connected by a circuit that the device periodically turns on / off.

Both *appliance* and *equipment* refer actually to the same meaning and it is equivalent to *peralatan* in SL. However, the use of both words is different. The Oxford Advanced Learner's Dictionary mentions *appliance* as a machine that is designed to do particular thing in the home, such as preparing food, heating or cleaning (62). At the same time, the Oxford dictionary also describes the word of *equipment* as the things that are needed for a particular purposes or activity (514).

Based on the explanation given, the *appliance* and *equipment* have specific and general understanding. The *appliance* refers to something specific since the manual product gives information for the use of hob in the kitchen. The use of *appliance* is considered as something specific because it is relevant to certain tool at home. Meanwhile, *equipment* has general understanding. Even the explanation given by Oxford dictionary shows that for particular purposes or activity, it is started by the *things*. While the *appliance* is directly started by the use of *machine*. This can be seen as the specific and general perspective. The manual product is able to explain the information in relation to the product (*machine*). At the same time, machine translation prefers to use more general word *equipment* with the explanation of things for special purposes or activity.

Different condition is presented in data 2. When in data 1 there is a tendency that machine translation applies the general meaning of lexical choice, then the opposite is occurred in data 2. Data 2 presents the word *berbahaya* in SL. The word is translated into *dangerous* by the manual product (MaP) and it is translated into *hazardous* in machine translation (MeT). The following is the words that are applied in complete sentence.

data 2

SL	:	Komponen pengemas (misalnya lapisan plastic, polistiren) dapat **berbahaya** bagi anak – anak
TL (MaP)	:	The packaging components (e.g. plastic film, polystyrene) can be **dangerous** to children
TL (MeT)	:	Packaging components (e.g. plastic coating, polystyrene) can be **hazardous** to children

Generally, both *dangerous* and *hazardous* are equivalent for the word *berbahaya* in SL. However, semantically it has different meaning. The meaning components for both words are different. Oxford Advanced Learner's Dictionary describes *dangerous* as likely to injure or harm somebody, or to damage, or to destroy something (p. 385). Meanwhile, Oxford Dictionary mentions *hazardous* as involving risk or danger, especially to somebody's health or safety (p. 716). From the explanation, it can be concluded that manual product tends to use more general understanding. It only explains about injure, harm, damage, or destroy somebody or something. However, machine translation prefers to use specific choice of word. The *hazardous* indicates about risk or danger especially for health or safety. When the explanation includes health or safety, it can be said that the word has specific understanding.

If it is trying to compare with the SL in complete sentence, the meaning of *berbahaya* refers to something in general condition. There is no specific information given in the text referring to health or safety of somebody. It is only explaining the danger of packaging components.

Data 3 presents the mode of phrase in comparison between the manual product and machine translation. The phrase in SL is *lingkungan kerja lainnya* and *lingkungan tempat tinggal lainnya*. The point of each phrase is *lingkungan kerja* and *lingkungan tempat tinggal*. Both have similar form of phrase in TL, however with different lexical choices.

data 3
SL   : Wilayah dapur staf di pertokoan, perkantoran dan **lingkungan kerja lainnya**. Rumah-rumah pertanian. Oleh klien di hotel, motel, dan **lingkungan tempat tinggal lainnya**.
TL (MaP) : Staff kitchen areas in shops, offices and **other working environment**. Farm houses. By clients in hotels, motels, and **other residential type environments**.
TL (MeT) : Staff kitchen areas in shops, offices and **other work environments**. Farm houses. By clients in hotels, motels, and **other residential neighborhoods**.

The translation in TL is *other working environment* and *other residential type of environment* in MaP. Meanwhile, the phrase of TL in MeT is *other work environment* and *other residential neighborhoods*. The use of *environment* is the most dominant in data 3. In general, the word means the conditions that affect the behaviour and development of somebody or something (p. 511). The word *neighborhood* is explained as a district or an area of a town, the people who live there (p. 1021).

Regarding to the meaning given by the dictionary, there is tendency that the machine translation tries to fit with the SL complete sentence. Since the SL explains about *lingkungan tempat tinggal* then the TL for MeT is translated into *other residential neighborhoods*. In here, the use of *environment* refers to general understanding of certain condition, while the *neighborhoods* tend to have specific perspective since earlier it discusses on residential condition.

The only problem comes when machine translation is unable to fit with adjective part of phrase. The adjective section should be *working* to explain the noun *environment*. However, machine translation is only translated into *other work environment*. It is totally different comparing with manual product. The MaP is able to apply *working* as adjective part of the noun *environment*. It is the reason that the translated version of MaP is *other working environment*.

CONCLUTIONS

From the explanation above, it can be concluded that the manual product and machine translation apply different choice of lexical word in the level of word and phrase. In level of word, the manual product and machine translation use different lexical choice. They swift to use general and specific words in translating the word of SL in TL. However, the important point is the manual product can determine more on how to apply the general or specific words. The same case also comes when both manual product and machine translation apply in the level of phrase. The use of phrase and lexical words is various since there is tendency to determine the context of its use. The context of use also enables the machine translation, especially to add or reduce the information in its translation. Adding or reducing is the machine translation condition when it thinks that the translation does not clear or inequal to the phrase of SL.

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